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(71) Applicant: **RELAY THERAPEUTICS, INC.** [US/US]; 399 Binney Street, 2nd Floor, Cambridge, Massachusetts 02139 (US).

(72) Inventors: **PAN, Yue**; 399 Binney Street, 2nd Floor, Cambridge, Massachusetts 02139 (US). **BOEZIO, Alessandro**; 399 Binney Street, 2nd Floor, Cambridge, Massachusetts 02139 (US). **FRIDRICH, Cary Griffin**; 399 Binney Street, 2nd Floor, Cambridge, Massachusetts 02139 (US). **KRUEGER, Elaine B.**; 399 Binney Street, 2nd Floor, Cambridge, Massachusetts 02139 (US). **MOUSTAKAS, Demetri T.**; 399 Binney Street, 2nd Floor, Cambridge, Massachusetts 02139 (US). **RAYNOR, Kevin David**; 399 Binney Street, 2nd Floor, Cambridge, Massachusetts 02139 (US). **SHORTSLEEVES, Kelley C.**; 399 Binney Street, 2nd Floor, Cambridge, Massachusetts 02139 (US). **MCLEAN, Thomas H.**; 399 Binney Street, 2nd Floor, Cambridge, Massachusetts 02139 (US). **DENINNO, Michael Paul**; 9 Hermitage Drive, Gales Ferry, Connecticut 06335 (US). **THOMSON, Christopher**; West Hill Innovation Park, Hertford Road, Hoddesdon Hertfordshire EN11 9FH (GB). **LARIVEE, Alexandre**; 2525 Marie-Curie, Montreal, Québec H4S 2E1 (CA). **BURNIE, Andrew J.**; 2525 Marie-Curie, Montreal, Québec H4S 2E1 (CA). **ATIENZA, Bren-Jordan**; 2525 Marie-Curie, Montreal, Québec H4S 2E1 (CA). **PERREAULT, Christian**; 2525 Marie-Curie, Montreal, Québec H4S 2E1 (CA). **MAERTENS, Gaetan**; 2525 Marie-Curie, Montreal, Québec H4S 2E1 (CA). **MOHAMED, Tarek**; 2525 Marie-Curie, Montreal, Québec H4S 2E1 (CA). **LEPITRE, Thomas**; 2525 Marie-Curie, Montreal, Québec H4S 2E1 (CA). **BAUM, Erich W.**; 399 Binney Street, 2nd Floor, Cambridge, MA 02139 (US). **GUNAYDIN, Hakan**; 399 Binney Street, 2nd Floor, Cambridge, MA 02139 (US).

(74) Agent: **REID, Andrea L.C.** et al.; c/o Dechert LLP, One International Place, 40th Floor, 100 Oliver Street, Boston, Massachusetts 02110-2605 (US).

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(54) Title: PI3Kα INHIBITORS AND METHODS OF USE THEREOF

(57) Abstract: The present disclosure relates to novel compounds and pharmaceutical compositions thereof, and methods for inhibiting the activity of PI3Kα enzymes with the compounds and compositions of the disclosure. The present disclosure further relates to, but is not limited to, methods for treating disorders associated with PI3Kα signaling with the compounds and compositions of the disclosure.

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PI3Kα INHIBITORS AND METHODS OF USE THEREOF

CROSS-REFERENCE TO RELATED APPLICATIONS

[0000] This application claims the benefit of U.S. Provisional Application No. 63/364,459, filed on May 10, 2022, the entirety of which is hereby incorporated by reference.

BACKGROUND

[0001] Phosphatidylinositol 3-kinases (PI3Ks) comprise a family of lipid kinases that catalyze the transfer of phosphate to the D-3' position of inositol lipids to produce phosphoinositol-3-phosphate (PIP), phosphoinositol-3,4-diphosphate (PIP_2) and phosphoinositol-3,4,5-triphosphate (PIP_3), which, in turn, act as second messengers in signaling cascades by docking proteins containing pleckstrin-homology, FYVE, Phox and other phospholipid-binding domains into a variety of signaling complexes often at the plasma membrane (Vanhaesebroeck et al., Annu. Rev. Biochem 70:535 (2001); Katso et al., Annu. Rev. Cell Dev. Biol. 17:615 (2001)). Of the two Class 1 PI3K sub-classes, Class 1A PI3Ks are heterodimers composed of a catalytic p110 subunit (alpha, beta, or delta isoforms) constitutively associated with a regulatory subunit that can be p85 alpha, p55 alpha, p50 alpha, p85 beta, or p55 gamma. The Class 1B sub-class has one family member, a heterodimer composed of a catalytic p110 gamma subunit associated with one of two regulatory subunits, p101 or p84 (Fruman et al., Annu Rev. Biochem. 67:481 (1998); Suire et al., Curr. Biol. 15:566 (2005)). The modular domains of the p85/55/50 subunits include Src Homology (SH2) domains that bind phosphotyrosine residues in a specific sequence context on activated receptor and cytoplasmic tyrosine kinases, resulting in activation and localization of Class 1A PI3Ks. Class 1B PI3K is activated directly by G protein-coupled receptors that bind a diverse repertoire of peptide and non-peptide ligands (Stephens et al., Cell 89:105 (1997); Katso et al., Annu. Rev. Cell Dev. Biol. 17:615-675 (2001)).

[0002] Consequently, the resultant phospholipid products of Class I PI3Ks link upstream receptors with downstream cellular activities including proliferation, survival, chemotaxis, cellular trafficking, motility, metabolism, inflammatory and allergic responses, transcription and translation (Cantley et al., Cell 64:281 (1991); Escobedo and Williams, Nature 335:85 (1988); Fantl et al., Cell 69:413 (1992)). In many cases, PIP_2 and PIP_3 recruit Aid, the product of the human homologue of the viral oncogene v-Akt, to the plasma membrane where it acts as a nodal point for many intracellular signaling pathways important for growth

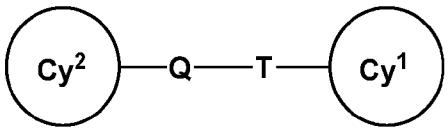
and survival (Fantl et al., Cell 69:413-423 (1992); Bader et al., Nature Rev. Cancer 5:921 (2005); Vivanco and Sawyer, Nature Rev. Cancer 2:489 (2002)).

[0003] Aberrant regulation of PI3K, which often increases survival through Aid activation, is one of the most prevalent events in human cancer and has been shown to occur at multiple levels. The tumor suppressor gene PTEN, which dephosphorylates phosphoinositides at the 3' position of the inositol ring, and in so doing antagonizes PI3K activity, is functionally deleted in a variety of tumors. In other tumors, the genes for the p110 alpha isoform, PIK3CA, and for Akt are amplified, and increased protein expression of their gene products has been demonstrated in several human cancers. Furthermore, mutations and translocation of p85 alpha that serve to up-regulate the p85-p110 complex have been described in human cancers. Finally, somatic missense mutations in PIK3CA that activate downstream signaling pathways have been described at significant frequencies in a wide diversity of human cancers (Kang et el., Proc. Natl. Acad. Sci. USA 102:802 (2005); Samuels et al., Science 304:554 (2004); Samuels et al., Cancer Cell 7:561-573 (2005)). These observations show that deregulation of phosphoinositol-3 kinase, and the upstream and downstream components of this signaling pathway, is one of the most common deregulations associated with human cancers and proliferative diseases (Parsons et al., Nature 436:792 (2005); Hennessey at el., Nature Rev. Drug Disc. 4:988-1004 (2005)).

[0004] In view of the above, inhibitors of PI3Kα would be of particular value in the treatment of proliferative disease and other disorders. While multiple inhibitors of PI3Ks have been developed (for example, taselisib, alpelisib, buparlisib and others), these molecules inhibit multiple Class 1A PI3K isoforms. Inhibitors that are active against multiple Class 1A PI3K isoforms are known as "pan-PI3K" inhibitors. A major hurdle for the clinical development of existing PI3K inhibitors has been the inability to achieve the required level of target inhibition in tumors while avoiding toxicity in cancer patients. Pan-PI3K inhibitors share certain target-related toxicities including diarrhea, rash, fatigue, and hyperglycemia. The toxicity of PI3K inhibitors is dependent on their isoform selectivity profile. Inhibition of PI3Kα is associated with hyperglycemia and rash, whereas inhibition of PI3Kδ or PI3Kγ is associated with diarrhea, myelosuppression, and transaminitis (Hanker et al., Cancer Discovery (2019) PMID: 30837161. Therefore, selective inhibitors of PI3Kα may increase the therapeutic window, enabling sufficient target inhibition in the tumor while avoiding dose-limiting toxicity in cancer patients.

SUMMARY

[0005] In some embodiments, the present disclosure provides a compound of formula I:



I

or a pharmaceutically acceptable salt thereof, wherein each of Cy^1, Cy^2, Q, and T is as defined in embodiments and classes and subclasses herein.

[0006] In some embodiments, the present disclosure provides a pharmaceutical composition comprising a compound of formula I, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier, adjuvant, or diluent.

[0007] In some embodiments, the present disclosure provides a method of treating a PI3Kα-mediated disorder comprising administering to a patient in need thereof a compound of formula I, or composition comprising said compound.

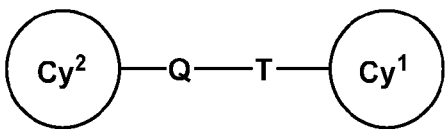
[0008] In some embodiments, the present disclosure provides a process for providing a compound of formula I, or synthetic intermediates thereof.

[0009] In some embodiments, the present disclosure provides a process for providing pharmaceutical compositions comprising compounds of formula I.

DETAILED DESCRIPTION

1. General Description of Certain Embodiments of the Disclosure

[0010] Compounds of the present disclosure, and pharmaceutical compositions thereof, are useful as inhibitors of PI3Kα. In some embodiments, the present disclosure provides a compound of formula I:



I

or a pharmaceutically acceptable salt thereof, wherein:

Cy^1 is phenyl; naphthyl; cubanyl; adamantyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated

monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein Cy^1 is substituted with n instances of R^1;

Cy^2 is phenyl; naphthyl; cubanyl; adamantyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein Cy^2 is substituted with m instances of R^2;

Q is L^Q;

T is a bivalent C_{1-3} aliphatic chain substituted with q instances of R^T;

each R^1 is independently $-L^1-R^{1A}$;

each R^2 is independently $-L^2-R^{2A}$;

each R^T is independently $-L^T-R^{TA}$; or

two instances of R^T are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^1 instances of R^{TTC};

two instances of R^1 are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^2 instances of R^{11C};

two instances of R^2 are taken together with their intervening atoms to form a 3-7 membered saturated, partially unsaturated, or aromatic carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^3 instances of R^{22C};

one instance of R^T and one instance of R^1 are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^4 instances of R^{T1C}; or

one instance of R^T and one instance of R^L are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^5 instances of R^{TLC};

each of L^1, L^2, L^Q, and L^T is independently a covalent bond, or a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by $-CH(R^L)-$, $-C(R^L)_2-$, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -N(R)C(NR)-, -N(R)C(NOR)-, -N(R)C(NCN)-, -C(O)N(R)-, $-N(R)S(O)_2-$, $-S(O)_2N(R)-$, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or $-S(O)_2-$;

each R^{1A} is independently R^A or R^B substituted by r^1 instances of R^{1C};

each R^{2A} is independently R^A or R^B substituted by r^2 instances of R^{2C};

each R^{TA} is independently R^A or R^B substituted by r^3 instances of R^{TC};

each R^L is independently R^A or R^B substituted by r^4 instances of R^{LC};

each instance of R^A is independently oxo, deuterium, halogen, -CN, $-NO_2$, -OR, $-SF_5$, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -S(O)(NCN)R, -S(NCN)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$;

each instance of R^B is independently a C_{1-6} aliphatic chain; phenyl; naphthyl; cubanyl; adamantyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur;

each instance of R^{1C}, R^{2C}, R^{TC}, R^{TTC}, R^{11C}, R^{22C}, R^{T1C}, R^{TLC}, and R^{LC} is independently oxo, deuterium, halogen, -CN, $-NO_2$, -OR, $-SF_5$, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur;

each instance of R is independently hydrogen, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or

two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered saturated, partially unsaturated, or heteroaryl ring having 0-3 heteroatoms, in addition to the nitrogen, independently selected from nitrogen, oxygen, and sulfur; and

each of n, m, q, p^1, p^2, p^3, p^4, p^5, r^1, r^2, r^3, and r^4 is independently 0, 1, 2, 3, 4, or 5.

2. Compounds and Definitions

[0011] Compounds of the present disclosure include those described generally herein, and are further illustrated by the classes, subclasses, and species disclosed herein. As used herein, the

following definitions shall apply unless otherwise indicated. For purposes of this disclosure, the chemical elements are identified in accordance with the Periodic Table of the Elements, CAS version, Handbook of Chemistry and Physics, 75th Ed. Additionally, general principles of organic chemistry are described in "Organic Chemistry", Thomas Sorrell, University Science Books, Sausalito: 1999, and "March's Advanced Organic Chemistry", 5th Ed., Ed.: Smith, M.B. and March, J., John Wiley & Sons, New York: 2001, the entire contents of which are hereby incorporated by reference.

[0012] The term "aliphatic" or "aliphatic group", as used herein, means a straight-chain (*i.e.*, unbranched) or branched, substituted or unsubstituted hydrocarbon chain that is completely saturated or that contains one or more units of unsaturation, or a monocyclic hydrocarbon or bicyclic hydrocarbon that is completely saturated or that contains one or more units of unsaturation, but which is not aromatic (also referred to herein as "carbocycle" or "cycloaliphatic"), that has a single point of attachment to the rest of the molecule. Unless otherwise specified, aliphatic groups contain 1-6 aliphatic carbon atoms. In some embodiments, aliphatic groups contain 1-5 aliphatic carbon atoms. In other embodiments, aliphatic groups contain 1-4 aliphatic carbon atoms. In still other embodiments, aliphatic groups contain 1-3 aliphatic carbon atoms, and in yet other embodiments, aliphatic groups contain 1-2 aliphatic carbon atoms. In some embodiments, "cycloaliphatic" (or "carbocycle") refers to a monocyclic C_3-C_6 hydrocarbon that is completely saturated or that contains one or more units of unsaturation, but which is not aromatic, that has a single point of attachment to the rest of the molecule. Suitable aliphatic groups include, but are not limited to, linear or branched, substituted or unsubstituted alkyl, alkenyl, alkynyl groups and hybrids thereof such as (cycloalkyl)alkyl, (cycloalkenyl)alkyl or (cycloalkyl)alkenyl.

[0013] The term "alkyl", unless otherwise indicated, as used herein, refers to a monovalent aliphatic hydrocarbon radical having a straight chain, branched chain, monocyclic moiety, or polycyclic moiety or combinations thereof, wherein the radical is optionally substituted at one or more carbons of the straight chain, branched chain, monocyclic moiety, or polycyclic moiety or combinations thereof with one or more substituents at each carbon, wherein the one or more substituents are independently C_1-C_{10} alkyl. Examples of "alkyl" groups include methyl, ethyl, propyl, isopropyl, butyl, *iso*-butyl, *sec*-butyl, *tert*-butyl, pentyl, hexyl, heptyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, norbornyl, and the like.

[0014] The term "lower alkyl" refers to a C_{1-4} straight or branched alkyl group. Exemplary lower alkyl groups are methyl, ethyl, propyl, isopropyl, butyl, isobutyl, and tert-butyl.

[0015] The term "lower haloalkyl" refers to a C_{1-4} straight or branched alkyl group that is substituted with one or more halogen atoms.

[0016] The term "heteroatom" means one or more of oxygen, sulfur, nitrogen, phosphorus, or silicon (including, any oxidized form of nitrogen, sulfur, phosphorus, or silicon; the quaternized form of any basic nitrogen or; a substitutable nitrogen of a heterocyclic ring, for example N (as in 3,4-dihydro-2*H*-pyrrolyl), NH (as in pyrrolidinyl) or NR^+ (as in N-substituted pyrrolidinyl)).

[0017] The term "unsaturated," as used herein, means that a moiety has one or more units of unsaturation.

[0018] As used herein, the term "C_{1-8} (or C_{1-6}, or C_{1-4}) bivalent saturated or unsaturated, straight or branched, hydrocarbon chain", refers to bivalent alkylene, alkenylene, and alkynylene chains that are straight or branched as defined herein.

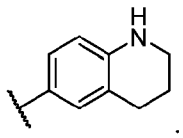
[0019] The term "alkylene" refers to a bivalent alkyl group. An "alkylene chain" is a polymethylene group, *i.e.*, $-(CH_2)_n-$, wherein n is a positive integer, preferably from 1 to 6, from 1 to 4, from 1 to 3, from 1 to 2, or from 2 to 3. A substituted alkylene chain is a polymethylene group in which one or more methylene hydrogen atoms are replaced with a substituent. Suitable substituents include those described below for a substituted aliphatic group.

[0020] The term "alkenylene" refers to a bivalent alkenyl group. A substituted alkenylene chain is a polymethylene group containing at least one double bond in which one or more hydrogen atoms are replaced with a substituent. Suitable substituents include those described below for a substituted aliphatic group.

[0021] The term "halogen" means F, Cl, Br, or I.

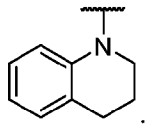
[0022] The term "aryl," used alone or as part of a larger moiety as in "aralkyl," "aralkoxy," or "aryloxyalkyl," refers to monocyclic or bicyclic ring systems having a total of five to fourteen ring members, wherein at least one ring in the system is aromatic and wherein each ring in the system contains 3 to 7 ring members. The term "aryl" may be used interchangeably with the term "aryl ring." In certain embodiments of the present disclosure, "aryl" refers to an aromatic ring system which includes, but is not limited to, phenyl, biphenyl, naphthyl, anthracyl and the like, which may bear one or more substituents.

[0023] The terms "heteroaryl" or "heteroaromatic", unless otherwise defined, as used herein refers to a monocyclic aromatic 5-6 membered ring containing one or more heteroatoms, for example one to three heteroatoms, such as nitrogen, oxygen, and sulfur, or an 8-10 membered polycyclic ring system containing one or more heteroatoms, wherein at least one ring in the polycyclic ring system is aromatic, and the point of attachment of the polycyclic ring system is through a ring atom on an aromatic ring. A heteroaryl ring may be linked to adjacent radicals though carbon or nitrogen. Examples of heteroaryl rings include but are not limited to furan, thiophene, pyrrole, thiazole, oxazole, isothiazole, isoxazole, imidazole, pyrazole, triazole, pyridine, pyrimidine, indole, etc. For example, unless otherwise defined, 1,2,3,4-tetrahydroquinoline is a heteroaryl ring if its point of attachment is through the benzo ring, *e.g.*:



[0024] The terms "heterocyclyl" or "heterocyclic group", unless otherwise defined, refer to a saturated or partially unsaturated 3-10 membered monocyclic or 7-14 membered polycyclic ring system, including bridged or fused rings, and whose ring system includes one to four heteroatoms, such as nitrogen, oxygen, and sulfur. A heterocyclyl ring may be linked to adjacent radicals through carbon or nitrogen.

[0025] The term "partially unsaturated" in the context of rings, unless otherwise defined, refers to a monocyclic ring, or a component ring within a polycyclic (*e.g.*, bicyclic, tricyclic, etc.) ring system, wherein the component ring contains at least one degree of unsaturation in addition to those provided by the ring itself, but is not aromatic. Examples of partially unsaturated rings include, but are not limited to, 3,4-dihydro-2H-pyran, 3-pyrroline, 2-thiazoline, etc. Where a partially unsaturated ring is part of a polycyclic ring system, the other component rings in the polycyclic ring system may be saturated, partially unsaturated, or aromatic, but the point of attachment of the polycyclic ring system is on a partially unsaturated component ring. For example, unless otherwise defined, 1,2,3,4-tetrahydroquinoline is a partially unsaturated ring if its point of attachment is through the piperidino ring, *e.g.*:

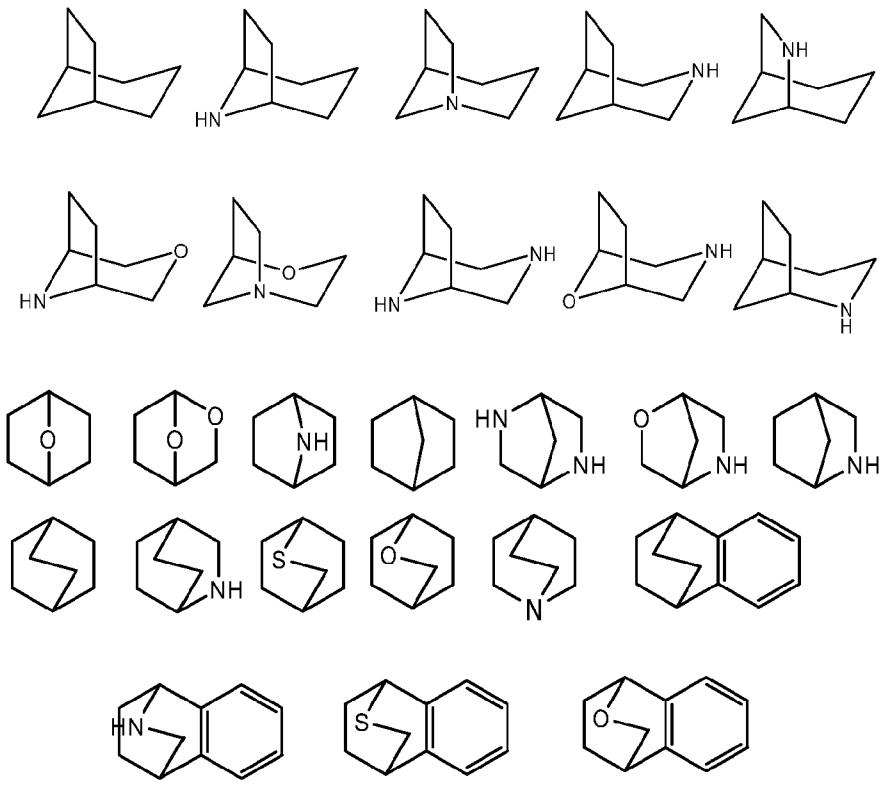


[0026] The term "saturated" in the context of rings, unless otherwise defined, refers to a 3-10 membered monocyclic ring, or a 7-14 membered polycyclic (*e.g.*, bicyclic, tricyclic, etc.) ring system, wherein the monocyclic ring or the component ring that is the point of attachment for the polycyclic ring system contains no additional degrees of unsaturation in addition to that provided by the ring itself. Examples of monocyclic saturated rings include, but are not limited to, azetidine, oxetane, cyclohexane, etc. Where a saturated ring is part of a polycyclic ring system, the other component rings in the polycyclic ring system may be saturated, partially unsaturated, or aromatic, but the point of attachment of the polycyclic ring system is on a saturated component ring. For example, unless otherwise defined, 2-azaspiro[3.4]oct-6-ene is a saturated ring if its point of attachment is through the azetidino ring, *e.g.*:



[0027] The terms "alkylene", "arylene", "cycloalkylene", "heteroarylene", "heterocycloalkylene", and the other similar terms with the suffix "-ylene" as used herein refers to a divalently bonded version of the group that the suffix modifies. For example, "alkylene" is a divalent alkyl group connecting the groups to which it is attached.

[0028] As used herein, the term "bridged bicyclic" refers to any bicyclic ring system, *i.e.*, carbocyclic or heterocyclic, saturated or partially unsaturated, having at least one bridge. As defined by IUPAC, a "bridge" is an unbranched chain of atoms or an atom or a valence bond connecting two bridgeheads, where a "bridgehead" is any skeletal atom of the ring system which is bonded to three or more skeletal atoms (excluding hydrogen). In some embodiments, a bridged bicyclic group has 7-12 ring members and 0-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur. Such bridged bicyclic groups are well known in the art and include those groups set forth below where each group is attached to the rest of the molecule at any substitutable carbon or nitrogen atom. Unless otherwise specified, a bridged bicyclic group is optionally substituted with one or more substituents as set forth for aliphatic groups. Additionally or alternatively, any substitutable nitrogen of a bridged bicyclic group is optionally substituted. Exemplary bridged bicyclics include:



[0029] As described herein, compounds of the disclosure may contain "optionally substituted" moieties. In general, the term "substituted," whether preceded by the term "optionally" or not, means that one or more hydrogens of the designated moiety are replaced with a suitable substituent. Unless otherwise indicated, an "optionally substituted" group may have a suitable substituent at each substitutable position of the group, and when more than one position in any given structure may be substituted with more than one substituent selected from a specified group, the substituent may be either the same or different at every position. Combinations of substituents envisioned by this disclosure are preferably those that result in the formation of stable or chemically feasible compounds. The term "stable," as used herein, refers to compounds that are not substantially altered when subjected to conditions to allow for their production, detection, and, in certain embodiments, their recovery, purification, and use for one or more of the purposes disclosed herein.

[0030] Suitable monovalent substituents on a substitutable carbon atom of an "optionally substituted" group are independently halogen; $-(CH_2)_{0-4}R^{\circ}$; $-(CH_2)_{0-4}OR^{\circ}$; $-O(CH_2)_{0-4}R^{\circ}$, $-O-(CH_2)_{0-4}C(O)OR^{\circ}$; $-(CH_2)_{0-4}CH(OR^{\circ})_2$; $-(CH_2)_{0-4}SR^{\circ}$; $-(CH_2)_{0-4}Ph$, which may be substituted with R°; $-(CH_2)_{0-4}O(CH_2)_{0-1}Ph$ which may be substituted with R°;

–CH=CHPh, which may be substituted with R°; –$(CH_2)_{0-4}O(CH_2)_{0-1}$-pyridyl which may be substituted with R°; –NO_2; –CN; –N_3; -$(CH_2)_{0-4}N(R°)_2$; –$(CH_2)_{0-4}N(R°)C(O)R°$; –$N(R°)C(S)R°$; –$(CH_2)_{0-4}N(R°)C(O)NR°_2$; -$N(R°)C(S)NR°_2$; –$(CH_2)_{0-4}N(R°)C(O)OR°$; –$N(R°)N(R°)C(O)R°$; -$N(R°)N(R°)C(O)NR°_2$; -$N(R°)N(R°)C(O)OR°$; –$(CH_2)_{0-4}C(O)R°$; –$C(S)R°$; –$(CH_2)_{0-4}C(O)OR°$; –$(CH_2)_{0-4}C(O)SR°$; -$(CH_2)_{0-4}C(O)OSiR°_3$; –$(CH_2)_{0-4}OC(O)R°$; –$OC(O)(CH_2)_{0-4}SR°$; –$SC(S)SR°$; –$(CH_2)_{0-4}SC(O)R°$; –$(CH_2)_{0-4}C(O)NR°_2$; –$C(S)NR°_2$; –$C(S)SR°$; –$SC(S)SR°$, -$(CH_2)_{0-4}OC(O)NR°_2$; -$C(O)N(OR°)R°$; –$C(O)C(O)R°$; –$C(O)CH_2C(O)R°$; –$C(NOR°)R°$; -$(CH_2)_{0-4}SSR°$; –$(CH_2)_{0-4}S(O)_2R°$; –$(CH_2)_{0-4}S(O)_2OR°$; –$(CH_2)_{0-4}OS(O)_2R°$; –$S(O)_2NR°_2$; -$(CH_2)_{0-4}S(O)R°$; -$N(R°)S(O)_2NR°_2$; –$N(R°)S(O)_2R°$; –$N(OR°)R°$; –$C(NH)NR°_2$; –$P(O)(OR°)R°$; -$P(O)R°_2$; -$OP(O)R°_2$; –$OP(O)(OR°)_2$; –$SiR°_3$; –($C_{1-4}$ straight or branched alkylene)O–$N(R°)_2$; or –(C_{1-4} straight or branched alkylene)C(O)O–$N(R°)_2$, wherein each R° may be substituted as defined below and is independently hydrogen, C_{1-6} aliphatic, –CH_2Ph, –$O(CH_2)_{0-1}Ph$, -CH_2-(5-6 membered heteroaryl ring), or a 5–6–membered saturated, partially unsaturated, or aryl ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or, notwithstanding the definition above, two independent occurrences of R°, taken together with their intervening atom(s), form a 3–12–membered saturated, partially unsaturated, or aryl mono– or bicyclic ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, or sulfur, which may be substituted as defined below.

[0031] Suitable monovalent substituents on R° (or the ring formed by taking two independent occurrences of R° together with their intervening atoms), are independently halogen, –$(CH_2)_{0-2}R^•$, –(haloR•), –$(CH_2)_{0-2}OH$, –$(CH_2)_{0-2}OR^•$, –$(CH_2)_{0-2}CH(OR^•)_2$; -O(haloR•), –CN, –N_3, –$(CH_2)_{0\ 2}C(O)R^•$, –$(CH_2)_{0\ 2}C(O)OH$, –$(CH_2)_{0\ 2}C(O)OR^•$, –$(CH_2)_{0\ 2}SR^•$, –$(CH_2)_{0-2}SH$, –$(CH_2)_{0-2}NH_2$, –$(CH_2)_{0-2}NHR^•$, –$(CH_2)_{0-2}NR^•_2$, –NO_2, –$SiR^•_3$, –$OSiR^•_3$, -C(O)SR•, –(C_{1-4} straight or branched alkylene)C(O)OR•, or –SSR• wherein each R• is unsubstituted or where preceded by "halo" is substituted only with one or more halogens, and is independently selected from C_{1-4} aliphatic, –CH_2Ph, –$O(CH_2)_{0-1}Ph$, or a 5–6–membered saturated, partially unsaturated, or aryl ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, or sulfur. Suitable divalent substituents on a saturated carbon atom of R° include =O and =S.

[0032] Suitable divalent substituents on a saturated carbon atom of an "optionally substituted" group include the following: =O, =S, =NNR^*_2, =NNHC(O)R*, =NNHC(O)OR*,

$=NNHS(O)_2R^*$, $=NR^*$, $=NOR^*$, $-O(C(R^*_2))_{2-3}O-$, or $-S(C(R^*_2))_{2-3}S-$, wherein each independent occurrence of R^* is selected from hydrogen, C_{1-6} aliphatic which may be substituted as defined below, or an unsubstituted 5–6–membered saturated, partially unsaturated, or aryl ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, or sulfur. Suitable divalent substituents that are bound to vicinal substitutable carbons of an "optionally substituted" group include: $-O(CR^*_2)_{2-3}O-$, wherein each independent occurrence of R^* is selected from hydrogen, C_{1-6} aliphatic which may be substituted as defined below, or an unsubstituted 5–6–membered saturated, partially unsaturated, or aryl ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, or sulfur.

[0033] Suitable substituents on the aliphatic group of R^* include halogen, $-R^\bullet$, -(halo$R^\bullet$), -OH, $-OR^\bullet$, -O(halo$R^\bullet$), –CN, –C(O)OH, $-C(O)OR^\bullet$, $-NH_2$, $-NHR^\bullet$, $-NR^\bullet_2$, or $-NO_2$, wherein each $R^\bullet$ is unsubstituted or where preceded by "halo" is substituted only with one or more halogens, and is independently C_{1-4} aliphatic, $-CH_2Ph$, $-O(CH_2)_{0-1}Ph$, or a 5–6–membered saturated, partially unsaturated, or aryl ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, or sulfur.

[0034] Suitable substituents on a substitutable nitrogen of an "optionally substituted" group include $-R^\dagger$, $-NR^\dagger_2$, $-C(O)R^\dagger$, $-C(O)OR^\dagger$, $-C(O)C(O)R^\dagger$, $-C(O)CH_2C(O)R^\dagger$, $-S(O)_2R^\dagger$, $-S(O)_2NR^\dagger_2$, $-C(S)NR^\dagger_2$, $-C(NH)NR^\dagger_2$, or $-N(R^\dagger)S(O)_2R^\dagger$; wherein each $R^\dagger$ is independently hydrogen, C_{1-6} aliphatic which may be substituted as defined below, unsubstituted –OPh, or an unsubstituted 5–6–membered saturated, partially unsaturated, or aryl ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or, notwithstanding the definition above, two independent occurrences of $R^\dagger$, taken together with their intervening atom(s) form an unsubstituted 3–12–membered saturated, partially unsaturated, or aryl mono– or bicyclic ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, or sulfur.

[0035] Suitable substituents on the aliphatic group of $R^\dagger$ are independently halogen, $-R^\bullet$, -(halo$R^\bullet$), –OH, $-OR^\bullet$, -O(halo$R^\bullet$), –CN, –C(O)OH, $-C(O)OR^\bullet$, $-NH_2$, $-NHR^\bullet$, $-NR^\bullet_2$, or $-NO_2$, wherein each $R^\bullet$ is unsubstituted or where preceded by "halo" is substituted only with one or more halogens, and is independently C_{1-4} aliphatic, $-CH_2Ph$, $-O(CH_2)_{0-1}Ph$, or a 5–6–membered saturated, partially unsaturated, or aryl ring having 0–4 heteroatoms independently selected from nitrogen, oxygen, or sulfur.

[0036] The term "isomer" as used herein refers to a compound having the identical chemical formula but different structural or optical configurations. The term "stereoisomer" as used herein refers to and includes isomeric molecules that have the same molecular formula but differ in positioning of atoms and/or functional groups in the space. All stereoisomers of the present compounds (*e.g.*, those which may exist due to asymmetric carbons on various substituents), including enantiomeric forms and diastereomeric forms, are contemplated within the scope of this disclosure. Therefore, unless otherwise stated, single stereochemical isomers as well as mixtures of enantiomeric, diastereomeric, and geometric (or conformational) isomers of the present compounds are within the scope of the disclosure.

[0037] The term "tautomer" as used herein refers to one of two or more structural isomers which exist in equilibrium and which are readily converted from one isomeric form to another. It is understood that tautomers encompass valence tautomers and proton tautomers (also known as prototropic tautomers). Valence tautomers include interconversions by reorganization of some of the bonding electrons. Proton tautomers include interconversions via migration of a proton, such as keto-enol and imine-enamine isomerizations. Unless otherwise stated, all tautomers of the compounds of the disclosure are within the scope of the disclosure.

[0038] The term "isotopic substitution" as used herein refers to the substitution of an atom with its isotope. The term "isotope" as used herein refers to an atom having the same atomic number as that of atoms dominant in nature but having a mass number (neutron number) different from the mass number of the atoms dominant in nature. It is understood that a compound with an isotopic substitution refers to a compound in which at least one atom contained therein is substituted with its isotope. Atoms that can be substituted with its isotope include, but are not limited to, hydrogen, carbon, and oxygen. Examples of the isotope of a hydrogen atom include ^{2}H (also represented as D) and ^{3}H. Examples of the isotope of a carbon atom include ^{13}C and ^{14}C. Examples of the isotope of an oxygen atom include ^{18}O. Unless otherwise stated, all isotopic substitution of the compounds of the disclosure are within the scope of the disclosure. Such compounds are useful, for example, as analytical tools, as probes in biological assays, or as therapeutic agents in accordance with the present disclosure.

[0039] As used herein, the term "pharmaceutically acceptable salt" refers to those salts which are, within the scope of sound medical judgment, suitable for use in contact with the tissues of humans and lower animals without undue toxicity, irritation, allergic response and the like,

and are commensurate with a reasonable benefit/risk ratio. Exemplary pharmaceutically acceptable salts are found, *e.g.*, in Berge, *et al.* (*J. Pharm. Sci.* 1977, 66(1), 1; and Gould, P.L., *Int. J. Pharmaceutics* 1986, 33, 201-217; (each hereby incorporated by reference in its entirety).

[0040] Pharmaceutically acceptable salts of the compounds of this disclosure include those derived from suitable inorganic and organic acids and bases. Examples of pharmaceutically acceptable, nontoxic acid addition salts are salts of an amino group formed with inorganic acids such as hydrochloric acid, hydrobromic acid, phosphoric acid, sulfuric acid and perchloric acid or with organic acids such as acetic acid, oxalic acid, maleic acid, tartaric acid, citric acid, succinic acid or malonic acid or by using other methods used in the art such as ion exchange. Other pharmaceutically acceptable salts include adipate, alginate, ascorbate, aspartate, benzenesulfonate, benzoate, bisulfate, borate, butyrate, camphorate, camphorsulfonate, citrate, cyclopentanepropionate, digluconate, dodecylsulfate, ethanesulfonate, formate, fumarate, glucoheptonate, glycerophosphate, gluconate, hemisulfate, heptanoate, hexanoate, hydroiodide, 2–hydroxy–ethanesulfonate, lactobionate, lactate, laurate, lauryl sulfate, malate, maleate, malonate, methanesulfonate, 2–naphthalenesulfonate, nicotinate, nitrate, oleate, oxalate, palmitate, pamoate, pectinate, persulfate, 3–phenylpropionate, phosphate, pivalate, propionate, stearate, succinate, sulfate, tartrate, thiocyanate, p–toluenesulfonate, undecanoate, valerate salts, and the like.

[0041] Salts derived from appropriate bases include alkali metal, alkaline earth metal, ammonium and $N^+(C_{1-4}alkyl)_4$ salts. Representative alkali or alkaline earth metal salts include sodium, lithium, potassium, calcium, magnesium, and the like. Further pharmaceutically acceptable salts include, when appropriate, nontoxic ammonium, quaternary ammonium, and amine cations formed using counterions such as halide, hydroxide, carboxylate, sulfate, phosphate, nitrate, loweralkyl sulfonate, and aryl sulfonate.

[0042] Pharmaceutically acceptable salts are also intended to encompass hemi-salts, wherein the ratio of compound:acid is respectively 2:1. Exemplary hemi-salts are those salts derived from acids comprising two carboxylic acid groups, such as malic acid, fumaric acid, maleic acid, succinic acid, tartaric acid, glutaric acid, oxalic acid, adipic acid and citric acid. Other exemplary hemi-salts are those salts derived from diprotic mineral acids such as sulfuric acid. Exemplary preferred hemi-salts include, but are not limited to, hemimaleate, hemifumarate, and hemisuccinate.

[0043] As used herein the term "about" is used herein to mean approximately, roughly, around, or in the region of. When the term "about" is used in conjunction with a numerical range, it modifies that range by extending the boundaries above and below the numerical values set forth. In general, the term "about" is used herein to modify a numerical value above and below the stated value by a variance of 20 percent up or down (higher or lower).

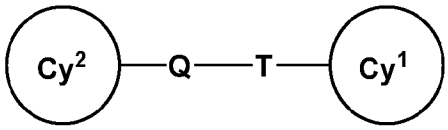
[0044] An "effective amount", "sufficient amount", or "therapeutically effective amount" as used herein is an amount of a compound that is sufficient to effect beneficial or desired results, including clinical results. As such, the effective amount may be sufficient, *e.g.*, to reduce or ameliorate the severity and/or duration of afflictions related to PI3Kα signaling, or one or more symptoms thereof, prevent the advancement of conditions or symptoms related to afflictions related to PI3Kα signaling, or enhance or otherwise improve the prophylactic or therapeutic effect(s) of another therapy. An effective amount also includes the amount of the compound that avoids or substantially attenuates undesirable side effects.

[0045] As used herein and as well understood in the art, "treatment" is an approach for obtaining beneficial or desired results, including clinical results. Beneficial or desired clinical results may include, but are not limited to, alleviation or amelioration of one or more symptoms or conditions, diminution of extent of disease or affliction, a stabilized (*i.e.*, not worsening) state of disease or affliction, preventing spread of disease or affliction, delay or slowing of disease or affliction progression, amelioration or palliation of the disease or affliction state and remission (whether partial or total), whether detectable or undetectable. "Treatment" can also mean prolonging survival as compared to expected survival if not receiving treatment. In some embodiments, treatment may be administered after one or more symptoms have developed. In other embodiments, treatment may be administered in the absence of symptoms. For example, treatment may be administered to a susceptible individual prior to the onset of symptoms (*e.g.*, in light of a history of symptoms and/or in light of genetic or other susceptibility factors). Treatment may also be continued after symptoms have resolved, for example to prevent or delay their recurrence.

[0046] The phrase "in need thereof" refers to the need for symptomatic or asymptomatic relief from conditions related to PI3Kα signaling activity or that may otherwise be relieved by the compounds and/or compositions of the disclosure.

3. Description of Exemplary Embodiments

[0047] As described above, in some embodiments, the present disclosure provides a compound of formula I:



I

or a pharmaceutically acceptable salt thereof, wherein:

Cy^1 is phenyl; naphthyl; cubanyl; adamantyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein Cy^1 is substituted with n instances of R^1;

Cy^2 is phenyl; naphthyl; cubanyl; adamantyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein Cy^2 is substituted with m instances of R^2;

Q is L^Q;

T is a bivalent C_{1-3} aliphatic chain substituted with q instances of R^T;

each R^1 is independently $-L^1-R^{1A}$;

each R^2 is independently $-L^2-R^{2A}$;

each R^T is independently $-L^T-R^{TA}$; or

two instances of R^T are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^1 instances of R^{TTC};

two instances of R^1 are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^2 instances of R^{11C};

two instances of R^2 are taken together with their intervening atoms to form a 3-7 membered saturated, partially unsaturated, or aromatic carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^3 instances of R^{22C};

one instance of R^T and one instance of R^1 are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^4 instances of R^{T1C}; or

one instance of R^T and one instance of R^L are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^5 instances of R^{TLC};

each of L^1, L^2, L^Q, and L^T is independently a covalent bond, or a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by $-CH(R^L)-$, $-C(R^L)_2-$, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -N(R)C(NR)-, -N(R)C(NOR)-, -N(R)C(NCN)-, -C(O)N(R)-, $-N(R)S(O)_2-$, $-S(O)_2N(R)-$, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or $-S(O)_2-$;

each R^{1A} is independently R^A or R^B substituted by r^1 instances of R^{1C};

each R^{2A} is independently R^A or R^B substituted by r^2 instances of R^{2C};

each R^{TA} is independently R^A or R^B substituted by r^3 instances of R^{TC};

each R^L is independently R^A or R^B substituted by r^4 instances of R^{LC};

each instance of R^A is independently oxo, deuterium, halogen, -CN, $-NO_2$, -OR, $-SF_5$, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -S(O)(NCN)R, -S(NCN)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$;

each instance of R^B is independently a C_{1-6} aliphatic chain; phenyl; naphthyl; cubanyl; adamantyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur;

each instance of R^{1C}, R^{2C}, R^{TC}, R^{TTC}, R^{11C}, R^{22C}, R^{T1C}, R^{TLC}, and R^{LC} is independently oxo, deuterium, halogen, -CN, $-NO_2$, -OR, $-SF_5$, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur;

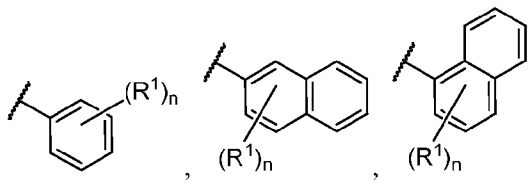
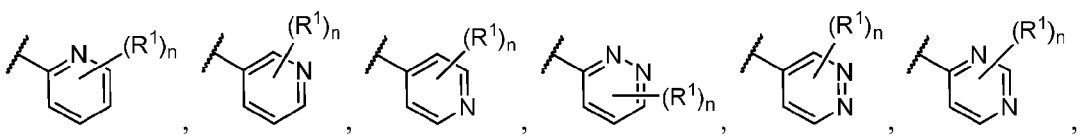
each instance of R is independently hydrogen, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or

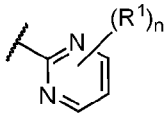
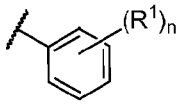
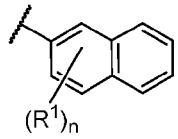
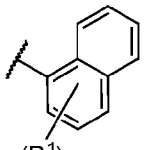
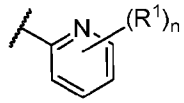
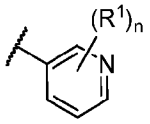
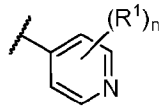
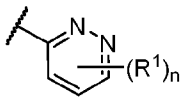
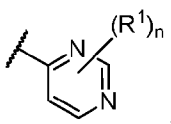
two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered saturated, partially unsaturated, or heteroaryl ring having 0-3 heteroatoms, in addition to the nitrogen, independently selected from nitrogen, oxygen, and sulfur; and

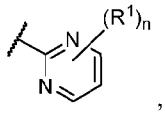
each of n, m, q, p^1, p^2, p^3, p^4, p^5, r^1, r^2, r^3, and r^4 is independently 0, 1, 2, 3, 4, or 5.

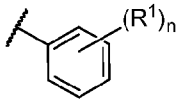
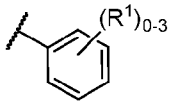
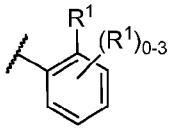
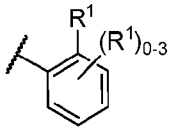
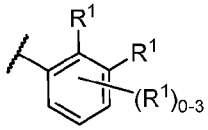
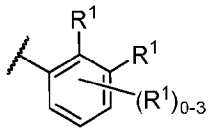
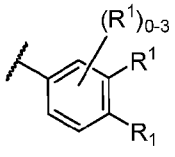
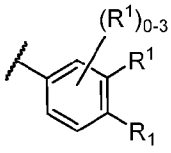
[0048] As defined generally above, Cy^1 is phenyl; naphthyl; cubanyl; adamantyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein Cy^1 is substituted with n instances of R^1.

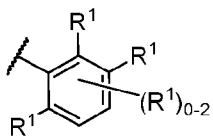
[0049] In some embodiments, Cy^1 is phenyl, wherein Cy^1 is substituted with n instances of R^1. In some embodiments, Cy^1 is naphthyl, wherein Cy^1 is substituted with n instances of R^1. In some embodiments, Cy^1 is cubanyl, wherein Cy^1 is substituted with n instances of R^1. In some embodiments, Cy^1 is adamantyl, wherein Cy^1 is substituted with n instances of R^1. In some embodiments, Cy^1 is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, wherein Cy^1 is substituted with n instances of R^1. In some embodiments, Cy^1 is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^1 is substituted with n instances of R^1. In some embodiments, Cy^1 is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^1 is substituted with n instances of R^1. In some embodiments, Cy^1 is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^1 is substituted with n instances of R^1.

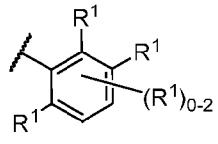
[0050] In some embodiments, Cy^1 is  ,  ,

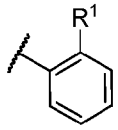
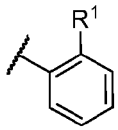
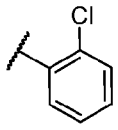
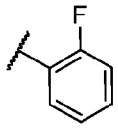
or  , wherein R^1 and n are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 and n are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 and n are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 and n are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 and n are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 and n are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 and n are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 and n are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 and n are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 and n are as defined in the embodiments and classes and subclasses herein.

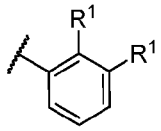
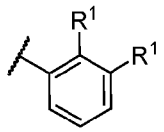
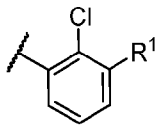
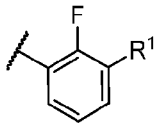
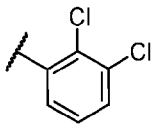
embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 and n are as defined in the embodiments and classes and subclasses herein.

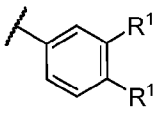
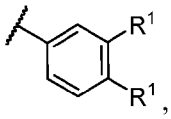
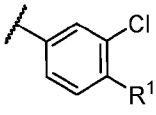
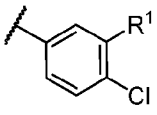
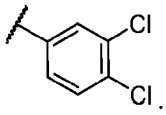
[0051] In some embodiments, Cy^1 is  , wherein R^1 is halogen and n is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is halogen. In some embodiments, Cy^1 is  , wherein R^1 is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is halogen. In some embodiments, Cy^1 is  , wherein R^1 is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is halogen. In some embodiments, Cy^1 is  , wherein R^1 is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is halogen.

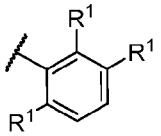
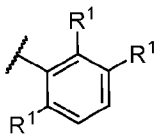
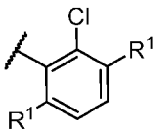
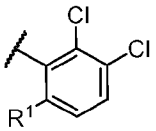
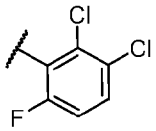
In some embodiments, Cy^1 is  , wherein R^1 is as defined in the

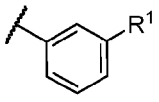
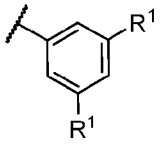
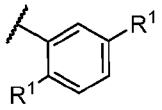
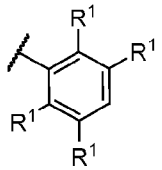
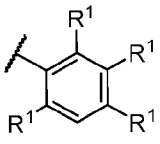
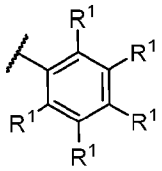
embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is halogen.

[0052] In some embodiments, Cy^1 is  , wherein R^1 is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is halogen. In some embodiments, Cy^1 is  . In some embodiments, Cy^1 is  .

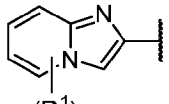
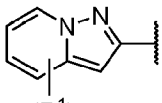
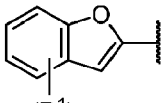
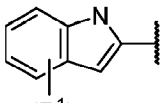
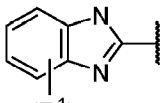
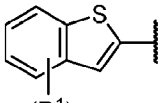
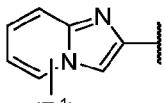
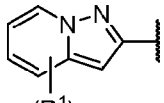
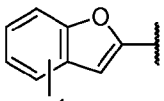
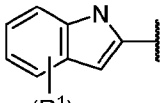
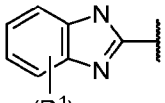
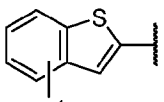
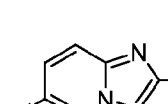
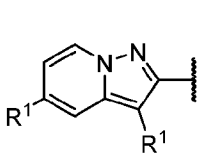
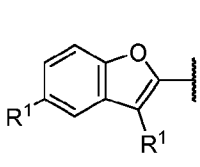
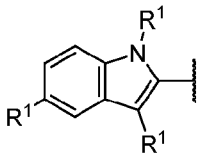
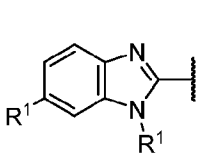
[0053] In some embodiments, Cy^1 is  , wherein R^1 is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is halogen. In some embodiments, Cy^1 is  , wherein R^1 is halogen. In some embodiments, Cy^1 is  , wherein R^1 is halogen. In some embodiments, Cy^1 is  .

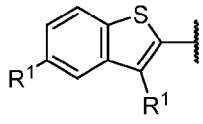
[0054] In some embodiments, Cy^1 is  , wherein R^1 is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is halogen. In some embodiments, Cy^1 is  , wherein R^1 is halogen. In some embodiments, Cy^1 is  , wherein R^1 is halogen. In some embodiments, Cy^1 is  .

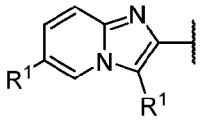
[0055] In some embodiments, Cy^1 is  , wherein R^1 is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is halogen. In some embodiments, Cy^1 is  , wherein R^1 is halogen. In some embodiments, Cy^1 is  , wherein R^1 is halogen. In some embodiments, Cy^1 is  .

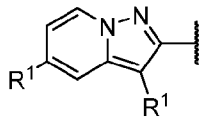
[0056] In some embodiments, Cy^1 is  , wherein R^1 is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein R^1 is as defined in the embodiments and classes and subclasses herein.

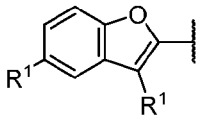
[0057] In some embodiments, Cy^1 is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein Cy^1 is substituted with n instances of R^1 wherein R^1 is as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is an 8-10 membered bicyclic heteroaryl ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein Cy^1 is substituted with n instances of R^1 wherein R^1 is as defined in the embodiments

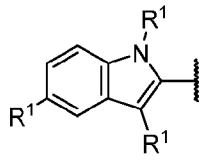
and classes and subclasses herein. In some embodiments, Cy^1 is  ,  ,  ,  ,  , or  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  ,  ,  ,  ,  , or

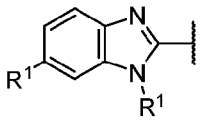


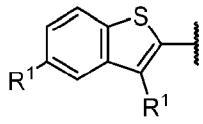
, wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is,

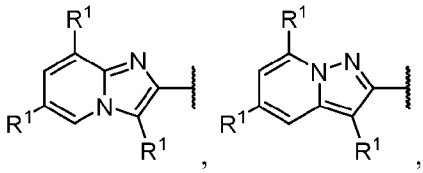
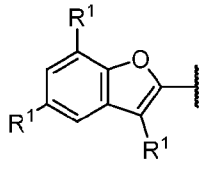
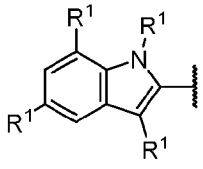
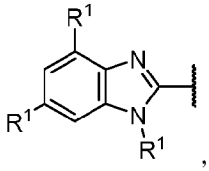
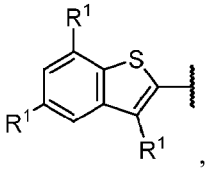


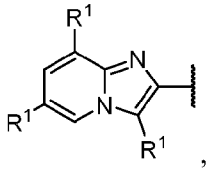
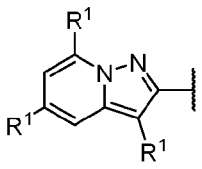
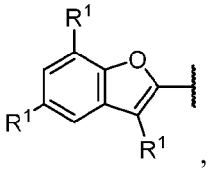
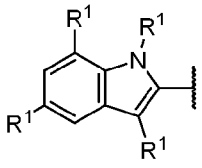
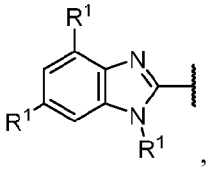
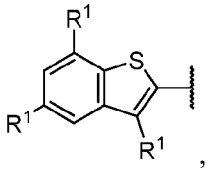
, wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is

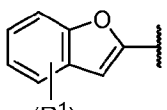
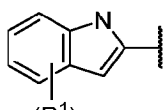


, wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is,



, wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  ,  ,  ,  , or  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments,

Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein. In some embodiments, Cy^1 is  , wherein n and R^1 are as defined in the embodiments and classes and subclasses herein.

[0058] In some embodiments, Cy^1 is selected from the groups depicted in the compounds in Table 1. In some embodiments, Cy^1 is not  , or  .

[0059] As defined generally above, Cy^2 is phenyl; naphthyl; cubanyl; adamantyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4

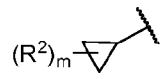
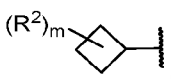
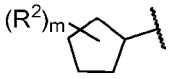
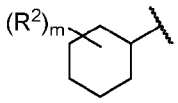
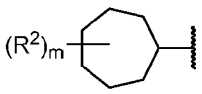
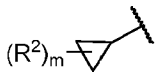
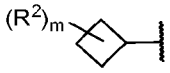
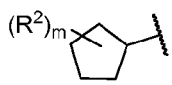
heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein Cy^2 is substituted with m instances of R^2.

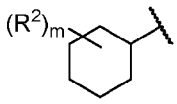
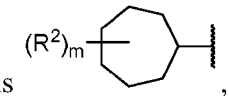
[0060] In some embodiments, Cy^2 is phenyl, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is naphthyl, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is cubanyl, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is adamantyl, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2.

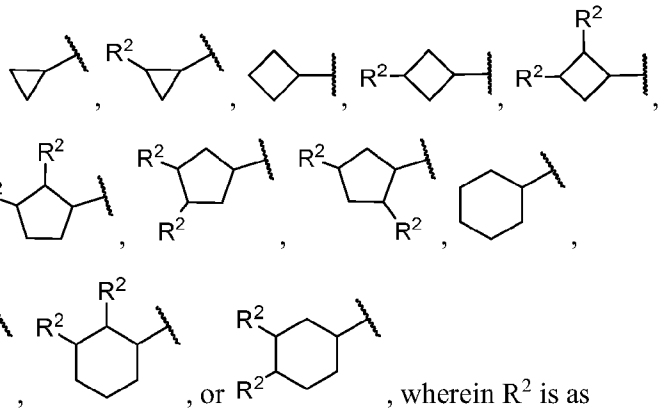
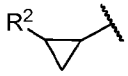
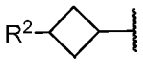
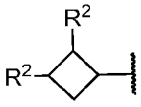
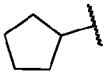
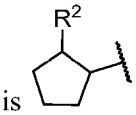
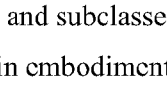
[0061] In some embodiments, Cy^2 is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 9-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is an 8-9 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is an 8-membered bicyclic heteroaryl ring having 1-4 heteroatoms

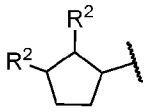
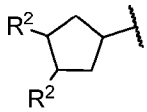
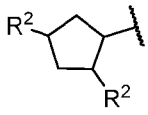
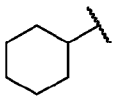
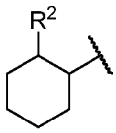
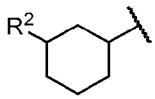
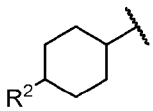
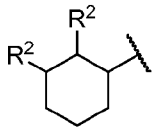
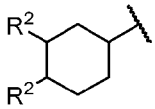
independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 9-membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 10-membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2.

[0062] In some embodiments, Cy^2 is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 4-6 membered saturated or partially unsaturated monocyclic carbocyclic ring, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 4-5 membered saturated or partially unsaturated monocyclic carbocyclic ring, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 5-6 membered saturated or partially unsaturated monocyclic carbocyclic ring, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 4-membered saturated or partially unsaturated monocyclic carbocyclic ring, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 5-membered saturated or partially unsaturated monocyclic carbocyclic ring, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 6-membered saturated or partially unsaturated monocyclic carbocyclic ring, wherein Cy^2 is substituted with m instances of R^2.

[0063] In some embodiments, Cy^2 is  ,  ,  ,  , or  , wherein R^2 and m are as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 and m are as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 and m are as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 and m are as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

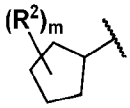
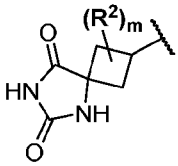
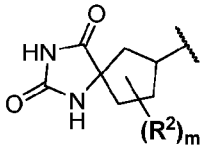
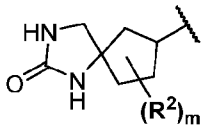
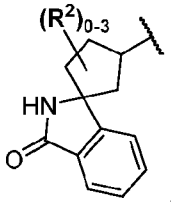
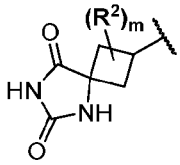
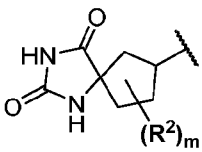
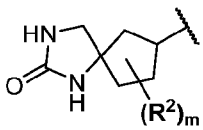
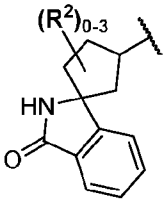

, wherein R^2 and m are as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 and m are as defined in embodiments and classes and subclasses herein.

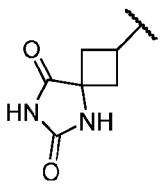
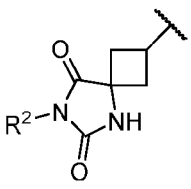
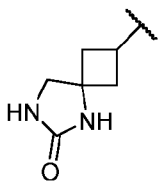
[0064] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein.

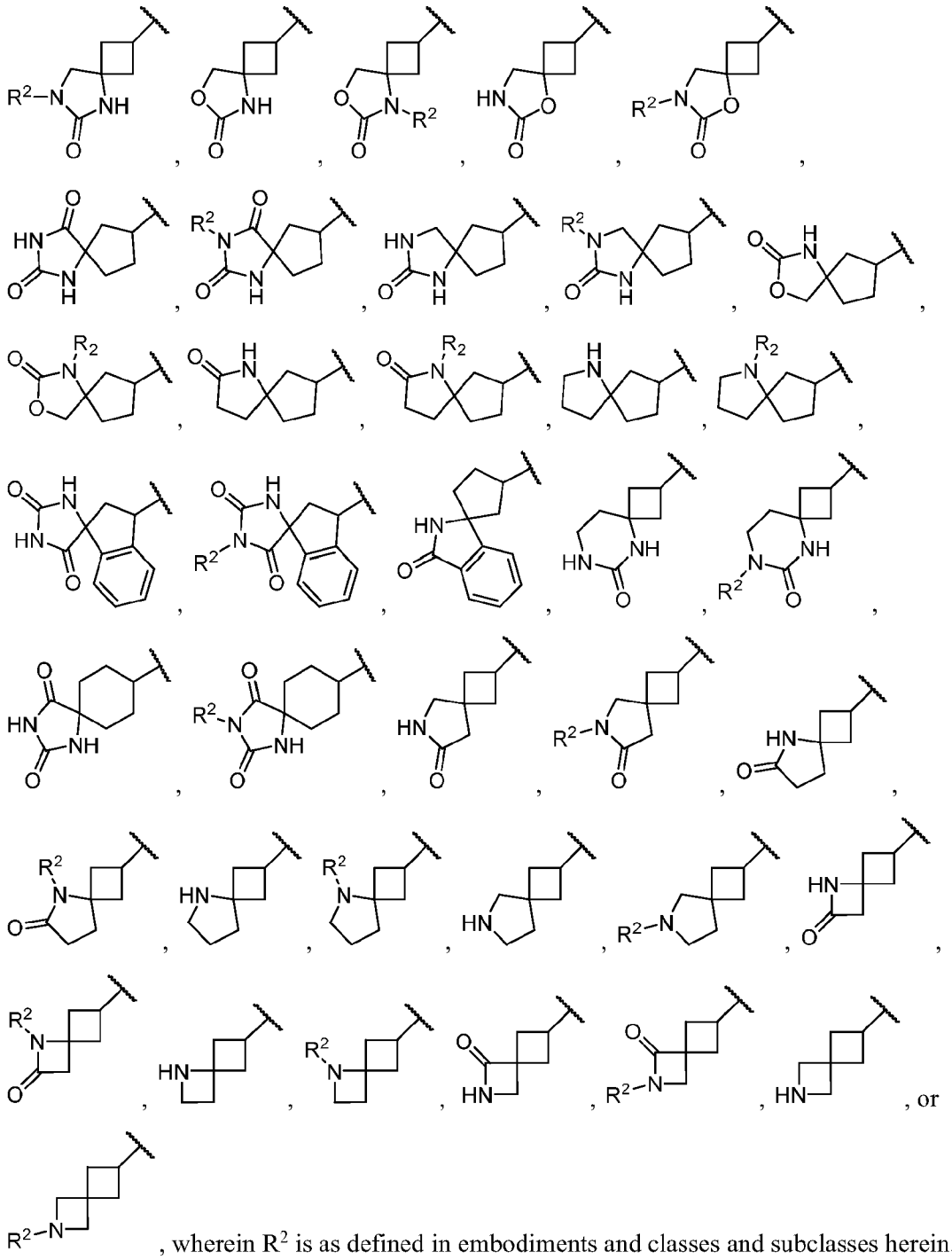
subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein.

[0065] In some embodiments, Cy^2 is a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is an 8-10 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is

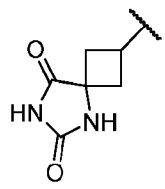
substituted with m instances of R^2. In some embodiments, Cy^2 is an 8-9 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is an 8-membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 9-membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2.

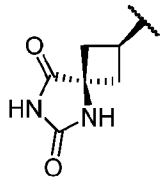
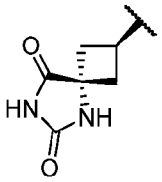
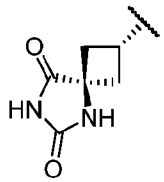
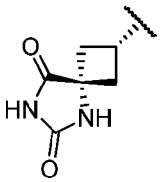
[0066] In some embodiments, Cy^2 is  ,  ,  ,  ,  , or  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  .

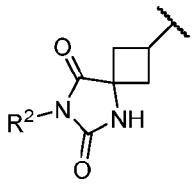
[0067] In some embodiments, Cy^2 is  ,  ,  ,



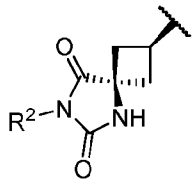
, wherein R^2 is as defined in embodiments and classes and subclasses herein.

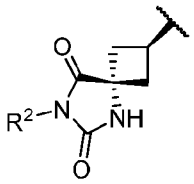
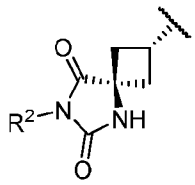
[0068] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is

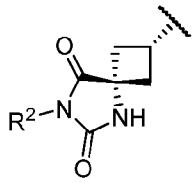

. In some embodiments, Cy^2 is 
. In some embodiments, Cy^2 is 
. In some embodiments, Cy^2 is 
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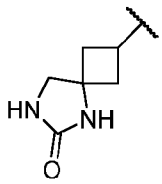


[0069] In some embodiments, Cy^2 is , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

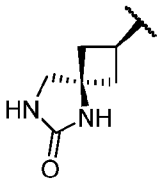

, wherein R^2 is as defined in embodiments and classes and subclasses herein.

In some embodiments, Cy^2 is 
, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is 
, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

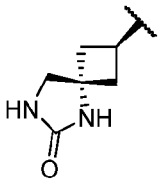

, wherein R^2 is as defined in embodiments and classes and subclasses herein.



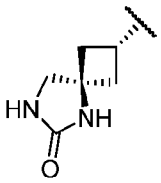
[0070] In some embodiments, Cy^2 is . In some embodiments, Cy^2 is



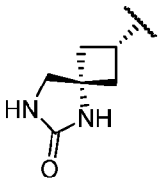
. In some embodiments, Cy^2 is



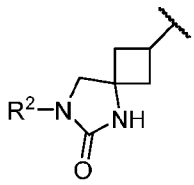
. In some embodiments, Cy^2 is



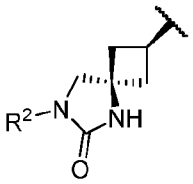
. In some embodiments, Cy^2 is



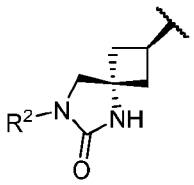
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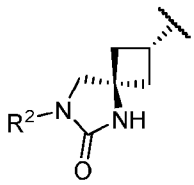
[0071] In some embodiments, Cy^2 is , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is



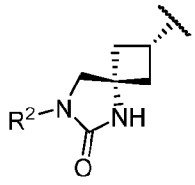
, wherein R^2 is as defined in embodiments and classes and subclasses herein.



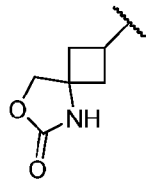
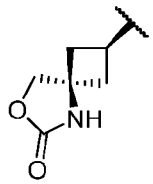
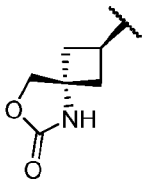
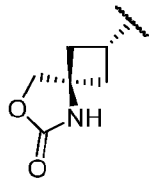
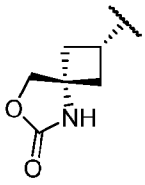
In some embodiments, Cy^2 is , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

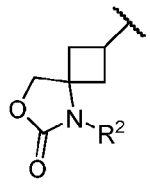
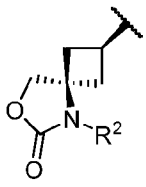
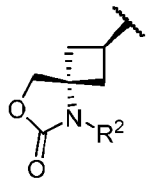
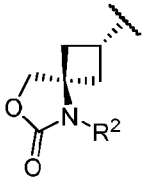


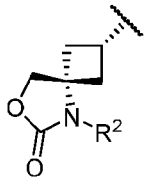
, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

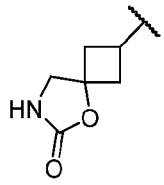
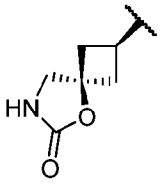
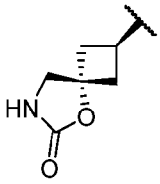
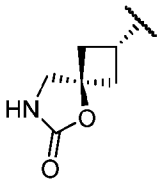
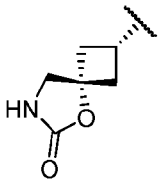


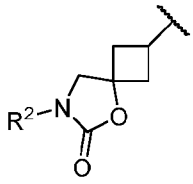
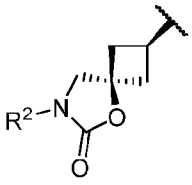
, wherein R^2 is as defined in embodiments and classes and subclasses herein.

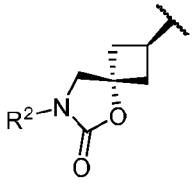
[0072] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  .

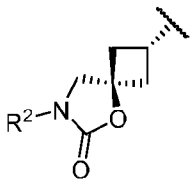
[0073] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes

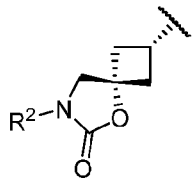
and subclasses herein. In some embodiemnts, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein.

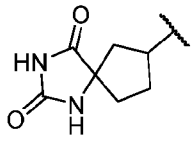
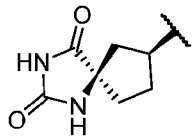
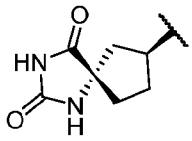
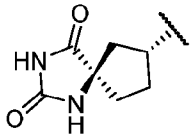
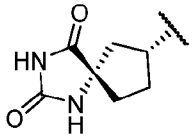
[0074] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  .

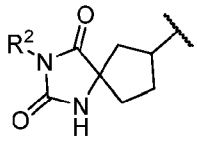
[0075] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein.

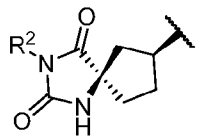
In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and

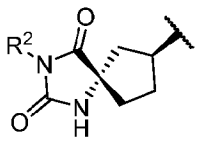
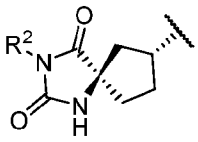
classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

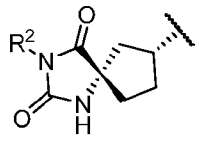
 , wherein R^2 is as defined in embodiments and classes and subclasses herein.

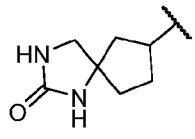
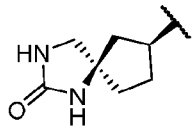
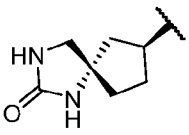
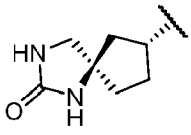
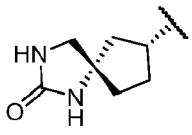
[0076] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  .

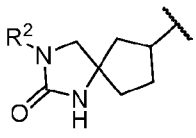
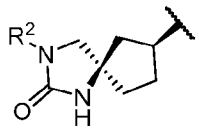
[0077] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

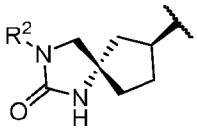
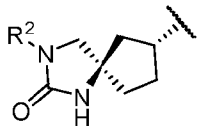
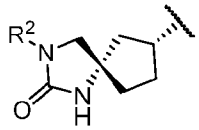
 , wherein R^2 is as defined in embodiments and classes and subclasses herein.

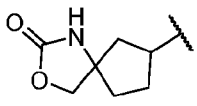
In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is

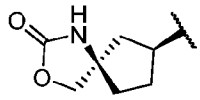
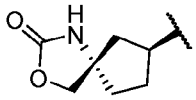
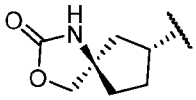
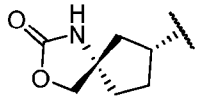
as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein.

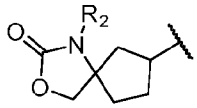
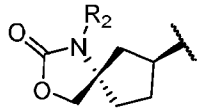
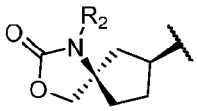
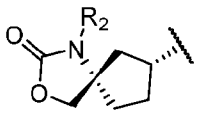
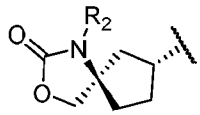
[0078] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  .

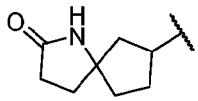
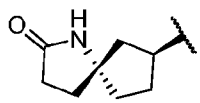
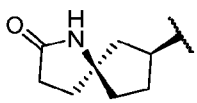
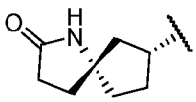
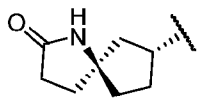
[0079] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein.

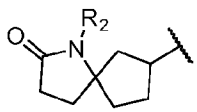
In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein.

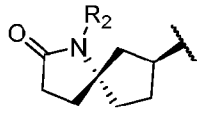
[0080] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is

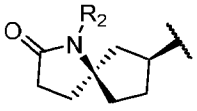
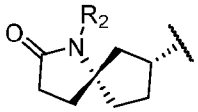
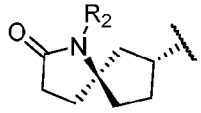
 . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  .

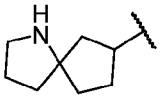
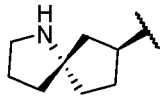
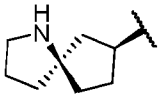
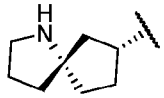
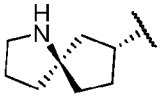
[0081] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein.

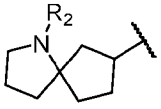
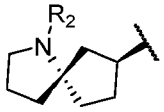
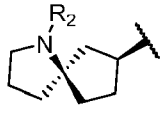
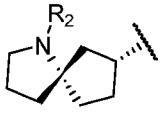
[0082] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  .

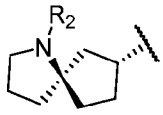
[0083] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

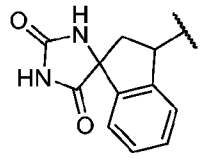
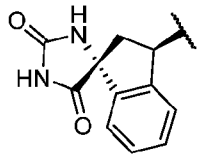
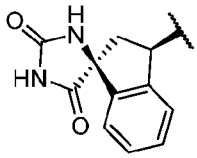
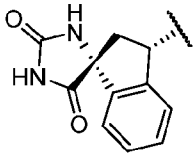
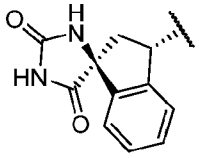

, wherein R^2 is as defined in embodiments and classes and subclasses herein.

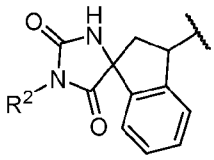
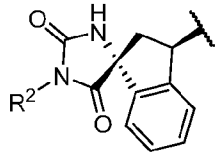
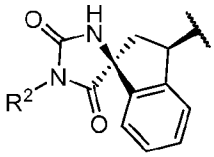
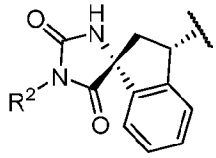
In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein.

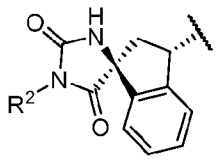
[0084] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  .

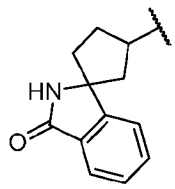
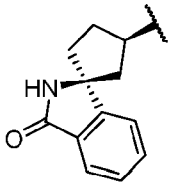
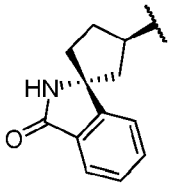
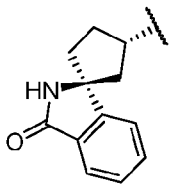
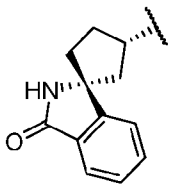
[0085] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and

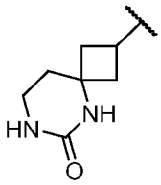
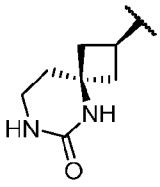
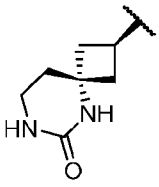
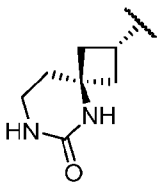
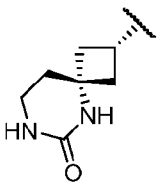
classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein.

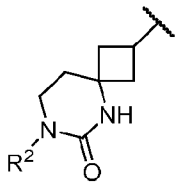
[0086] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  .

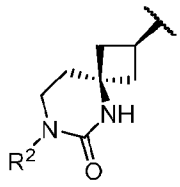
[0087] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses

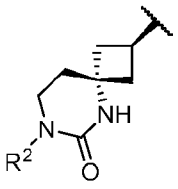
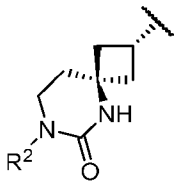
herein. In some embodiments, Cy^2 is  , wherein R^2 is a defined in embodiments and classes and subclasses herein.

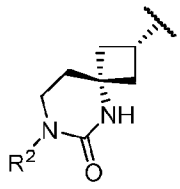
[0088] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  .

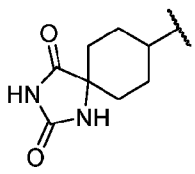
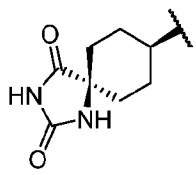
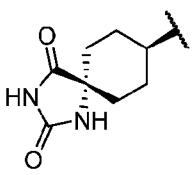
[0089] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  .

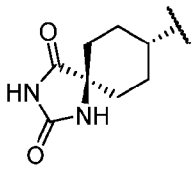
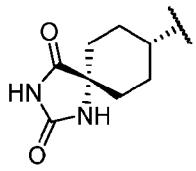
[0090] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

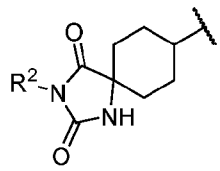
 , wherein R^2 is as defined in embodiments and classes and subclasses herein.

In some embodiemnts, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

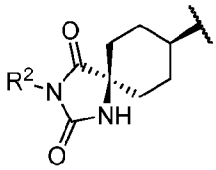
 , wherein R^2 is as defined in embodiments and classes and subclasses herein.

[0091] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2

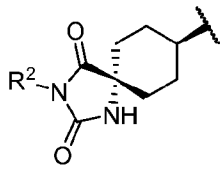
is  . In some embodiments, Cy^2 is  .



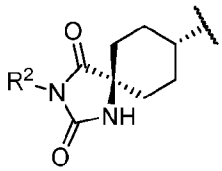
[0092] In some embodiments, Cy^2 is , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is



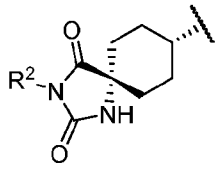
, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is



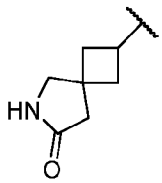
, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is



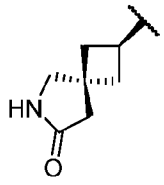
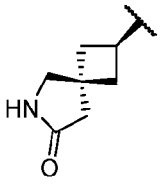
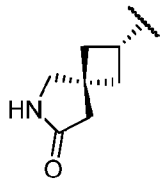
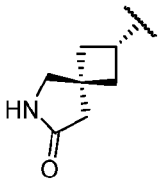
, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

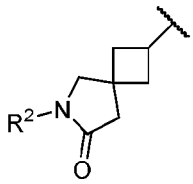


, wherein R^2 is as defined in embodiments and classes and subclasses herein.

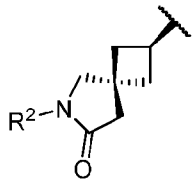


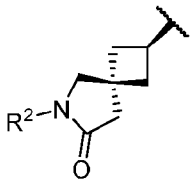
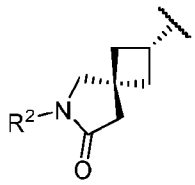
[0093] In some embodiments, Cy^2 is . In some embodiments, Cy^2 is

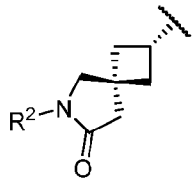

. In some embodiments, Cy^2 is 
. In some embodiments, Cy^2 is 
. In some embodiments, Cy^2 is 
.

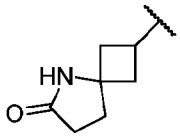
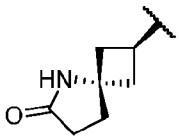
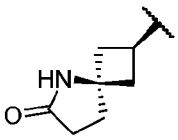
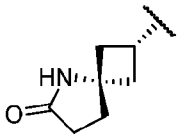
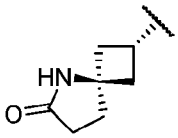


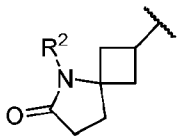
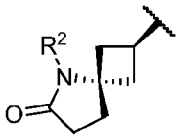
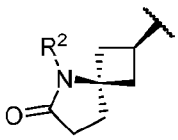
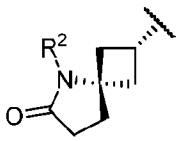
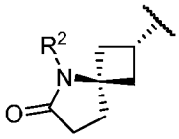
[0094] In some embodiments, Cy^2 is , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

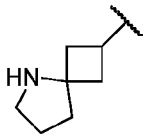

, wherein R^2 is as defined in embodiments and classes and subclasses herein.

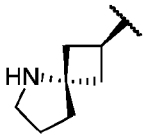
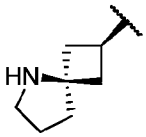
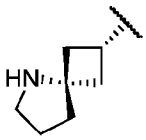
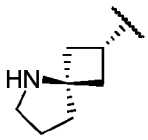
In some embodiments, Cy^2 is 
, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is 
, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

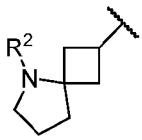
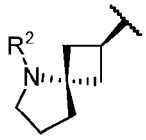
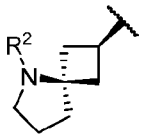
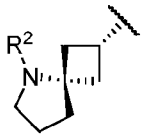
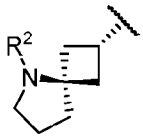

, wherein R^2 is as defined in classes and subclasses herein.

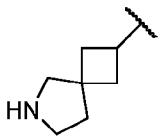
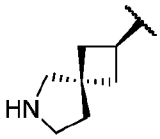
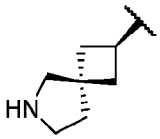
[0095] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  .

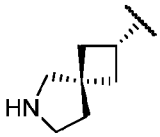
[0096] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in classes and subclasses herein.

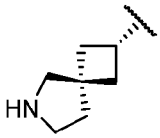
[0097] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is


. In some embodiments, Cy^2 is 
. In some embodiments, Cy^2 is 
. In some embodiments, Cy^2 is 
.

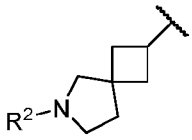
[0098] In some embodiments, Cy^2 is 
, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is 
, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is 
, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is 
, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is 
, wherein R^2 is as defined in embodiments and classes and subclasses herein.

[0099] In some embodiments, Cy^2 is 
. In some embodiments, Cy^2 is 
. In some embodiments, $Cy^2$is 
. In some embodiments, Cy^2 is

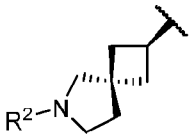


. In some embodiments, Cy^2 is 

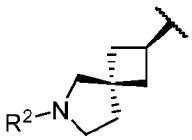
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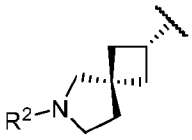
[0100] In some embodiments, Cy^2 is 

, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

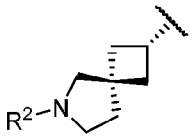


, wherein R^2 is as defined in embodiments and classes and subclasses herein.

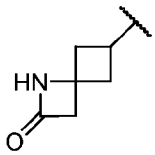
In some embodiments, Cy^2 is 

, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is 

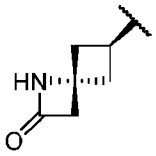
, wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

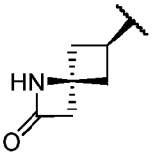


, wherein R^2 is as defined in embodiments and classes and subclasses herein.

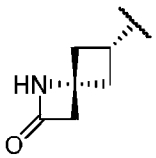
[0101] In some embodiments, Cy^2 is 

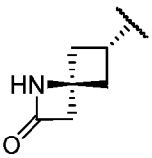
. In some embodiments, Cy^2 is



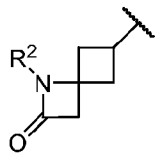
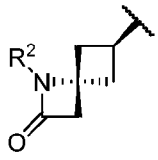
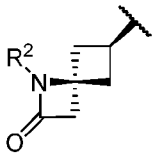
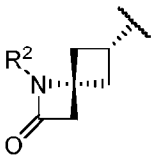
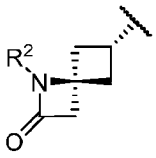
. In some embodiments, Cy^2 is 

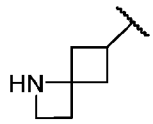
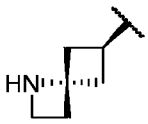
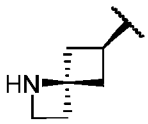
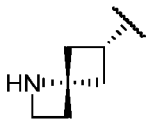
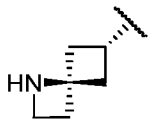
. In some embodiments, Cy^2 is

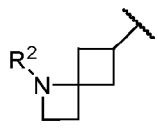


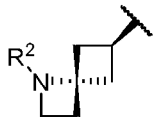
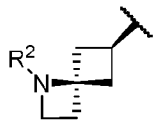
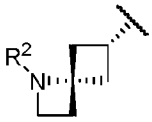
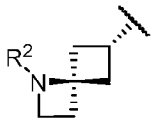
. In some embodiments, Cy^2 is 

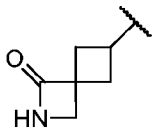
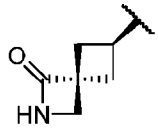
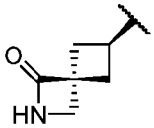
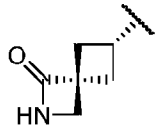
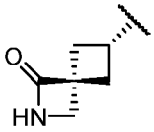
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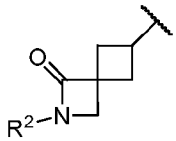
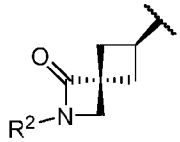
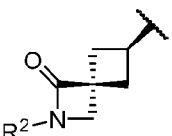
[0102] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein.

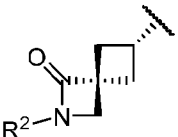
[0103] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  .

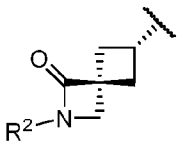
[0104] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments

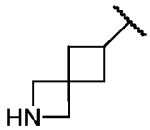
and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein.

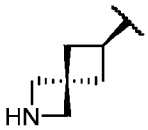
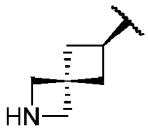
[0105] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is  .

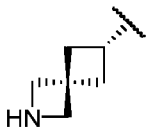
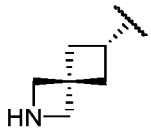
[0106] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and

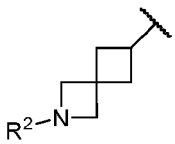
classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

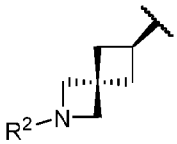
 , wherein R^2 is as defined in embodiments and classes and subclasses herein.

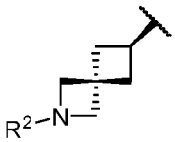
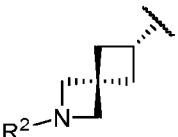
[0107] In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is

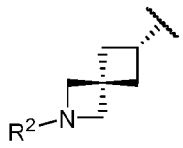
 . In some embodiments, Cy^2 is  . In some embodiments, Cy^2 is

 . In some embodiments, Cy^2 is  .

[0108] In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

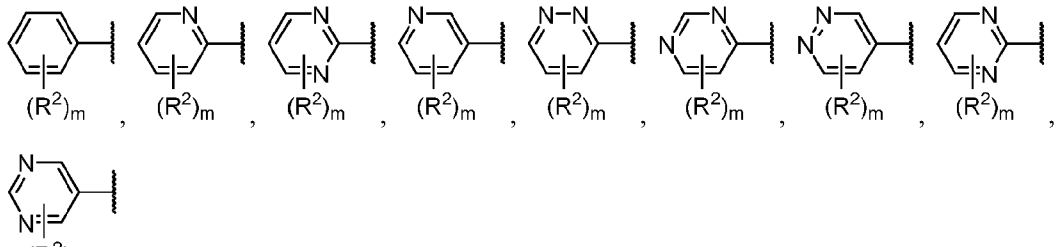
 , wherein R^2 is as defined in embodiments and classes and subclasses herein.

In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

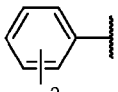
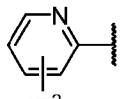


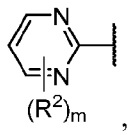
, wherein R^2 is as defined in embodiments and classes and subclasses herein.

[0109] In some embodiments, Cy^2 is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is a 5-6 membered monocyclic heteroaryl ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is pyridyl, pyrimidinyl, pyridazinyl, triazinyl, or tetrazinyl. In some embodiments, Cy^2 is

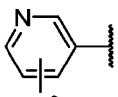
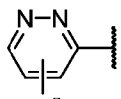


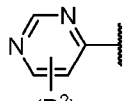
, wherein each R^2 is as defined in embodiments and classes and subclasses herein.

In some embodiments, Cy^2 is  , wherein each R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein each R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is

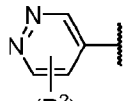
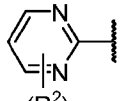


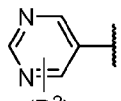
, wherein each R^2 is as defined in embodiments and classes and subclasses herein.

In some embodiments, Cy^2 is  , wherein each R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein each R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is



, wherein each R^2 is as defined in embodiments and classes and subclasses herein.

In some embodiments, Cy^2 is  wherein each R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is  , wherein each R^2 is as defined in embodiments and classes and subclasses herein. In some embodiments, Cy^2 is



, wherein each R^2 is as defined in embodiments and classes and subclasses herein.

[0110] In some embodiments, Cy^2 is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein Cy^2 is substituted with m instances of R^2. In some embodiments, Cy^2 is aziridinyl, oxiranyl, azetidinyl, oxetanyl, pyrrolidinyl, piperidinyl, piperazinyl, tetrahydrofuranyl, tetrahydropyranyl, dioxanyl, morpholinyl, tetrahydrothiofuranyl, tetrahydrothiopyranyl, thiomorpholinyl, azepanyl, homomorpholinyl, and homothiomorpholinyl. In some embodiments, Cy^2 is azetidinyl, pyrrolidinyl, or piperidinyl.

In some embodiments, Cy^2 is  .

[0111] In some embodiments, Cy^2 is selected from the groups depicted in the compounds in Table 1.

[0112] As defined generally above, Q is L^Q, wherein L^Q is as defined in embodiments and classes and subclasses herein.

[0113] In some embodiments, Q is a covalent bond, or a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by $-CH(R^L)-$, $-C(R^L)_2-$, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, $-N(R)-$, $-N(R)C(O)-$, $-C(O)N(R)-$, $-N(R)S(O)_2-$, $-S(O)_2N(R)-$, $-O-$, $-C(O)-$, $-OC(O)-$, $-C(O)O-$, $-S-$, $-S(O)-$, or $-S(O)_2-$. In some embodiments, Q is a covalent bond. In some embodiments, Q is a C_{1-4} bivalent saturated or unsaturated,

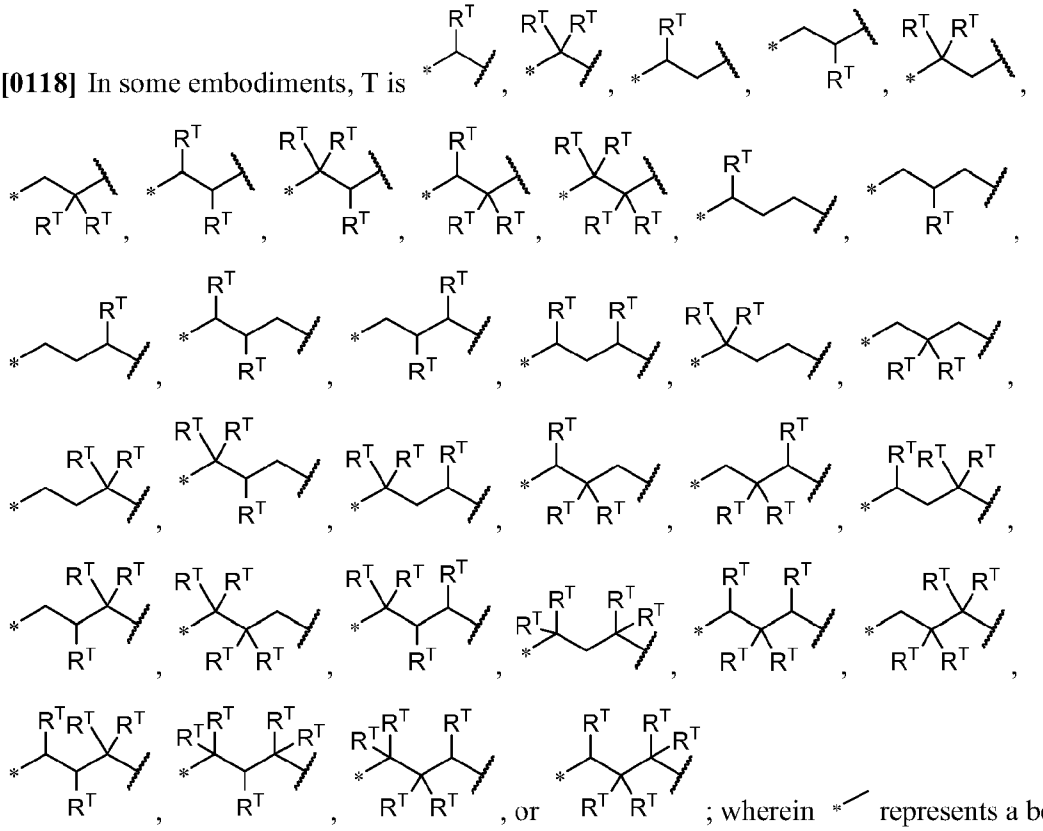
straight or branched hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by -CH(R^L)-, -C(R^L)$_2$-, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, -N(R)S(O)$_2$-, -S(O)$_2$N(R)-, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or -S(O)$_2$-. In some embodiments, Q is a C_{1-4} bivalent saturated or unsaturated, straight, or branched hydrocarbon chain.

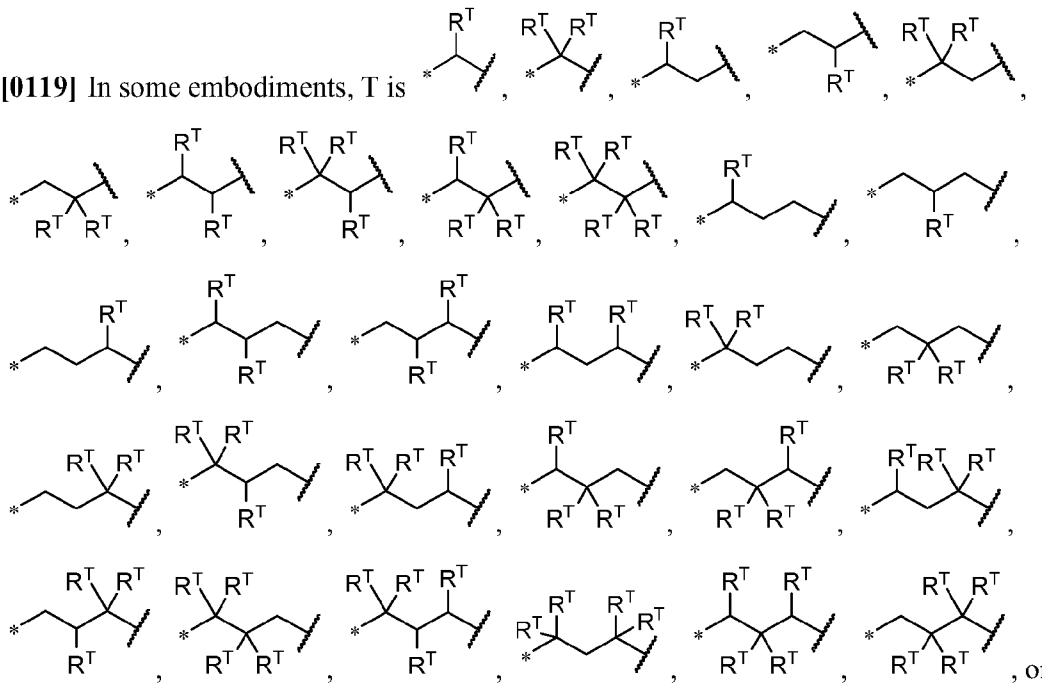
[0114] In some embodiments, Q is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by -CH(R^L)-, -C(R^L)$_2$-, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, -N(R)S(O)$_2$-, -S(O)$_2$N(R)-, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or -S(O)$_2$-. In some embodiments, Q is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by -CH(R^L)-, -C(R^L)$_2$-, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, -N(R)S(O)$_2$-, -S(O)$_2$N(R)-, or -O-. In some embodiments, Q is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain.

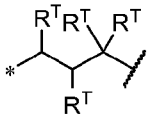
[0115] In some embodiments, Q is -C(O)N(R)-, -C(O)N(R)CH$_2$-, -N(R)-, -CH$_2$C(O)N(R)- , -N(R)C(O)N(R)-, or a covalent bond. In some embodiments, Q is -C(O)N(H)-, -C(O)N(H)CH$_2$-, -N(H)-, -CH$_2$C(O)N(H)-, -N(H)C(O)N(H)-, or a covalent bond. In some embodiments, Q is -C(O)N(H)-, -C(O)N(H)CH$_2$-, or a covalent bond. In some embodiments, Q is -C(O)N(H)- or -C(O)N(H)CH$_2$-. In some embodiments, Q is -C(O)N(H)-. In some embodiments, Q is -C(O)N(H)CH$_2$-. In some embodiments, Q is -N(H)-. In some embodiments, Q is -CH$_2$C(O)N(H)-. In some embodiments, Q is -N(H)C(O)N(H)-. In some embodiments, Q is a covalent bond.

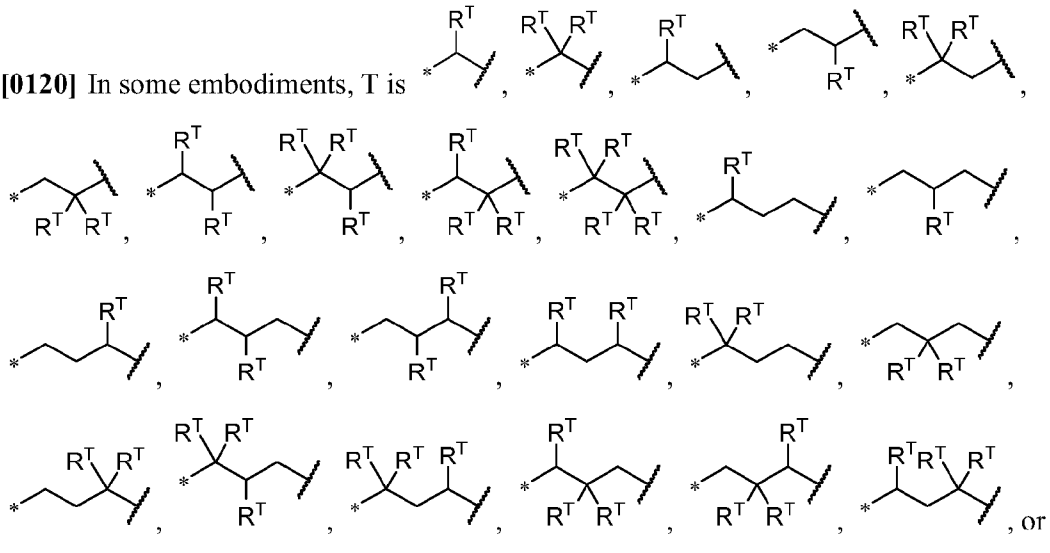
[0116] In some embodiments, Q is selected from the groups depicted in the compounds in Table 1.

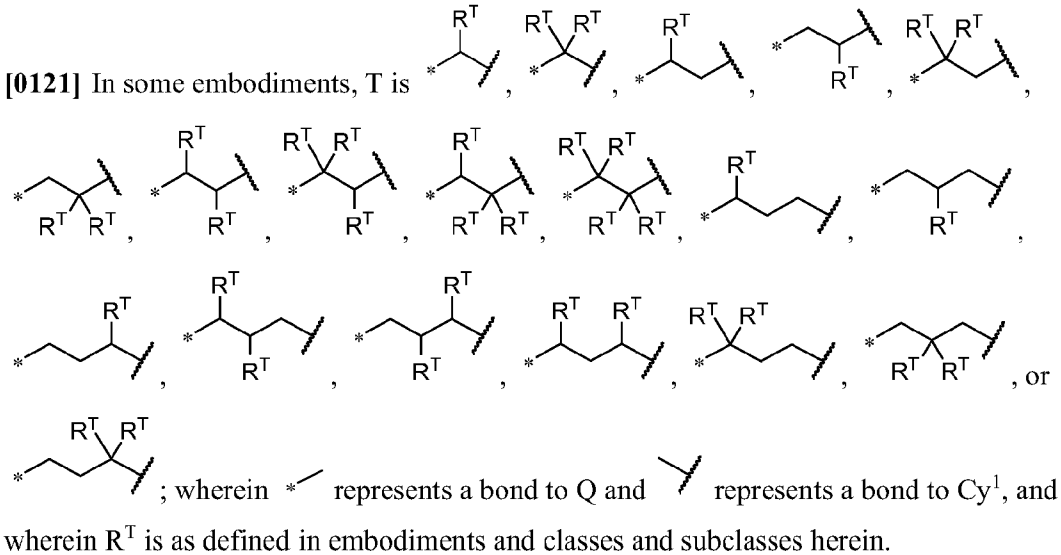
[0117] As defined generally above, T is a bivalent C_{1-3} aliphatic chain substituted with q instances of R^T. In some embodiments, T is a bivalent C_{2-3} aliphatic chain substituted with q instances of R^T. In some embodiments, T is a bivalent C_{1-2} aliphatic chain substituted with q instances of R^T. In some embodiments, T is a bivalent C_1 aliphatic chain substituted with q instances of R^T. In some embodiments, T is a bivalent C_2 aliphatic chain substituted with q instances of R^T. In some embodiments, T is a bivalent C_3 aliphatic chain substituted with q instances of R^T.

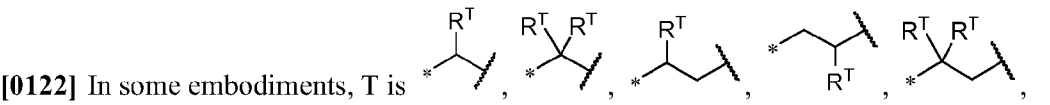
[0118] In some embodiments, T is  ; wherein represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein.

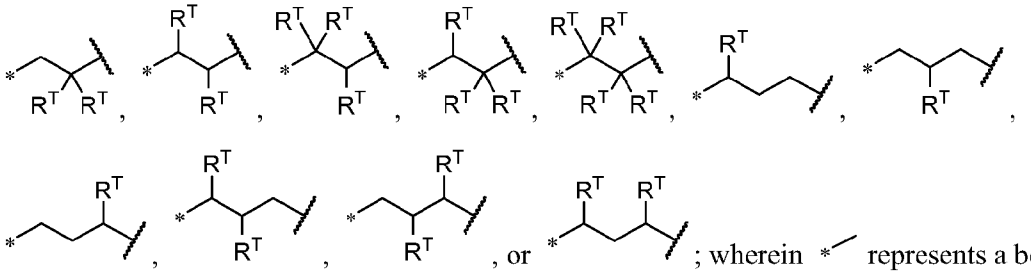
[0119] In some embodiments, T is 

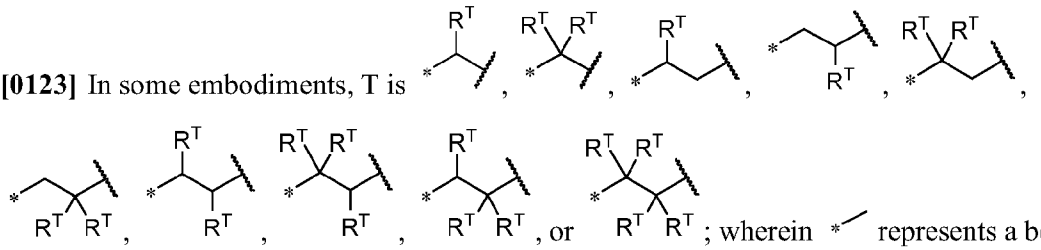

; wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein.

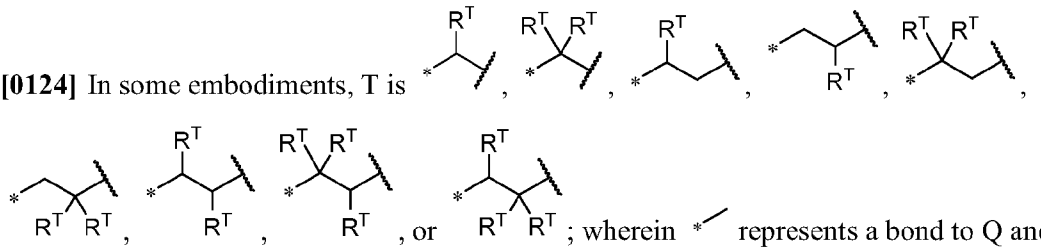
[0120] In some embodiments, T is 
; wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein.

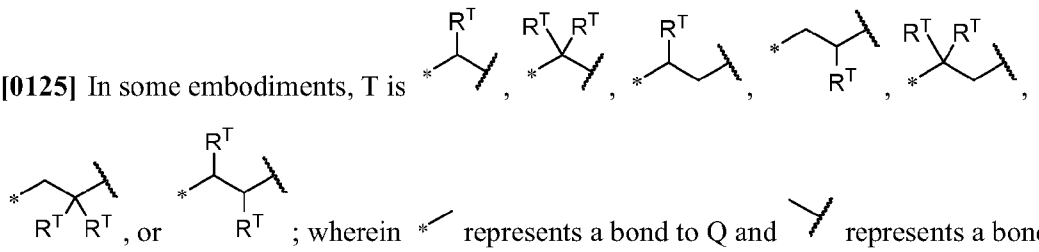
[0121] In some embodiments, T is 
; wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein.

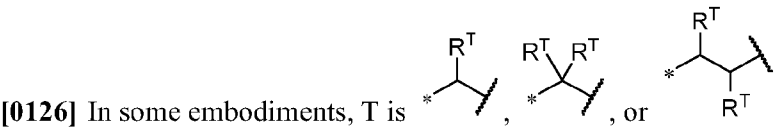
[0122] In some embodiments, T is 


; wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein.

[0123] In some embodiments, T is 
; wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein.

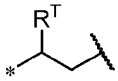
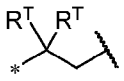
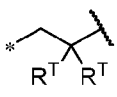
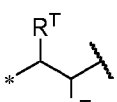
[0124] In some embodiments, T is 
; wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein.

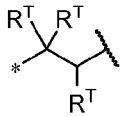
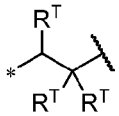
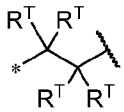
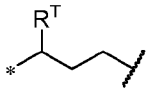
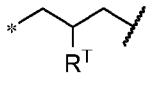
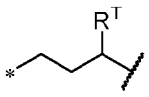
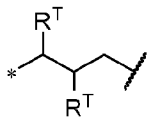
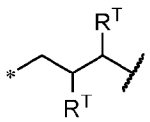
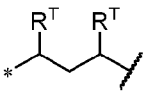
[0125] In some embodiments, T is 
; wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein.

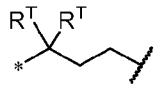
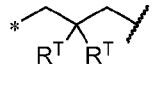
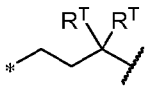
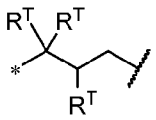
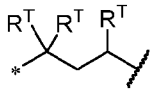
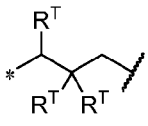
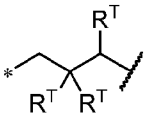
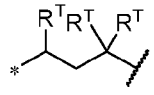
[0126] In some embodiments, T is 
; wherein * represents a

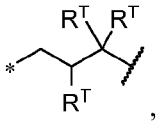
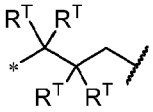
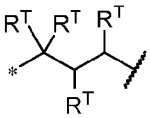
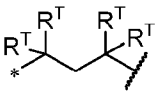
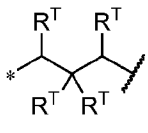
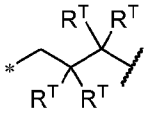
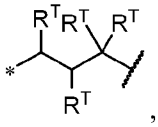
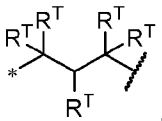
bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein.

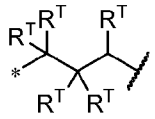
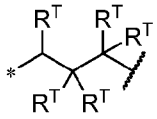
[0127] In some embodiments, T is  or  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein.

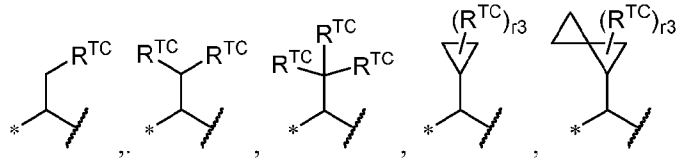
[0128] In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein.

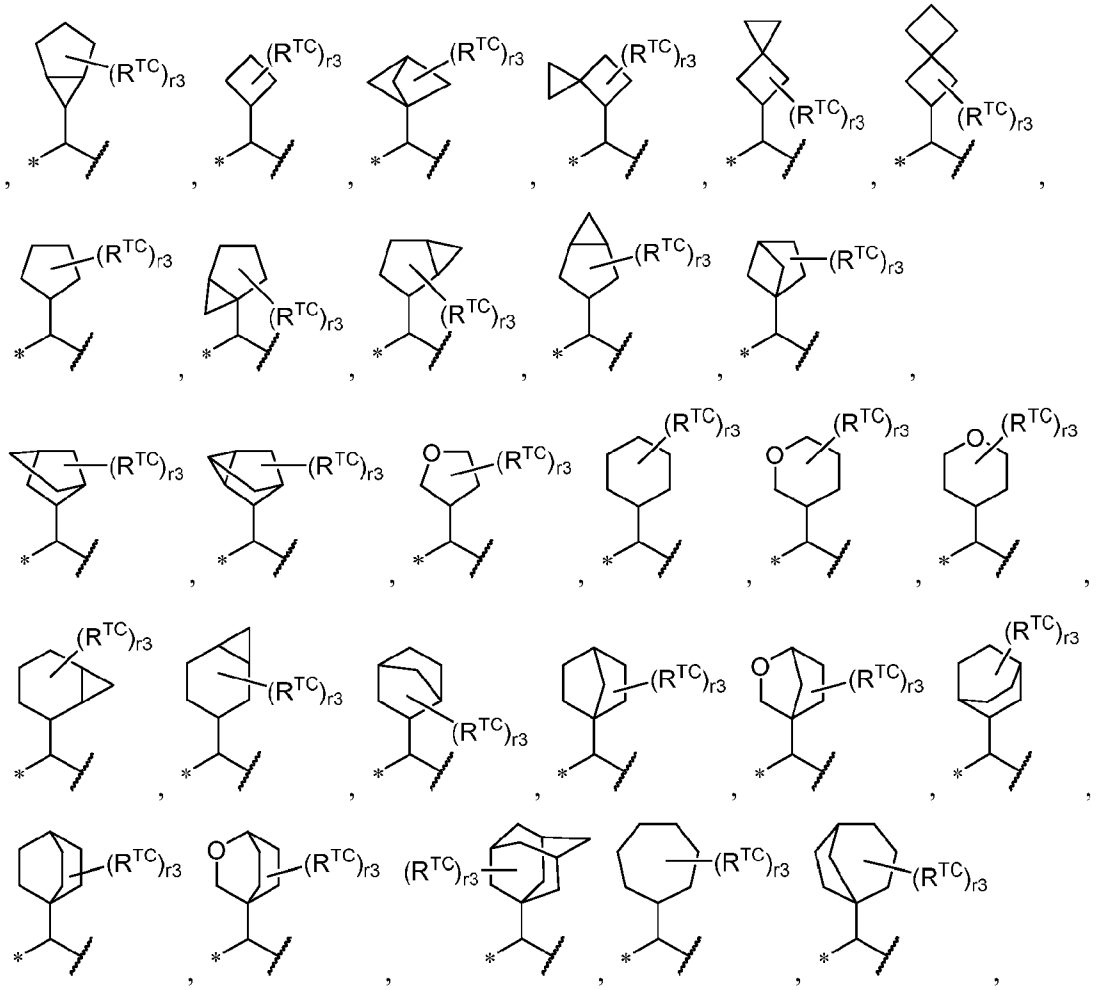
In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond

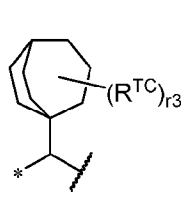
to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is,  , wherein represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is

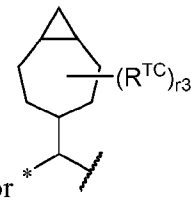

, wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is 
, wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is 
, wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is 
, wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is 
, wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is 
, wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is 
, wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is 
, wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein.

In some embodiments, T is  , wherein represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein represents a bond to Q and  represents a bond to Cy^1, and wherein R^T is as defined in embodiments and classes and subclasses herein.

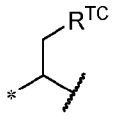
[0129] In some embodiments, T is  ,

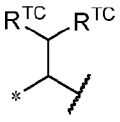


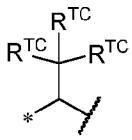


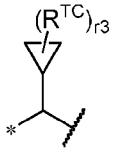
, or 

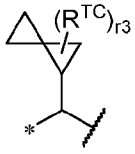
; wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein.

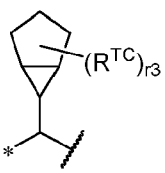
[0130] In some embodiments, T is 

, wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} is as defined in embodiments and classes and subclasses herein. In some embodiments, T is 

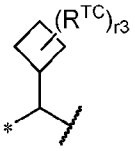
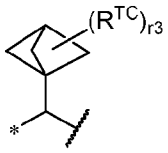
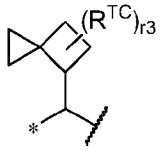
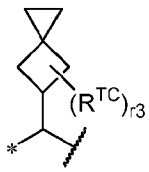
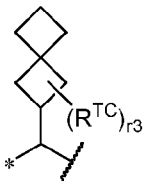
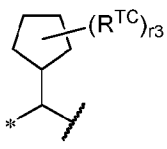
, wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} is as defined in embodiments and classes and subclasses herein. In some embodiments, T is 

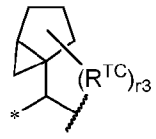
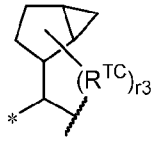
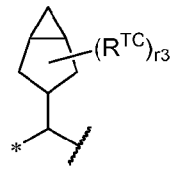
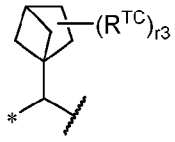
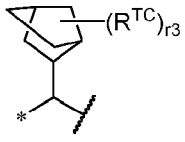
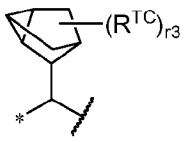
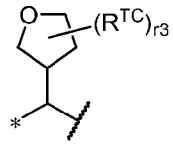
, wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} is as defined in embodiments and classes and subclasses herein. In some embodiments, T is 

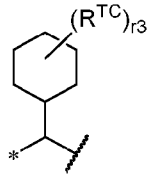
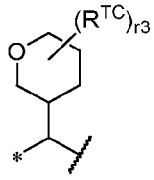
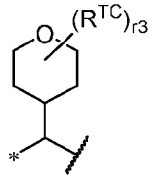
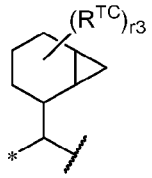
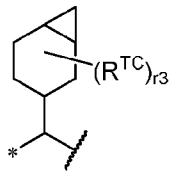
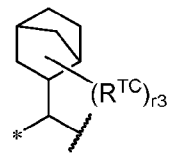
, wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is 

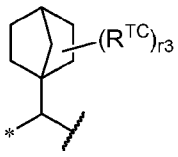
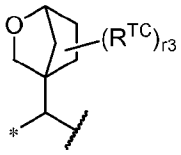
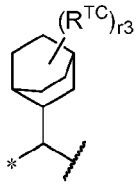
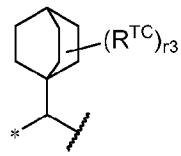
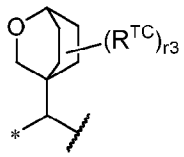
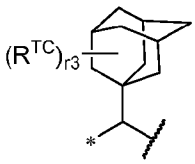
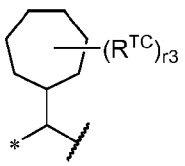
, wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is 

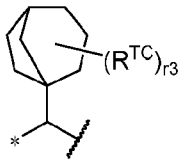
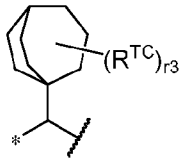
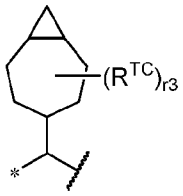
, wherein * represents a bond to Q and represents a

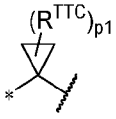
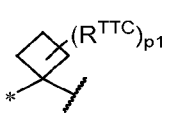
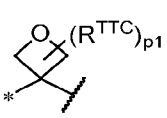
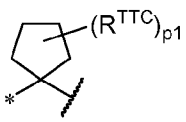
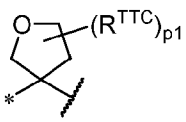
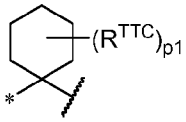
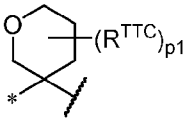
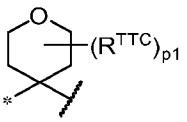
bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and Y represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and Y represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is,  , wherein * represents a bond to Q and Y represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and Y represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and Y represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and Y represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T

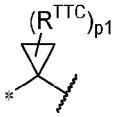
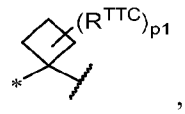
is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in

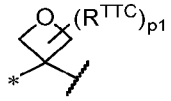
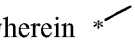
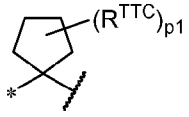
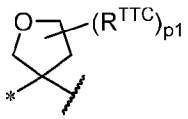
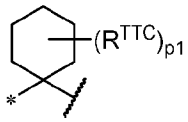
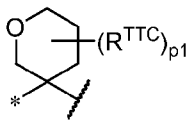
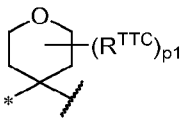
embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some

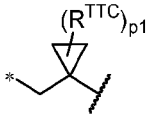
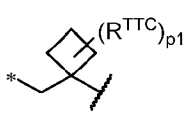
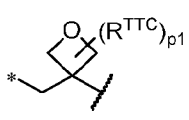
embodiments, T is  , wherein * represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is ,

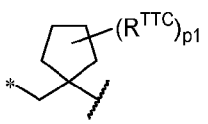
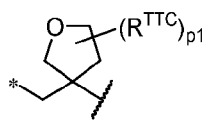
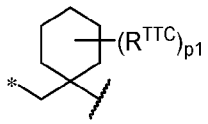
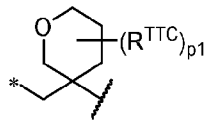
wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TC} and r^3 are as defined in embodiments and classes and subclasses herein.

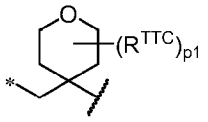
[0131] In some embodiments, T is  ,  ,  ,  ,  ,  ,  , or  ; wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein.

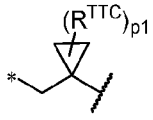
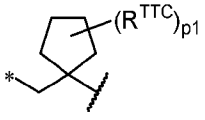
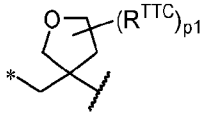
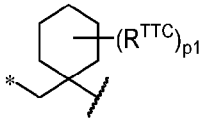
[0132] In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a

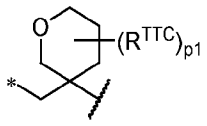
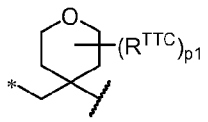
bond to Q and  represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein  represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein.

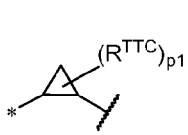
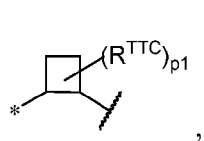
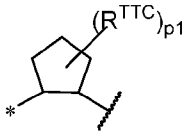
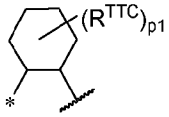
[0133] In some embodiments, T is  ,  , 

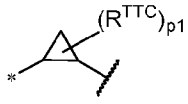
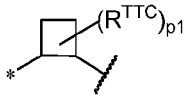
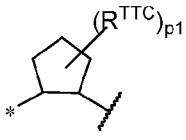
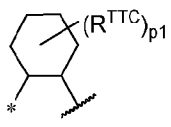




, or

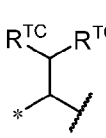
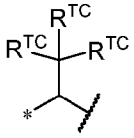
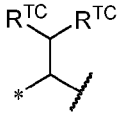
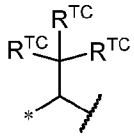
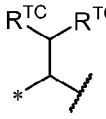
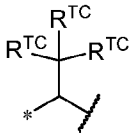
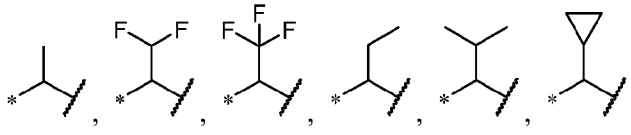
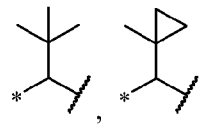
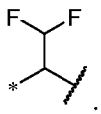
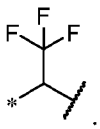
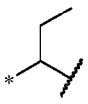
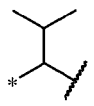
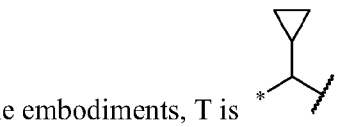
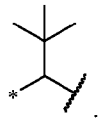
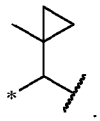

; wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein.

[0134] In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In

some embodiments, T is  , wherein * represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein.

[0135] In some embodiments, T is  ,  ,  , or  ; wherein * represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein.

[0136] In some embodiments, T is  , wherein * represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and  represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is  , wherein * represents a bond to Q and 

represents a bond to Cy^1, and wherein R^{TTC} and p^1 are as defined in embodiments and classes and subclasses herein. In some embodiments, T is.  , or  , wherein each R^{TC} is as defined in embodiments and classes and subclasses herein. In some embodiments, T is.  , or  , wherein each R^{TC} is as defined in embodiments and classes and subclasses herein. In some embodiments, T is.  , or  , wherein each R^{TC} is independently deuterium, halogen, or an optionally substituted group selected from C_{1-6} aliphatic. In some embodiments, T is  ,  , . In some embodiments, T is.  . In some embodiments, T is  . In some embodiments, T is  . In some embodiments, T is  . In some embodiments, T is  . In some embodiments, T is  . In some embodiments, T is  . In some embodiments, T is  .

[0137] In some embodiments, T is selected from the groups depicted in the compounds in Table 1.

[0138] As defined generally above, each R^1 is independently $-L^1-R^{1A}$; or two instances of R^1 are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and

sulfur; wherein the ring is substituted with p^2 instances of R^{11C}; or one instance of R^T and one instance of R^1 are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^4 instances of R^{T1C}.

[0139] In some embodiments, each R^1 is independently $-L^1-R^{1A}$. In some embodiments, each R^1 is independently $-R^{1A}$.

[0140] In some embodiments, each R^1 is independently R^A. In some embodiments, each R^1 (*i.e.*, $-L^1-R^{1A}$ taken together) is independently oxo, deuterium, halogen, -CN, $-NO_2$, -OR, $-SF_5$, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -S(O)(NCN)R, -S(NCN)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$; wherein R is as defined in embodiments and classes and subclasses herein.

[0141] In some embodiments, R^1 is oxo. In some embodiments, R^1 is deuterium. In some embodiments, each R^1 is independently halogen. In some embodiments, R^1 is -CN. In some embodiments, R^1 is $-NO_2$. In some embodiments, each R^1 is independently -OR, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, R^1 is $-SF_5$. In some embodiments, each R^1 is independently -SR, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently $-NR_2$, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently $-S(O)_2R$, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently $-S(O)_2NR_2$, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, R^1 is $-S(O)_2F$. In some embodiments, each R^1 is independently -S(O)R, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently $-S(O)NR_2$, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -S(O)(NR)R, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -S(O)(NCN)R, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -S(NCN)R, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -C(O)R, wherein R is as

defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -C(O)OR, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -C(O)NR_2, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -C(O)N(R)OR, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -OC(O)R, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -OC(O)NR_2, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -N(R)C(O)OR, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -N(R)C(O)R, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -N(R)C(O)NR_2, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -N(R)C(NR)NR_2, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -N(R)S(O)$_2$$NR_2$, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -N(R)S(O)$_2$R, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -P(O)R_2, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -P(O)(R)OR, wherein R is as defined in embodiments and classes and subclasses herein. In some embodiments, each R^1 is independently -B(OR)$_2$, wherein R is as defined in embodiments and classes and subclasses herein.

[0142] In some embodiments, each R^1 is independently R^B substituted by r^1 instances of R^{1C}. In some embodiments, R^1 (*i.e.*, $-L^1$-R^{1A} taken together) is a C_{1-6} aliphatic chain; phenyl; naphthyl; cubanyl; adamantyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4

heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}.

[0143] In some embodiments, each R^1 (*i.e.*, $-L^1-R^{1A}$ taken together) is independently halogen, -CN, -OR, or a C_{1-6} aliphatic chain substituted with r^1 halogens. In some embodiments, each R^1 is independently halogen, -CN, -OR, or a C_{1-6} aliphatic chain substituted with 0-5 halogens. In some embodiments, each R^1 is independently halogen, -CN, -O-(C_{1-6} aliphatic chain substituted with 0-5 halogens), or a C_{1-6} aliphatic chain substituted with 0-5 halogens. In some embodiments, each R^1 is independently halogen or a C_{1-6} aliphatic chain substituted with 0-5 halogens. In some embodiments, each R^1 is independently halogen or a C_{1-6} aliphatic chain substituted with 0-4 halogens. In some embodiments, each R^1 is independently halogen or a C_{1-6} aliphatic chain substituted with 0-3 halogens. In some embodiments, each R^1 is independently halogen or a C_{1-3} aliphatic chain substituted with 0-3 halogens. In some embodiments, each R^1 is independently halogen or a C_{1-3} aliphatic chain substituted with 0-2 halogens.

[0144] In some embodiments, each R^1 is independently a halogen selected from Br, Cl, and F. In some embodiments, each R^1 is independently a halogen selected from Cl and F. In some embodiments, R^1 is Cl. In some embodiments, R^1 is F.

[0145] In some embodiments, at least one R^1 is halogen. In some embodiments, at least two R^1 are halogen. In some embodiments, at least three R^1 are halogen. In some embodiments, one instance of R^1 is Cl. In some embodiments, two instances of R^1 are Cl. In some embodiments, one instance of R^1 is F. In some embodiments, two instances of R^1 are F. In some embodiments, one instance of R^1 is Cl, and one instance of R^1 is F. In some embodiments, two instances of R^1 are Cl, and one instance of R^1 is F. In some embodiments, one instance of R^1 is Cl, and two instances of R^1 are F.

[0146] In some embodiments, each R^1 is independently a C_{1-6} aliphatic chain substituted with 0-5 halogens. In some embodiments, each R^1 is independently a C_{1-6} aliphatic chain substituted with 0-4 halogens. In some embodiments, each R^1 is independently a C_{1-6} aliphatic chain substituted with 0-3 halogens. In some embodiments, each R^1 is independently a C_{1-3} aliphatic chain substituted with 0-3 halogens. In some embodiments, each R^1 is independently a C_{1-3} aliphatic chain substituted with 0-2 halogens.

[0147] In some embodiments, at least one R^1 is C_{1-3} aliphatic optionally substituted with 1-3 halogen. In some embodiments, at least one R^1 is -O-C_{1-3} aliphatic optionally substituted with 1-3 halogen.

[0148] In some embodiments, each R^1 (*i.e.*, $-L^1$-R^{1A} taken together) is independently halogen, -OH, $-OCH_3$, or C_{1-3} aliphatic optionally substituted with 1-3 halogen. In some embodiments, each R^1 is independently fluorine, chlorine, $-OCH_3$, or $-CH_3$. In some embodiments, R^1 is -OH. In some embodiments, R^1 is $-CH_3$. In some embodiments, R^1 is $-OCH_3$. In some embodiments, R^1 is $-CF_3$. In some embodiments, R^1 is $-CHF_2$.

[0149] In some embodiments, two instances of R^1 are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^2 instances of R^{11C}; wherein p^2 and R^{11C} are as defined in embodiments and classes and subclasses herein.

[0150] In some embodiments, one instance of R^T and one instance of R^1 are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^4 instances of R^{T1C}; wherein p^4 and R^{T1C} are as defined in embodiments and classes and subclasses herein.

[0151] In some embodiments, R^1 is selected from the groups depicted in the compounds in Table 1.

[0152] As defined generally above, each R^2 is independently $-L^2$-R^{2A}; or two instances of R^2 are taken together with their intervening atoms to form a 3-7 membered saturated, partially unsaturated, or aromatic carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^3 instances of R^{22C}.

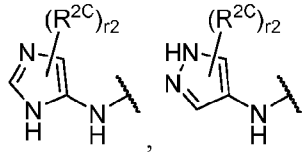
[0153] In some embodiments, each R^2 is independently $-L^2$-R^{2A}. In some embodiments each R^2 is independently R^{2A}.

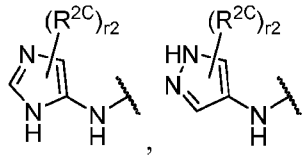
[0154] In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is -N(R)-R^{2A}, wherein R and R^{2A} are as defined in embodiments and classes and subclasses herein. In some embodiments,

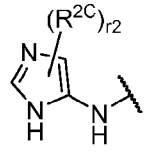
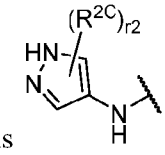
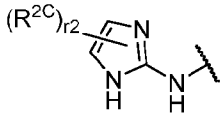
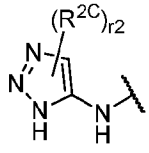
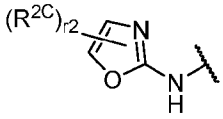
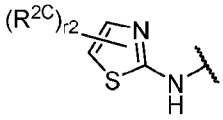
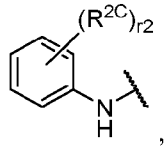
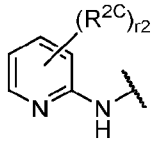
R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is -NH-R^{2A}, wherein R^{2A} is as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is -CH(R^L)-R^{2A}, wherein R and R^{2A} are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is -CH_2-R^{2A}, wherein R^{2A} is as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is -N(R)C(O)-R^{2A}, wherein R and R^{2A} are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is -NHC(O)-R^{2A}, wherein R^{2A} is as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is -N(R)C(O)CH(R^L)-R^{2A}, wherein R and R^{2A} are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is -NHC(O)CH_2-R^{2A}, wherein R^{2A} is as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is -N(R)C(O)N(R)-R^{2A}, wherein R and R^{2A} are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is -NHC(O)NH-R^{2A}, wherein R^{2A} is as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is -N(R)C(O)CH(R^L)O-R^{2A}, wherein R and R^{2A} are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is -NHC(O)CH_2O-R^{2A}, wherein R^{2A} is as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is -CH(R^L)N(R)-R^{2A}, wherein R and R^{2A} are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is -CH(R^L)O-R^{2A}, wherein R and R^{2A} are as defined in embodiments and classes and subclasses herein.

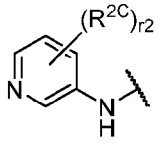
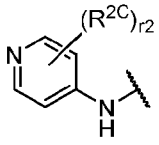
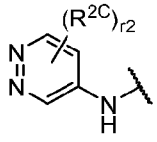
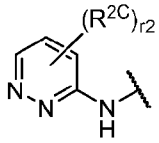
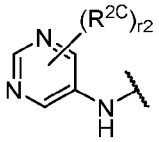
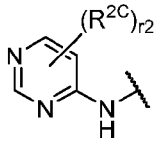
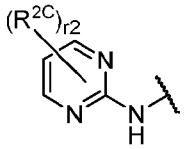
[0155] In some embodiments, R^2 is -N(R)-R^{2A}, -N(R)C(O)-R^{2A}, -CH(R^L)N(R)-R^{2A}, -N(R)C(O)CH(R^L)-R^{2A}, -CH(R^L)O-R^{2A}, -CH(R^L)-R^{2A}, or -R^{2A}. In some embodiments, R^2 is -N(R)-R^{2A}, -N(R)C(O)-R^{2A}, -CH(R^L)N(R)-R^{2A}, or -R^{2A}. In some embodiments, R^2 is -N(R)-R^{2A}, -N(R)C(O)-R^{2A}, or -R^{2A}. In some embodiments, R^2 is -N(R)C(O)-R^{2A} or -R^{2A}.

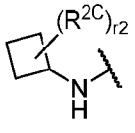
[0156] In some embodiments, R^2 is -N(H)-R^{2A}, -N(H)C(O)-R^{2A}, -CH_2N(H)-R^{2A}, -N(H)C(O)CH_2-R^{2A}, -CH_2O-R^{2A}, -CH_2-R^{2A}, or -R^{2A}. In some embodiments, R^2 is -N(H)-R^{2A}, -N(H)C(O)-R^{2A}, -CH_2N(H)-R^{2A}, or -R^{2A}. In some embodiments, R^2 is -N(H)-R^{2A}, -N(H)C(O)-R^{2A}, or -R^{2A}. In some embodiments, R^2 is -N(H)C(O)-R^{2A} or -R^{2A}.

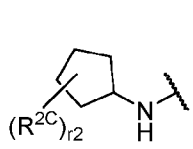
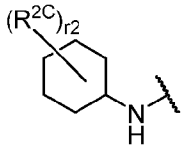
[0157] In some embodiments, R^2 (*i.e.*, $-L^2-R^{2A}$ taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein.

[0158] In some embodiments, R^2 (*i.e.*, $-L^2-R^{2A}$ taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein.

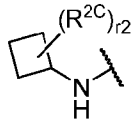
[0159] In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2

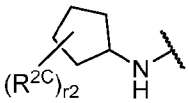
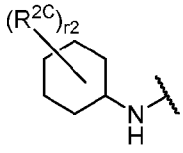
(*i.e.*, $-L^2-R^{2A}$ taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2-R^{2A}$ taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2-R^{2A}$ taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2-R^{2A}$ taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2-R^{2A}$ taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2-R^{2A}$ taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2-R^{2A}$ taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein.

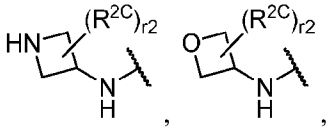
[0160] In some embodiments, R^2 (*i.e.*, $-L^2-R^{2A}$ taken together) is  ,

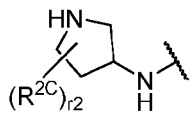
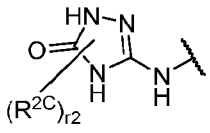



, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is

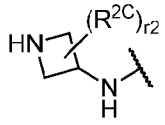


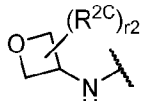
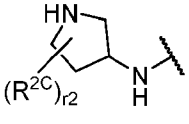
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein.

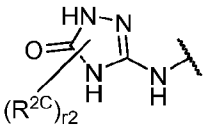
[0161] In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  ,

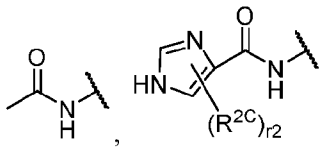
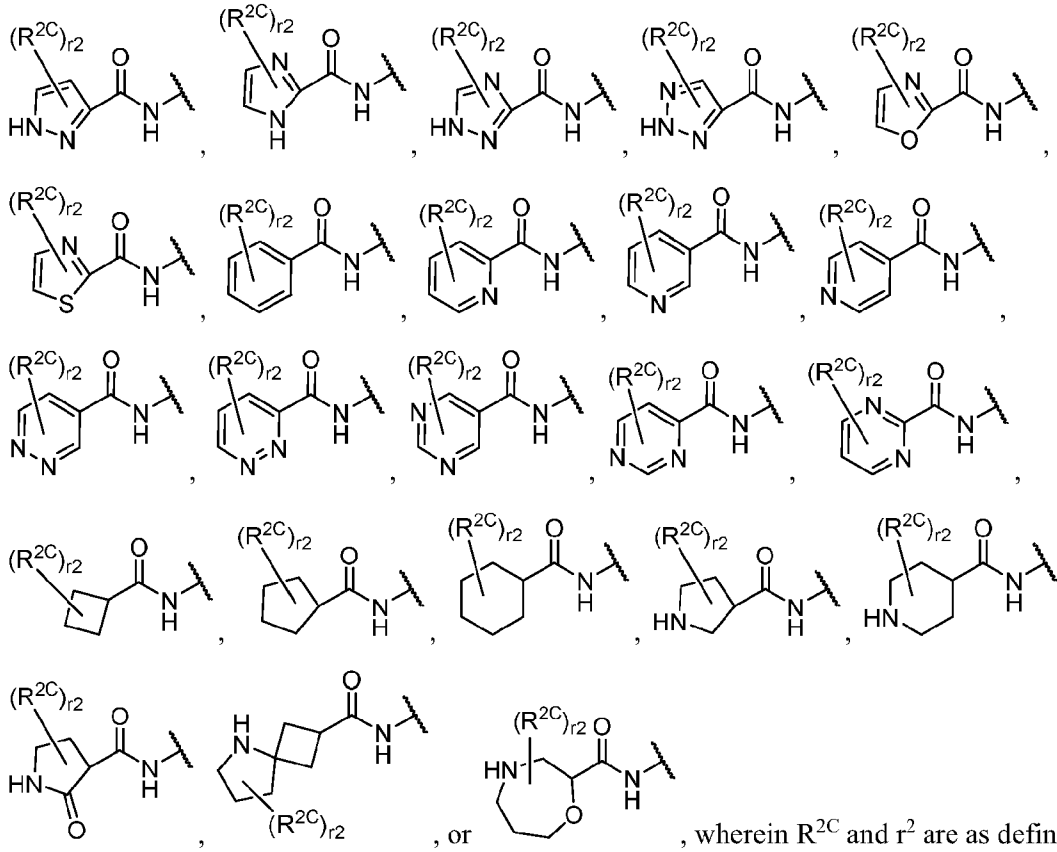
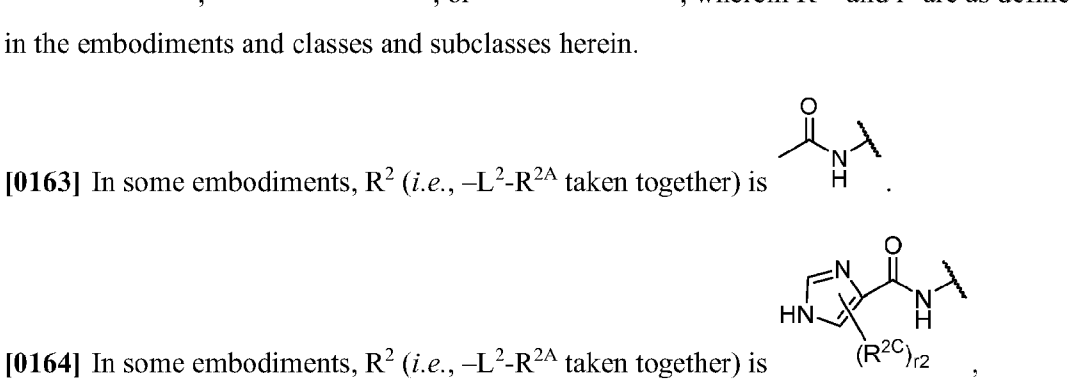



, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is



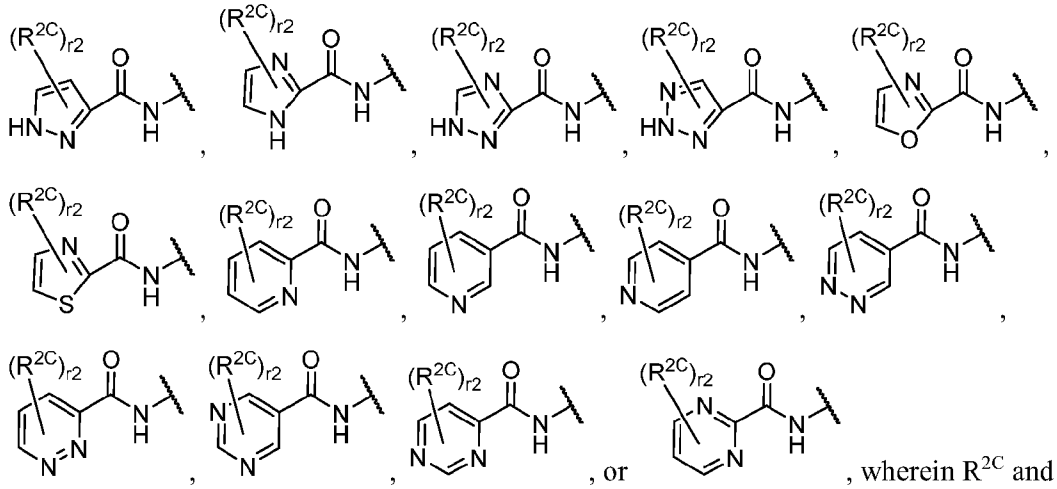
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments,

R^2 (*i.e.*, $-L^2-R^{2A}$ taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein.

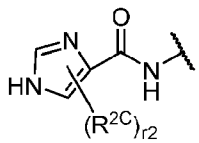
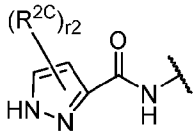
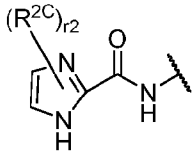
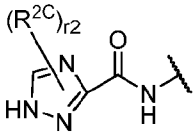
[0162] In some embodiments, R^2 (*i.e.*, $-L^2-R^{2A}$ taken together) is  ,  ,  , or , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein.

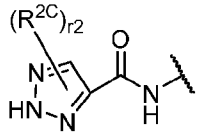
[0163] In some embodiments, R^2 (*i.e.*, $-L^2-R^{2A}$ taken together) is .

[0164] In some embodiments, R^2 (*i.e.*, $-L^2-R^{2A}$ taken together) is ,

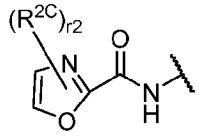


, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein.

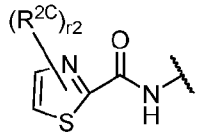
[0165] In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is



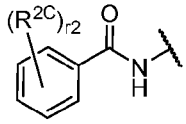
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is



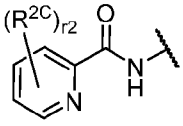
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is



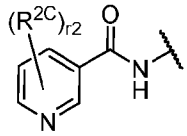
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is



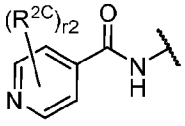
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is



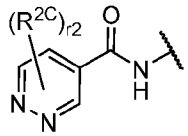
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is



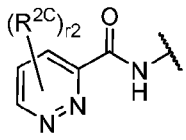
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is



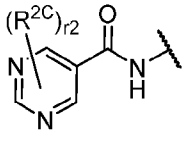
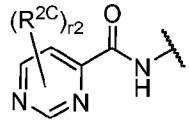
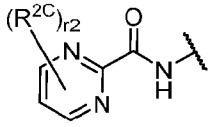
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is

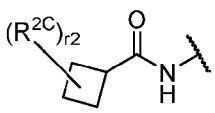
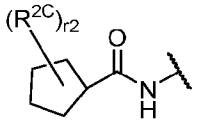
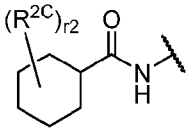
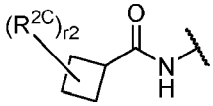
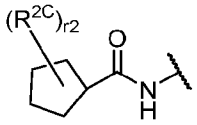
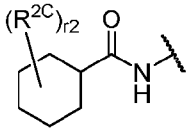


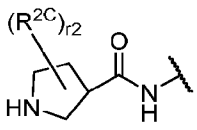
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is

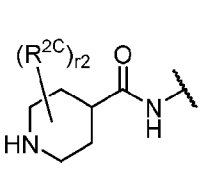
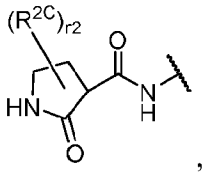
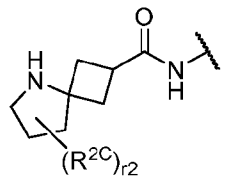
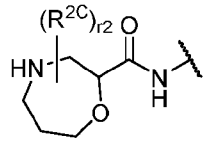
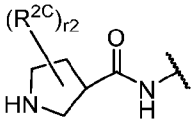
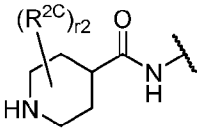
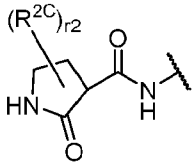


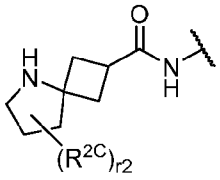
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In

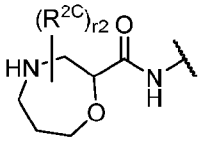
some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein.

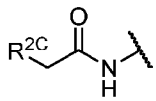
[0166] In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  ,  , or  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein.

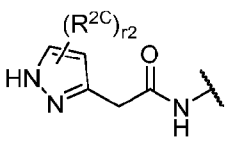
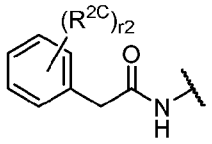
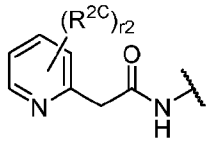
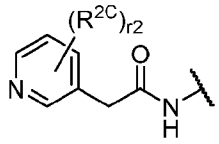
[0167] In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  ,

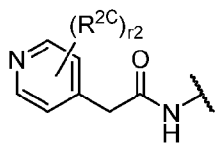
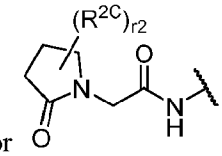



, or  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is

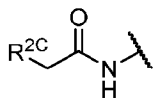
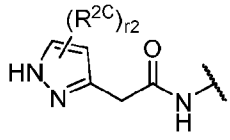
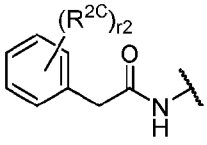
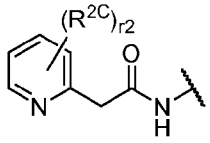
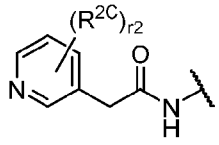
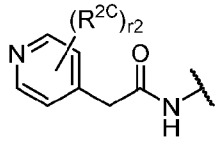
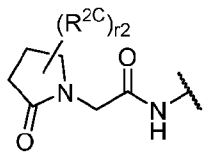
 , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is

 , wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein.

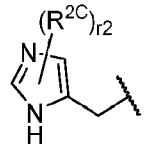
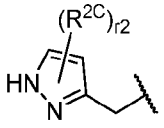
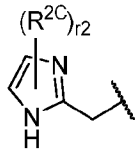
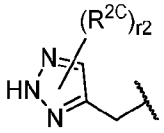
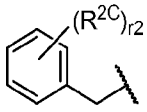
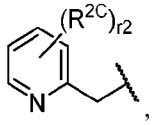
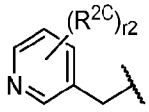
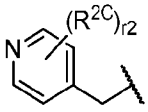
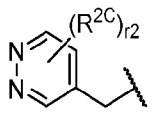
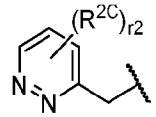
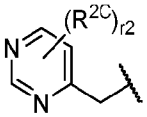
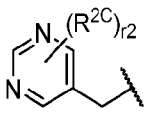
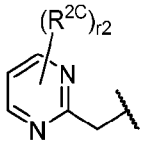
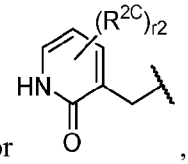
[0168] In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  ,

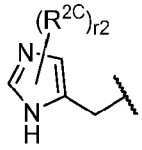
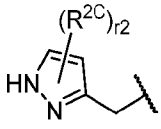
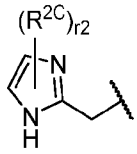
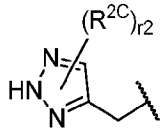
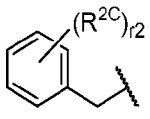



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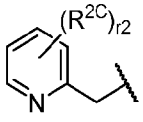
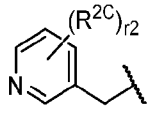
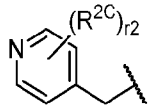
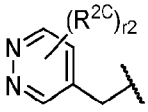
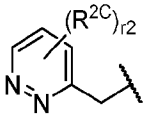
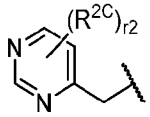
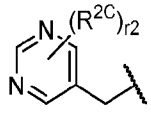
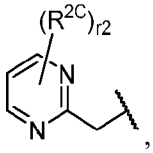
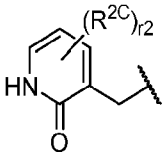

, or 
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein.

[0169] In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is 
wherein R^{2C} is as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is 
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is 
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is 
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is 
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is 
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is 
, wherein R^{2C} and r^2 are as defined in the embodiments and classes and

subclasses herein.

[0170] In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  , or  , wherein R^{2A}, R^{2C}, and r^2 are as defined in the embodiments and classes and subclasses herein.

[0171] In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in embodiments and classes and subclasses herein. In some

embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in embodiments and classes and subclasses herein. In some embodiments, R^2 (*i.e.*, $-L^2$-R^{2A} taken together) is  , wherein R^{2C} and r^2 are as defined in embodiments and classes and subclasses herein.

[0172] In some embodiments, each R^2 (*i.e.*, $-L^2-R^{2A}$ taken together) is independently halogen, -OH, $-OCH_3$, or C_{1-3} aliphatic optionally substituted with 1-3 halogen. In some embodiments, each R^2 is independently fluorine, chlorine, $-OCH_3$, or $-CH_3$. In some embodiments, R^2 is -OH. In some embodiments, R^2 is $-CH_3$. In some embodiments, R^2 is $-OCH_3$. In some embodiments, R^2 is $-CF_3$. In some embodiments, R^2 is $-CHF_2$.

[0173] In some embodiments, two instances of R^2 are taken together with their intervening atoms to form a 3-7 membered saturated, partially unsaturated, or aromatic carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^3 instances of R^{22C}. In some embodiments, two instances of R^2 are taken together with their intervening atoms to form a 3-7 membered saturated, partially unsaturated, or aromatic carbocyclic ring; wherein the ring is substituted with p^3 instances of R^{22C}. In some embodiments, two instances of R^2 are taken together with their intervening atoms to form a 6-membered aromatic carbocyclic ring; wherein the ring is substituted with p^3 instances of R^{22C}.

[0174] In some embodiments, R^2 is selected from the groups depicted in the compounds in Table 1.

[0175] As defined generally above, each R^T is independently $-L^T-R^{TA}$; or two instances of R^T are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^1 instances of R^{TTC}; or one instance of R^T and one instance of R^1 are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^4 instances of R^{T1C}; or one instance of R^T and one instance of R^L are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^5 instances of R^{TLC}.

[0176] In some embodiments, each R^T is independently $-L^T-R^{TA}$. In some embodiments, each R^T is independently $-R^{TA}$. In some embodiments, each R^T is independently R^A. In some embodiments, each R^T is independently R^B substituted by r^3 instances of R^{TC}.

[0177] In some embodiments, R^T (*i.e.*, $-L^T-R^{TA}$ taken together) is a C_{1-6} aliphatic chain; phenyl; naphthyl; cubanyl; adamantyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted with r^3 instances of R^{TC}.

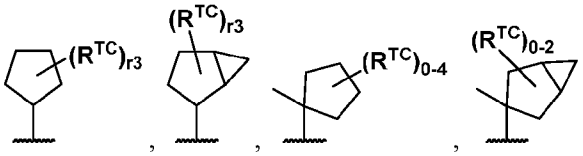
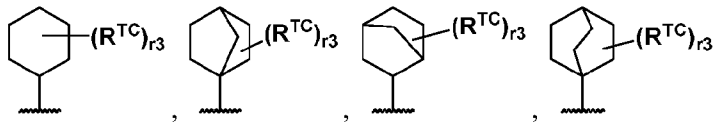
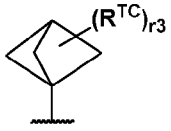
[0178] In some embodiments, R^T is a C_{1-6} aliphatic chain; adamantyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted with r^3 instances of R^{TC}.

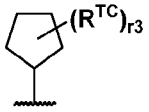
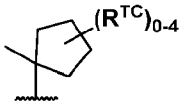
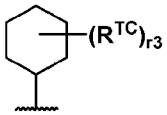
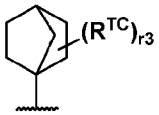
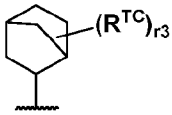
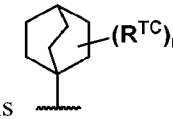
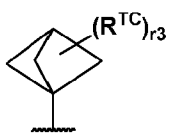
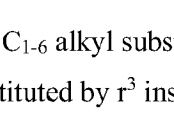
[0179] In some embodiments, R^T is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^T is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted with r^3 instances of R^{TC}.

[0180] In some embodiments, R^T is a 3-7 membered saturated monocyclic carbocyclic ring; a 5-12 membered saturated bicyclic carbocyclic ring; a 3-7 membered saturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and

sulfur; or a 7-12 membered saturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted with r^3 instances of R^{TC}. In some embodiments, R^T is a 3-7 membered saturated monocyclic carbocyclic ring; or a 5-12 membered saturated bicyclic carbocyclic ring; each of which is substituted with r^3 instances of R^{TC}. In some embodiments, R^T is a 3-7 membered saturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted with r^3 instances of R^{TC}.

[0181] In some embodiments, R^T (*i.e.*, $-L^T-R^{TA}$ taken together) is a C_{1-6} aliphatic chain substituted with r^3 instances of R^{TC}. In some embodiments, R^T (*i.e.*, $-L^T-R^{TA}$ taken together) is phenyl substituted with r^3 instances of R^{TC}. In some embodiments, R^T (*i.e.*, $-L^T-R^{TA}$ taken together) is naphthyl substituted with r^3 instances of R^{TC}. In some embodiments, R^T (*i.e.*, $-L^T-R^{TA}$ taken together) is cubanyl substituted with r^3 instances of R^{TC}. In some embodiments, R^T (*i.e.*, $-L^T-R^{TA}$ taken together) is adamantyl substituted with r^3 instances of R^{TC}. In some embodiments, R^T (*i.e.*, $-L^T-R^{TA}$ taken together) is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein the ring is substituted with r^3 instances of R^{TC}. In some embodiments, R^T (*i.e.*, $-L^T-R^{TA}$ taken together) is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein the ring is substituted with r^3 instances of R^{TC}. In some embodiments, R^T (*i.e.*, $-L^T-R^{TA}$ taken together) is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, wherein the ring is substituted with r^3 instances of R^{TC}. In some embodiments, R^T (*i.e.*, $-L^T-R^{TA}$ taken together) is a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring, wherein the ring is substituted with r^3 instances of R^{TC}. In some embodiments, R^T (*i.e.*, $-L^T-R^{TA}$ taken together) is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein the ring is substituted with r^3 instances of R^{TC}. In some embodiments, R^T (*i.e.*, $-L^T-R^{TA}$ taken together) is a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein the ring is substituted with r^3 instances of R^{TC}.

[0182] In some embodiments, R^T is  ,  , or  .

[0183] In some embodiments, R^T is  . In some embodiments, R^T is  . In some embodiments, R^T is  . In some embodiments, R^T is  . In some embodiments, R^T is  . In some embodiments, R^T is  . In some embodiments, R^T is  . In some embodiments, R^T is  . In some embodiments, R^T is  . In some embodiments, R^T is . In some embodiments, R^T is  . In some embodiments, R^T is CF3. In some embodiments, R^T is C_{1-6} alkyl substituted by r^3 instances of R^{TC}. In some embodiments, R^T is C_{3-8} cycloalkyl substituted by r^3 instances of R^{TC}.

[0184] In some embodiments, two instances of R^T are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^1 instances of R^{TTC}.

[0185] In some embodiments, one instance of R^T and one instance of R^1 are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic

heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^4 instances of R^{T1C}.

[0186] In some embodiments, one instance of R^T and one instance of R^L are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^5 instances of R^{TLC}.

[0187] In some embodiments, R^T is selected from the groups depicted in the compounds in Table 1.

[0188] As defined generally above, L^1 is a covalent bond, or a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by $-CH(R^L)-$, $-C(R^L)_2-$, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, $-N(R)S(O)_2-$, $-S(O)_2N(R)-$, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or $-S(O)_2-$. In some embodiments, L^1 is a covalent bond. In some embodiments, L^1 is a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by $-CH(R^L)-$, $-C(R^L)_2-$, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, $-N(R)S(O)_2-$, $-S(O)_2N(R)-$, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or $-S(O)_2-$. In some embodiments, L^1 is a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain.

[0189] In some embodiments, L^1 is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by $-CH(R^L)-$, $-C(R^L)_2-$, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, $-N(R)S(O)_2-$, $-S(O)_2N(R)-$, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or $-S(O)_2-$. In some embodiments, L^1 is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by $-CH(R^L)-$, $-C(R^L)_2-$, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, $-N(R)S(O)_2-$, $-S(O)_2N(R)-$, or -O-. In some embodiments, L^1 is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain.

[0190] In some embodiments, L^1 is selected from the groups depicted in the compounds in Table 1.

[0191] As defined generally above, L^2 is a covalent bond, or a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by $-CH(R^L)-$, $-C(R^L)_2-$, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, $-N(R)S(O)_2-$, $-S(O)_2N(R)-$, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or $-S(O)_2-$. In some embodiments, L^2 is a covalent bond. In some embodiments, L^2 is a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by $-CH(R^L)-$, $-C(R^L)_2-$, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, $-N(R)S(O)_2-$, $-S(O)_2N(R)-$, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or $-S(O)_2-$. In some embodiments, L^2 is a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain.

[0192] In some embodiments, L^2 is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by $-CH(R^L)-$, $-C(R^L)_2-$, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, $-N(R)S(O)_2-$, $-S(O)_2N(R)-$, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or $-S(O)_2-$. In some embodiments, L^2 is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by $-CH(R^L)-$, $-C(R^L)_2-$, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, $-N(R)S(O)_2-$, $-S(O)_2N(R)-$, or -O-. In some embodiments, L^2 is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain.

[0193] In some embodiments, L^2 is -N(R)-, -N(R)C(O)-, $-CH(R^L)N(R)-$, $-N(R)C(O)CH(R^L)-$, $-CH(R^L)O-$, $-CH(R^L)-$, or a covalent bond. In some embodiments, R^2 is -N(R)-, -N(R)C(O)-, $-CH(R^L)N(R)-$, or a covalent bond. In some embodiments, R^2 is -N(R)-, -N(R)C(O)-, or a covalent bond. In some embodiments, R^2 is -N(R)C(O)- or a covalent bond.

[0194] In some embodiments, R^2 is -N(H)-, -N(H)C(O)-, $-CH_2N(H)-$, $-N(H)C(O)CH_2-$, $-CH_2O-$, $-CH_2-$, or a covalent bond. In some embodiments, R^2 is -N(H)-, -N(H)C(O)-, $-CH_2N(H)-$, or a covalent bond. In some embodiments, R^2 is -N(H)-, -N(H)C(O)-, or a covalent bond. In some embodiments, R^2 is -N(H)C(O)- or a covalent bond.

[0195] In some embodiments, L^2 is -N(R)C(O)- or -N(R)C(O)N(R)-. In some embodiments, L^2 is -N(H)C(O)- or -N(H)C(O)N(H)-. In some embodiments, L^2 is -N(R)C(O)-. In some embodiments, L^2 is -N(H)C(O)-. In some embodiments, L^2 is -N(R)C(O)N(R)-. In some embodiments, L^2 is -N(H)C(O)N(H)-. In some embodiments, L^2 is -N(R)-. In some

embodiments, L^2 is -N(H)-. In some embodiments, L^2 is a covalent bond. In some embodiments, L^2 is -CH(R^L)N(R)-. In some embodiments, L^2 is -N(R)C(O)CH(R^L)-. In some embodiments, L^2 is -CH(R^L)O-. In some embodiments, L^2 is -CH(R^L)-.

[0196] In some embodiments, L^2 is selected from the groups depicted in the compounds in Table 1.

[0197] As defined generally above, L^Q is a covalent bond, or a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by -CH(R^L)-, -C(R^L)$_2$-, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, -N(R)S(O)$_2$-, -S(O)$_2$N(R)-, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or -S(O)$_2$-. In some embodiments, L^Q is a covalent bond. In some embodiments, L^Q is a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by -CH(R^L)-, -C(R^L)$_2$-, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, -N(R)S(O)$_2$-, -S(O)$_2$N(R)-, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or -S(O)$_2$-. In some embodiments, L^Q is a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain.

[0198] In some embodiments, L^Q is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by -CH(R^L)-, -C(R^L)$_2$-, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, -N(R)S(O)$_2$-, -S(O)$_2$N(R)-, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or -S(O)$_2$-. In some embodiments, L^Q is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by -CH(R^L)-, -C(R^L)$_2$-, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, -N(R)S(O)$_2$-, -S(O)$_2$N(R)-, or -O-. In some embodiments, L^Q is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain.

[0199] In some embodiments, L^Q is -C(O)N(R)-, -C(O)N(R)CH$_2$-, -N(R)-, -CH$_2$C(O)N(R)- , -N(R)C(O)N(R)-, or a covalent bond. In some embodiments, L^Q is -C(O)N(H)-, -C(O)N(H)CH$_2$-, -N(H)-, -CH$_2$C(O)N(H)-, -N(H)C(O)N(H)-, or a covalent bond. In some embodiments, L^Q is -C(O)N(H)-, -C(O)N(H)CH$_2$-, or a covalent bond. In some embodiments, L^Q is -C(O)N(H)- or -C(O)N(H)CH$_2$-. In some embodiments, L^Q is -C(O)N(H)-. In some embodiments, L^Q is -C(O)N(H)CH$_2$-. In some embodiments, L^Q is -

N(H)-. In some embodiments, L^Q is -$CH_2C(O)N(H)$-. In some embodiments, L^Q is -N(H)C(O)N(H)-. In some embodiments, L^Q is a covalent bond.

[0200] In some embodiments, L^Q is selected from the groups depicted in the compounds in Table 1.

[0201] As defined generally above, L^T is a covalent bond, or a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by -$CH(R^L)$-, -$C(R^L)_2$-, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, -N(R)$S(O)_2$-, -$S(O)_2$N(R)-, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or -$S(O)_2$-. In some embodiments, L^T is a covalent bond. In some embodiments, L^T is a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by -$CH(R^L)$-, -$C(R^L)_2$-, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, -N(R)$S(O)_2$-, -$S(O)_2$N(R)-, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or -$S(O)_2$-. In some embodiments, L^X is a C_{1-4} bivalent saturated or unsaturated, straight, or branched hydrocarbon chain.

[0202] In some embodiments, L^T is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by -$CH(R^L)$-, -$C(R^L)_2$-, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, -N(R)$S(O)_2$-, -$S(O)_2$N(R)-, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or -$S(O)_2$-. In some embodiments, L^T is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by -$CH(R^L)$-, -$C(R^L)_2$-, -N(R)-, -N(R)C(O)-, -C(O)N(R)-, -N(R)$S(O)_2$-, -$S(O)_2$N(R)-, or -O-. In some embodiments, L^T is a C_{1-2} bivalent saturated or unsaturated hydrocarbon chain.

[0203] In some embodiments, L^T is selected from the groups depicted in the compounds in Table 1.

[0204] As defined generally above, each R^{1A} is independently R^A or R^B substituted by r^1 instances of R^{1C}. In some embodiments, each R^{1A} is independently R^A. In some embodiments, each R^{1A} is independently R^B substituted by r^1 instances of R^{1C}.

[0205] In some embodiments, R^{1A} is phenyl; naphthyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently

selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{1A} is substituted by r^1 instances of R^{1C}.

[0206] In some embodiments, R^{1A} is phenyl substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein R^{1A} is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is phenyl or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein R^{1A} is substituted by r^1 instances of R^{1C}.

[0207] In some embodiments, R^{1A} is phenyl; naphthyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; wherein R^{1A} is substituted by r^1 instances of R^{1C}.

[0208] In some embodiments, R^{1A} is phenyl substituted by r^1 instances of a group independently selected from oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, and optionally substituted C_{1-6} aliphatic. In some embodiments, R^{1A} is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein R^{1A} is substituted by r^1 instances of a group independently selected from oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, and optionally substituted C_{1-6} aliphatic. In some embodiments, R^{1A} is phenyl or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur, wherein R^{1A} is substituted by r^1 instances of a group independently selected from oxo,

halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, and optionally substituted C_{1-6} aliphatic.

[0209] In some embodiments, R^{1A} is phenyl substituted by 1-3 instances of R^{1C}. In some embodiments, R^{1A} is phenyl substituted by 2 instances of R^{1C}. In some embodiments, R^{1A} is phenyl substituted by 1 instance of R^{1C}.

[0210] In some embodiments, R^{1A} is phenyl substituted by 1-3 instances of a group independently selected from halogen, -CN, -O-(optionally substituted C_{1-6} aliphatic), and an optionally substituted C_{1-6} aliphatic. In some embodiments, R^{1A} is phenyl substituted by 1-3 instances of a group independently selected from halogen and C_{1-3} aliphatic optionally substituted with 1-3 halogen. In some embodiments, R^{1A} is phenyl substituted by 1-3 instances of a group independently selected from fluorine, chlorine, -CH_3, -CHF_2, and -CF_3.

[0211] In some embodiments, R^{1A} is phenyl substituted by 2 instances of a group independently selected from halogen, -CN, -O-(optionally substituted C_{1-6} aliphatic), and an optionally substituted C_{1-6} aliphatic. In some embodiments, R^{1A} is phenyl substituted by 2 instances of a group independently selected from halogen and C_{1-3} aliphatic optionally substituted with 1-3 halogen. In some embodiments, R^{1A} is phenyl substituted by 2 instances of a group independently selected from fluorine, chlorine, -CH_3, -CHF_2, and -CF_3.

[0212] In some embodiments, R^{1A} is phenyl substituted by one group selected from halogen, -CN, -O-(optionally substituted C_{1-6} aliphatic), and an optionally substituted C_{1-6} aliphatic. In some embodiments, R^{1A} is phenyl substituted by one halogen or C_{1-3} aliphatic group optionally substituted with 1-3 halogen. In some embodiments, R^{1A} is phenyl substituted by one fluorine, chlorine, -CH_3, -CHF_2, or -CF_3.

[0213] In some embodiments, each R^{1A} is independently oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, or deuterium.

[0214] In some embodiments, each R^{1A} is independently oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R,

-N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2NR_2$, -N(R)S(O)$_2$R, -P(O)R_2, -P(O)(R)OR, or -B(OR)$_2$.

[0215] In some embodiments, R^{1A} is oxo. In some embodiments, each R^{1A} is independently halogen. In some embodiments, R^{1A} is –CN. In some embodiments, R^{1A} is -NO_2. In some embodiments, each R^{1A} is independently -OR. In some embodiments, each R^{1A} is independently -SR. In some embodiments, each R^{1A} is independently -NR_2. In some embodiments, each R^{1A} is independently -S(O)$_2$R. In some embodiments, each R^{1A} is independently -S(O)$_2NR_2$. In some embodiments, R^{1A} is -S(O)$_2$F. In some embodiments, each R^{1A} is independently -S(O)R. In some embodiments, each R^{1A} is independently -S(O)NR_2. In some embodiments, each R^{1A} is independently -S(O)(NR)R. In some embodiments, each R^{1A} is independently -C(O)R. In some embodiments, each R^{1A} is independently -C(O)OR. In some embodiments, each R^{1A} is independently -C(O)NR_2. In some embodiments, each R^{1A} is independently -C(O)N(R)OR. In some embodiments, each R^{1A} is independently -OC(O)R. In some embodiments, each R^{1A} is independently -OC(O)NR_2. In some embodiments, each R^{1A} is independently -N(R)C(O)OR. In some embodiments, each R^{1A} is independently -N(R)C(O)R. In some embodiments, each R^{1A} is independently -N(R)C(O)NR_2. In some embodiments, each R^{1A} is independently -N(R)C(NR)NR_2. In some embodiments, each R^{1A} is independently -N(R)S(O)$_2NR_2$. In some embodiments, each R^{1A} is independently -N(R)S(O)$_2$R. In some embodiments, each R^{1A} is independently -P(O)R_2. In some embodiments, each R^{1A} is independently -P(O)(R)OR. In some embodiments, each R^{1A} is independently -B(OR)$_2$. In some embodiments, R^{1A} is deuterium.

[0216] In some embodiments, R^{1A} is halogen, -CN, -NO_2, -OR, -SR, -NR_2, -S(O)$_2$R, -S(O)$_2NR_2$, -S(O)$_2$F, -S(O)R, -S(O)NR_2, -S(O)(NR)R, -C(O)R, -C(O)OR, -C(O)NR_2, -C(O)N(R)OR, -OC(O)R, -OC(O)NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2NR_2$, -N(R)S(O)$_2$R, -P(O)R_2, -P(O)(R)OR, or -B(OR)$_2$.

[0217] In some embodiments, R^{1A} is halogen, -CN, or -NO_2. In some embodiments, R^{1A} is -OR, -SR, or -NR_2. In some embodiments, R^{1A} is -S(O)$_2$R, -S(O)$_2NR_2$, -S(O)$_2$F, -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, R^{1A} is -C(O)R, -C(O)OR, -C(O)NR_2, or -C(O)N(R)OR. In some embodiments, R^{1A} is -OC(O)R or -OC(O)NR_2. In some embodiments, R^{1A} is -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2NR_2$, or -N(R)S(O)$_2$R. In some embodiments, R^{1A} is -P(O)R_2 or -P(O)(R)OR.

[0218] In some embodiments, R^{1A} is -OR, -OC(O)R, or -OC(O)NR_2. In some embodiments, R^{1A} is -SR, -$S(O)_2$R, -$S(O)_2NR_2$, -$S(O)_2$F, -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, R^{1A} is -NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)$S(O)_2NR_2$, or -N(R)$S(O)_2$R.

[0219] In some embodiments, R^{1A} is -$S(O)_2$R, -$S(O)_2NR_2$, or -$S(O)_2$F. In some embodiments, R^{1A} is -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, R^{1A} is -SR, -$S(O)_2$R, or -S(O)R. In some embodiments, R^{1A} is -$S(O)_2NR_2$, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, R^{1A} is -$S(O)_2NR_2$ or -S(O)NR_2. In some embodiments, R^{1A} is -SR, -$S(O)_2$R, -$S(O)_2NR_2$, or -S(O)R.

[0220] In some embodiments, R^{1A} is -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, R^{1A} is -N(R)$S(O)_2NR_2$ or -N(R)$S(O)_2$R. In some embodiments, R^{1A} is -N(R)C(O)OR or -N(R)C(O)R. In some embodiments, R^{1A} is -N(R)C(O)NR_2 or -N(R)$S(O)_2NR_2$. In some embodiments, R^{1A} is -N(R)C(O)OR, -N(R)C(O)R, or -N(R)$S(O)_2$R.

[0221] In some embodiments, R^{1A} is -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, R^{1A} is -NR_2, -N(R)C(O)OR, or -N(R)C(O)R. In some embodiments, R^{1A} is -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)$S(O)_2$R.

[0222] In some embodiments, R^{1A} is a C_{1-6} aliphatic chain; phenyl; naphthyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}.

[0223] In some embodiments, R^{1A} is a C_{1-6} aliphatic chain substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is phenyl substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is naphthyl substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^1 instances of R^{1C}. In

some embodiments, R^{1A} is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^1 instances of R^{1C}.

[0224] In some embodiments, R^{1A} is phenyl; naphthyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}.

[0225] In some embodiments, R^{1A} is phenyl; naphthyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}.

[0226] In some embodiments, R^{1A} is phenyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is naphthyl; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}.

[0227] In some embodiments, R^{1A} is phenyl or naphthyl; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}.

[0228] In some embodiments, R^{1A} is phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is naphthyl or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a 5-12 membered

saturated or partially unsaturated bicyclic carbocyclic ring or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}.

[0229] In some embodiments, R^{1A} is phenyl or a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is naphthyl or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}.

[0230] In some embodiments, R^{1A} is a C_{1-6} aliphatic chain; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a C_{1-6} aliphatic chain; phenyl; naphthyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a C_{1-6} aliphatic chain; phenyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}.

[0231] In some embodiments, R^{1A} is a C_{1-6} aliphatic chain, a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a C_{1-6} aliphatic chain, a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^1 instances of R^{1C}. In some embodiments, R^{1A} is a C_{1-6} aliphatic chain, phenyl, or a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; each of which is substituted by r^1 instances of R^{1C}.

[0232] In some embodiments, each R^{1A} is independently halogen, -CN, -OR, or a C_{1-6} aliphatic chain substituted with r^1 halogens. In some embodiments, each R^{1A} is independently halogen, -CN, -OR, or a C_{1-6} aliphatic chain substituted with 0-5 halogens. In some embodiments, each R^{1A} is independently halogen, -CN, -O-(C_{1-6} aliphatic chain substituted with 0-5 halogens), or a C_{1-6} aliphatic chain substituted with 0-5 halogens. In some embodiments, each R^{1A} is independently halogen or a C_{1-6} aliphatic chain substituted with 0-5 halogens. In some embodiments, each R^{1A} is independently halogen or a C_{1-6} aliphatic chain substituted with 0-4 halogens. In some embodiments, each R^{1A} is independently halogen or a C_{1-6} aliphatic chain substituted with 0-3 halogens. In some embodiments, each R^{1A} is independently halogen or a C_{1-3} aliphatic chain substituted with 0-3 halogens. In some embodiments, each R^{1A} is independently halogen or a C_{1-3} aliphatic chain substituted with 0-2 halogens.

[0233] In some embodiments, each R^{1A} is independently a halogen selected from Br, Cl, and F. In some embodiments, each R^{1A} is independently a halogen selected from Cl and F. In some embodiments, R^{1A} is Cl. In some embodiments, R^{1A} is F.

[0234] In some embodiments, at least one R^{1A} is halogen. In some embodiments, at least two R^{1A} are halogen. In some embodiments, at least three R^{1A} are halogen. In some embodiments one instance of R^{1A} is Cl. In some embodiments two instances of R^{1A} are Cl. In some embodiments, one instance of R^{1A} is F. In some embodiments, two instances of R^{1A} are F. In some embodiments, one instance of R^{1A} is Cl, and one instance of R^{1A} is F. In some embodiments, two instances of R^{1A} are Cl, and one instance of R^{1A} is F. In some embodiments, one instance of R^{1A} is Cl, and two instances of R^{1A} are F.

[0235] In some embodiments, R^{1A} is a C_{1-6} aliphatic chain substituted with 0-5 halogens. In some embodiments, R^{1A} is a C_{1-6} aliphatic chain substituted with 0-4 halogens. In some embodiments, R^{1A} is a C_{1-6} aliphatic chain substituted with 0-3 halogens. In some embodiments, R^{1A} is a C_{1-3} aliphatic chain substituted with 0-3 halogens. In some embodiments, R^{1A} is a C_{1-3} aliphatic chain substituted with 0-2 halogens.

[0236] In some embodiments, at least one R^{1A} is C_{1-3} aliphatic optionally substituted with 1-3 halogen. In some embodiments, at least one R^{1A} is -O-C_{1-3} aliphatic optionally substituted with 1-3 halogen.

[0237] In some embodiments, each R^{1A} is independently halogen, -OH, -OCH_3, or C_{1-3} aliphatic optionally substituted with 1-3 halogen. In some embodiments, each R^{1A} is independently fluorine, chlorine, -OCH_3, or -CH_3. In some embodiments, R^{1A} is -OH. In some embodiments, R^{1A} is -CH_3. In some embodiments, R^{1A} is -OCH_3. In some embodiments, R^{1A} is -CF_3. In some embodiments, R^{1A} is -CHF_2.

[0238] In some embodiments, R^{1A} is selected from the groups depicted in the compounds in Table 1.

[0239] As defined generally above, each R^{2A} is independently R^A or R^B substituted by r^2 instances of R^{2C}. In some embodiments, each R^{2A} is R^A. In some embodiments, each R^{2A} is R^B substituted by r^2 instances of R^{2C}.

[0240] In some embodiments, R^{2A} is phenyl; naphthyl; cubanyl; adamantyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is substituted by r^2 instances of R^{2C}.

[0241] In some embodiments, R^{2A} is phenyl; naphthyl; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is

substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is phenyl; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is phenyl or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is substituted by r^2 instances of R^{2C}.

[0242] In some embodiments, R^{2A} is phenyl; naphthyl; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is substituted by r^2 instances of a group independently selected from oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, and optionally substituted C_{1-6} aliphatic. In some embodiments, R^{2A} is phenyl; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is substituted by r^2 instances of a group independently selected from oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, and optionally substituted C_{1-6} aliphatic. In some embodiments, R^{2A} is phenyl or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is substituted by r^2 instances of a group independently selected from oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, and optionally substituted C_{1-6} aliphatic.

[0243] In some embodiments, R^{2A} is phenyl substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is phenyl substituted by r^2 instances of a group independently selected

from oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, and optionally substituted C_{1-6} aliphatic.

[0244] In some embodiments, R^{2A} is phenyl substituted by 1-3 instances of a group independently selected from halogen, -CN, -O-(optionally substituted C_{1-6} aliphatic), and an optionally substituted C_{1-6} aliphatic. In some embodiments, R^{2A} is phenyl substituted by 1-3 instances of a group independently selected from halogen and C_{1-3} aliphatic optionally substituted with 1-3 halogen. In some embodiments, R^{2A} is phenyl substituted by 1-3 instances of a group independently selected from fluorine, chlorine, -CH_3, -CHF_2, and -CF_3.

[0245] In some embodiments, R^{2A} is phenyl substituted by 2 instances of a group independently selected from halogen, -CN, -O-(optionally substituted C_{1-6} aliphatic), and an optionally substituted C_{1-6} aliphatic. In some embodiments, R^{2A} is phenyl substituted by 2 instances of a group independently selected from halogen and C_{1-3} aliphatic optionally substituted with 1-3 halogen. In some embodiments, R^{2A} is phenyl substituted by 2 instances of a group independently selected from fluorine, chlorine, -CH_3, -CHF_2, and -CF_3.

[0246] In some embodiments, R^{2A} is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is substituted by r^2 instances of a group independently selected from oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, and optionally substituted C_{1-6} aliphatic.

[0247] In some embodiments, R^{2A} is an 8-10 membered bicyclic heteroaryl ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is an 8-10 membered bicyclic heteroaryl ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is substituted by r^2 instances of a group independently selected from oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$,

-S(O)(NR)R, -C(O)R, -C(O)OR, -C(O)NR_2, -C(O)N(R)OR, -OC(O)R, -OC(O)NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2NR_2$, -N(R)S(O)$_2$R, -P(O)R_2, -P(O)(R)OR, or -B(OR)$_2$, and optionally substituted C_{1-6} aliphatic.

[0248] In some embodiments, R^{2A} is an 8-10 membered bicyclic heteroaryl ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is substituted by 0-2 instances of a group independently selected from halogen, -CN, -O-(optionally substituted C_{1-6} aliphatic), and an optionally substituted C_{1-6} aliphatic. In some embodiments, R^{2A} is an 8-10 membered bicyclic heteroaryl ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is substituted by 0-2 instances of a group independently selected from halogen and C_{1-3} aliphatic optionally substituted with 1-3 halogen. In some embodiments, R^{2A} is an 8-10 membered bicyclic heteroaryl ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is substituted by 0-2 instances of a group independently selected from fluorine, chlorine, -CH_3, -CHF_2, and -CF_3.

[0249] In some embodiments, R^{2A} is oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -S(O)$_2$R, -S(O)$_2NR_2$, -S(O)$_2$F, -S(O)R, -S(O)NR_2, -S(O)(NR)R, -C(O)R, -C(O)OR, -C(O)NR_2, -C(O)N(R)OR, -OC(O)R, -OC(O)NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2NR_2$, -N(R)S(O)$_2$R, -P(O)R_2, -P(O)(R)OR, -B(OR)$_2$, or deuterium.

[0250] In some embodiments, R^{2A} is oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -S(O)$_2$R, -S(O)$_2NR_2$, -S(O)$_2$F, -S(O)R, -S(O)NR_2, -S(O)(NR)R, -C(O)R, -C(O)OR, -C(O)NR_2, -C(O)N(R)OR, -OC(O)R, -OC(O)NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2NR_2$, -N(R)S(O)$_2$R, -P(O)R_2, -P(O)(R)OR, or -B(OR)$_2$.

[0251] In some embodiments, R^{2A} is oxo. In some embodiments, R^{2A} is halogen. In some embodiments, R^{2A} is –CN. In some embodiments, R^{2A} is -NO_2. In some embodiments, R^{2A} is -OR. In some embodiments, R^{2A} is -SR. In some embodiments, R^{2A} is -NR_2. In some embodiments, R^{2A} is -S(O)$_2$R. In some embodiments, R^{2A} is -S(O)$_2NR_2$. In some embodiments, R^{2A} is -S(O)$_2$F. In some embodiments, R^{2A} is -S(O)R. In some embodiments, R^{2A} is -S(O)NR_2. In some embodiments, R^{2A} is -S(O)(NR)R. In some embodiments, R^{2A} is -C(O)R. In some embodiments, R^{2A} is -C(O)OR. In some embodiments, R^{2A} is -C(O)NR_2. In some embodiments, R^{2A} is -C(O)N(R)OR. In some embodiments, R^{2A} is -OC(O)R. In some embodiments, R^{2A} is -OC(O)NR_2. In some embodiments, R^{2A} is -N(R)C(O)OR. In

some embodiments, R^{2A} is -N(R)C(O)R. In some embodiments, R^{2A} is -N(R)C(O)NR_2. In some embodiments, R^{2A} is -N(R)C(NR)NR_2. In some embodiments, R^{2A} is -N(R)S(O)$_2NR_2$. In some embodiments, R^{2A} is -N(R)S(O)$_2$R. In some embodiments, R^{2A} is -P(O)R_2. In some embodiments, R^{2A} is -P(O)(R)OR. In some embodiments, R^{2A} is -B(OR)$_2$. In some embodiments, R^{2A} is deuterium.

[0252] In some embodiments, R^{2A} is halogen, -CN, -NO_2, -OR, -SR, -NR_2, -S(O)$_2$R, -S(O)$_2NR_2$, -S(O)$_2$F, -S(O)R, -S(O)NR_2, -S(O)(NR)R, -C(O)R, -C(O)OR, -C(O)NR_2, -C(O)N(R)OR, -OC(O)R, -OC(O)NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2NR_2$, -N(R)S(O)$_2$R, -P(O)R_2, -P(O)(R)OR, or -B(OR)$_2$.

[0253] In some embodiments, R^{2A} is halogen, -CN, or -NO_2. In some embodiments, R^{2A} is -OR, -SR, or -NR_2. In some embodiments, R^{2A} is -S(O)$_2$R, -S(O)$_2NR_2$, -S(O)$_2$F, -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, R^{2A} is -C(O)R, -C(O)OR, -C(O)NR_2, or -C(O)N(R)OR. In some embodiments, R^{2A} is -OC(O)R or -OC(O)NR_2. In some embodiments, R^{2A} is -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2NR_2$, or -N(R)S(O)$_2$R. In some embodiments, R^{2A} is -P(O)R_2 or -P(O)(R)OR.

[0254] In some embodiments, R^{2A} is -OR, -OC(O)R, or -OC(O)NR_2. In some embodiments, R^{2A} is -SR, -S(O)$_2$R, -S(O)$_2NR_2$, -S(O)$_2$F, -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, R^{2A} is -NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2NR_2$, or -N(R)S(O)$_2$R.

[0255] In some embodiments, R^{2A} is -S(O)$_2$R, -S(O)$_2NR_2$, or -S(O)$_2$F. In some embodiments, R^{2A} is -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, R^{2A} is -SR, -S(O)$_2$R, or -S(O)R. In some embodiments, R^{2A} is -S(O)$_2NR_2$, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, R^{2A} is -S(O)$_2NR_2$ or -S(O)NR_2. In some embodiments, R^{2A} is -SR, -S(O)$_2$R, -S(O)$_2NR_2$, or -S(O)R.

[0256] In some embodiments, R^{2A} is -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, R^{2A} is -N(R)S(O)$_2NR_2$ or -N(R)S(O)$_2$R. In some embodiments, R^{2A} is -N(R)C(O)OR or -N(R)C(O)R. In some embodiments, R^{2A} is -N(R)C(O)NR_2 or -N(R)S(O)$_2NR_2$. In some embodiments, R^{2A} is -N(R)C(O)OR, -N(R)C(O)R, or -N(R)S(O)$_2$R.

[0257] In some embodiments, R^{2A} is -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, R^{2A} is -NR_2, -N(R)C(O)OR, or -N(R)C(O)R. In some embodiments, R^{2A} is -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)S(O)$_2$R.

[0258] In some embodiments, R^{2A} is a C_{1-6} aliphatic chain; phenyl; naphthyl; cubanyl; adamantyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}.

[0259] In some embodiments, R^{2A} is a C_{1-6} aliphatic chain substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is phenyl substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is naphthyl substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is cubanyl substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is adamantyl substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^2 instances of R^{2C}.

[0260] In some embodiments, R^{2A} is phenyl; naphthyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of

R^{2C}. In some embodiments, R^{2A} is cubanyl; adamantyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}.

[0261] In some embodiments, R^{2A} is phenyl; naphthyl; cubanyl; adamantyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}.

[0262] In some embodiments, R^{2A} is phenyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is naphthyl; cubanyl; adamantyl; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}.

[0263] In some embodiments, R^{2A} is phenyl or naphthyl; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from

nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}.

[0264] In some embodiments, R^{2A} is phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is naphthyl or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is cubanyl; adamantyl; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}.

[0265] In some embodiments, R^{2A} is phenyl or a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is naphthyl; cubanyl; adamantyl; or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4

heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}.

[0266] In some embodiments, R^{2A} is a C_{1-6} aliphatic chain; cubanyl; adamantyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a C_{1-6} aliphatic chain; phenyl; naphthyl; cubanyl; adamantyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a C_{1-6} aliphatic chain; phenyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}.

[0267] In some embodiments, R^{2A} is a C_{1-6} aliphatic chain, cubanyl, adamantyl, a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a C_{1-6} aliphatic chain, a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^2 instances of R^{2C}. In some embodiments, R^{2A} is a C_{1-6} aliphatic chain, phenyl, or a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; each of which is substituted by r^2 instances of R^{2C}.

[0268] In some embodiments, R^{2A} is selected from the groups depicted in the compounds in Table 1.

[0269] As defined generally above, each R^{TA} is independently R^A or R^B substituted with r^3 instances of R^{TC}. In some embodiments, each R^T is independently R^A. In some embodiments, each R^T is independently R^B substituted with r^3 instances of R^{TC}.

[0270] In some embodiments, R^{TA} is oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or deuterium.

[0271] In some embodiments, R^{TA} is oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$.

[0272] In some embodiments, R^{TA} is oxo. In some embodiments, R^{TA} is halogen. In some embodiments, R^{TA} is –CN. In some embodiments, R^{TA} is $-NO_2$. In some embodiments, R^{TA} is -OR. In some embodiments, R^{TA} is -SR. In some embodiments, R^{TA} is $-NR_2$. In some embodiments, R^{TA} is $-S(O)_2R$. In some embodiments, R^{TA} is $-S(O)_2NR_2$. In some embodiments, R^{TA} is $-S(O)_2F$. In some embodiments, R^{TA} is -S(O)R. In some embodiments, R^{TA} is $-S(O)NR_2$. In some embodiments, R^{TA} is -S(O)(NR)R. In some embodiments, R^{TA} is -C(O)R. In some embodiments, R^{TA} is -C(O)OR. In some embodiments, R^{TA} is $-C(O)NR_2$. In some embodiments, R^{TA} is -C(O)N(R)OR. In some embodiments, R^{TA} is -OC(O)R. In some embodiments, R^{TA} is $-OC(O)NR_2$. In some embodiments, R^{TA} is -N(R)C(O)OR. In some embodiments, R^{TA} is -N(R)C(O)R. In some embodiments, R^{TA} is $-N(R)C(O)NR_2$. In some embodiments, R^{TA} is $-N(R)C(NR)NR_2$. In some embodiments, R^{TA} is $-N(R)S(O)_2NR_2$. In some embodiments, R^{TA} is $-N(R)S(O)_2R$. In some embodiments, R^{TA} is $-P(O)R_2$. In some embodiments, R^{TA} is -P(O)(R)OR. In some embodiments, R^{TA} is $-B(OR)_2$. In some embodiments, R^{TA} is deuterium.

[0273] In some embodiments, R^{TA} is halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$.

[0274] In some embodiments, R^{TA} is halogen, -CN, or $-NO_2$. In some embodiments, R^{TA} is -OR, -SR, or $-NR_2$. In some embodiments, R^{TA} is $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R,

$-S(O)NR_2$, or $-S(O)(NR)R$. In some embodiments, R^{TA} is $-C(O)R$, $-C(O)OR$, $-C(O)NR_2$, or $-C(O)N(R)OR$. In some embodiments, R^{TA} is $-OC(O)R$ or $-OC(O)NR_2$. In some embodiments, R^{TA} is $-N(R)C(O)OR$, $-N(R)C(O)R$, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, or $-N(R)S(O)_2R$. In some embodiments, R^{TA} is $-P(O)R_2$ or $-P(O)(R)OR$.

[0275] In some embodiments, R^{TA} is $-OR$, $-OC(O)R$, or $-OC(O)NR_2$. In some embodiments, R^{TA} is $-SR$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, $-S(O)R$, $-S(O)NR_2$, or $-S(O)(NR)R$. In some embodiments, R^{TA} is $-NR_2$, $-N(R)C(O)OR$, $-N(R)C(O)R$, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, or $-N(R)S(O)_2R$.

[0276] In some embodiments, R^{TA} is $-S(O)_2R$, $-S(O)_2NR_2$, or $-S(O)_2F$. In some embodiments, R^{TA} is $-S(O)R$, $-S(O)NR_2$, or $-S(O)(NR)R$. In some embodiments, R^{TA} is $-SR$, $-S(O)_2R$, or $-S(O)R$. In some embodiments, R^{TA} is $-S(O)_2NR_2$, $-S(O)NR_2$, or $-S(O)(NR)R$. In some embodiments, R^{TA} is $-S(O)_2NR_2$ or $-S(O)NR_2$. In some embodiments, R^{TA} is $-SR$, $-S(O)_2R$, $-S(O)_2NR_2$, or $-S(O)R$.

[0277] In some embodiments, R^{TA} is $-N(R)C(O)OR$, $-N(R)C(O)R$, or $-N(R)C(O)NR_2$. In some embodiments, R^{TA} is $-N(R)S(O)_2NR_2$ or $-N(R)S(O)_2R$. In some embodiments, R^{TA} is $-N(R)C(O)OR$ or $-N(R)C(O)R$. In some embodiments, R^{TA} is $-N(R)C(O)NR_2$ or $-N(R)S(O)_2NR_2$. In some embodiments, R^{TA} is $-N(R)C(O)OR$, $-N(R)C(O)R$, or $-N(R)S(O)_2R$.

[0278] In some embodiments, R^{TA} is $-NR_2$, $-N(R)C(O)OR$, $-N(R)C(O)R$, or $-N(R)C(O)NR_2$. In some embodiments, R^{TA} is $-NR_2$, $-N(R)C(O)OR$, or $-N(R)C(O)R$. In some embodiments, R^{TA} is $-NR_2$, $-N(R)C(O)OR$, $-N(R)C(O)R$, or $-N(R)S(O)_2R$.

[0279] In some embodiments, R^{TA} is a C_{1-6} aliphatic chain; phenyl; naphthyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}.

[0280] In some embodiments, R^{TA} is a C_{1-6} aliphatic chain substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is phenyl substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is naphthyl substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^3 instances of R^{TC}.

[0281] In some embodiments, R^{TA} is phenyl; naphthyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}.

[0282] In some embodiments, R^{TA} is phenyl; naphthyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic

ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}.

[0283] In some embodiments, R^{TA} is phenyl; naphthyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}.

[0284] In some embodiments, R^{TA} is phenyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is naphthyl; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}.

[0285] In some embodiments, R^{TA} is phenyl or naphthyl; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic

ring; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}.

[0286] In some embodiments, R^{TA} is phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is naphthyl or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}.

[0287] In some embodiments, R^{TA} is phenyl or a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is naphthyl or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r3 instances of R^{TC}. In some embodiments, R^{TA} is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}.

[0288] In some embodiments, R^{TA} is a C_{1-6} aliphatic chain; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a C_{1-6} aliphatic chain; phenyl; naphthyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a C_{1-6} aliphatic chain; phenyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}.

[0289] In some embodiments, R^{TA} is a C_{1-6} aliphatic chain, a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a C_{1-6} aliphatic chain, a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^3 instances of R^{TC}. In some embodiments, R^{TA} is a C_{1-6} aliphatic chain, phenyl, or a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; each of which is substituted by r^3 instances of R^{TC}.

[0290] In some embodiments, R^{TA} is selected from the groups depicted in the compounds in Table 1.

[0291] As defined generally above, each R^L is independently R^A or R^B substituted by r^4 instances of R^{LC}. In some embodiments, each R^L is independently R^A. In some embodiments, each R^L is independently R^B substituted by r^4 instances of R^{LC}.

[0292] In some embodiments, R^L is oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, or deuterium.

[0293] In some embodiments, R^L is oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, or -$B(OR)_2$.

[0294] In some embodiments, R^L is oxo. In some embodiments, R^L is halogen. In some embodiments, R^L is –CN. In some embodiments, R^L is -NO_2. In some embodiments, R^L is -OR. In some embodiments, R^L is -SR. In some embodiments, R^L is -NR_2. In some embodiments, R^L is -$S(O)_2R$. In some embodiments, R^L is -$S(O)_2NR_2$. In some embodiments, R^L is -$S(O)_2F$. In some embodiments, R^L is -S(O)R. In some embodiments, R^L is -$S(O)NR_2$. In some embodiments, R^L is -S(O)(NR)R. In some embodiments, R^L is -C(O)R. In some embodiments, R^L is -C(O)OR. In some embodiments, R^L is -$C(O)NR_2$. In some embodiments, R^L is -C(O)N(R)OR. In some embodiments, R^L is -OC(O)R. In some embodiments, R^L is -$OC(O)NR_2$. In some embodiments, R^L is -N(R)C(O)OR. In some embodiments, R^L is -N(R)C(O)R. In some embodiments, R^L is -$N(R)C(O)NR_2$. In some embodiments, R^L is -$N(R)C(NR)NR_2$. In some embodiments, R^L is -$N(R)S(O)_2NR_2$. In some embodiments, R^L is -$N(R)S(O)_2R$. In some embodiments, R^L is -$P(O)R_2$. In some embodiments, R^L is -P(O)(R)OR. In some embodiments, R^L is -$B(OR)_2$. In some embodiments, R^L is deuterium.

[0295] In some embodiments, R^L is halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, or -$B(OR)_2$.

[0296] In some embodiments, R^L is halogen, -CN, or -NO_2. In some embodiments, R^L is -OR, -SR, or -NR_2. In some embodiments, R^L is -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, or -S(O)(NR)R. In some embodiments, R^L is -C(O)R, -C(O)OR, -$C(O)NR_2$, or -C(O)N(R)OR. In some embodiments, R^L is -OC(O)R or -$OC(O)NR_2$. In some

embodiments, R^L is -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2$$NR_2$, or -N(R)S(O)$_2$R. In some embodiments, R^L is -P(O)R_2 or -P(O)(R)OR.

[0297] In some embodiments, R^L is -OR, -OC(O)R, or -OC(O)NR_2. In some embodiments, R^L is -SR, -S(O)$_2$R, -S(O)$_2$$NR_2$, -S(O)$_2$F, -S(O)R, -S(O)$NR_2$, or -S(O)(NR)R. In some embodiments, R^L is -NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2$$NR_2$, or -N(R)S(O)$_2$R.

[0298] In some embodiments, R^L is -S(O)$_2$R, -S(O)$_2$$NR_2$, or -S(O)$_2$F. In some embodiments, R^L is -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, R^L is -SR, -S(O)$_2$R, or -S(O)R. In some embodiments, R^L is -S(O)$_2$$NR_2$, -S(O)$NR_2$, or -S(O)(NR)R. In some embodiments, R^L is -S(O)$_2$$NR_2$ or -S(O)NR_2. In some embodiments, R^L is -SR, -S(O)$_2$R, -S(O)$_2$$NR_2$, or -S(O)R.

[0299] In some embodiments, R^L is -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, R^L is -N(R)S(O)$_2$$NR_2$ or -N(R)S(O)$_2$R. In some embodiments, R^L is -N(R)C(O)OR or -N(R)C(O)R. In some embodiments, R^L is -N(R)C(O)NR_2 or -N(R)S(O)$_2$$NR_2$. In some embodiments, R^L is -N(R)C(O)OR, -N(R)C(O)R, or -N(R)S(O)$_2$R.

[0300] In some embodiments, R^L is -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, R^L is -NR_2, -N(R)C(O)OR, or -N(R)C(O)R. In some embodiments, R^L is -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)S(O)$_2$R.

[0301] In some embodiments, R^L is a C_{1-6} aliphatic chain; phenyl; naphthyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}.

[0302] In some embodiments, R^L is a C_{1-6} aliphatic chain substituted by r^4 instances of R^{LC}. In some embodiments, R^L is phenyl substituted by r^4 instances of R^{LC}. In some embodiments, R^L is naphthyl substituted by r^4 instances of R^{LC}. In some embodiments, R^L is

a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^4 instances of R^{LC}.

[0303] In some embodiments, R^L is phenyl; naphthyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}.

[0304] In some embodiments, R^L is phenyl; naphthyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4

heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}.

[0305] In some embodiments, R^L is phenyl; naphthyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}.

[0306] In some embodiments, R^L is phenyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is naphthyl; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}.

[0307] In some embodiments, R^L is phenyl or naphthyl; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2

heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}.

[0308] In some embodiments, R^L is phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is naphthyl or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}.

[0309] In some embodiments, R^L is phenyl or a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is naphthyl or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}.

[0310] In some embodiments, R^L is a C_{1-6} aliphatic chain; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated

monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a C_{1-6} aliphatic chain; phenyl; naphthyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a C_{1-6} aliphatic chain; phenyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}.

[0311] In some embodiments, R^L is a C_{1-6} aliphatic chain, a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a C_{1-6} aliphatic chain, a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; each of which is substituted by r^4 instances of R^{LC}. In some embodiments, R^L is a C_{1-6} aliphatic chain, phenyl, or a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; each of which is substituted by r^4 instances of R^{LC}.

[0312] In some embodiments, R^L is selected from the groups depicted in the compounds in Table 1.

[0313] As defined generally above, each instance of R^A is independently oxo, deuterium, halogen, -CN, $-NO_2$, -OR, $-SF_5$, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$.

[0314] In some embodiments, each instance of R^A is independently oxo, halogen, -CN, $-NO_2$, -OR, $-SF_5$, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R,

-C(O)R, -C(O)OR, -C(O)NR_2, -C(O)N(R)OR, -OC(O)R, -OC(O)NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)$S(O)_2NR_2$, -N(R)$S(O)_2$R, -P(O)R_2, -P(O)(R)OR, or -$B(OR)_2$.

[0315] In some embodiments, R^A is oxo. In some embodiments, R^A is halogen. In some embodiments, R^A is –CN. In some embodiments, R^A is -NO_2. In some embodiments, R^A is –OR. In some embodiments, R^A is –SF_5. In some embodiments, R^A is –SR. In some embodiments, R^A is -NR_2. In some embodiments, R^A is -$S(O)_2$R. In some embodiments, R^A is -$S(O)_2NR_2$. In some embodiments, R^A is -$S(O)_2$F. In some embodiments, R^A is -S(O)R. In some embodiments, R^A is -S(O)NR_2. In some embodiments, R^A is -S(O)(NR)R. In some embodiments, R^A is -C(O)R. In some embodiments, R^A is -C(O)OR. In some embodiments, R^A is -C(O)NR_2. In some embodiments, R^A is -C(O)N(R)OR. In some embodiments, R^A is -OC(O)R. In some embodiments, R^A is -OC(O)NR_2. In some embodiments, R^A is -N(R)C(O)OR. In some embodiments, R^A is -N(R)C(O)R. In some embodiments, R^A is -N(R)C(O)NR_2. In some embodiments, R^A is -N(R)C(NR)NR_2. In some embodiments, R^A is -N(R)$S(O)_2NR_2$. In some embodiments, R^A is -N(R)$S(O)_2$R. In some embodiments, R^A is -P(O)R_2. In some embodiments, R^A is -P(O)(R)OR. In some embodiments, R^A is -$B(OR)_2$. In some embodiments, R^A is deuterium.

[0316] In some embodiments, R^A is halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2$R, -$S(O)_2NR_2$, -$S(O)_2$F, -S(O)R, -S(O)NR_2, -S(O)(NR)R, -C(O)R, -C(O)OR, -C(O)NR_2, -C(O)N(R)OR, -OC(O)R, -OC(O)NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)$S(O)_2NR_2$, -N(R)$S(O)_2$R, -P(O)R_2, -P(O)(R)OR, or -$B(OR)_2$.

[0317] In some embodiments, R^A is halogen, -CN, or -NO_2. In some embodiments, R^A is -OR, -SR, or -NR_2. In some embodiments, R^A is -$S(O)_2$R, -$S(O)_2NR_2$, -$S(O)_2$F, -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, R^A is -C(O)R, -C(O)OR, -C(O)NR_2, or -C(O)N(R)OR. In some embodiments, R^A is -OC(O)R or -OC(O)NR_2. In some embodiments, R^A is -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)$S(O)_2NR_2$, or -N(R)$S(O)_2$R. In some embodiments, R^A is -P(O)R_2 or -P(O)(R)OR.

[0318] In some embodiments, R^A is -OR, -OC(O)R, or -OC(O)NR_2. In some embodiments, R^A is -SR, -$S(O)_2$R, -$S(O)_2NR_2$, -$S(O)_2$F, -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, R^A is -NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)$S(O)_2NR_2$, or -N(R)$S(O)_2$R.

[0319] In some embodiments, R^A is $-S(O)_2R$, $-S(O)_2NR_2$, or $-S(O)_2F$. In some embodiments, R^A is $-S(O)R$, $-S(O)NR_2$, or $-S(O)(NR)R$. In some embodiments, R^A is $-SR$, $-S(O)_2R$, or $-S(O)R$. In some embodiments, R^A is $-S(O)_2NR_2$, $-S(O)NR_2$, or $-S(O)(NR)R$. In some embodiments, R^A is $-S(O)_2NR_2$ or $-S(O)NR_2$. In some embodiments, R^A is $-SR$, $-S(O)_2R$, $-S(O)_2NR_2$, or $-S(O)R$.

[0320] In some embodiments, R^A is $-N(R)C(O)OR$, $-N(R)C(O)R$, or $-N(R)C(O)NR_2$. In some embodiments, R^A is $-N(R)S(O)_2NR_2$ or $-N(R)S(O)_2R$. In some embodiments, R^A is $-N(R)C(O)OR$ or $-N(R)C(O)R$. In some embodiments, R^A is $-N(R)C(O)NR_2$ or $-N(R)S(O)_2NR_2$. In some embodiments, R^A is $-N(R)C(O)OR$, $-N(R)C(O)R$, or $-N(R)S(O)_2R$.

[0321] In some embodiments, R^A is $-NR_2$, $-N(R)C(O)OR$, $-N(R)C(O)R$, or $-N(R)C(O)NR_2$. In some embodiments, R^A is $-NR_2$, $-N(R)C(O)OR$, or $-N(R)C(O)R$. In some embodiments, R^A is $-NR_2$, $-N(R)C(O)OR$, $-N(R)C(O)R$, or $-N(R)S(O)_2R$.

[0322] In some embodiments, R^A is selected from the groups depicted in the compounds in Table 1.

[0323] As defined generally above, each instance of R^B is independently a C_{1-6} aliphatic chain; phenyl; naphthyl; cubanyl; adamantyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0324] In some embodiments, R^B is a C_{1-6} aliphatic chain. In some embodiments, R^B is phenyl. In some embodiments, R^B is naphthyl. In some embodiments, R^B is cubanyl. In some embodiments, R^B is adamantyl. In some embodiments, R^B is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R^B is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R^B is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring. In some embodiments, R^B is a 5-12 membered saturated or partially

unsaturated bicyclic carbocyclic ring. In some embodiments, R^B is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R^B is a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0325] In some embodiments, R^B is phenyl; naphthyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0326] In some embodiments, R^B is phenyl; naphthyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R^B is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0327] In some embodiments, R^B is phenyl; naphthyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring. In some embodiments, R^B is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially

unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0328] In some embodiments, R^B is phenyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R^B is naphthyl; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0329] In some embodiments, R^B is phenyl or naphthyl. In some embodiments, R^B is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R^B is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring. In some embodiments, R^B is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0330] In some embodiments, R^B is phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R^B is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R^B is naphthyl or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R^B is a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0331] In some embodiments, R^B is phenyl or a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring. In some embodiments, R^B is naphthyl or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring. In some embodiments, R^B is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R^B is an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0332] In some embodiments, R^B is a C_{1-6} aliphatic chain; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R^B is a C_{1-6} aliphatic chain; phenyl; naphthyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring. In some embodiments, R^B is a C_{1-6} aliphatic chain; phenyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0333] In some embodiments, R^B is a C_{1-6} aliphatic chain, a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring. In some embodiments, R^B is a C_{1-6} aliphatic chain, a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R^B is a C_{1-6} aliphatic chain, phenyl, or a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring.

[0334] In some embodiments, R^B is selected from the groups depicted in the compounds in Table 1.

[0335] As defined generally above, each instance of R^{1C} is independently oxo, deuterium, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0336] In some embodiments, each instance of R^{1C} is independently oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0337] In some embodiments, each instance of R^{1C} is independently oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, or -$B(OR)_2$. In some embodiments, each instance of R^{1C} is independently an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0338] In some embodiments, R^{1C} is oxo. In some embodiments, R^{1C} is deuterium. In some embodiments, each instance of R^{1C} is independently halogen. In some embodiments, R^{1C} is -CN. In some embodiments, R^{1C} is -NO_2. In some embodiments, R^{1C} is -OR. In some

embodiments, R^{1C} is -SR. In some embodiments, R^{1C} is $-NR_2$. In some embodiments, R^{1C} is $-S(O)_2R$. In some embodiments, R^{1C} is $-S(O)_2NR_2$. In some embodiments, R^{1C} is $-S(O)_2F$. In some embodiments, R^{1C} is -S(O)R. In some embodiments, R^{1C} is $-S(O)NR_2$. In some embodiments, R^{1C} is -S(O)(NR)R. In some embodiments, R^{1C} is -C(O)R. In some embodiments, R^{1C} is -C(O)OR. In some embodiments, R^{1C} is $-C(O)NR_2$. In some embodiments, R^{1C} is -C(O)N(R)OR. In some embodiments, R^{1C} is -OC(O)R. In some embodiments, R^{1C} is $-OC(O)NR_2$. In some embodiments, R^{1C} is -N(R)C(O)OR. In some embodiments, R^{1C} is -N(R)C(O)R. In some embodiments, R^{1C} is $-N(R)C(O)NR_2$. In some embodiments, R^{1C} is $-N(R)C(NR)NR_2$. In some embodiments, R^{1C} is $-N(R)S(O)_2NR_2$. In some embodiments, R^{1C} is $-N(R)S(O)_2R$. In some embodiments, R^{1C} is $-P(O)R_2$. In some embodiments, R^{1C} is -P(O)(R)OR. In some embodiments, R^{1C} is $-B(OR)_2$.

[0339] In some embodiments, each instance of R^{1C} is independently halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$.

[0340] In some embodiments, each instance of R^{1C} is independently halogen, -CN, or $-NO_2$. In some embodiments, each instance of R^{1C} is independently -OR, -SR, or $-NR_2$. In some embodiments, each instance of R^{1C} is independently $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{1C} is independently -C(O)R, -C(O)OR, $-C(O)NR_2$, or -C(O)N(R)OR. In some embodiments, each instance of R^{1C} is independently -OC(O)R or $-OC(O)NR_2$. In some embodiments, each instance of R^{1C} is independently -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, or $-N(R)S(O)_2R$. In some embodiments, each instance of R^{1C} is independently $-P(O)R_2$ or -P(O)(R)OR.

[0341] In some embodiments, each instance of R^{1C} is independently -OR, -OC(O)R, or $-OC(O)NR_2$. In some embodiments, each instance of R^{1C} is independently -SR, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{1C} is independently $-NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, or $-N(R)S(O)_2R$.

[0342] In some embodiments, each instance of R^{1C} is independently $-S(O)_2R$, $-S(O)_2NR_2$, or $-S(O)_2F$. In some embodiments, each instance of R^{1C} is independently -S(O)R, $-S(O)NR_2$,

or -S(O)(NR)R. In some embodiments, each instance of R^{1C} is independently -SR, $-S(O)_2R$, or -S(O)R. In some embodiments, each instance of R^{1C} is independently $-S(O)_2NR_2$, $-S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{1C} is independently $-S(O)_2NR_2$ or $-S(O)NR_2$. In some embodiments, each instance of R^{1C} is independently -SR, $-S(O)_2R$, $-S(O)_2NR_2$, or -S(O)R.

[0343] In some embodiments, each instance of R^{1C} is independently -N(R)C(O)OR, $-N(R)C(O)R$, or $-N(R)C(O)NR_2$. In some embodiments, each instance of R^{1C} is independently $-N(R)S(O)_2NR_2$ or $-N(R)S(O)_2R$. In some embodiments, each instance of R^{1C} is independently -N(R)C(O)OR or $-N(R)C(O)R$. In some embodiments, each instance of R^{1C} is independently $-N(R)C(O)NR_2$ or $-N(R)S(O)_2NR_2$. In some embodiments, each instance of R^{1C} is independently -N(R)C(O)OR, $-N(R)C(O)R$, or $-N(R)S(O)_2R$.

[0344] In some embodiments, each instance of R^{1C} is independently $-NR_2$, -N(R)C(O)OR, $-N(R)C(O)R$, or $-N(R)C(O)NR_2$. In some embodiments, each instance of R^{1C} is independently $-NR_2$, -N(R)C(O)OR, or $-N(R)C(O)R$. In some embodiments, each instance of R^{1C} is independently $-NR_2$, -N(R)C(O)OR, $-N(R)C(O)R$, or $-N(R)S(O)_2R$.

[0345] In some embodiments, each instance of R^{1C} is independently an optionally substituted C_{1-6} aliphatic. In some embodiments, each instance of R^{1C} is independently an optionally substituted phenyl. In some embodiments, each instance of R^{1C} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{1C} is independently an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0346] In some embodiments, each instance of R^{1C} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{1C} is independently an optionally substituted phenyl or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0347] In some embodiments, each instance of R^{1C} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted phenyl. In some embodiments, each instance of R^{1C}

is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0348] In some embodiments, each instance of R^{1C} is independently an optionally substituted group selected from phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0349] In some embodiments, each instance of R^{1C} is independently a C_{1-6} aliphatic. In some embodiments, R^{1C} is phenyl. In some embodiments, each instance of R^{1C} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{1C} is independently a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0350] In some embodiments, each instance of R^{1C} is independently a C_{1-6} aliphatic or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{1C} is independently phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0351] In some embodiments, each instance of R^{1C} is independently a C_{1-6} aliphatic or phenyl. In some embodiments, each instance of R^{1C} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0352] In some embodiments, each instance of R^{1C} is independently phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0353] In some embodiments, each instance of R^{1C} is independently halogen, -CN, -O-(optionally substituted C_{1-6} aliphatic), or an optionally substituted C_{1-6} aliphatic. In some embodiments, each instance of R^{1C} is independently halogen, -CN, -O-(C_{1-6} aliphatic), or C_{1-6} aliphatic; wherein each C_{1-6} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{1C} is independently halogen or C_{1-3} aliphatic optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{1C} is independently fluorine, chlorine, $-CH_3$, $-CHF_2$, or $-CF_3$.

[0354] In some embodiments, each instance of R^{1C} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or optionally substituted C_{1-6} aliphatic.

[0355] In some embodiments, each instance of R^{1C} is independently selected from the groups depicted in the compounds in Table 1.

[0356] As defined generally above, each instance of R^{2C} is independently oxo, deuterium, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0357] In some embodiments, each instance of R^{2C} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0358] In some embodiments, each instance of R^{2C} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$. In some embodiments, each instance of R^{2C} is independently an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0359] In some embodiments, R^{2C} is oxo. In some embodiments, R^{2C} is deuterium. In some embodiments, each instance of R^{2C} is independently halogen. In some embodiments, R^{2C} is -CN. In some embodiments, R^{2C} is $-NO_2$. In some embodiments, R^{2C} is -OR. In some embodiments, R^{2C} is -SR. In some embodiments, R^{2C} is $-NR_2$. In some embodiments, R^{2C} is $-S(O)_2R$. In some embodiments, R^{2C} is $-S(O)_2NR_2$. In some embodiments, R^{2C} is $-S(O)_2F$. In some embodiments, R^{2C} is -S(O)R. In some embodiments, R^{2C} is $-S(O)NR_2$. In some embodiments, R^{2C} is -S(O)(NR)R. In some embodiments, R^{2C} is -C(O)R. In some embodiments, R^{2C} is -C(O)OR. In some embodiments, R^{2C} is $-C(O)NR_2$. In some embodiments, R^{2C} is -C(O)N(R)OR. In some embodiments, R^{2C} is -OC(O)R. In some embodiments, R^{2C} is $-OC(O)NR_2$. In some embodiments, R^{2C} is -N(R)C(O)OR. In some embodiments, R^{2C} is -N(R)C(O)R. In some embodiments, R^{2C} is $-N(R)C(O)NR_2$. In some embodiments, R^{2C} is $-N(R)C(NR)NR_2$. In some embodiments, R^{2C} is $-N(R)S(O)_2NR_2$. In some embodiments, R^{2C} is $-N(R)S(O)_2R$. In some embodiments, R^{2C} is $-P(O)R_2$. In some embodiments, R^{2C} is -P(O)(R)OR. In some embodiments, R^{2C} is $-B(OR)_2$.

[0360] In some embodiments, each instance of R^{2C} is independently halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$.

[0361] In some embodiments, each instance of R^{2C} is independently halogen, -CN, or $-NO_2$. In some embodiments, each instance of R^{2C} is independently -OR, -SR, or $-NR_2$. In some embodiments, each instance of R^{2C} is independently $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{2C} is independently -C(O)R, -C(O)OR, $-C(O)NR_2$, or -C(O)N(R)OR. In some embodiments, each instance of R^{2C}

is independently -OC(O)R or -OC(O)NR_2. In some embodiments, each instance of R^{2C} is independently -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2NR_2$, or -N(R)S(O)$_2$R. In some embodiments, each instance of R^{2C} is independently -P(O)R_2 or -P(O)(R)OR.

[0362] In some embodiments, each instance of R^{2C} is independently -OR, -OC(O)R, or -OC(O)NR_2. In some embodiments, each instance of R^{2C} is independently -SR, -S(O)$_2$R, -S(O)$_2NR_2$, -S(O)$_2$F, -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, each instance of R^{2C} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2NR_2$, or -N(R)S(O)$_2$R.

[0363] In some embodiments, each instance of R^{2C} is independently -S(O)$_2$R, -S(O)$_2NR_2$, or -S(O)$_2$F. In some embodiments, each instance of R^{2C} is independently -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, each instance of R^{2C} is independently -SR, -S(O)$_2$R, or -S(O)R. In some embodiments, each instance of R^{2C} is independently -S(O)$_2NR_2$, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, each instance of R^{2C} is independently -S(O)$_2NR_2$ or -S(O)NR_2. In some embodiments, each instance of R^{2C} is independently -SR, -S(O)$_2$R, -S(O)$_2NR_2$, or -S(O)R.

[0364] In some embodiments, each instance of R^{2C} is independently -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, each instance of R^{2C} is independently -N(R)S(O)$_2NR_2$ or -N(R)S(O)$_2$R. In some embodiments, each instance of R^{2C} is independently -N(R)C(O)OR or -N(R)C(O)R. In some embodiments, each instance of R^{2C} is independently -N(R)C(O)NR_2 or -N(R)S(O)$_2NR_2$. In some embodiments, each instance of R^{2C} is independently -N(R)C(O)OR, -N(R)C(O)R, or -N(R)S(O)$_2$R.

[0365] In some embodiments, each instance of R^{2C} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, each instance of R^{2C} is independently -NR_2, -N(R)C(O)OR, or -N(R)C(O)R. In some embodiments, each instance of R^{2C} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)S(O)$_2$R.

[0366] In some embodiments, each instance of R^{2C} is independently an optionally substituted C_{1-6} aliphatic. In some embodiments, each instance of R^{2C} is independently an optionally substituted phenyl. In some embodiments, each instance of R^{2C} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{2C} is independently an optionally substituted

5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0367] In some embodiments, each instance of R^{2C} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{2C} is independently an optionally substituted phenyl or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0368] In some embodiments, each instance of R^{2C} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted phenyl. In some embodiments, each instance of R^{2C} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0369] In some embodiments, each instance of R^{2C} is independently an optionally substituted group selected from phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0370] In some embodiments, each instance of R^{2C} is independently a C_{1-6} aliphatic. In some embodiments, R^{2C} is phenyl. In some embodiments, each instance of R^{2C} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{2C} is independently a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0371] In some embodiments, each instance of R^{2C} is independently a C_{1-6} aliphatic or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{2C} is independently phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0372] In some embodiments, each instance of R^{2C} is independently a C_{1-6} aliphatic or phenyl. In some embodiments, each instance of R^{2C} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0373] In some embodiments, each instance of R^{2C} is independently phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0374] In some embodiments, each instance of R^{2C} is independently halogen, -CN, -O-(optionally substituted C_{1-6} aliphatic), or an optionally substituted C_{1-6} aliphatic. In some embodiments, each instance of R^{2C} is independently halogen, -CN, -O-(C_{1-6} aliphatic), or C_{1-6} aliphatic; wherein each C_{1-6} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{2C} is independently halogen or C_{1-3} aliphatic optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{2C} is independently fluorine, chlorine, $-CH_3$, $-CHF_2$, or $-CF_3$.

[0375] In some embodiments, each instance of R^{2C} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or optionally substituted C_{1-6} aliphatic.

[0376] In some embodiments, each instance of R^{2C} is independently a C_{1-6} aliphatic optionally substituted with (i) 1 or 2 groups independently selected from -O-(C_{1-6} aliphatic), -OH, -N(C_{1-6} aliphatic)$_2$, and -CN, and (ii) 1, 2, or 3 atoms independently selected from halogen and deuterium. In some embodiments, each instance of R^{2C} is independently a C_{1-6} aliphatic optionally substituted with (i) 1 or 2 groups independently selected from -O-(C_{1-6} aliphatic), -OH, -N(C_{1-6} aliphatic)$_2$, and -CN, and (ii) 1, 2, or 3 halogen atoms. In some embodiments, each instance of R^{2C} is independently a C_{1-6} aliphatic optionally substituted with 1 or 2 groups independently selected from -O-(C_{1-6} aliphatic), -OH, -N(C_{1-6} aliphatic)$_2$, and -CN. In some embodiments, each instance of R^{2C} is independently a C_{1-6} aliphatic

optionally substituted with 1, 2, or 3 atoms independently selected from halogen and deuterium. In some embodiments, each instance of R^{2C} is independently a C_{1-6} aliphatic optionally substituted with 1, 2, or 3 atoms independently selected from halogen.

[0377] In some embodiments, each instance of R^{2C} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{2C} is independently oxo, deuterium, halogen, or -CN. In some embodiments, each instance of R^{2C} is independently oxo, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{2C} is independently -O-(C_{1-3} aliphatic) or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{2C} is independently -O-(C_{1-3} aliphatic) or C_{1-3} aliphatic.

[0378] In some embodiments, each instance of R^{2C} is independently selected from the groups depicted in the compounds in Table 1.

[0379] As defined generally above, each instance of R^{TC} is independently oxo, deuterium, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0380] In some embodiments, each instance of R^{TC} is independently oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0381] In some embodiments, each instance of R^{TC} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$. In some embodiments, each instance of R^{TC} is independently an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0382] In some embodiments, R^{TC} is oxo. In some embodiments, R^{TC} is deuterium. In some embodiments, each instance of R^{TC} is independently halogen. In some embodiments, R^{TC} is -CN. In some embodiments, R^{TC} is $-NO_2$. In some embodiments, R^{TC} is -OR. In some embodiments, R^{TC} is -SR. In some embodiments, R^{TC} is $-NR_2$. In some embodiments, R^{TC} is $-S(O)_2R$. In some embodiments, R^{TC} is $-S(O)_2NR_2$. In some embodiments, R^{TC} is $-S(O)_2F$. In some embodiments, R^{TC} is -S(O)R. In some embodiments, R^{TC} is $-S(O)NR_2$. In some embodiments, R^{TC} is -S(O)(NR)R. In some embodiments, R^{TC} is -C(O)R. In some embodiments, R^{TC} is -C(O)OR. In some embodiments, R^{TC} is $-C(O)NR_2$. In some embodiments, R^{TC} is -C(O)N(R)OR. In some embodiments, R^{TC} is -OC(O)R. In some embodiments, R^{TC} is $-OC(O)NR_2$. In some embodiments, R^{TC} is -N(R)C(O)OR. In some embodiments, R^{TC} is -N(R)C(O)R. In some embodiments, R^{TC} is $-N(R)C(O)NR_2$. In some embodiments, R^{TC} is $-N(R)C(NR)NR_2$. In some embodiments, R^{TC} is $-N(R)S(O)_2NR_2$. In some embodiments, R^{TC} is $-N(R)S(O)_2R$. In some embodiments, R^{TC} is $-P(O)R_2$. In some embodiments, R^{TC} is -P(O)(R)OR. In some embodiments, R^{TC} is $-B(OR)_2$.

[0383] In some embodiments, each instance of R^{TC} is independently halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$.

[0384] In some embodiments, each instance of R^{TC} is independently halogen, -CN, or $-NO_2$. In some embodiments, each instance of R^{TC} is independently -OR, -SR, or $-NR_2$. In some embodiments, each instance of R^{TC} is independently $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{TC} is independently -C(O)R, -C(O)OR, $-C(O)NR_2$, or -C(O)N(R)OR. In some embodiments, each instance of

R^{TC} is independently -OC(O)R or -OC(O)NR_2. In some embodiments, each instance of R^{TC} is independently -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2$$NR_2$, or -N(R)S(O)$_2$R. In some embodiments, each instance of R^{TC} is independently -P(O)R_2 or -P(O)(R)OR.

[0385] In some embodiments, each instance of R^{TC} is independently -OR, -OC(O)R, or -OC(O)NR_2. In some embodiments, each instance of R^{TC} is independently -SR, -S(O)$_2$R, -S(O)$_2$$NR_2$, -S(O)$_2$F, -S(O)R, -S(O)$NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{TC} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2$$NR_2$, or -N(R)S(O)$_2$R.

[0386] In some embodiments, each instance of R^{TC} is independently -S(O)$_2$R, -S(O)$_2$$NR_2$, or -S(O)$_2$F. In some embodiments, each instance of R^{TC} is independently -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, each instance of R^{TC} is independently -SR, -S(O)$_2$R, or -S(O)R. In some embodiments, each instance of R^{TC} is independently -S(O)$_2$$NR_2$, -S(O)$NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{TC} is independently -S(O)$_2$$NR_2$ or -S(O)NR_2. In some embodiments, each instance of R^{TC} is independently -SR, -S(O)$_2$R, -S(O)$_2$$NR_2$, or -S(O)R.

[0387] In some embodiments, each instance of R^{TC} is independently -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, each instance of R^{TC} is independently -N(R)S(O)$_2$$NR_2$ or -N(R)S(O)$_2$R. In some embodiments, each instance of R^{TC} is independently -N(R)C(O)OR or -N(R)C(O)R. In some embodiments, each instance of R^{TC} is independently -N(R)C(O)NR_2 or -N(R)S(O)$_2$$NR_2$. In some embodiments, each instance of R^{TC} is independently -N(R)C(O)OR, -N(R)C(O)R, or -N(R)S(O)$_2$R.

[0388] In some embodiments, each instance of R^{TC} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, each instance of R^{TC} is independently -NR_2, -N(R)C(O)OR, or -N(R)C(O)R. In some embodiments, each instance of R^{TC} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)S(O)$_2$R.

[0389] In some embodiments, each instance of R^{TC} is independently an optionally substituted C_{1-6} aliphatic. In some embodiments, each instance of R^{TC} is independently an optionally substituted phenyl. In some embodiments, each instance of R^{TC} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{TC} is independently an optionally substituted

5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0390] In some embodiments, each instance of R^{TC} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{TC} is independently an optionally substituted phenyl or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0391] In some embodiments, each instance of R^{TC} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted phenyl. In some embodiments, each instance of R^{TC} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0392] In some embodiments, each instance of R^{TC} is independently an optionally substituted group selected from phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0393] In some embodiments, each instance of R^{TC} is independently a C_{1-6} aliphatic. In some embodiments, R^{TC} is phenyl. In some embodiments, each instance of R^{TC} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{TC} is independently a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0394] In some embodiments, each instance of R^{TC} is independently a C_{1-6} aliphatic or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{TC} is independently phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0395] In some embodiments, each instance of R^{TC} is independently a C_{1-6} aliphatic or phenyl. In some embodiments, each instance of R^{TC} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0396] In some embodiments, each instance of R^{TC} is independently phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0397] In some embodiments, each instance of R^{TC} is independently halogen, -CN, -O-(optionally substituted C_{1-6} aliphatic), or an optionally substituted C_{1-6} aliphatic. In some embodiments, each instance of R^{TC} is independently halogen, -CN, -O-(C_{1-6} aliphatic), or C_{1-6} aliphatic; wherein each C_{1-6} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{TC} is independently halogen or C_{1-3} aliphatic optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{TC} is independently fluorine, chlorine, $-CH_3$, $-CHF_2$, or $-CF_3$.

[0398] In some embodiments, each instance of R^{TC} is a C_{1-6} aliphatic optionally substituted with (i) 1 or 2 groups independently selected from -O-(C_{1-6} aliphatic), -OH, -N(C_{1-6} aliphatic)$_2$, and -CN, and (ii) 1, 2, or 3 atoms independently selected from halogen and deuterium. In some embodiments, each instance of R^{TC} is a C_{1-6} aliphatic optionally substituted with (i) 1 or 2 groups independently selected from -O-(C_{1-6} aliphatic), -OH, -N(C_{1-6} aliphatic)$_2$, and -CN, and (ii) 1, 2, or 3 halogen atoms. In some embodiments, each instance of R^{TC} is a C_{1-6} aliphatic optionally substituted with 1 or 2 groups independently selected from -O-(C_{1-6} aliphatic), -OH, -N(C_{1-6} aliphatic)$_2$, and -CN. In some embodiments, each instance of R^{TC} is a C_{1-6} aliphatic optionally substituted with 1, 2, or 3 atoms independently selected from halogen and deuterium. In some embodiments, each instance of R^{TC} is a C_{1-6} aliphatic optionally substituted with 1, 2, or 3 atoms independently selected from halogen.

[0399] In some embodiments, each instance of R^{TC} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally

substituted with one or more halogen atoms. In some embodiments, each instance of R^{TC} is independently oxo, deuterium, halogen, or -CN. In some embodiments, each instance of R^{TC} is independently oxo, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{TC} is independently -O-(C_{1-3} aliphatic) or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{TC} is is independently -O-(C_{1-3} aliphatic) or C_{1-3} aliphatic.

[0400] In some embodiments, each instance of R^{TC} is independently halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{TC} is independently halogen, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{TC} is independently fluorine, chlorine, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{TC} is independently fluorine or -OH.

[0401] In some embodiments, each instance of R^{TC} is independently oxo, deuterium, halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{TC} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{TC} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{TC} is independently oxo, deuterium, fluorine, chlorine, -CN, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{TC} is independently oxo, deuterium, -CN, fluorine, or -OH. In some embodiments, each instance of R^{TC} is independently oxo, deuterium, -CN, $-CH_3$, or $-CHF_2$. In some embodiments, each instance of R^{TC} is independently deuterium, -CN, $-CH_3$, or $-CHF_2$.

[0402] In some embodiments, each instance of R^{TC} is independently oxo, halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{TC} is independently oxo, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{TC} is independently oxo, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{TC} is

independently oxo, fluorine, chlorine, -CN, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{TC} is independently oxo, -CN, fluorine, or -OH. In some embodiments, each instance of R^{TC} is independently oxo, -CN, $-CH_3$, or $-CHF_2$. In some embodiments, each instance of R^{TC} is independently -CN, $-CH_3$, or $-CHF_2$.

[0403] In some embodiments, each instance of R^{TC} is independently selected from the groups depicted in the compounds in Table 1.

[0404] As defined generally above, each instance of R^{TTC} is independently oxo, deuterium, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0405] In some embodiments, each instance of R^{TTC} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0406] In some embodiments, each instance of R^{TTC} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$. In some embodiments, each instance of R^{TTC} is independently an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently

selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0407] In some embodiments, R^{TTC} is oxo. In some embodiments, R^{TTC} is deuterium. In some embodiments, each instance of R^{TTC} is independently halogen. In some embodiments, R^{TTC} is -CN. In some embodiments, R^{TTC} is $-NO_2$. In some embodiments, R^{TTC} is -OR. In some embodiments, R^{TTC} is -SR. In some embodiments, R^{TTC} is $-NR_2$. In some embodiments, R^{TTC} is $-S(O)_2R$. In some embodiments, R^{TTC} is $-S(O)_2NR_2$. In some embodiments, R^{TTC} is $-S(O)_2F$. In some embodiments, R^{TTC} is -S(O)R. In some embodiments, R^{TTC} is $-S(O)NR_2$. In some embodiments, R^{TTC} is -S(O)(NR)R. In some embodiments, R^{TTC} is -C(O)R. In some embodiments, R^{TTC} is -C(O)OR. In some embodiments, R^{TTC} is $-C(O)NR_2$. In some embodiments, R^{TTC} is -C(O)N(R)OR. In some embodiments, R^{TTC} is -OC(O)R. In some embodiments, R^{TTC} is $-OC(O)NR_2$. In some embodiments, R^{TTC} is -N(R)C(O)OR. In some embodiments, R^{TTC} is -N(R)C(O)R. In some embodiments, R^{TTC} is $-N(R)C(O)NR_2$. In some embodiments, R^{TTC} is $-N(R)C(NR)NR_2$. In some embodiments, R^{TTC} is $-N(R)S(O)_2NR_2$. In some embodiments, R^{TTC} is $-N(R)S(O)_2R$. In some embodiments, R^{TTC} is $-P(O)R_2$. In some embodiments, R^{TTC} is -P(O)(R)OR. In some embodiments, R^{TTC} is $-B(OR)_2$.

[0408] In some embodiments, each instance of R^{TTC} is independently halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$.

[0409] In some embodiments, each instance of R^{TTC} is independently halogen, -CN, or $-NO_2$. In some embodiments, each instance of R^{TTC} is independently -OR, -SR, or $-NR_2$. In some embodiments, each instance of R^{TTC} is independently $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{TTC} is independently -C(O)R, -C(O)OR, $-C(O)NR_2$, or -C(O)N(R)OR. In some embodiments, each instance of R^{TTC} is independently -OC(O)R or $-OC(O)NR_2$. In some embodiments, each instance of R^{TTC} is independently -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, or $-N(R)S(O)_2R$. In some embodiments, each instance of R^{TTC} is independently $-P(O)R_2$ or -P(O)(R)OR.

[0410] In some embodiments, each instance of R^{TTC} is independently -OR, -OC(O)R, or -OC(O)NR_2. In some embodiments, each instance of R^{TTC} is independently -SR, -$S(O)_2$R, -$S(O)_2NR_2$, -$S(O)_2$F, -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, each instance of R^{TTC} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)$S(O)_2NR_2$, or -N(R)$S(O)_2$R.

[0411] In some embodiments, each instance of R^{TTC} is independently -$S(O)_2$R, -$S(O)_2NR_2$, or -$S(O)_2$F. In some embodiments, each instance of R^{TTC} is independently -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, each instance of R^{TTC} is independently -SR, -$S(O)_2$R, or -S(O)R. In some embodiments, each instance of R^{TTC} is independently -$S(O)_2NR_2$, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, each instance of R^{TTC} is independently -$S(O)_2NR_2$ or -S(O)NR_2. In some embodiments, each instance of R^{TTC} is independently -SR, -$S(O)_2$R, -$S(O)_2NR_2$, or -S(O)R.

[0412] In some embodiments, each instance of R^{TTC} is independently -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, each instance of R^{TTC} is independently -N(R)$S(O)_2NR_2$ or -N(R)$S(O)_2$R. In some embodiments, each instance of R^{TTC} is independently -N(R)C(O)OR or -N(R)C(O)R. In some embodiments, each instance of R^{TTC} is independently -N(R)C(O)NR_2 or -N(R)$S(O)_2NR_2$. In some embodiments, each instance of R^{TTC} is independently -N(R)C(O)OR, -N(R)C(O)R, or -N(R)$S(O)_2$R.

[0413] In some embodiments, each instance of R^{TTC} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, each instance of R^{TTC} is independently -NR_2, -N(R)C(O)OR, or -N(R)C(O)R. In some embodiments, each instance of R^{TTC} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)$S(O)_2$R.

[0414] In some embodiments, each instance of R^{TTC} is independently an optionally substituted C_{1-6} aliphatic. In some embodiments, each instance of R^{TTC} is independently an optionally substituted phenyl. In some embodiments, each instance of R^{TTC} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{TTC} is independently an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0415] In some embodiments, each instance of R^{TTC} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted 3-7 membered saturated or partially

unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{TTC} is independently an optionally substituted phenyl or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0416] In some embodiments, each instance of R^{TTC} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted phenyl. In some embodiments, each instance of R^{TTC} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0417] In some embodiments, each instance of R^{TTC} is independently an optionally substituted group selected from phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0418] In some embodiments, each instance of R^{TTC} is independently a C_{1-6} aliphatic. In some embodiments, R^{TTC} is phenyl. In some embodiments, each instance of R^{TTC} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{TTC} is independently a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0419] In some embodiments, each instance of R^{TTC} is independently a C_{1-6} aliphatic or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{TTC} is independently phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0420] In some embodiments, each instance of R^{TTC} is independently a C_{1-6} aliphatic or phenyl. In some embodiments, each instance of R^{TTC} is independently a 3-7 membered

saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0421] In some embodiments, each instance of R^{TTC} is independently phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0422] In some embodiments, each instance of R^{TTC} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or optionally substituted C_{1-6} aliphatic.

[0423] In some embodiments, each instance of R^{TTC} is independently halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{TTC} is independently halogen, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{TTC} is independently fluorine, chlorine, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{TTC} is independently fluorine or -OH.

[0424] In some embodiments, each instance of R^{TTC} is independently oxo, deuterium, halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{TTC} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{TTC} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{TTC} is independently oxo, deuterium, fluorine, chlorine, -CN, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{TTC} is independently oxo, deuterium, -CN, fluorine, or -OH. In some embodiments, each instance

of R^{TTC} is independently oxo, deuterium, -CN, $-CH_3$, or $-CHF_2$. In some embodiments, each instance of R^{TTC} is independently deuterium, -CN, $-CH_3$, or $-CHF_2$.

[0425] In some embodiments, each instance of R^{TTC} is independently oxo, halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{TTC} is independently oxo, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{TTC} is independently oxo, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{TTC} is independently oxo, fluorine, chlorine, -CN, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{TTC} is independently oxo, -CN, fluorine, or -OH. In some embodiments, each instance of R^{TTC} is independently oxo, -CN, $-CH_3$, or $-CHF_2$. In some embodiments, each instance of R^{TTC} is independently -CN, $-CH_3$, or $-CHF_2$.

[0426] In some embodiments, each instance of R^{TTC} is independently selected from the groups depicted in the compounds in Table 1.

[0427] As defined generally above, each instance of R^{11C} is independently oxo, deuterium, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0428] In some embodiments, each instance of R^{11C} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and

sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0429] In some embodiments, each instance of R^{11C} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$. In some embodiments, each instance of R^{11C} is independently an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0430] In some embodiments, R^{11C} is oxo. In some embodiments, R^{11C} is deuterium. In some embodiments, each instance of R^{11C} is independently halogen. In some embodiments, R^{11C} is -CN. In some embodiments, R^{11C} is $-NO_2$. In some embodiments, R^{11C} is -OR. In some embodiments, R^{11C} is -SR. In some embodiments, R^{11C} is $-NR_2$. In some embodiments, R^{11C} is $-S(O)_2R$. In some embodiments, R^{11C} is $-S(O)_2NR_2$. In some embodiments, R^{11C} is $-S(O)_2F$. In some embodiments, R^{11C} is -S(O)R. In some embodiments, R^{11C} is $-S(O)NR_2$. In some embodiments, R^{11C} is -S(O)(NR)R. In some embodiments, R^{11C} is -C(O)R. In some embodiments, R^{11C} is -C(O)OR. In some embodiments, R^{11C} is $-C(O)NR_2$. In some embodiments, R^{11C} is -C(O)N(R)OR. In some embodiments, R^{11C} is -OC(O)R. In some embodiments, R^{11C} is $-OC(O)NR_2$. In some embodiments, R^{11C} is -N(R)C(O)OR. In some embodiments, R^{11C} is -N(R)C(O)R. In some embodiments, R^{11C} is $-N(R)C(O)NR_2$. In some embodiments, R^{11C} is $-N(R)C(NR)NR_2$. In some embodiments, R^{11C} is $-N(R)S(O)_2NR_2$. In some embodiments, R^{11C} is $-N(R)S(O)_2R$. In some embodiments, R^{11C} is $-P(O)R_2$. In some embodiments, R^{11C} is -P(O)(R)OR. In some embodiments, R^{11C} is $-B(OR)_2$.

[0431] In some embodiments, each instance of R^{11C} is independently halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$.

[0432] In some embodiments, each instance of R^{11C} is independently halogen, -CN, or -NO_2. In some embodiments, each instance of R^{11C} is independently -OR, -SR, or -NR_2. In some embodiments, each instance of R^{11C} is independently -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{11C} is independently -C(O)R, -C(O)OR, -$C(O)NR_2$, or -C(O)N(R)OR. In some embodiments, each instance of R^{11C} is independently -OC(O)R or -$OC(O)NR_2$. In some embodiments, each instance of R^{11C} is independently -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, or -$N(R)S(O)_2R$. In some embodiments, each instance of R^{11C} is independently -$P(O)R_2$ or -P(O)(R)OR.

[0433] In some embodiments, each instance of R^{11C} is independently -OR, -OC(O)R, or -$OC(O)NR_2$. In some embodiments, each instance of R^{11C} is independently -SR, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{11C} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, or -$N(R)S(O)_2R$.

[0434] In some embodiments, each instance of R^{11C} is independently -$S(O)_2R$, -$S(O)_2NR_2$, or -$S(O)_2F$. In some embodiments, each instance of R^{11C} is independently -S(O)R, -$S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{11C} is independently -SR, -$S(O)_2R$, or -S(O)R. In some embodiments, each instance of R^{11C} is independently -$S(O)_2NR_2$, -$S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{11C} is independently -$S(O)_2NR_2$ or -$S(O)NR_2$. In some embodiments, each instance of R^{11C} is independently -SR, -$S(O)_2R$, -$S(O)_2NR_2$, or -S(O)R.

[0435] In some embodiments, each instance of R^{11C} is independently -N(R)C(O)OR, -N(R)C(O)R, or -$N(R)C(O)NR_2$. In some embodiments, each instance of R^{11C} is independently -$N(R)S(O)_2NR_2$ or -$N(R)S(O)_2R$. In some embodiments, each instance of R^{11C} is independently -N(R)C(O)OR or -N(R)C(O)R. In some embodiments, each instance of R^{11C} is independently -$N(R)C(O)NR_2$ or -$N(R)S(O)_2NR_2$. In some embodiments, each instance of R^{11C} is independently -N(R)C(O)OR, -N(R)C(O)R, or -$N(R)S(O)_2R$.

[0436] In some embodiments, each instance of R^{11C} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -$N(R)C(O)NR_2$. In some embodiments, each instance of R^{11C} is independently -NR_2, -N(R)C(O)OR, or -N(R)C(O)R. In some embodiments, each instance of R^{11C} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -$N(R)S(O)_2R$.

[0437] In some embodiments, each instance of R^{11C} is independently an optionally substituted C_{1-6} aliphatic. In some embodiments, each instance of R^{11C} is independently an optionally substituted phenyl. In some embodiments, each instance of R^{11C} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{11C} is independently an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0438] In some embodiments, each instance of R^{11C} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{11C} is independently an optionally substituted phenyl or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0439] In some embodiments, each instance of R^{11C} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted phenyl. In some embodiments, each instance of R^{11C} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0440] In some embodiments, each instance of R^{11C} is independently an optionally substituted group selected from phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0441] In some embodiments, each instance of R^{11C} is independently a C_{1-6} aliphatic. In some embodiments, R^{11C} is phenyl. In some embodiments, each instance of R^{11C} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{11C} is independently a 5-6 membered monocyclic

heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0442] In some embodiments, each instance of R^{11C} is independently a C_{1-6} aliphatic or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{11C} is independently phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0443] In some embodiments, each instance of R^{11C} is independently a C_{1-6} aliphatic or phenyl. In some embodiments, each instance of R^{11C} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0444] In some embodiments, each instance of R^{11C} is independently phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0445] In some embodiments, each instance of R^{11C} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or optionally substituted C_{1-6} aliphatic.

[0446] In some embodiments, each instance of R^{11C} is independently halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{11C} is independently halogen, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{11C} is independently fluorine, chlorine, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{11C} is independently fluorine or -OH.

[0447] In some embodiments, each instance of R^{11C} is independently oxo, deuterium, halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{11C} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{11C} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{11C} is independently oxo, deuterium, fluorine, chlorine, -CN, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{11C} is independently oxo, deuterium, -CN, fluorine, or -OH. In some embodiments, each instance of R^{11C} is independently oxo, deuterium, -CN, $-CH_3$, or $-CHF_2$. In some embodiments, each instance of R^{11C} is independently deuterium, -CN, $-CH_3$, or $-CHF_2$.

[0448] In some embodiments, each instance of R^{11C} is independently oxo, halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{11C} is independently oxo, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{11C} is independently oxo, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{11C} is independently oxo, fluorine, chlorine, -CN, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{11C} is independently oxo, -CN, fluorine, or -OH. In some embodiments, each instance of R^{11C} is independently oxo, -CN, $-CH_3$, or $-CHF_2$. In some embodiments, each instance of R^{11C} is independently -CN, $-CH_3$, or $-CHF_2$.

[0449] In some embodiments, each instance of R^{11C} is independently selected from the groups depicted in the compounds in Table 1.

[0450] As defined generally above, each instance of R^{22C} is independently oxo, deuterium, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and

sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0451] In some embodiments, each instance of R^{22C} is independently oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0452] In some embodiments, each instance of R^{22C} is independently oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, or -$B(OR)_2$. In some embodiments, each instance of R^{22C} is independently an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0453] In some embodiments, R^{22C} is oxo. In some embodiments, R^{22C} is deuterium. In some embodiments, each instance of R^{22C} is independently halogen. In some embodiments, R^{22C} is -CN. In some embodiments, R^{22C} is -NO_2. In some embodiments, R^{22C} is -OR. In some embodiments, R^{22C} is -SR. In some embodiments, R^{22C} is -NR_2. In some embodiments, R^{22C} is -$S(O)_2R$. In some embodiments, R^{22C} is -$S(O)_2NR_2$. In some embodiments, R^{22C} is -$S(O)_2F$. In some embodiments, R^{22C} is -S(O)R. In some embodiments, R^{22C} is -$S(O)NR_2$. In some embodiments, R^{22C} is -S(O)(NR)R. In some embodiments, R^{22C} is -C(O)R. In some embodiments, R^{22C} is -C(O)OR. In some embodiments, R^{22C} is -$C(O)NR_2$. In some embodiments, R^{22C} is -C(O)N(R)OR. In some embodiments, R^{22C} is -OC(O)R. In some embodiments, R^{22C} is -$OC(O)NR_2$. In some embodiments, R^{22C} is -N(R)C(O)OR. In some embodiments, R^{22C} is -N(R)C(O)R. In some embodiments, R^{22C} is -$N(R)C(O)NR_2$. In some embodiments, R^{22C} is -$N(R)C(NR)NR_2$. In some embodiments, R^{22C} is -$N(R)S(O)_2NR_2$. In some embodiments, R^{22C} is -$N(R)S(O)_2R$. In

some embodiments, R^{22C} is $-P(O)R_2$. In some embodiments, R^{22C} is -P(O)(R)OR. In some embodiments, R^{22C} is $-B(OR)_2$.

[0454] In some embodiments, each instance of R^{22C} is independently halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$.

[0455] In some embodiments, each instance of R^{22C} is independently halogen, -CN, or $-NO_2$. In some embodiments, each instance of R^{22C} is independently -OR, -SR, or $-NR_2$. In some embodiments, each instance of R^{22C} is independently $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{22C} is independently -C(O)R, -C(O)OR, $-C(O)NR_2$, or -C(O)N(R)OR. In some embodiments, each instance of R^{22C} is independently -OC(O)R or $-OC(O)NR_2$. In some embodiments, each instance of R^{22C} is independently -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, or $-N(R)S(O)_2R$. In some embodiments, each instance of R^{22C} is independently $-P(O)R_2$ or -P(O)(R)OR.

[0456] In some embodiments, each instance of R^{22C} is independently -OR, -OC(O)R, or $-OC(O)NR_2$. In some embodiments, each instance of R^{22C} is independently -SR, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{22C} is independently $-NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, or $-N(R)S(O)_2R$.

[0457] In some embodiments, each instance of R^{22C} is independently $-S(O)_2R$, $-S(O)_2NR_2$, or $-S(O)_2F$. In some embodiments, each instance of R^{22C} is independently -S(O)R, $-S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{22C} is independently -SR, $-S(O)_2R$, or -S(O)R. In some embodiments, each instance of R^{22C} is independently $-S(O)_2NR_2$, $-S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{22C} is independently $-S(O)_2NR_2$ or $-S(O)NR_2$. In some embodiments, each instance of R^{22C} is independently -SR, $-S(O)_2R$, $-S(O)_2NR_2$, or -S(O)R.

[0458] In some embodiments, each instance of R^{22C} is independently -N(R)C(O)OR, -N(R)C(O)R, or $-N(R)C(O)NR_2$. In some embodiments, each instance of R^{22C} is independently $-N(R)S(O)_2NR_2$ or $-N(R)S(O)_2R$. In some embodiments, each instance of R^{22C} is independently -N(R)C(O)OR or -N(R)C(O)R. In some embodiments, each instance of

R^{22C} is independently -N(R)C(O)NR_2 or -N(R)S(O)$_2NR_2$. In some embodiments, each instance of R^{22C} is independently -N(R)C(O)OR, -N(R)C(O)R, or -N(R)S(O)$_2$R.

[0459] In some embodiments, each instance of R^{22C} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, each instance of R^{22C} is independently -NR_2, -N(R)C(O)OR, or -N(R)C(O)R. In some embodiments, each instance of R^{22C} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)S(O)$_2$R.

[0460] In some embodiments, each instance of R^{22C} is independently an optionally substituted C_{1-6} aliphatic. In some embodiments, each instance of R^{22C} is independently an optionally substituted phenyl. In some embodiments, each instance of R^{22C} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{22C} is independently an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0461] In some embodiments, each instance of R^{22C} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{22C} is independently an optionally substituted phenyl or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0462] In some embodiments, each instance of R^{22C} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted phenyl. In some embodiments, each instance of R^{22C} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0463] In some embodiments, each instance of R^{22C} is independently an optionally substituted group selected from phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen,

oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0464] In some embodiments, each instance of R^{22C} is independently a C_{1-6} aliphatic. In some embodiments, R^{22C} is phenyl. In some embodiments, each instance of R^{22C} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{22C} is independently a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0465] In some embodiments, each instance of R^{22C} is independently a C_{1-6} aliphatic or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{22C} is independently phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0466] In some embodiments, each instance of R^{22C} is independently a C_{1-6} aliphatic or phenyl. In some embodiments, each instance of R^{22C} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0467] In some embodiments, each instance of R^{22C} is independently phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0468] In some embodiments, each instance of R^{22C} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or optionally substituted C_{1-6} aliphatic.

[0469] In some embodiments, each instance of R^{22C} is independently halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{22C} is independently halogen, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{22C} is independently fluorine, chlorine, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{22C} is independently fluorine or -OH.

[0470] In some embodiments, each instance of R^{22C} is independently oxo, deuterium, halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{22C} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{22C} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{22C} is independently oxo, deuterium, fluorine, chlorine, -CN, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{22C} is independently oxo, deuterium, -CN, fluorine, or -OH. In some embodiments, each instance of R^{22C} is independently oxo, deuterium, -CN, $-CH_3$, or $-CHF_2$. In some embodiments, each instance of R^{22C} is independently deuterium, -CN, $-CH_3$, or $-CHF_2$.

[0471] In some embodiments, each instance of R^{22C} is independently oxo, halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{22C} is independently oxo, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{22C} is independently oxo, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{22C} is independently oxo, fluorine, chlorine, -CN, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{22C} is independently oxo, -CN, fluorine, or -OH. In some embodiments, each instance of R^{22C} is independently oxo, -CN, $-CH_3$, or $-CHF_2$. In some embodiments, each instance of R^{22C} is independently -CN, $-CH_3$, or $-CHF_2$.

[0472] In some embodiments, each instance of R^{22C} is independently selected from the groups depicted in the compounds in Table 1.

[0473] As defined generally above, each instance of R^{T1C} is independently oxo, deuterium, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0474] In some embodiments, each instance of R^{T1C} is independently oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, -$B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0475] In some embodiments, each instance of R^{T1C} is independently oxo, halogen, -CN, -NO_2, -OR, -SR, -NR_2, -$S(O)_2R$, -$S(O)_2NR_2$, -$S(O)_2F$, -S(O)R, -$S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -$C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, -$OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, -$N(R)C(O)NR_2$, -$N(R)C(NR)NR_2$, -$N(R)S(O)_2NR_2$, -$N(R)S(O)_2R$, -$P(O)R_2$, -P(O)(R)OR, or -$B(OR)_2$. In some embodiments, each instance of R^{T1C} is independently an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0476] In some embodiments, R^{T1C} is oxo. In some embodiments, R^{T1C} is deuterium. In some embodiments, each instance of R^{T1C} is independently halogen. In some embodiments, R^{T1C} is -CN. In some embodiments, R^{T1C} is -NO_2. In some embodiments, R^{T1C} is -OR. In some embodiments, R^{T1C} is -SR. In some embodiments, R^{T1C} is -NR_2. In some embodiments, R^{T1C} is -$S(O)_2R$. In some embodiments, R^{T1C} is -$S(O)_2NR_2$. In some embodiments, R^{T1C} is -$S(O)_2F$. In some embodiments, R^{T1C} is -S(O)R. In some

embodiments, R^{T1C} is -S(O)NR_2. In some embodiments, R^{T1C} is -S(O)(NR)R. In some embodiments, R^{T1C} is -C(O)R. In some embodiments, R^{T1C} is -C(O)OR. In some embodiments, R^{T1C} is -C(O)NR_2. In some embodiments, R^{T1C} is -C(O)N(R)OR. In some embodiments, R^{T1C} is -OC(O)R. In some embodiments, R^{T1C} is -OC(O)NR_2. In some embodiments, R^{T1C} is -N(R)C(O)OR. In some embodiments, R^{T1C} is -N(R)C(O)R. In some embodiments, R^{T1C} is -N(R)C(O)NR_2. In some embodiments, R^{T1C} is -N(R)C(NR)NR_2. In some embodiments, R^{T1C} is -N(R)S(O)$_2$$NR_2$. In some embodiments, R^{T1C} is -N(R)S(O)$_2$R. In some embodiments, R^{T1C} is -P(O)R_2. In some embodiments, R^{T1C} is -P(O)(R)OR. In some embodiments, R^{T1C} is -B(OR)$_2$.

[0477] In some embodiments, each instance of R^{T1C} is independently halogen, -CN, -NO_2, -OR, -SR, -NR_2, -S(O)$_2$R, -S(O)$_2$$NR_2$, -S(O)$_2$F, -S(O)R, -S(O)$NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, -C(O)NR_2, -C(O)N(R)OR, -OC(O)R, -OC(O)NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2$$NR_2$, -N(R)S(O)$_2$R, -P(O)$R_2$, -P(O)(R)OR, or -B(OR)$_2$.

[0478] In some embodiments, each instance of R^{T1C} is independently halogen, -CN, or -NO_2. In some embodiments, each instance of R^{T1C} is independently -OR, -SR, or -NR_2. In some embodiments, each instance of R^{T1C} is independently -S(O)$_2$R, -S(O)$_2$$NR_2$, -S(O)$_2$F, -S(O)R, -S(O)$NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{T1C} is independently -C(O)R, -C(O)OR, -C(O)NR_2, or -C(O)N(R)OR. In some embodiments, each instance of R^{T1C} is independently -OC(O)R or -OC(O)NR_2. In some embodiments, each instance of R^{T1C} is independently -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2$$NR_2$, or -N(R)S(O)$_2$R. In some embodiments, each instance of R^{T1C} is independently -P(O)R_2 or -P(O)(R)OR.

[0479] In some embodiments, each instance of R^{T1C} is independently -OR, -OC(O)R, or -OC(O)NR_2. In some embodiments, each instance of R^{T1C} is independently -SR, -S(O)$_2$R, -S(O)$_2$$NR_2$, -S(O)$_2$F, -S(O)R, -S(O)$NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{T1C} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2$$NR_2$, or -N(R)S(O)$_2$R.

[0480] In some embodiments, each instance of R^{T1C} is independently -S(O)$_2$R, -S(O)$_2$$NR_2$, or -S(O)$_2$F. In some embodiments, each instance of R^{T1C} is independently -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, each instance of R^{T1C} is independently -SR, -S(O)$_2$R, or -S(O)R. In some embodiments, each instance of R^{T1C}

is independently $-S(O)_2NR_2$, $-S(O)NR_2$, or $-S(O)(NR)R$. In some embodiments, each instance of R^{T1C} is independently $-S(O)_2NR_2$ or $-S(O)NR_2$. In some embodiments, each instance of R^{T1C} is independently -SR, $-S(O)_2R$, $-S(O)_2NR_2$, or -S(O)R.

[0481] In some embodiments, each instance of R^{T1C} is independently -N(R)C(O)OR, $-N(R)C(O)R$, or $-N(R)C(O)NR_2$. In some embodiments, each instance of R^{T1C} is independently $-N(R)S(O)_2NR_2$ or $-N(R)S(O)_2R$. In some embodiments, each instance of R^{T1C} is independently -N(R)C(O)OR or $-N(R)C(O)R$. In some embodiments, each instance of R^{T1C} is independently $-N(R)C(O)NR_2$ or $-N(R)S(O)_2NR_2$. In some embodiments, each instance of R^{T1C} is independently -N(R)C(O)OR, $-N(R)C(O)R$, or $-N(R)S(O)_2R$.

[0482] In some embodiments, each instance of R^{T1C} is independently $-NR_2$, -N(R)C(O)OR, $-N(R)C(O)R$, or $-N(R)C(O)NR_2$. In some embodiments, each instance of R^{T1C} is independently $-NR_2$, -N(R)C(O)OR, or $-N(R)C(O)R$. In some embodiments, each instance of R^{T1C} is independently $-NR_2$, -N(R)C(O)OR, $-N(R)C(O)R$, or $-N(R)S(O)_2R$.

[0483] In some embodiments, each instance of R^{T1C} is independently an optionally substituted C_{1-6} aliphatic. In some embodiments, each instance of R^{T1C} is independently an optionally substituted phenyl. In some embodiments, each instance of R^{T1C} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{T1C} is independently an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0484] In some embodiments, each instance of R^{T1C} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{T1C} is independently an optionally substituted phenyl or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0485] In some embodiments, each instance of R^{T1C} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted phenyl. In some embodiments, each instance of R^{T1C} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently

selected from nitrogen, oxygen, and sulfur, or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0486] In some embodiments, each instance of R^{T1C} is independently an optionally substituted group selected from phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0487] In some embodiments, each instance of R^{T1C} is independently a C_{1-6} aliphatic. In some embodiments, R^{T1C} is phenyl. In some embodiments, each instance of R^{T1C} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{T1C} is independently a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0488] In some embodiments, each instance of R^{T1C} is independently a C_{1-6} aliphatic or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{T1C} is independently phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0489] In some embodiments, each instance of R^{T1C} is independently a C_{1-6} aliphatic or phenyl. In some embodiments, each instance of R^{T1C} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0490] In some embodiments, each instance of R^{T1C} is independently phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0491] In some embodiments, each instance of R^{T1C} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or optionally substituted C_{1-6} aliphatic.

[0492] In some embodiments, each instance of R^{T1C} is independently halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{T1C} is independently halogen, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{T1C} is independently fluorine, chlorine, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{T1C} is independently fluorine or -OH.

[0493] In some embodiments, each instance of R^{T1C} is independently oxo, deuterium, halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{T1C} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{T1C} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{T1C} is independently oxo, deuterium, fluorine, chlorine, -CN, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{T1C} is independently oxo, deuterium, -CN, fluorine, or -OH. In some embodiments, each instance of R^{T1C} is independently oxo, deuterium, -CN, $-CH_3$, or $-CHF_2$. In some embodiments, each instance of R^{T1C} is independently deuterium, -CN, $-CH_3$, or $-CHF_2$.

[0494] In some embodiments, each instance of R^{T1C} is independently oxo, halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{T1C} is independently oxo, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{T1C} is independently oxo, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{T1C} is independently oxo, fluorine, chlorine, -CN, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{T1C} is independently oxo, -CN, fluorine, or -OH. In

some embodiments, each instance of R^{T1C} is independently oxo, -CN, $-CH_3$, or $-CHF_2$. In some embodiments, each instance of R^{T1C} is independently -CN, $-CH_3$, or $-CHF_2$.

[0495] In some embodiments, each instance of R^{T1C} is independently selected from the groups depicted in the compounds in Table 1.

[0496] As defined generally above, each instance of R^{TLC} is independently oxo, deuterium, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0497] In some embodiments, each instance of R^{TLC} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0498] In some embodiments, each instance of R^{TLC} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$. In some embodiments, each instance of R^{TLC} is independently an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0499] In some embodiments, R^{TLC} is oxo. In some embodiments, R^{TLC} is deuterium. In some embodiments, each instance of R^{TLC} is independently halogen. In some embodiments, R^{TLC} is -CN. In some embodiments, R^{TLC} is $-NO_2$. In some embodiments, R^{TLC} is -OR. In some embodiments, R^{TLC} is -SR. In some embodiments, R^{TLC} is $-NR_2$. In some embodiments, R^{TLC} is $-S(O)_2R$. In some embodiments, R^{TLC} is $-S(O)_2NR_2$. In some embodiments, R^{TLC} is $-S(O)_2F$. In some embodiments, R^{TLC} is -S(O)R. In some embodiments, R^{TLC} is $-S(O)NR_2$. In some embodiments, R^{TLC} is -S(O)(NR)R. In some embodiments, R^{TLC} is -C(O)R. In some embodiments, R^{TLC} is -C(O)OR. In some embodiments, R^{TLC} is $-C(O)NR_2$. In some embodiments, R^{TLC} is -C(O)N(R)OR. In some embodiments, R^{TLC} is -OC(O)R. In some embodiments, R^{TLC} is $-OC(O)NR_2$. In some embodiments, R^{TLC} is -N(R)C(O)OR. In some embodiments, R^{TLC} is -N(R)C(O)R. In some embodiments, R^{TLC} is $-N(R)C(O)NR_2$. In some embodiments, R^{TLC} is $-N(R)C(NR)NR_2$. In some embodiments, R^{TLC} is $-N(R)S(O)_2NR_2$. In some embodiments, R^{TLC} is $-N(R)S(O)_2R$. In some embodiments, R^{TLC} is $-P(O)R_2$. In some embodiments, R^{TLC} is -P(O)(R)OR. In some embodiments, R^{TLC} is $-B(OR)_2$.

[0500] In some embodiments, each instance of R^{TLC} is independently halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$.

[0501] In some embodiments, each instance of R^{TLC} is independently halogen, -CN, or $-NO_2$. In some embodiments, each instance of R^{TLC} is independently -OR, -SR, or $-NR_2$. In some embodiments, each instance of R^{TLC} is independently $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{TLC} is independently -C(O)R, -C(O)OR, $-C(O)NR_2$, or -C(O)N(R)OR. In some embodiments, each instance of R^{TLC} is independently -OC(O)R or $-OC(O)NR_2$. In some embodiments, each instance of R^{TLC} is independently -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, or $-N(R)S(O)_2R$. In some embodiments, each instance of R^{TLC} is independently $-P(O)R_2$ or -P(O)(R)OR.

[0502] In some embodiments, each instance of R^{TLC} is independently -OR, -OC(O)R, or $-OC(O)NR_2$. In some embodiments, each instance of R^{TLC} is independently -SR, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each

instance of R^{TLC} is independently $-NR_2$, $-N(R)C(O)OR$, $-N(R)C(O)R$, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, or $-N(R)S(O)_2R$.

[0503] In some embodiments, each instance of R^{TLC} is independently $-S(O)_2R$, $-S(O)_2NR_2$, or $-S(O)_2F$. In some embodiments, each instance of R^{TLC} is independently $-S(O)R$, $-S(O)NR_2$, or $-S(O)(NR)R$. In some embodiments, each instance of R^{TLC} is independently $-SR$, $-S(O)_2R$, or $-S(O)R$. In some embodiments, each instance of R^{TLC} is independently $-S(O)_2NR_2$, $-S(O)NR_2$, or $-S(O)(NR)R$. In some embodiments, each instance of R^{TLC} is independently $-S(O)_2NR_2$ or $-S(O)NR_2$. In some embodiments, each instance of R^{TLC} is independently $-SR$, $-S(O)_2R$, $-S(O)_2NR_2$, or $-S(O)R$.

[0504] In some embodiments, each instance of R^{TLC} is independently $-N(R)C(O)OR$, $-N(R)C(O)R$, or $-N(R)C(O)NR_2$. In some embodiments, each instance of R^{TLC} is independently $-N(R)S(O)_2NR_2$ or $-N(R)S(O)_2R$. In some embodiments, each instance of R^{TLC} is independently $-N(R)C(O)OR$ or $-N(R)C(O)R$. In some embodiments, each instance of R^{TLC} is independently $-N(R)C(O)NR_2$ or $-N(R)S(O)_2NR_2$. In some embodiments, each instance of R^{TLC} is independently $-N(R)C(O)OR$, $-N(R)C(O)R$, or $-N(R)S(O)_2R$.

[0505] In some embodiments, each instance of R^{TLC} is independently $-NR_2$, $-N(R)C(O)OR$, $-N(R)C(O)R$, or $-N(R)C(O)NR_2$. In some embodiments, each instance of R^{TLC} is independently $-NR_2$, $-N(R)C(O)OR$, or $-N(R)C(O)R$. In some embodiments, each instance of R^{TLC} is independently $-NR_2$, $-N(R)C(O)OR$, $-N(R)C(O)R$, or $-N(R)S(O)_2R$.

[0506] In some embodiments, each instance of R^{TLC} is independently an optionally substituted C_{1-6} aliphatic. In some embodiments, each instance of R^{TLC} is independently an optionally substituted phenyl. In some embodiments, each instance of R^{TLC} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{TLC} is independently an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0507] In some embodiments, each instance of R^{TLC} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{TLC} is

independently an optionally substituted phenyl or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0508] In some embodiments, each instance of R^{TLC} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted phenyl. In some embodiments, each instance of R^{TLC} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0509] In some embodiments, each instance of R^{TLC} is independently an optionally substituted group selected from phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0510] In some embodiments, each instance of R^{TLC} is independently a C_{1-6} aliphatic. In some embodiments, R^{TLC} is phenyl. In some embodiments, each instance of R^{TLC} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{TLC} is independently a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0511] In some embodiments, each instance of R^{TLC} is independently a C_{1-6} aliphatic or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{TLC} is independently phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0512] In some embodiments, each instance of R^{TLC} is independently a C_{1-6} aliphatic or phenyl. In some embodiments, each instance of R^{TLC} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic

heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0513] In some embodiments, each instance of R^{TLC} is independently phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0514] In some embodiments, each instance of R^{TLC} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or optionally substituted C_{1-6} aliphatic.

[0515] In some embodiments, each instance of R^{TLC} is independently halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{TLC} is independently halogen, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{TLC} is independently fluorine, chlorine, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{TLC} is independently fluorine or -OH.

[0516] In some embodiments, each instance of R^{TLC} is independently oxo, deuterium, halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{TLC} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{TLC} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{TLC} is independently oxo, deuterium, fluorine, chlorine, -CN, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{TLC} is independently oxo, deuterium, -CN, fluorine, or -OH. In some embodiments, each instance of R^{TLC} is independently oxo, deuterium, -CN, $-CH_3$, or $-CHF_2$. In some embodiments, each instance of R^{TLC} is independently deuterium, -CN, $-CH_3$, or $-CHF_2$.

[0517] In some embodiments, each instance of R^{TLC} is independently oxo, halogen, -CN, -OH, -O-(optionally substituted C_{1-3} aliphatic), or an optionally substituted C_{1-3} aliphatic. In some embodiments, each instance of R^{TLC} is independently oxo, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms. In some embodiments, each instance of R^{TLC} is independently oxo, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with 1-3 halogen. In some embodiments, each instance of R^{TLC} is independently oxo, fluorine, chlorine, -CN, -OH, $-OCH_3$, $-OCF_3$, $-CH_3$, $-CHF_2$, or $-CF_3$. In some embodiments, each instance of R^{TLC} is independently oxo, -CN, fluorine, or -OH. In some embodiments, each instance of R^{TLC} is independently oxo, -CN, $-CH_3$, or $-CHF_2$. In some embodiments, each instance of R^{TLC} is independently -CN, $-CH_3$, or $-CHF_2$.

[0518] In some embodiments, each instance of R^{TLC} is independently selected from the groups depicted in the compounds in Table 1.

[0519] As defined generally above, each instance of R^{LC} is independently oxo, deuterium, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0520] In some embodiments, each instance of R^{LC} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0521] In some embodiments, each instance of R^{LC} is independently oxo, halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$. In some embodiments, each instance of R^{LC} is independently an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0522] In some embodiments, R^{LC} is oxo. In some embodiments, R^{LC} is deuterium. In some embodiments, each instance of R^{LC} is independently halogen. In some embodiments, R^{LC} is -CN. In some embodiments, R^{LC} is $-NO_2$. In some embodiments, R^{LC} is -OR. In some embodiments, R^{LC} is -SR. In some embodiments, R^{LC} is $-NR_2$. In some embodiments, R^{LC} is $-S(O)_2R$. In some embodiments, R^{LC} is $-S(O)_2NR_2$. In some embodiments, R^{LC} is $-S(O)_2F$. In some embodiments, R^{LC} is -S(O)R. In some embodiments, R^{LC} is $-S(O)NR_2$. In some embodiments, R^{LC} is -S(O)(NR)R. In some embodiments, R^{LC} is -C(O)R. In some embodiments, R^{LC} is -C(O)OR. In some embodiments, R^{LC} is $-C(O)NR_2$. In some embodiments, R^{LC} is -C(O)N(R)OR. In some embodiments, R^{LC} is -OC(O)R. In some embodiments, R^{LC} is $-OC(O)NR_2$. In some embodiments, R^{LC} is -N(R)C(O)OR. In some embodiments, R^{LC} is -N(R)C(O)R. In some embodiments, R^{LC} is $-N(R)C(O)NR_2$. In some embodiments, R^{LC} is $-N(R)C(NR)NR_2$. In some embodiments, R^{LC} is $-N(R)S(O)_2NR_2$. In some embodiments, R^{LC} is $-N(R)S(O)_2R$. In some embodiments, R^{LC} is $-P(O)R_2$. In some embodiments, R^{LC} is -P(O)(R)OR. In some embodiments, R^{LC} is $-B(OR)_2$.

[0523] In some embodiments, each instance of R^{LC} is independently halogen, -CN, $-NO_2$, -OR, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$.

[0524] In some embodiments, each instance of R^{LC} is independently halogen, -CN, or $-NO_2$. In some embodiments, each instance of R^{LC} is independently -OR, -SR, or $-NR_2$. In some embodiments, each instance of R^{LC} is independently $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{LC} is independently -C(O)R, -C(O)OR, $-C(O)NR_2$, or -C(O)N(R)OR. In some embodiments, each instance of

R^{LC} is independently -OC(O)R or -OC(O)NR_2. In some embodiments, each instance of R^{LC} is independently -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2$$NR_2$, or -N(R)S(O)$_2$R. In some embodiments, each instance of R^{LC} is independently -P(O)R_2 or -P(O)(R)OR.

[0525] In some embodiments, each instance of R^{LC} is independently -OR, -OC(O)R, or -OC(O)NR_2. In some embodiments, each instance of R^{LC} is independently -SR, -S(O)$_2$R, -S(O)$_2$$NR_2$, -S(O)$_2$F, -S(O)R, -S(O)$NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{LC} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, -N(R)C(O)NR_2, -N(R)C(NR)NR_2, -N(R)S(O)$_2$$NR_2$, or -N(R)S(O)$_2$R.

[0526] In some embodiments, each instance of R^{LC} is independently -S(O)$_2$R, -S(O)$_2$$NR_2$, or -S(O)$_2$F. In some embodiments, each instance of R^{LC} is independently -S(O)R, -S(O)NR_2, or -S(O)(NR)R. In some embodiments, each instance of R^{LC} is independently -SR, -S(O)$_2$R, or -S(O)R. In some embodiments, each instance of R^{LC} is independently -S(O)$_2$$NR_2$, -S(O)$NR_2$, or -S(O)(NR)R. In some embodiments, each instance of R^{LC} is independently -S(O)$_2$$NR_2$ or -S(O)NR_2. In some embodiments, each instance of R^{LC} is independently -SR, -S(O)$_2$R, -S(O)$_2$$NR_2$, or -S(O)R.

[0527] In some embodiments, each instance of R^{LC} is independently -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, each instance of R^{LC} is independently -N(R)S(O)$_2$$NR_2$ or -N(R)S(O)$_2$R. In some embodiments, each instance of R^{LC} is independently -N(R)C(O)OR or -N(R)C(O)R. In some embodiments, each instance of R^{LC} is independently -N(R)C(O)NR_2 or -N(R)S(O)$_2$$NR_2$. In some embodiments, each instance of R^{LC} is independently -N(R)C(O)OR, -N(R)C(O)R, or -N(R)S(O)$_2$R.

[0528] In some embodiments, each instance of R^{LC} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)C(O)NR_2. In some embodiments, each instance of R^{LC} is independently -NR_2, -N(R)C(O)OR, or -N(R)C(O)R. In some embodiments, each instance of R^{LC} is independently -NR_2, -N(R)C(O)OR, -N(R)C(O)R, or -N(R)S(O)$_2$R.

[0529] In some embodiments, each instance of R^{LC} is independently an optionally substituted C_{1-6} aliphatic. In some embodiments, each instance of R^{LC} is independently an optionally substituted phenyl. In some embodiments, each instance of R^{LC} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{LC} is independently an optionally substituted

5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0530] In some embodiments, each instance of R^{LC} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{LC} is independently an optionally substituted phenyl or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0531] In some embodiments, each instance of R^{LC} is independently an optionally substituted C_{1-6} aliphatic or an optionally substituted phenyl. In some embodiments, each instance of R^{LC} is independently an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0532] In some embodiments, each instance of R^{LC} is independently an optionally substituted group selected from phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0533] In some embodiments, each instance of R^{LC} is independently a C_{1-6} aliphatic. In some embodiments, R^{LC} is phenyl. In some embodiments, each instance of R^{LC} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{LC} is independently a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0534] In some embodiments, each instance of R^{LC} is independently a C_{1-6} aliphatic or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, each instance of R^{LC} is independently phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0535] In some embodiments, each instance of R^{LC} is independently a C_{1-6} aliphatic or phenyl. In some embodiments, each instance of R^{LC} is independently a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0536] In some embodiments, each instance of R^{LC} is independently phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0537] In some embodiments, each instance of R^{LC} is independently selected from the groups depicted in the compounds in Table 1.

[0538] As defined generally above, each instance of R is independently hydrogen, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered saturated, partially unsaturated, or heteroaryl ring having 0-3 heteroatoms, in addition to the nitrogen, independently selected from nitrogen, oxygen, and sulfur.

[0539] In some embodiments, R is hydrogen or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered saturated, partially unsaturated, or heteroaryl ring having 0-3 heteroatoms, in addition to the nitrogen, independently selected from nitrogen, oxygen, and sulfur.

[0540] In some embodiments, R is hydrogen. In some embodiments, R is an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected

from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R is hydrogen, C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0541] In some embodiments, R is an optionally substituted C_{1-6} aliphatic. In some embodiments, R is an optionally substituted phenyl. In some embodiments, R is an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R is an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0542] In some embodiments, R is an optionally substituted C_{1-6} aliphatic or an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R is an optionally substituted phenyl or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0543] In some embodiments, R is an optionally substituted C_{1-6} aliphatic or an optionally substituted phenyl. In some embodiments, R is an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or an optionally substituted 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0544] In some embodiments, R is an optionally substituted group selected from phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0545] In some embodiments, R is a C_{1-6} aliphatic. In some embodiments, R is phenyl. In some embodiments, R is a 3-7 membered saturated or partially unsaturated monocyclic

heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0546] In some embodiments, R is a C_{1-6} aliphatic or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur. In some embodiments, R is phenyl or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0547] In some embodiments, R is a C_{1-6} aliphatic or phenyl. In some embodiments, R is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0548] In some embodiments, R is phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, or a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur.

[0549] In some embodiments, two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered saturated, partially unsaturated, or heteroaryl ring having 1-3 heteroatoms, in addition to the nitrogen, independently selected from nitrogen, oxygen, and sulfur. In some embodiments, two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered saturated, partially unsaturated, or heteroaryl ring having no additional heteroatoms other than said nitrogen.

[0550] In some embodiments, two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered saturated ring having 0-3 heteroatoms, in addition to the nitrogen, independently selected from nitrogen, oxygen, and sulfur. In some embodiments, two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered partially unsaturated ring having 0-3 heteroatoms, in addition to the nitrogen, independently selected from nitrogen, oxygen, and sulfur. In some embodiments, two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered heteroaryl ring having 0-3 heteroatoms, in addition to the nitrogen, independently selected from nitrogen, oxygen, and sulfur.

[0551] In some embodiments, two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered saturated ring having 1-3 heteroatoms, in addition to the nitrogen, independently selected from nitrogen, oxygen, and sulfur. In some embodiments, two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered partially unsaturated ring having 1-3 heteroatoms, in addition to the nitrogen, independently selected from nitrogen, oxygen, and sulfur. In some embodiments, two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered heteroaryl ring having 1-3 heteroatoms, in addition to the nitrogen, independently selected from nitrogen, oxygen, and sulfur.

[0552] In some embodiments, two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered saturated ring having no additional heteroatoms other than said nitrogen. In some embodiments, two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered partially unsaturated ring having no additional heteroatoms other than said nitrogen. In some embodiments, two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered heteroaryl ring having no additional heteroatoms other than said nitrogen.

[0553] In some embodiments, R is selected from the groups depicted in the compounds in Table 1.

[0554] As defined generally above, n is 0, 1, 2, 3, 4, or 5. In some embodiments, n is 0. In some embodiments, n is 1. In some embodiments, n is 2. In some embodiments, n is 3. In some embodiments, n is 4. In some embodiments, n is 5. In some embodiments, n is 0 or 1. In some embodiments, n is 0, 1, or 2. In some embodiments, n is 0, 1, 2, or 3. In some embodiments, n is 0, 1, 2, 3, or 4. In some embodiments, n is 1 or 2. In some embodiments, n is 1, 2, or 3. In some embodiments, n is 1, 2, 3, or 4. In some embodiments, n is 1, 2, 3, 4, or 5. In some embodiments, n is 2 or 3. In some embodiments, n is 2, 3, or 4. In some embodiments, n is 2, 3, 4, or 5. In some embodiments, n is 3 or 4. In some embodiments, n is 3, 4, or 5. In some embodiments, n is 4 or 5. In some embodiments, n is selected from the values represented in the compounds in Table 1.

[0555] As defined generally above, m is 0, 1, 2, 3, 4, or 5. In some embodiments, m is 0. In some embodiments, m is 1. In some embodiments, m is 2. In some embodiments, m is 3. In some embodiments, m is 4. In some embodiments, m is 5. In some embodiments, m is 0 or

1. In some embodiments, m is 0, 1, or 2. In some embodiments, m is 0, 1, 2, or 3. In some embodiments, m is 0, 1, 2, 3, or 4. In some embodiments, m is 1 or 2. In some embodiments, m is 1, 2, or 3. In some embodiments, m is 1, 2, 3, or 4. In some embodiments, m is 1, 2, 3, 4, or 5. In some embodiments, m is 2 or 3. In some embodiments, m is 2, 3, or 4. In some embodiments, m is 2, 3, 4, or 5. In some embodiments, m is 3 or 4. In some embodiments, m is 3, 4, or 5. In some embodiments, m is 4 or 5. In some embodiments, m is selected from the values represented in the compounds in Table 1.

[0556] As defined generally above, q is 0, 1, 2, 3, 4, or 5. In some embodiments, q is 0. In some embodiments, q is 1. In some embodiments, q is 2. In some embodiments, q is 3. In some embodiments, q is 4. In some embodiments, q is 5. In some embodiments, q is 0 or 1. In some embodiments, q is 0, 1, or 2. In some embodiments, q is 0, 1, 2, or 3. In some embodiments, q is 0, 1, 2, 3, or 4. In some embodiments, q is 1 or 2. In some embodiments, q is 1, 2, or 3. In some embodiments, q is 1, 2, 3, or 4. In some embodiments, q is 1, 2, 3, 4, or 5. In some embodiments, q is 2 or 3. In some embodiments, q is 2, 3, or 4. In some embodiments, q is 2, 3, 4, or 5. In some embodiments, q is 3 or 4. In some embodiments, q is 3, 4, or 5. In some embodiments, q is 4 or 5. In some embodiments, q is selected from the values represented in the compounds in Table 1.

[0557] As defined generally above, p^1 is 0, 1, 2, 3, 4, or 5. In some embodiments, p^1 is 0. In some embodiments, p^1 is 1. In some embodiments, p^1 is 2. In some embodiments, p^1 is 3. In some embodiments, p^1 is 4. In some embodiments, p^1 is 5. In some embodiments, p^1 is 0 or 1. In some embodiments, p^1 is 0, 1, or 2. In some embodiments, p^1 is 0, 1, 2, or 3. In some embodiments, p^1 is 0, 1, 2, 3, or 4. In some embodiments, p^1 is 1 or 2. In some embodiments, p^1 is 1, 2, or 3. In some embodiments, p^1 is 1, 2, 3, or 4. In some embodiments, p^1 is 1, 2, 3, 4, or 5. In some embodiments, p^1 is 2 or 3. In some embodiments, p^1 is 2, 3, or 4. In some embodiments, p^1 is 2, 3, 4, or 5. In some embodiments, p^1 is 3 or 4. In some embodiments, p^1 is 3, 4, or 5. In some embodiments, p^1 is selected from the values represented in the compounds in Table 1.

[0558] As defined generally above, p^2 is 0, 1, 2, 3, 4, or 5. In some embodiments, p^2 is 0. In some embodiments, p^2 is 1. In some embodiments, p^2 is 2. In some embodiments, p^2 is 3. In some embodiments, p^2 is 4. In some embodiments, p^2 is 5. In some embodiments, p^2 is 0 or 1. In some embodiments, p^2 is 0, 1, or 2. In some embodiments, p^2 is 0, 1, 2, or 3. In some embodiments, p^2 is 0, 1, 2, 3, or 4. In some embodiments, p^2 is 1 or 2. In some embodiments, p^2 is 1, 2, or 3. In some embodiments, p^2 is 1, 2, 3, or 4. In some

embodiments, p^2 is 1, 2, 3, 4, or 5. In some embodiments, p^2 is 2 or 3. In some embodiments, p^2 is 2, 3, or 4. In some embodiments, p^2 is 2, 3, 4, or 5. In some embodiments, p^2 is 3 or 4. In some embodiments, p^2 is 3, 4, or 5. In some embodiments, p^2 is selected from the values represented in the compounds in Table 1.

[0559] As defined generally above, p^3 is 0, 1, 2, 3, 4, or 5. In some embodiments, p^3 is 0. In some embodiments, p^3 is 1. In some embodiments, p^3 is 2. In some embodiments, p^3 is 3. In some embodiments, p^3 is 4. In some embodiments, p^3 is 5. In some embodiments, p^3 is 0 or 1. In some embodiments, p^3 is 0, 1, or 2. In some embodiments, p^3 is 0, 1, 2, or 3. In some embodiments, p^3 is 0, 1, 2, 3, or 4. In some embodiments, p^3 is 1 or 2. In some embodiments, p^3 is 1, 2, or 3. In some embodiments, p^3 is 1, 2, 3, or 4. In some embodiments, p^3 is 1, 2, 3, 4, or 5. In some embodiments, p^3 is 2 or 3. In some embodiments, p^3 is 2, 3, or 4. In some embodiments, p^3 is 2, 3, 4, or 5. In some embodiments, p^3 is 3 or 4. In some embodiments, p^3 is 3, 4, or 5. In some embodiments, p^3 is selected from the values represented in the compounds in Table 1.

[0560] As defined generally above, p^4 is 0, 1, 2, 3, 4, or 5. In some embodiments, p^4 is 0. In some embodiments, p^4 is 1. In some embodiments, p^4 is 2. In some embodiments, p^4 is 3. In some embodiments, p^4 is 4. In some embodiments, p^4 is 5. In some embodiments, p^4 is 0 or 1. In some embodiments, p^4 is 0, 1, or 2. In some embodiments, p^4 is 0, 1, 2, or 3. In some embodiments, p^4 is 0, 1, 2, 3, or 4. In some embodiments, p^4 is 1 or 2. In some embodiments, p^4 is 1, 2, or 3. In some embodiments, p^4 is 1, 2, 3, or 4. In some embodiments, p^4 is 1, 2, 3, 4, or 5. In some embodiments, p^4 is 2 or 3. In some embodiments, p^4 is 2, 3, or 4. In some embodiments, p^4 is 2, 3, 4, or 5. In some embodiments, p^4 is 3 or 4. In some embodiments, p^4 is 3, 4, or 5. In some embodiments, p^4 is selected from the values represented in the compounds in Table 1.

[0561] As defined generally above, r^1 is 0, 1, 2, 3, 4, or 5. In some embodiments, r^1 is 0. In some embodiments, r^1 is 1. In some embodiments, r^1 is 2. In some embodiments, r^1 is 3. In some embodiments, r^1 is 4. In some embodiments, r^1 is 5. In some embodiments, r^1 is 0 or 1. In some embodiments, r^1 is 0, 1, or 2. In some embodiments, r^1 is 0, 1, 2, or 3. In some embodiments, r^1 is 0, 1, 2, 3, or 4. In some embodiments, r^1 is 1 or 2. In some embodiments, r^1 is 1, 2, or 3. In some embodiments, r^1 is 1, 2, 3, or 4. In some embodiments, r^1 is 1, 2, 3, 4, or 5. In some embodiments, r^1 is 2 or 3. In some embodiments, r^1 is 2, 3, or 4. In some embodiments, r^1 is 2, 3, 4, or 5. In some embodiments, r^1 is 3 or 4. In some embodiments, r^1

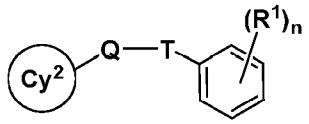
is 3, 4, or 5. In some embodiments, r^1 is selected from the values represented in the compounds in Table 1.

[0562] As defined generally above, r^2 is 0, 1, 2, 3, 4, or 5. In some embodiments, r^2 is 0. In some embodiments, r^2 is 1. In some embodiments, r^2 is 2. In some embodiments, r^2 is 3. In some embodiments, r^2 is 4. In some embodiments, r^2 is 5. In some embodiments, r^2 is 0 or 1. In some embodiments, r^2 is 0, 1, or 2. In some embodiments, r^2 is 0, 1, 2, or 3. In some embodiments, r^2 is 0, 1, 2, 3, or 4. In some embodiments, r^2 is 1 or 2. In some embodiments, r^2 is 1, 2, or 3. In some embodiments, r^2 is 1, 2, 3, or 4. In some embodiments, r^2 is 1, 2, 3, 4, or 5. In some embodiments, r^2 is 2 or 3. In some embodiments, r^2 is 2, 3, or 4. In some embodiments, r^2 is 2, 3, 4, or 5. In some embodiments, r^2 is 3 or 4. In some embodiments, r^2 is 3, 4, or 5. In some embodiments, r^2 is selected from the values represented in the compounds in Table 1.

[0563] As defined generally above, r^3 is 0, 1, 2, 3, 4, or 5. In some embodiments, r^3 is 0. In some embodiments, r^3 is 1. In some embodiments, r^3 is 2. In some embodiments, r^3 is 3. In some embodiments, r^3 is 4. In some embodiments, r^3 is 5. In some embodiments, r^3 is 0 or 1. In some embodiments, r^3 is 0, 1, or 2. In some embodiments, r^3 is 0, 1, 2, or 3. In some embodiments, r^3 is 0, 1, 2, 3, or 4. In some embodiments, r^3 is 1 or 2. In some embodiments, r^3 is 1, 2, or 3. In some embodiments, r^3 is 1, 2, 3, or 4. In some embodiments, r^3 is 1, 2, 3, 4, or 5. In some embodiments, r^3 is 2 or 3. In some embodiments, r^3 is 2, 3, or 4. In some embodiments, r^3 is 2, 3, 4, or 5. In some embodiments, r^3 is 3 or 4. In some embodiments, r^3 is 3, 4, or 5. In some embodiments, r^3 is selected from the values represented in the compounds in Table 1.

[0564] As defined generally above, r^4 is 0, 1, 2, 3, 4, or 5. In some embodiments, r^4 is 0. In some embodiments, r^4 is 1. In some embodiments, r^4 is 2. In some embodiments, r^4 is 3. In some embodiments, r^4 is 4. In some embodiments, r^4 is 5. In some embodiments, r^4 is 0 or 1. In some embodiments, r^4 is 0, 1, or 2. In some embodiments, r^4 is 0, 1, 2, or 3. In some embodiments, r^4 is 0, 1, 2, 3, or 4. In some embodiments, r^4 is 1 or 2. In some embodiments, r^4 is 1, 2, or 3. In some embodiments, r^4 is 1, 2, 3, or 4. In some embodiments, r^4 is 1, 2, 3, 4, or 5. In some embodiments, r^4 is 2 or 3. In some embodiments, r^4 is 2, 3, or 4. In some embodiments, r^4 is 2, 3, 4, or 5. In some embodiments, r^4 is 3 or 4. In some embodiments, r^4 is 3, 4, or 5. In some embodiments, r^4 is selected from the values represented in the compounds in Table 1.

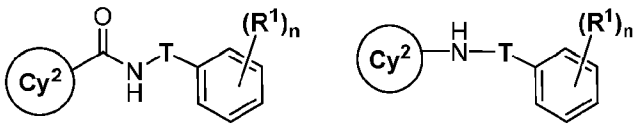
[0565] In some embodiments, the present disclosure provides a compound of formula I, wherein Cy^1 is phenyl substituted with n instances of R^1, forming a compound of formula II:



II

or a pharmaceutically acceptable salt thereof, wherein each of Cy^2, Q, R^1, T and n is as defined in embodiments and classes and subclasses herein.

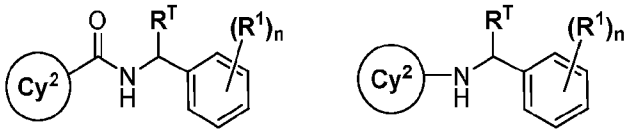
[0566] In some embodiments, the present disclosure provides a compound of formula II wherein Q is -C(O)NH- or -NH-, forming a compound of formula III or IV:



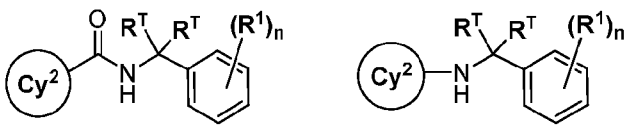
III IV

or a pharmaceutically acceptable salt thereof, wherein each of Cy^2, R^1, T and n is as defined in embodiments and classes and subclasses herein.

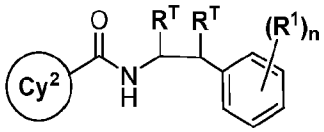
[0567] In some embodiments, the present disclosure provides a compound of formula III or IV, wherein T is selected from embodiments herein, forming a compound of formula V, VI, VII, VIII, IX, or X:



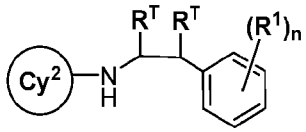
V VI



VII VIII



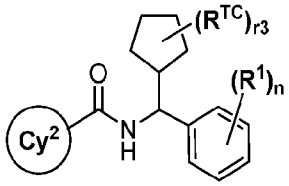
IX



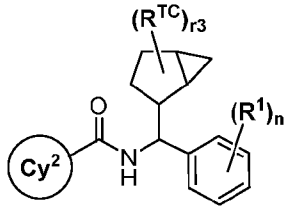
X

or a pharmaceutically acceptable salt thereof, wherein each of Cy^2, R^1, R^T and n is as defined in embodiments and classes and subclasses herein.

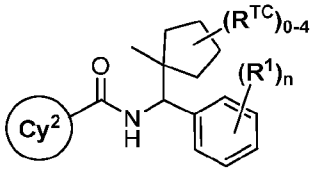
[0568] In some embodiments, the present disclosure provides a compound of formula V, wherein R^T is selected from embodiments herein, forming a compound of formula XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, or XIX:



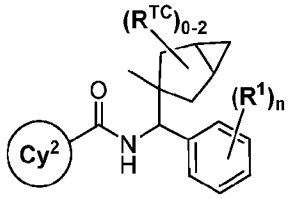
XI



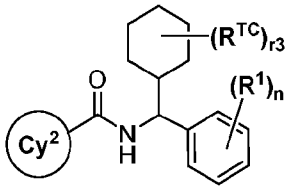
XII



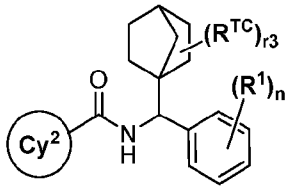
XIII



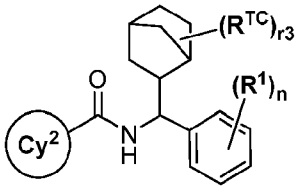
XIV



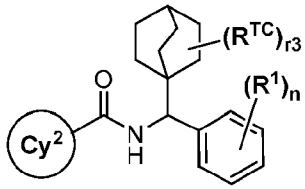
XV



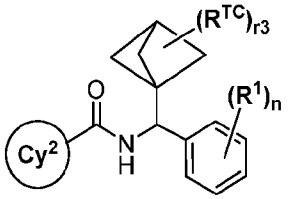
XVI



XVII



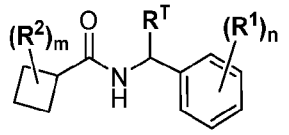
XVIII



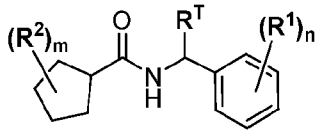
XIX

or a pharmaceutically acceptable salt thereof, wherein each of Cy^2, R^1, R^{TC}, n and r^3 is as defined in embodiments and classes and subclasses herein.

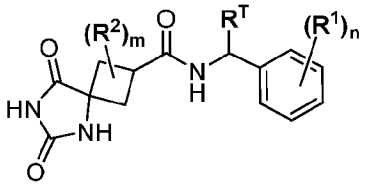
[0569] In some embodiments, the present disclosure provides a compound of formula V, wherein Cy^2 is selected from embodiments herein, forming a compound of formula XX, XXI, XXII, XXIII, XXIV, or XXV:



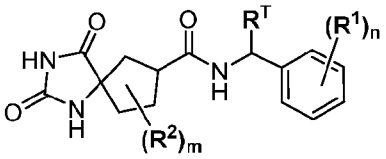
XX



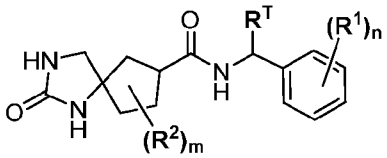
XXI



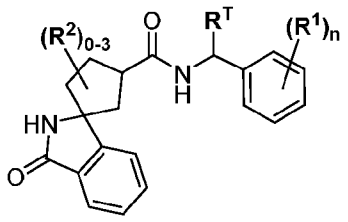
XXII



XXIII



XXIV

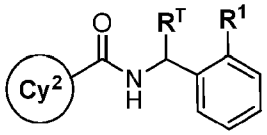


XXV

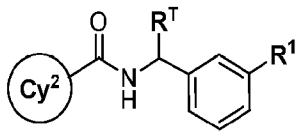
or a pharmaceutically acceptable salt thereof, wherein each of R^1, R^2, R^T, n and m is as defined in embodiments and classes and subclasses herein.

[0570] In some embodiments, the present disclosure provides a compound of formula V, wherein n and the position(s) of R^1 are selected from embodiments of Cy^1 herein, forming a

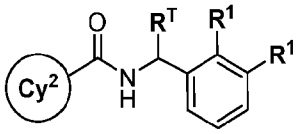
compound of formulas XXVI, XXVII, XXVIII, XXIX, XXX, XXXI, XXXII, XXXIII, XXXIV, XXXV, and XXXVI:



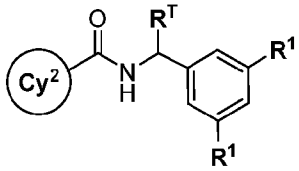
XXVI



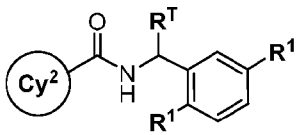
XXVII



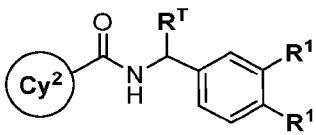
XXVIII



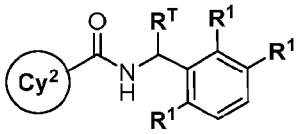
XXIX



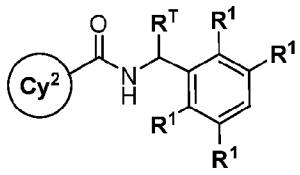
XXX



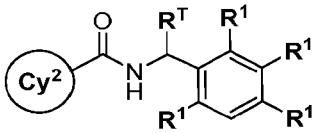
XXXI



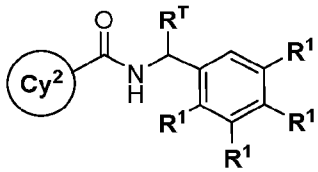
XXXII



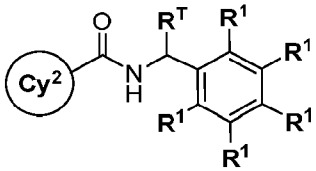
XXXIII



XXXIV



XXXV



XXXVI

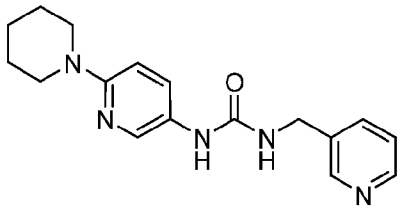
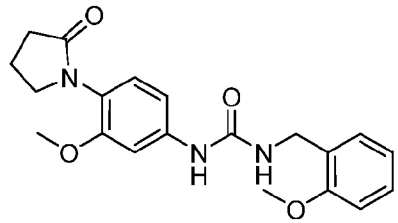
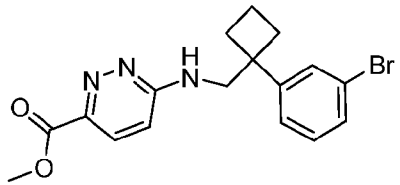
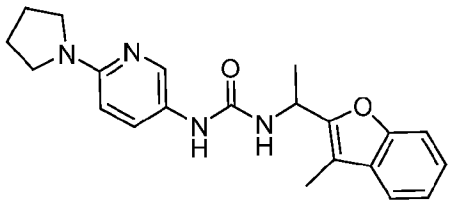
or a pharmaceutically acceptable salt thereof, wherein each of Cy^2, R^1, and R^T is as defined in embodiments and classes and subclasses herein.

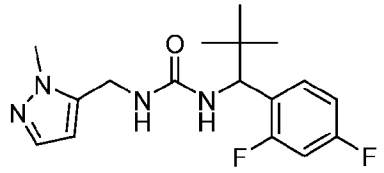
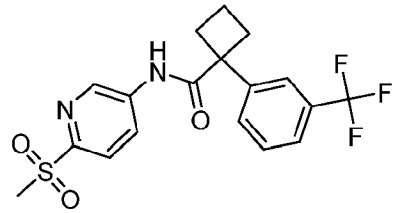
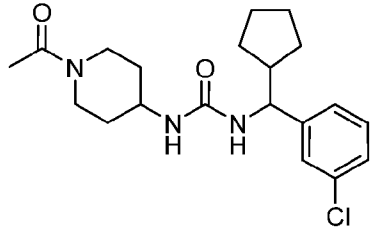
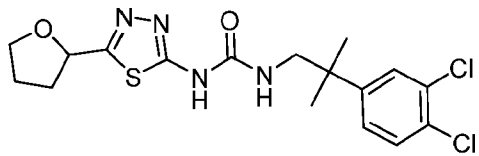
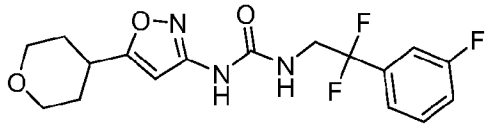
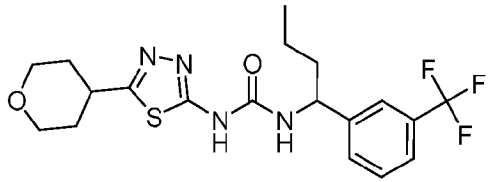
[0571] In some embodiments, the present disclosure provides a compound of formula I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX, XXI, XXI, XXII, XXIII, XXIV, XXV, XXVI, XXVII, XXVIII, XXIX, XXX, XXXI, XXXII, XXXIII, XXXIV, XXXV, or XXXVI, wherein L^1 is a covalent bond, and R^2 is $-N(H)C(O)-R^{2A}$, $-N(H)-R^{2A}$, $-CH_2-R^{2A}$, or $-R^{2A}$.

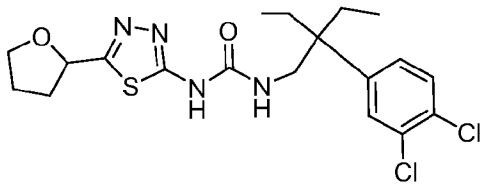
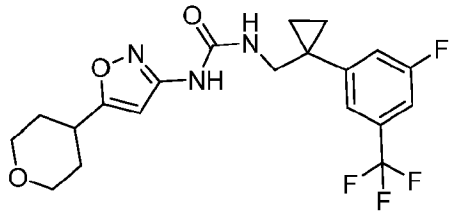
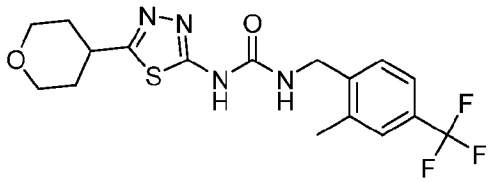
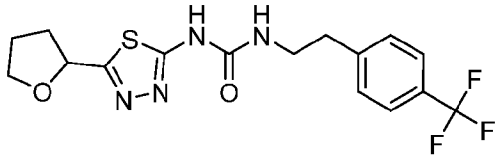
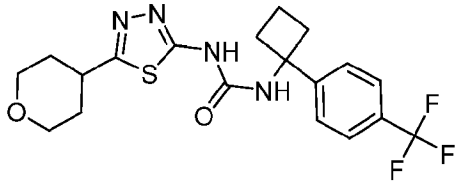
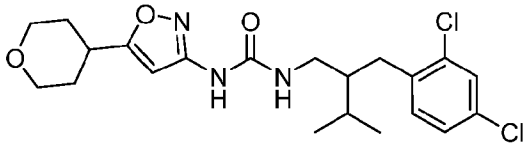
[0572] In some embodiments, the present disclosure provides a compound of I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX, XXI, XXI, XXII, XXIII, XXIV, XXV, XXVI, XXVII, XXVIII, XXIX, XXX, XXXI, XXXII, XXXIII, XXXIV, XXXV, or XXXVI, wherein L^1 is a covalent bond, and R^2 is $-N(H)C(O)-R^{2A}$. In some embodiments, the present disclosure provides a compound of I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX, XXI, XXI, XXII, XXIII, XXIV, XXV, XXVI, XXVII, XXVIII, XXIX, XXX, XXXI, XXXII, XXXIII, XXXIV, XXXV, or XXXVI, wherein L^1 is a covalent bond, and R^2 is $-N(H)-R^{2A}$. In some embodiments, the present disclosure provides a compound of I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX, XXI, XXI, XXII, XXIII, XXIV, XXV, XXVI, XXVII, XXVIII, XXIX, XXX, XXXI, XXXII, XXXIII, XXXIV, XXXV, or XXXVI, wherein L^1 is a covalent bond, and R^2 is $-CH_2-R^{2A}$. In some embodiments, the present disclosure provides a compound of I, II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX, XXI, XXI, XXII, XXIII, XXIV, XXV, XXVI, XXVII, XXVIII, XXIX, XXX, XXXI, XXXII, XXXIII, XXXIV, XXXV, or XXXVI, wherein L^1 is a covalent bond, and R^2 is $-R^{2A}$.

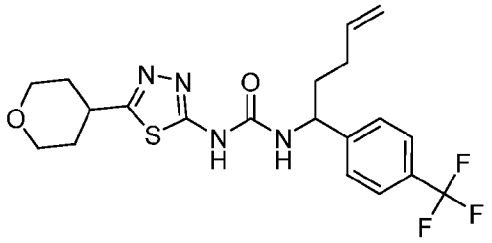
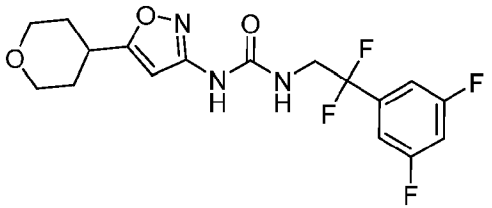
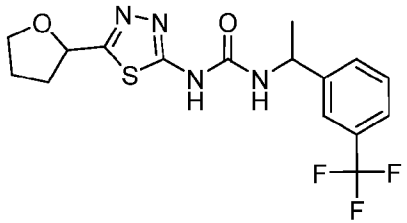
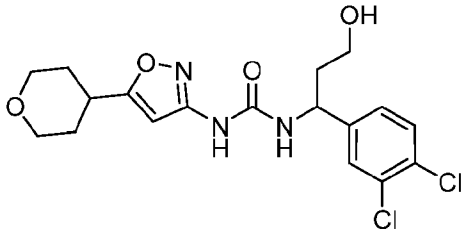
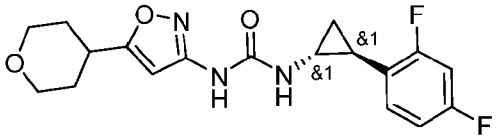
[0573] Examples of compounds of the present disclosure include those listed in the Tables and exemplification herein, or a pharmaceutically acceptable salt, stereoisomer, or mixture of stereoisomers thereof. In some embodiments, the present disclosure provides a compound selected from those depicted in Table 1, below, or a pharmaceutically acceptable salt, stereoisomer, or mixture of stereoisomers thereof. In some embodiments, the present disclosure provides a compound set forth in Table 1, below, or a pharmaceutically acceptable salt thereof. In some embodiments, the present disclosure provides a compound set forth in Table 1, below.

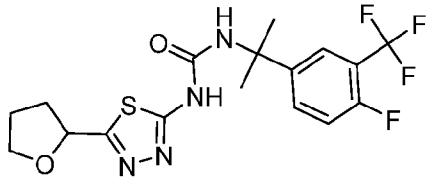
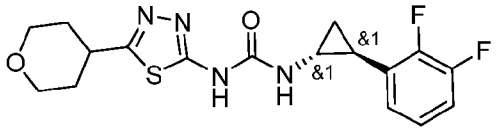
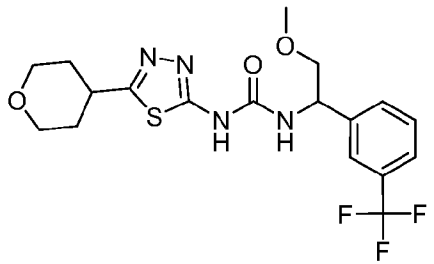
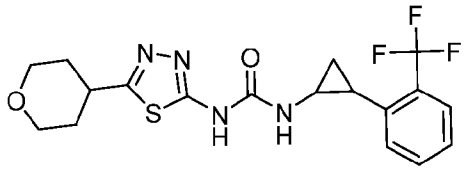
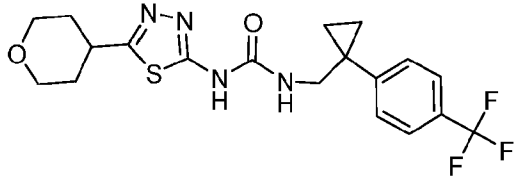
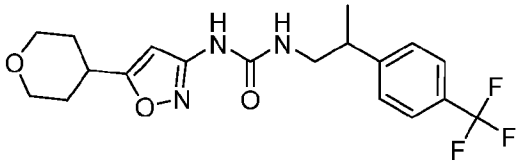
Table 1. Representative Compounds of the Disclosure with Bioactivity Data.

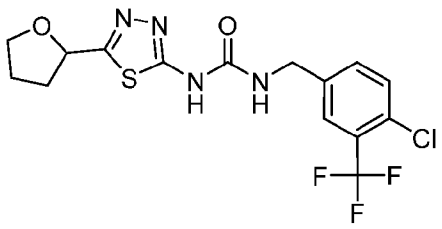
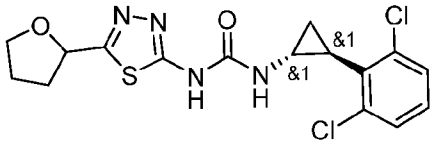
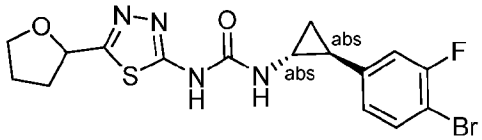
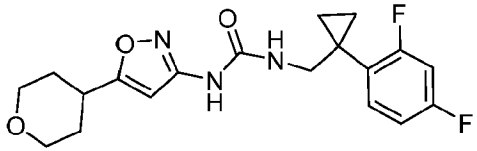
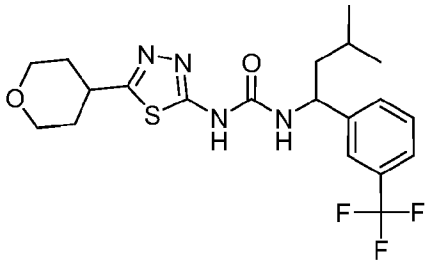
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I-2				E	
I-3			378.2	D	
I-4				E	

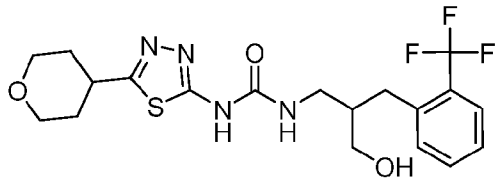
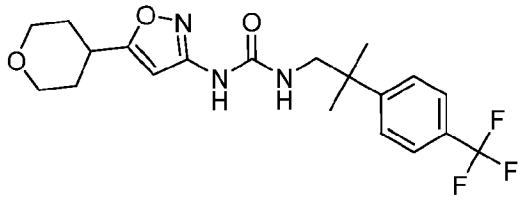
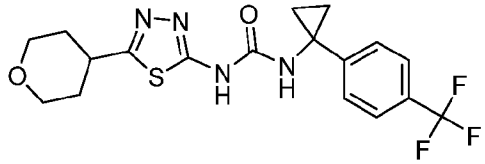
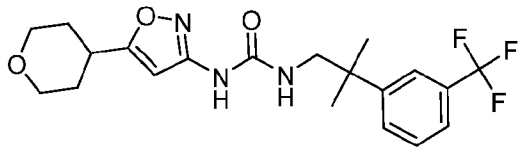
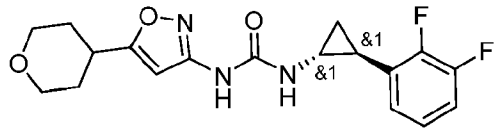
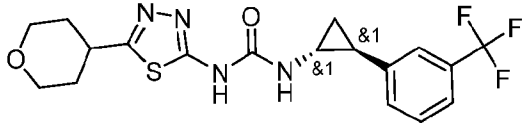
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I-10				E	

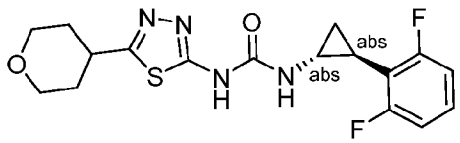
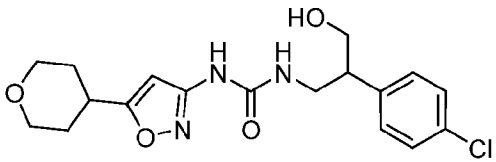
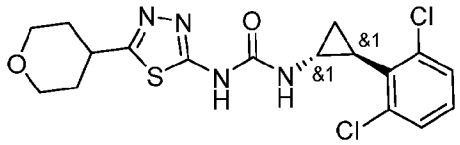
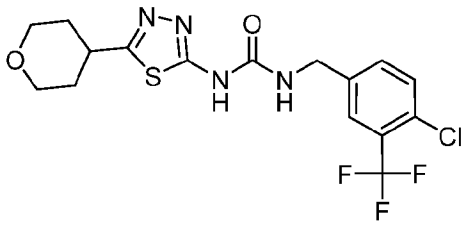
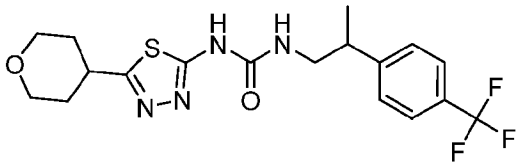
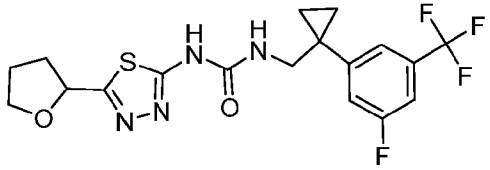
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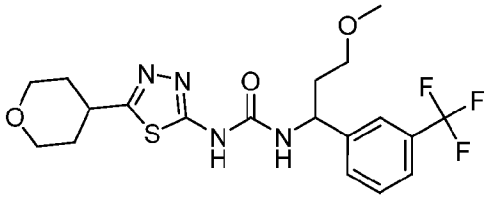
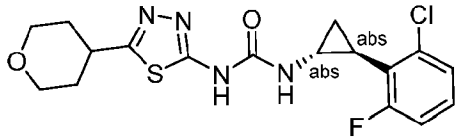
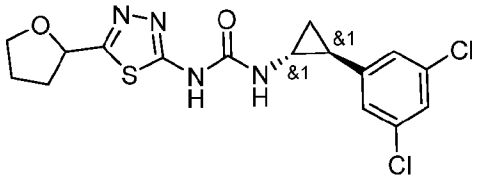
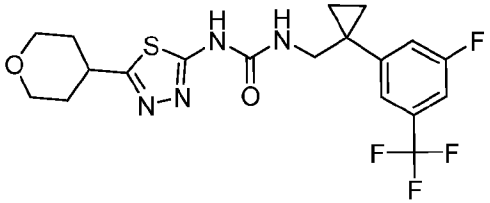
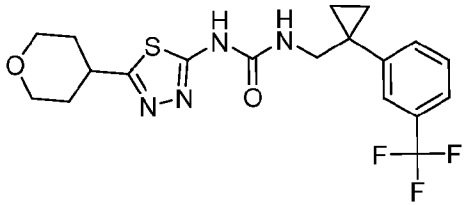
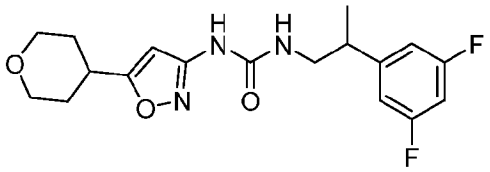
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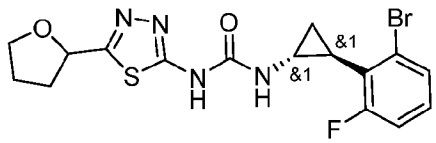
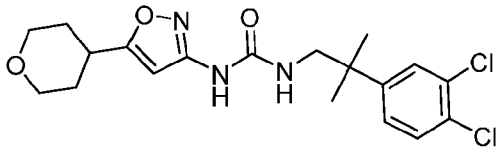
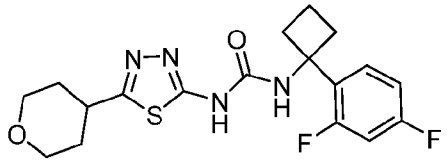
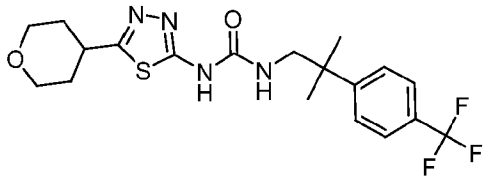
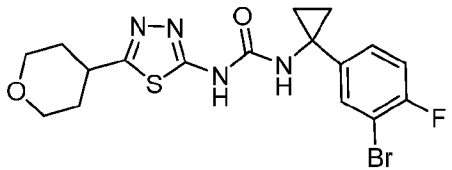
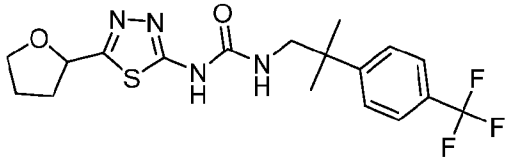
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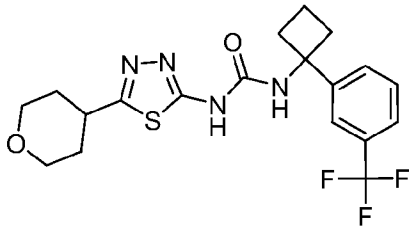
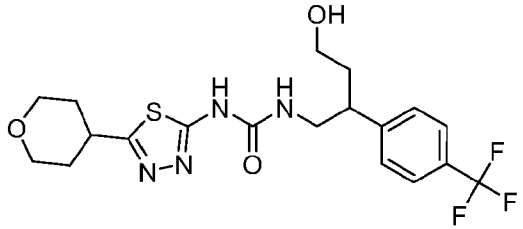
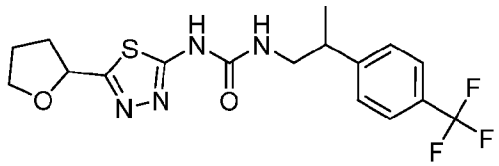
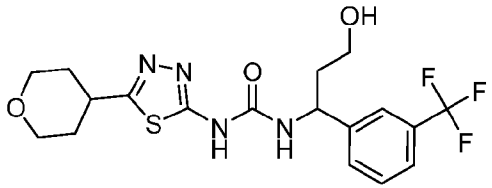
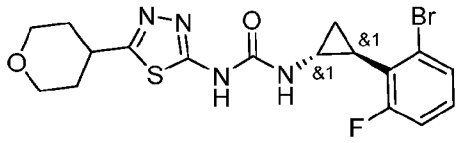
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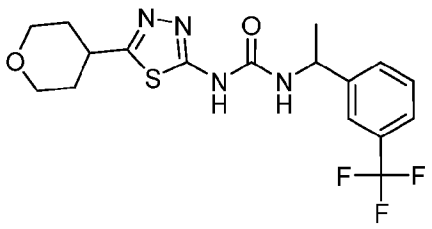
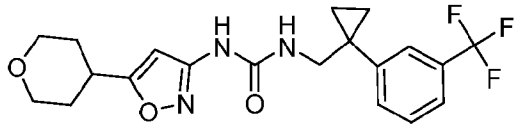
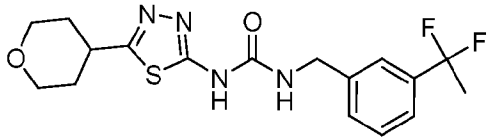
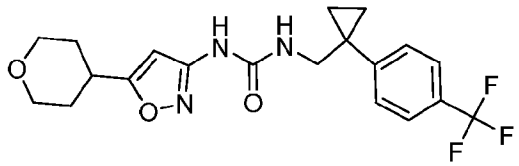
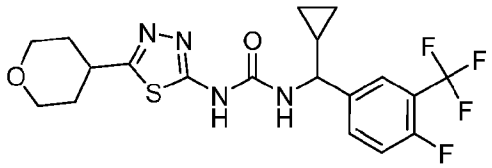
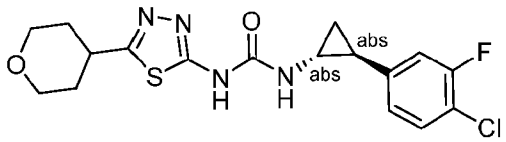
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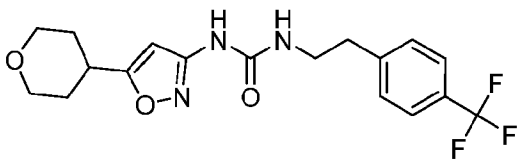
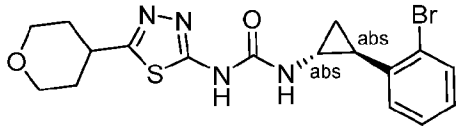
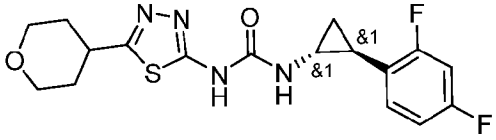
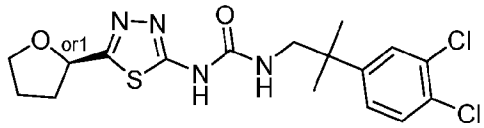
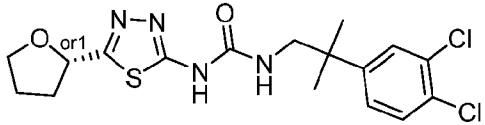
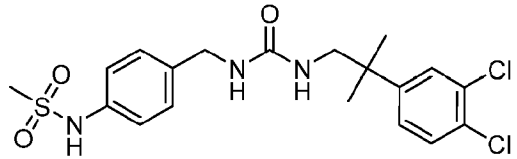
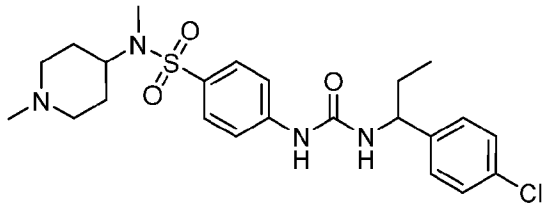
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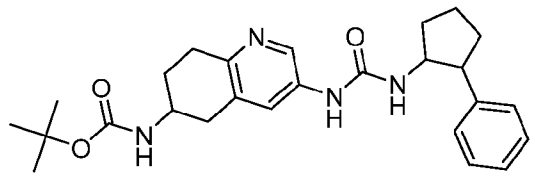
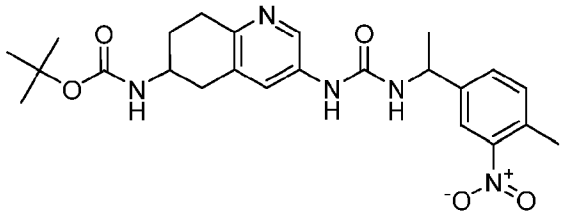
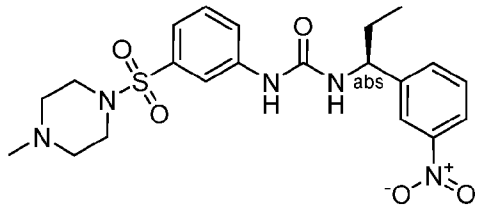
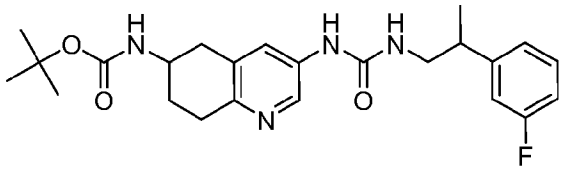
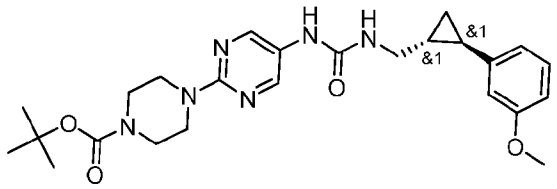
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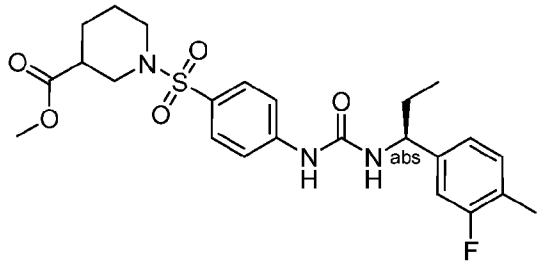
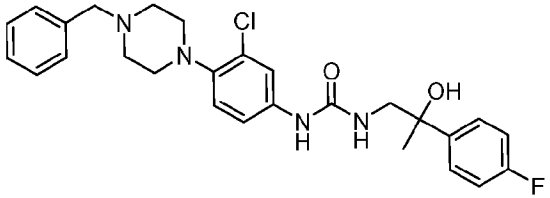
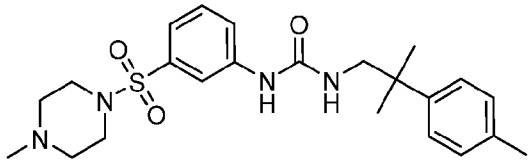
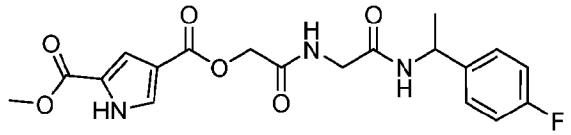
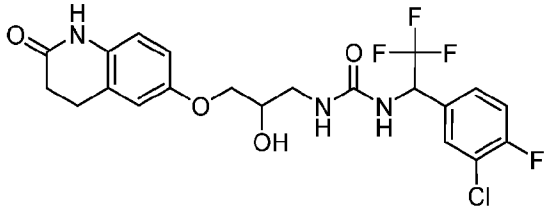
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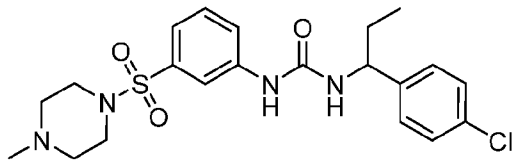
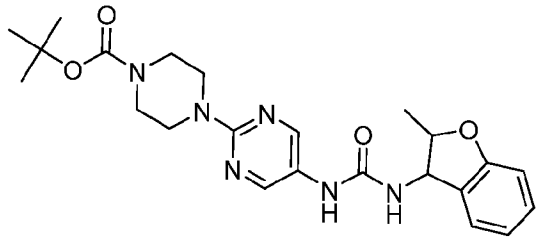
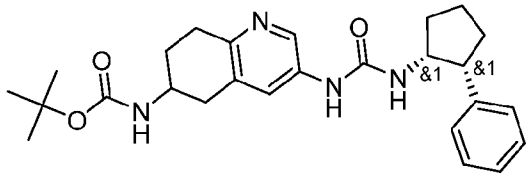
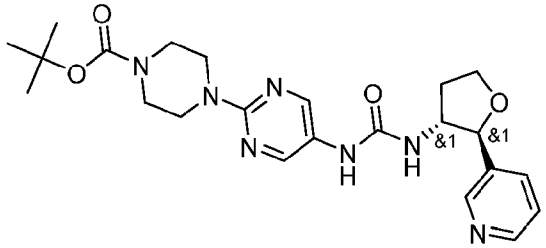
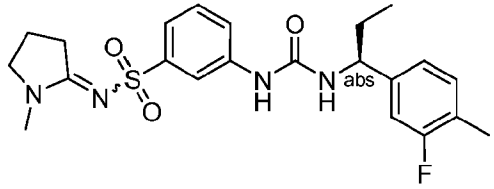
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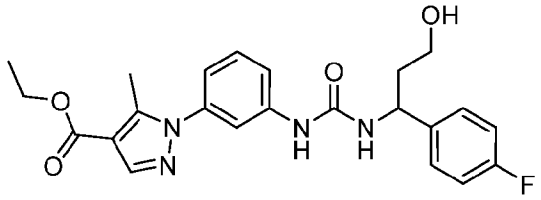
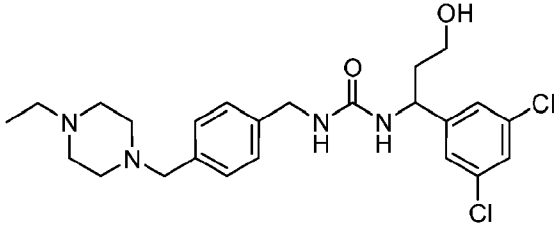
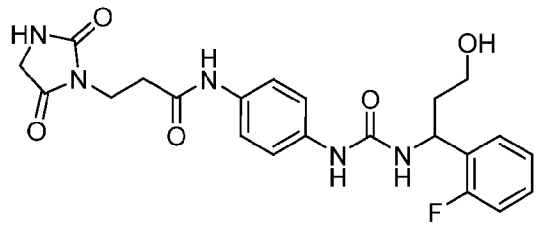
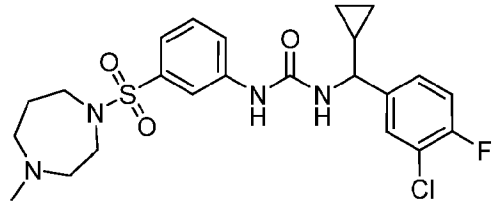
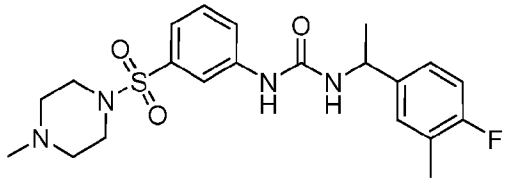
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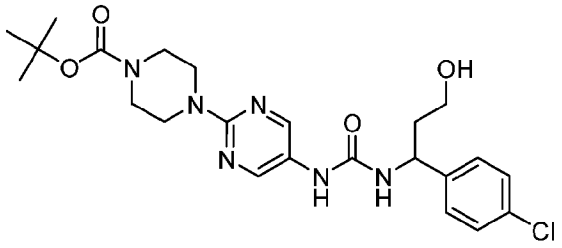
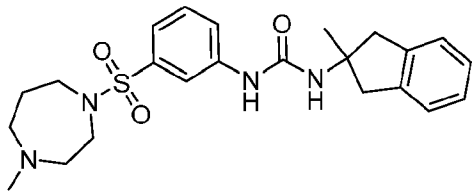
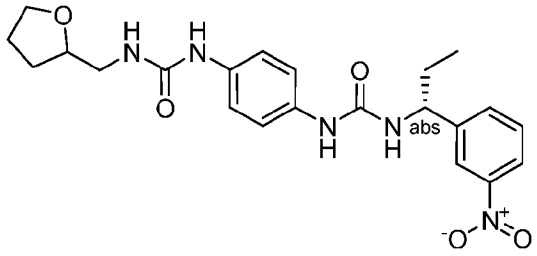
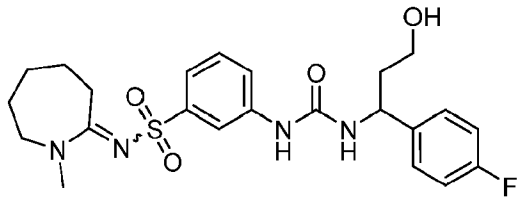
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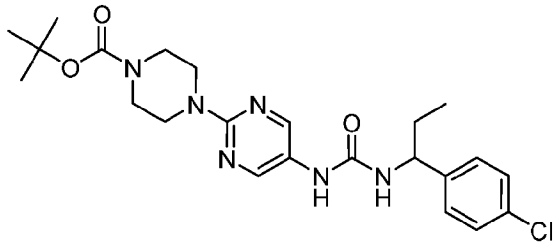
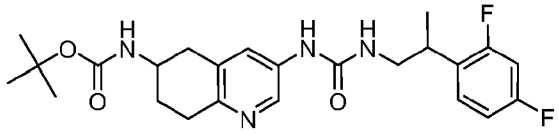
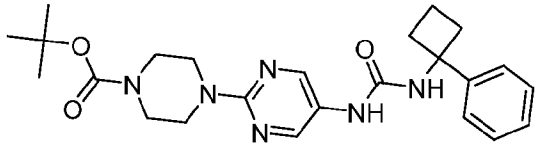
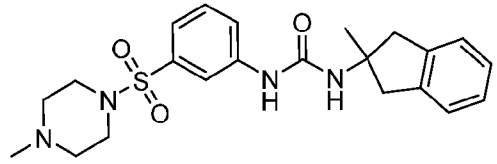
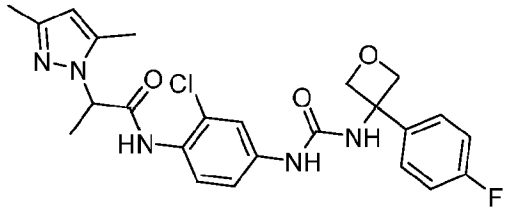
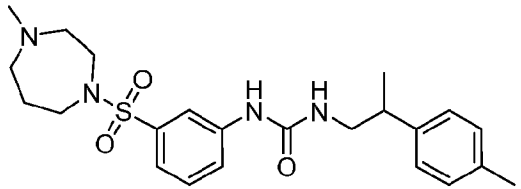
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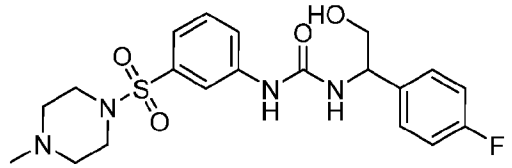
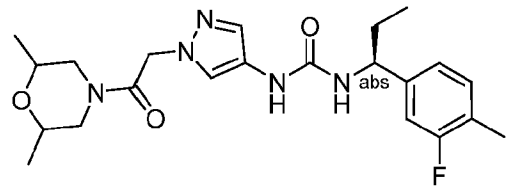
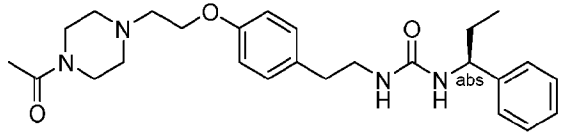
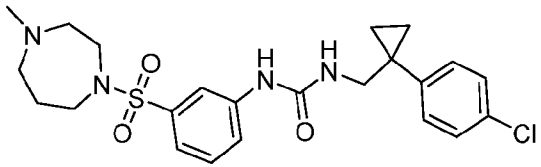
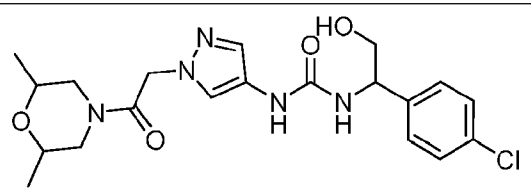
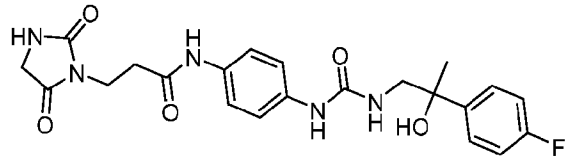
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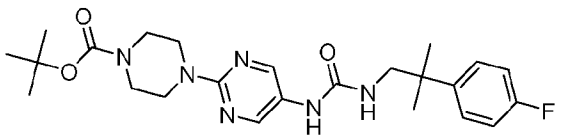
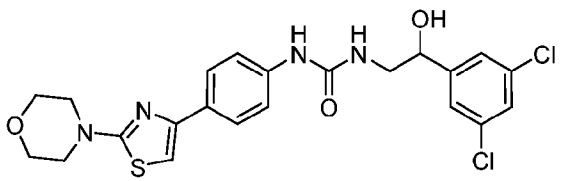
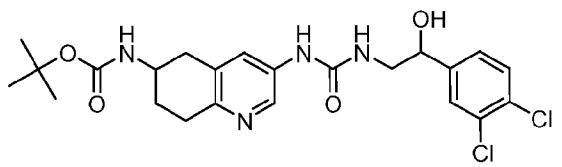
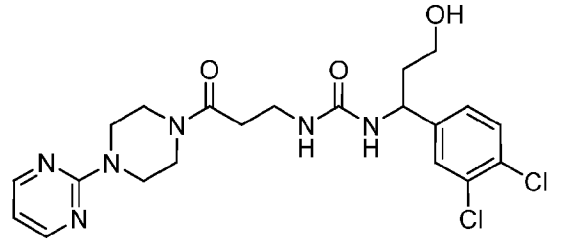
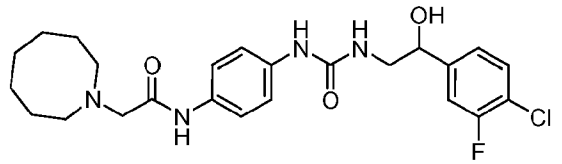
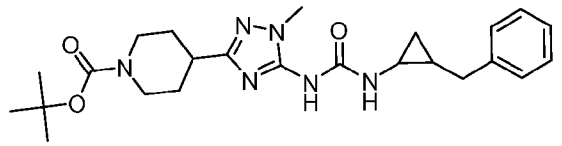
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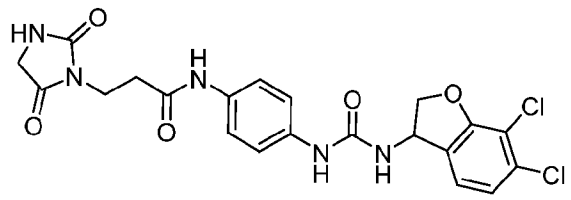
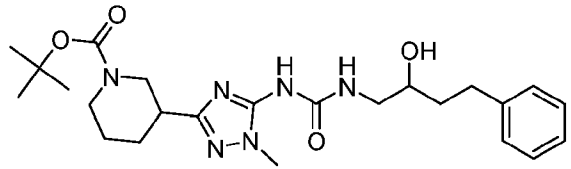
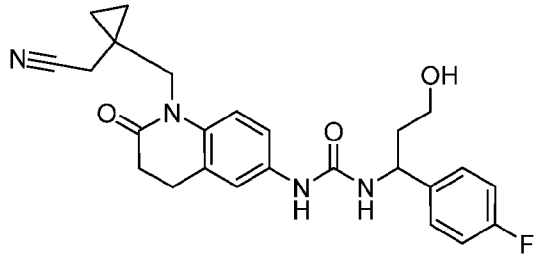
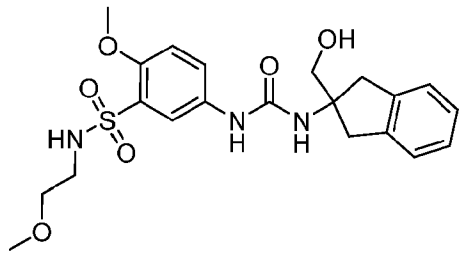
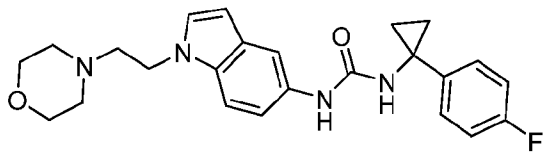
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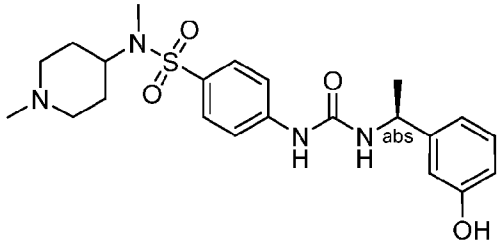
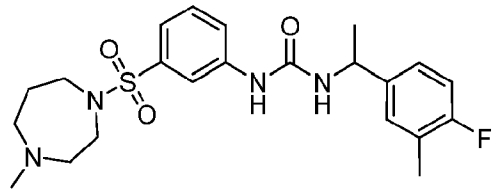
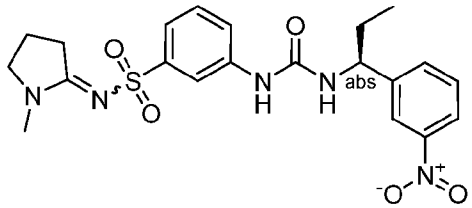
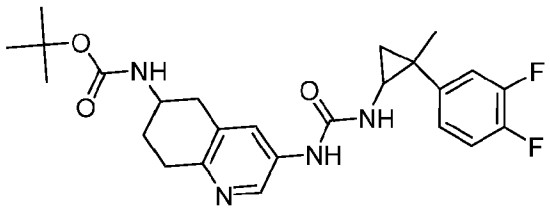
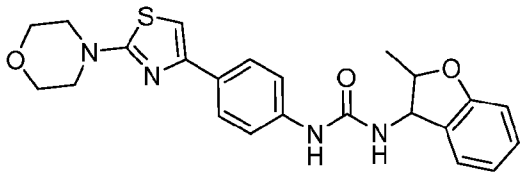
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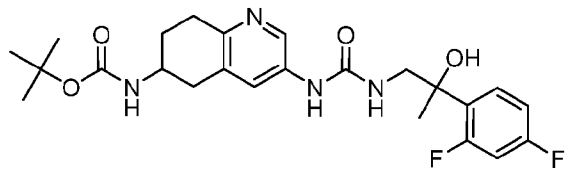
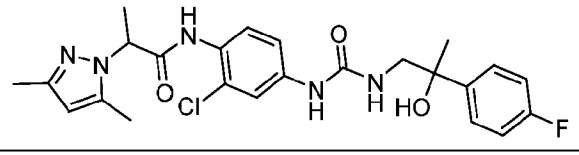
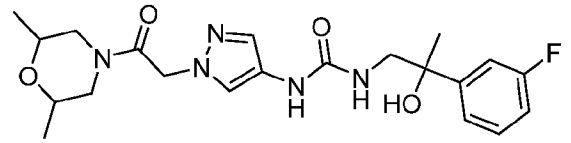
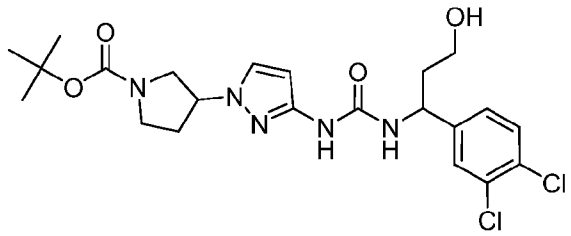
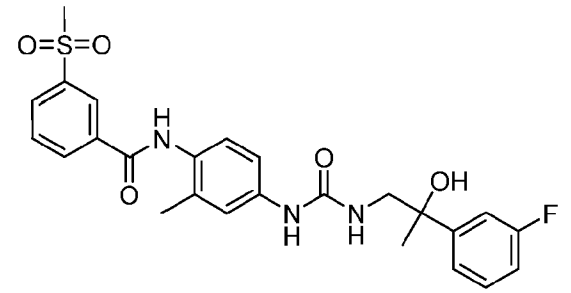
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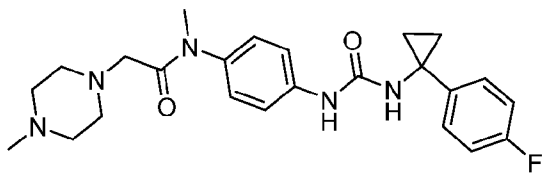
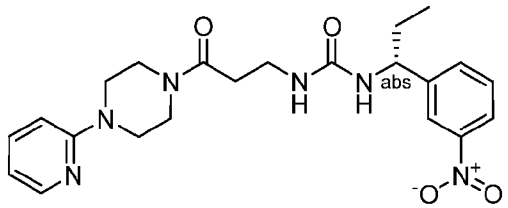
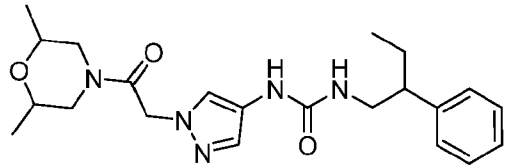
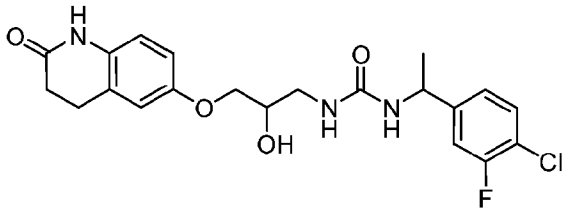
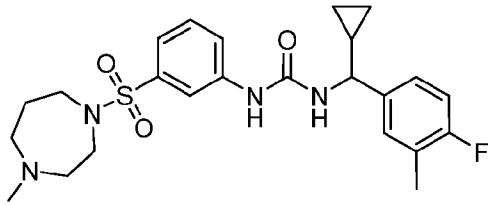
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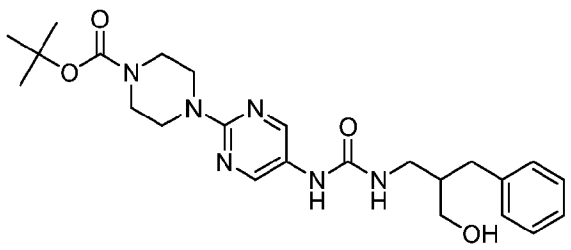
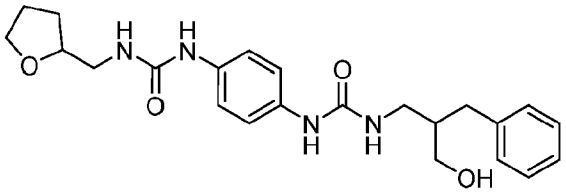
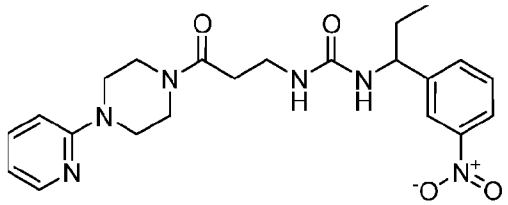
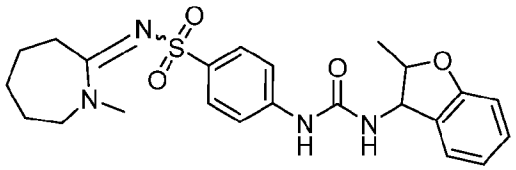
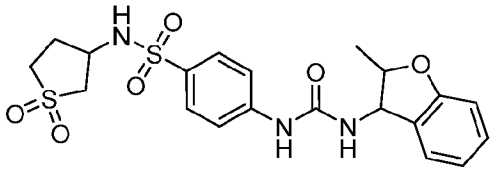
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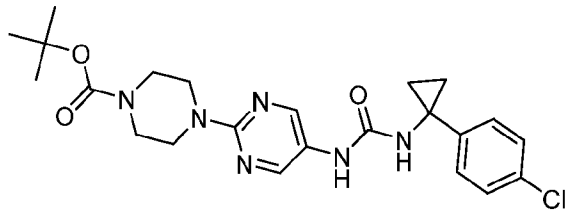
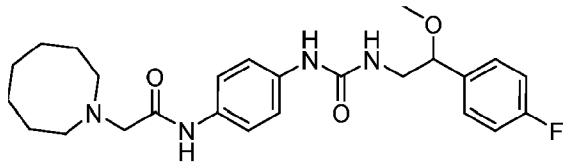
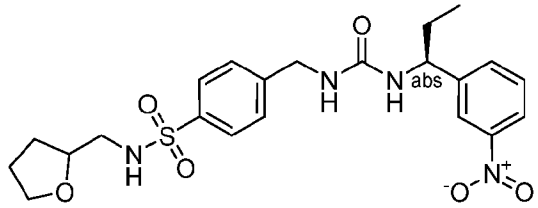
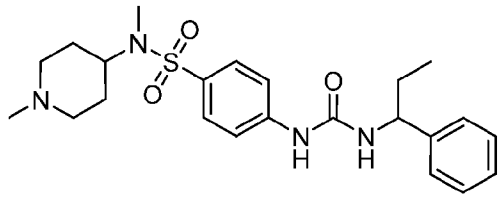
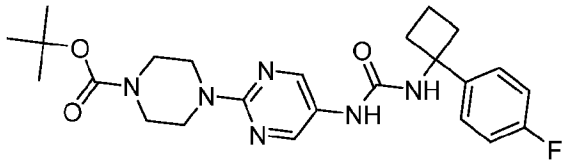
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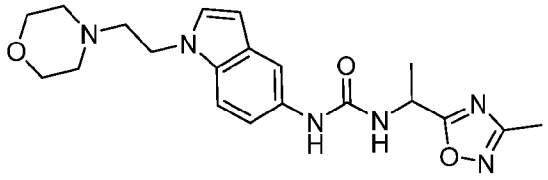
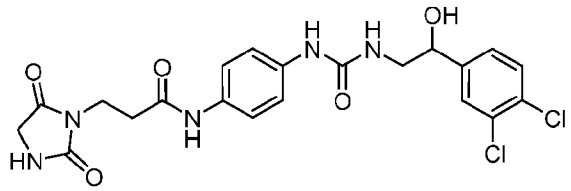
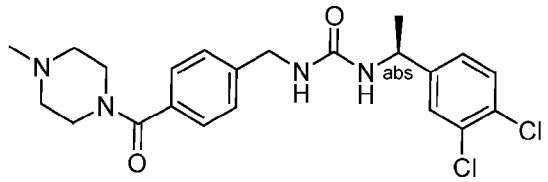
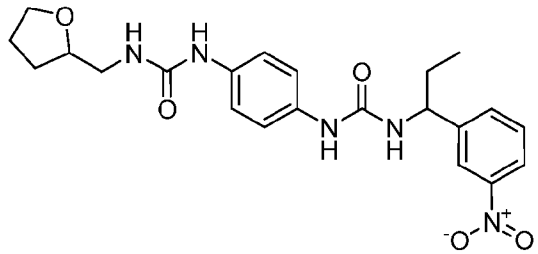
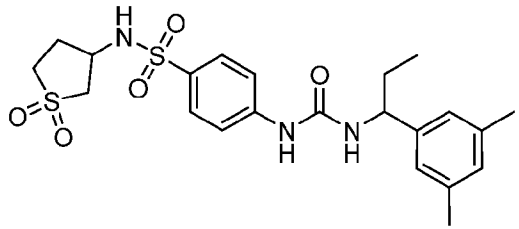
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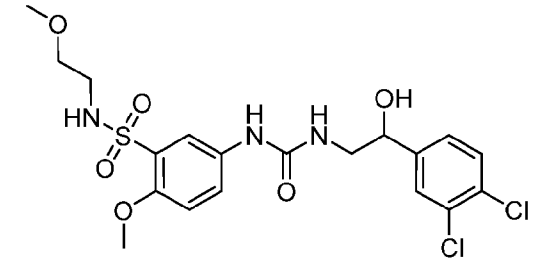
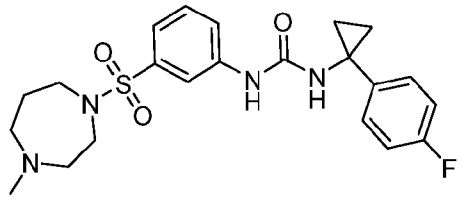
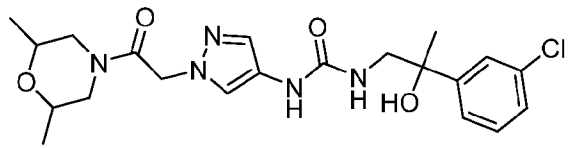
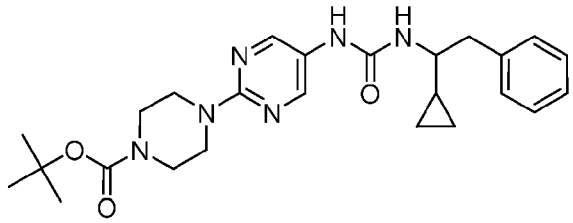
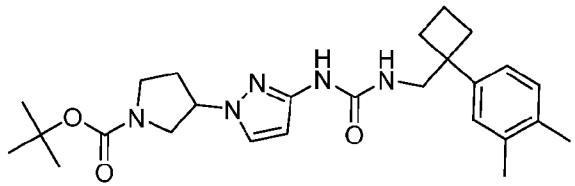
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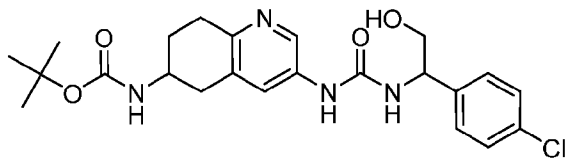
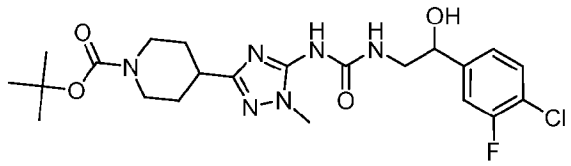
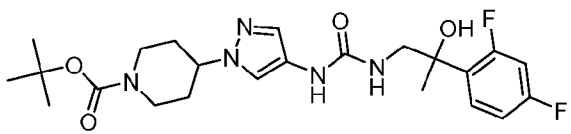
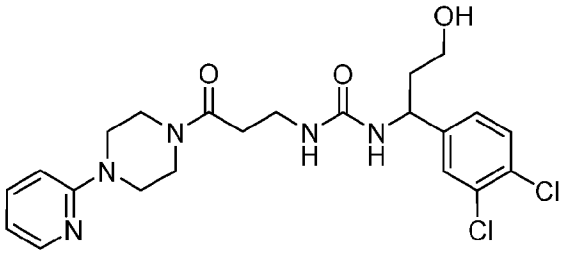
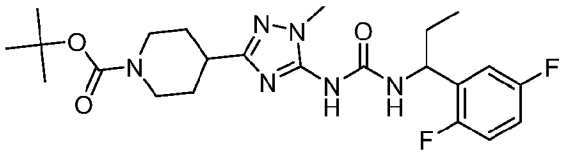
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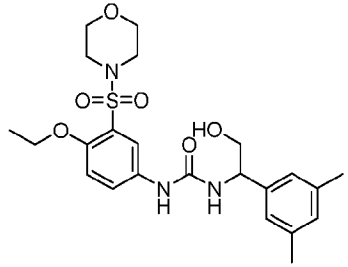
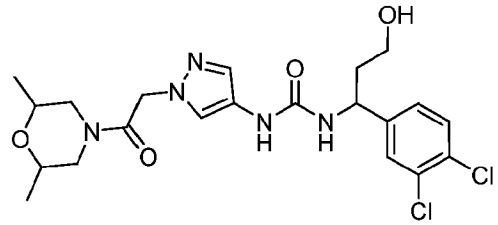
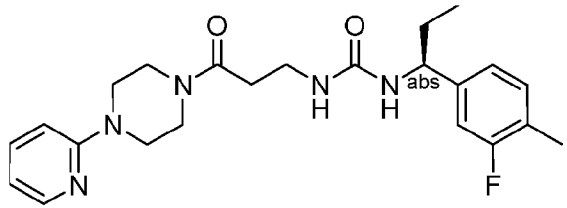
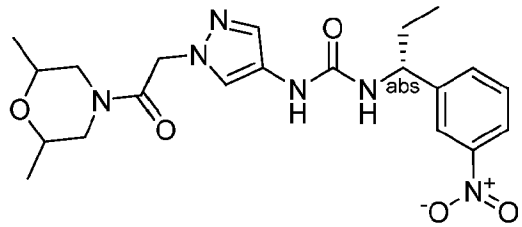
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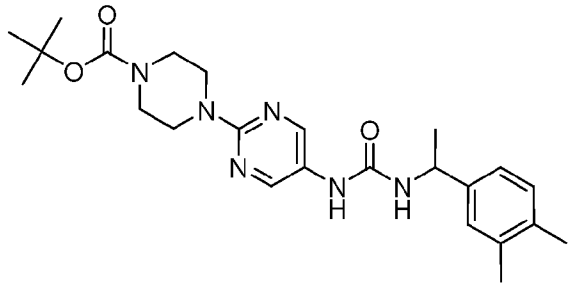
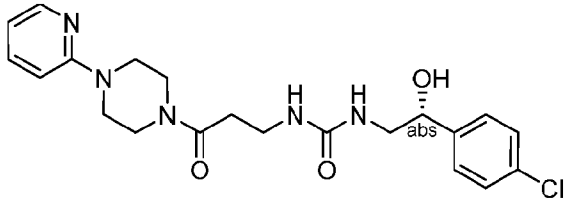
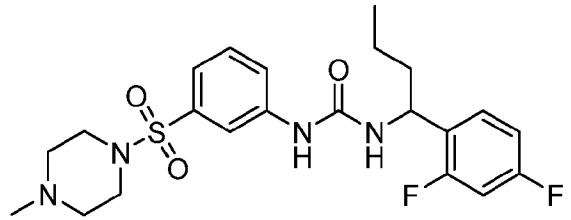
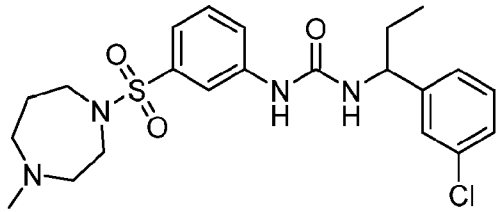
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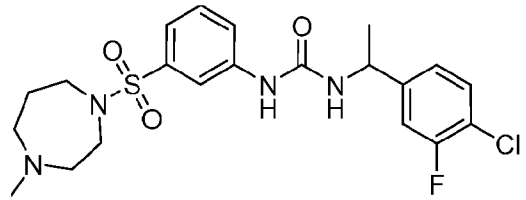
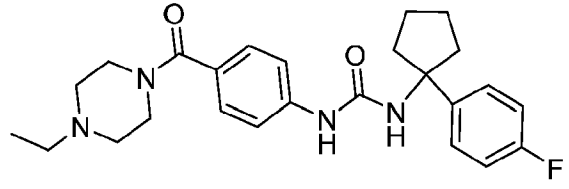
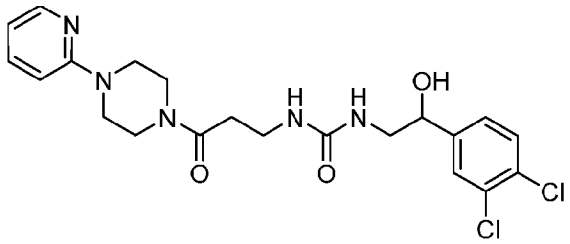
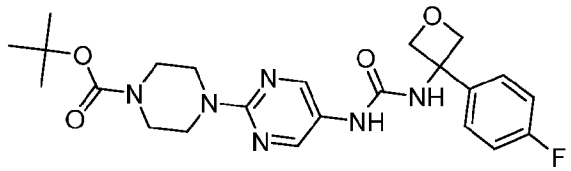
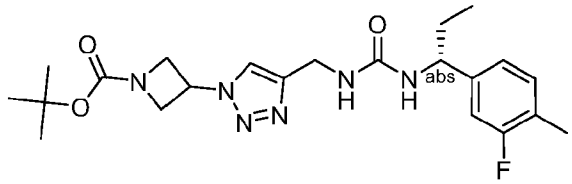
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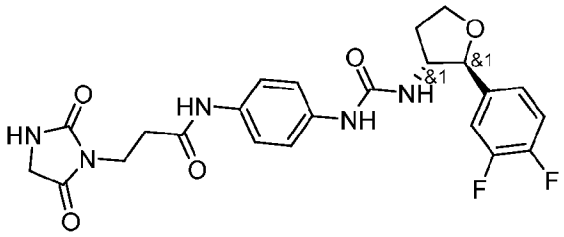
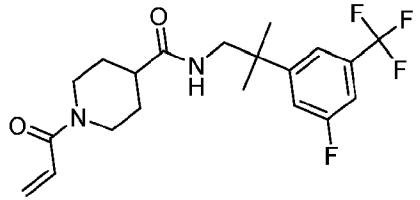
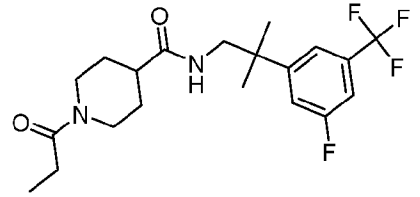
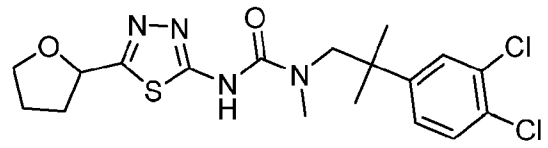
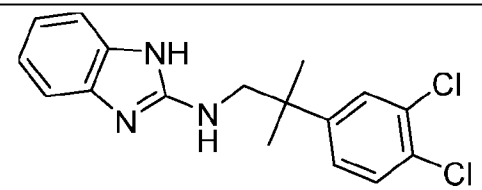
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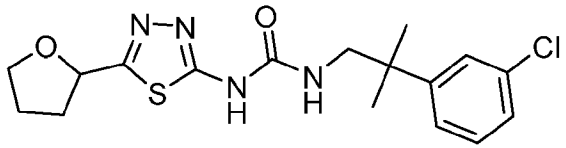
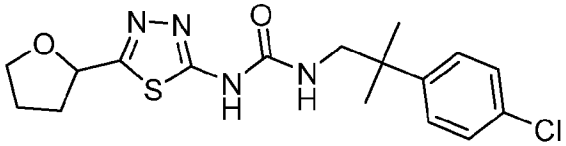
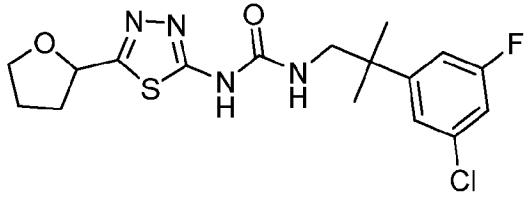
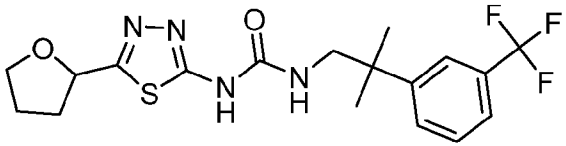
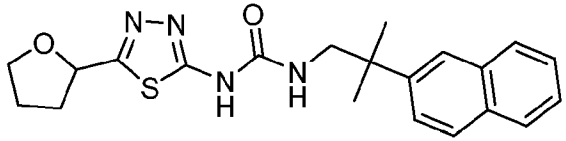
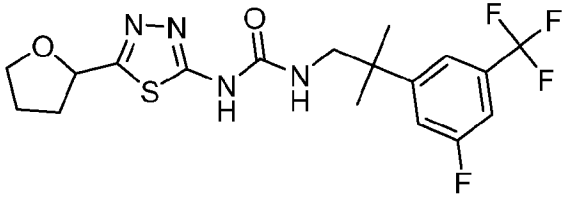
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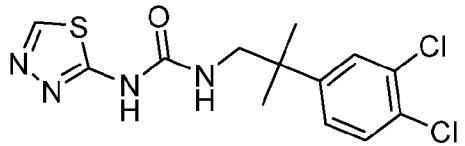
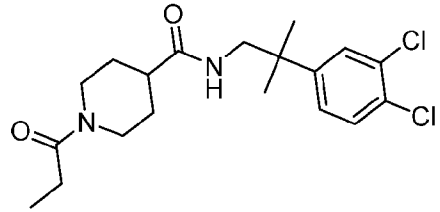
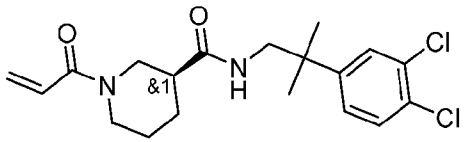
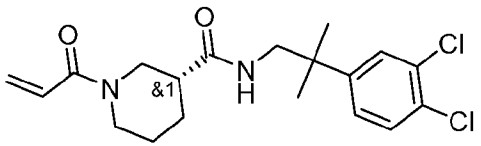
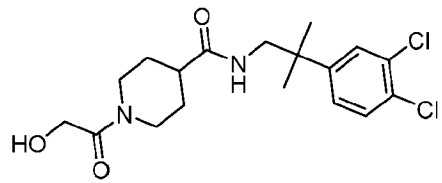
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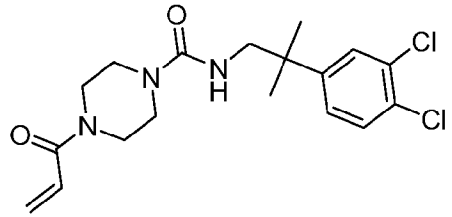
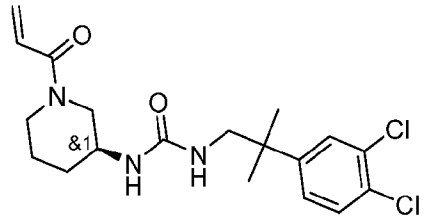
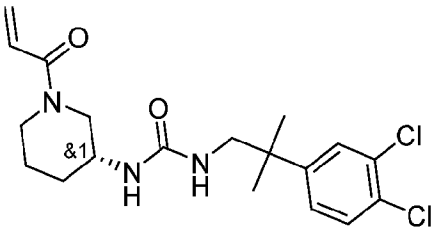
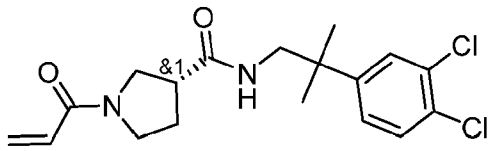
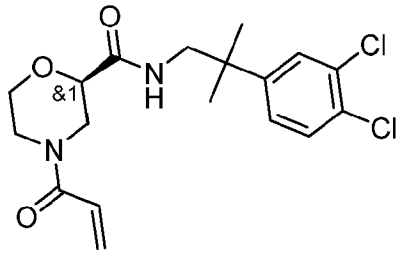
I-170				E	
I-171				E	
I-172				E	
I-173				E	

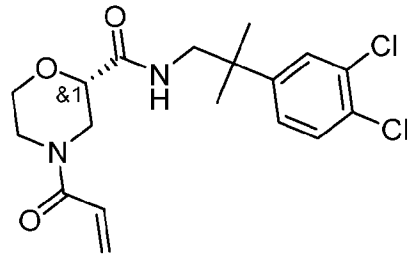
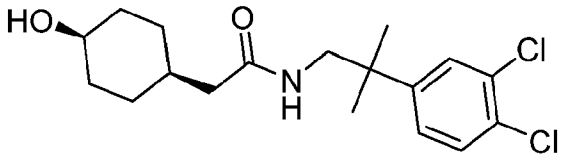
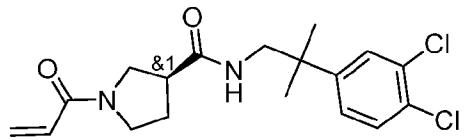
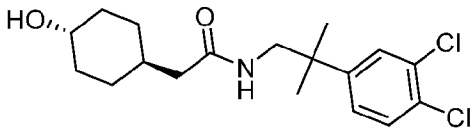
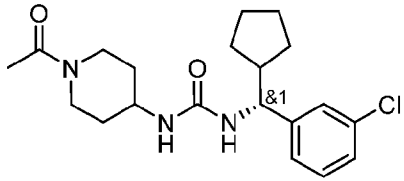
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I-175				E	
I-176				E	
I-177				E	
I-178				E	

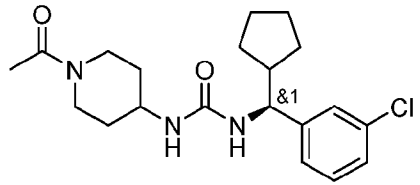
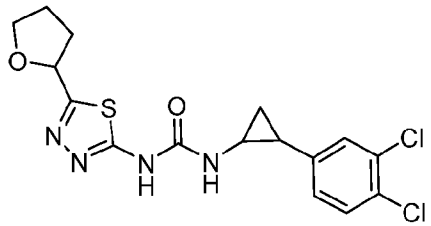
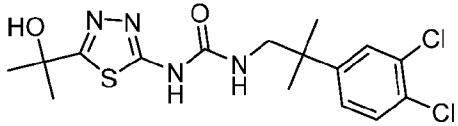
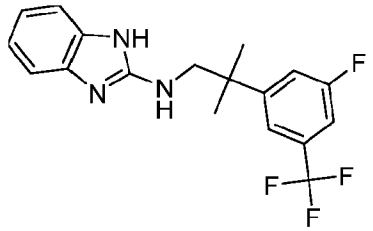
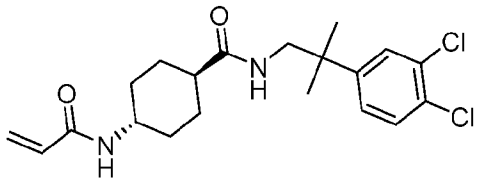
I-179				E	
I-180		(DMSO-d6, 400MHz): = 7.68 (t, J=6.4 Hz, 1H), 7.56-7.43 (m, 3H), 6.77 (dd, J=16.8, 10.4 Hz, 1H), 6.09 (d, J=2.4 Hz, 1H), 6.04 (d, J=2.4 Hz, 1H), 5.64 (dd, J=10.4, 2.4 Hz, 1H), 4.30 (d, J=12.8 Hz, 1H), 3.98 (d, J=12.8 Hz, 1H), 3.32-3.28 (m, 2H), 2.99 (t, J=12.4 Hz, 1H), 2.70-2.56 (m, 1H), 2.41-2.28 (m, 1H), 1.53 (d, J=12.4 Hz, 2H), 1.34 (s, 1H), 1.28 (s, 7H).	401.1	E	
I-181		(DMSO-d6, 400MHz): = 7.66 (t, J=6.0 Hz, 1H), 7.56-7.43 (m, 3H), 4.27 (d, J=13.2 Hz, 1H), 3.78 (d, J=13.2 Hz, 1H), 3.33-3.28 (m, 2H), 2.92 (t, J=11.6 Hz, 1H), 2.37-2.23 (m, 3H), 1.66-1.43 (m, 2H), 1.39-1.14 (m, 8H), 0.96 (t, J=7.2 Hz, 3H).	403.1	E	
I-182				E	
I-183				E	

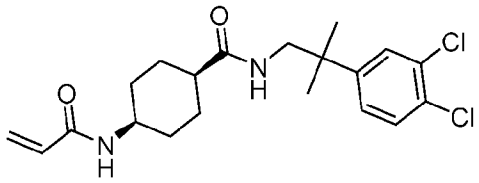
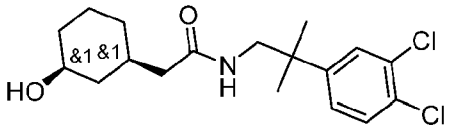
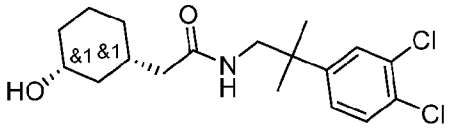
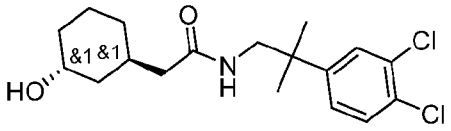
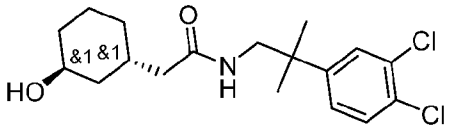
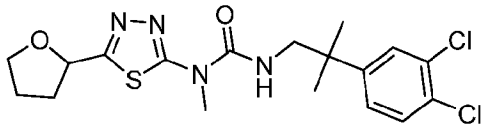
I-184				E	
I-185				E	
I-186				E	
I-187				E	
I-188				E	
I-189				E	

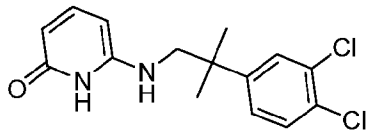
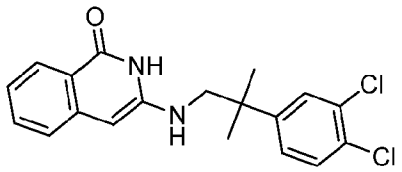
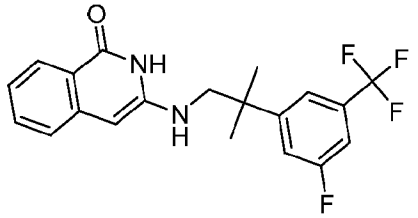
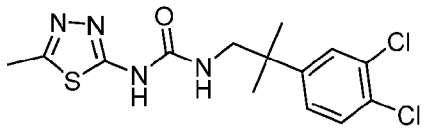
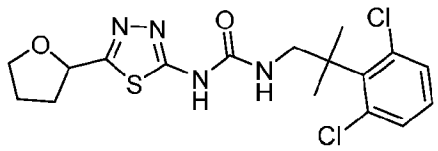
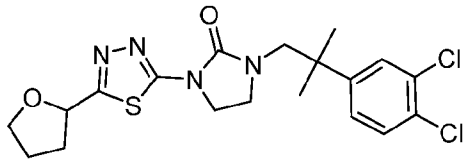
I-190				E	
I-191		(400 MHz, DMSO-d6): ppm 7.60-7.64 (m, 1H), 7.52-7.56 (m, 2H), 7.31-7.35 (m, 1H), 4.30 (d, J=12.8 Hz, 1H), 3.80 (d, J=13.6 Hz, 1H), 3.26 (d, J=6.0 Hz, 2H), 2.90-2.97 (m, 1H), 2.27-2.49 (m, 4H), 1.51-1.58 (m, 2H), 1.26-1.44 (m, 2H), 1.23 (s, 6H), 0.95-0.99 (m, 3H)	385	E	
I-192		(400 MHz, DMSO-d6): 7.73-7.70 (m, 1H), 7.56-7.53 (m, 2H), 7.36-7.32 (m, 1H), 6.81-6.69 (m, 1H), 6.08-6.03 (m, 1H), 5.67-5.63 (m, 1H), 4.29-4.23 (m, 1H), 3.97-3.75 (m, 1H), 3.31-3.17 (m, 2H), 3.06-2.95 (m, 1H), 2.68-2.59 (m, 1H), 2.30-2.16 (m, 1H), 1.72-1.58 (m, 2H), 1.56-1.46 (m, 1H), 1.42-1.26 (m, 1H), 1.24 (s, 6H).	383	E	
I-193		(400 MHz, DMSO-d6): 7.73-7.70 (m, 1H), 7.56-7.53 (m, 2H), 7.36-7.32 (m, 1H), 6.81-6.69 (m, 1H), 6.08-6.04 (m, 1H), 5.67-5.63 (m, 1H), 4.29-4.23 (m, 1H), 3.97-3.75 (m, 1H), 3.30-3.14 (m, 2H), 3.06-2.95 (m, 1H), 2.68-2.60 (m, 1H), 2.26-2.23 (m, 1H), 1.72-1.58 (m, 2H), 1.56-1.46 (m, 1H), 1.42-1.26 (m, 1H), 1.24 (s, 6H).	382.9	E	
I-194		(400 MHz, DMSO-d6) ppm 7.62-7.65 (m, 1H), 7.52-7.56 (m, 2H), 7.32-7.35(m, 1H), 4.45-4.49 (m, 1H), 4.25 (d, J=12.8 Hz, 1H), 3.97-4.13 (m, 2H), 3.63 (d, J=13.2 Hz, 1H), 3.24-3.27 (m, 2H), 2.86-2.93 (m, 1H), 2.54-2.70 (m, 1H), 2.29-2.42 (m, 1H), 1.53-1.58 (m, 2H), 1.27-1.49 (m, 1H), 1.26-1.34 (m, 1H), 1.23 (s, 6 H).	387.1	E	

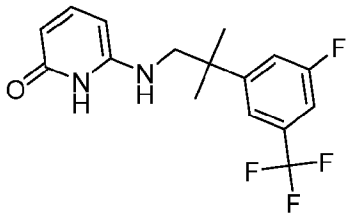
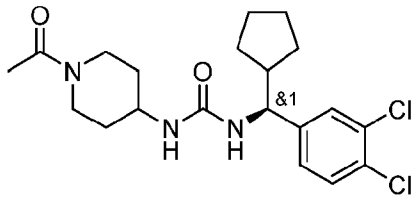
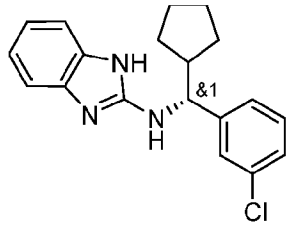
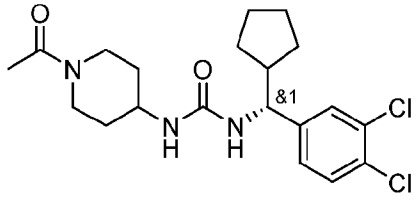
I-195		(400 MHz, DMSO-d6) 7.55 - 7.51 (m, 2H), 7.34 - 7.31 (m, 1H), 6.83 - 6.76 (m, 1H), 6.44 - 6.41 (m, 1H), 6.13 - 6.09 (m, 1H), 5.70 - 5.67 (m, 1H), 3.44 (d, J=13.2 Hz, 4H), 3.23 (d, J=6.0 Hz, 6H), 1.21 (s, 6 H).	384	E	
I-196		(400 MHz, DMSO-d6) 7.57 - 7.55 (m, 2H), 7.37 - 7.34 (m, 1H), 6.82 - 6.54 (m, 1H), 6.07 - 6.03 (m, 2H), 5.67 - 5.61 (m, 2H), 3.70 - 3.46 (m, 4H), 3.27 - 3.23 (m, 3H), 1.77 - 1.55 (m, 2H), 1.41 (d, J=6.40 Hz, 2H), 1.21 (s, 6H).	398.1	E	
I-197		(400 MHz, DMSO-d6) 7.57 - 7.55 (m, 2H), 7.37 - 7.34 (m, 1H), 6.82 - 6.54 (m, 1H), 6.07 - 6.03 (m, 2H), 5.67 - 5.61 (m, 2H), 3.70 - 3.46 (m, 4H), 3.27 - 3.23 (m, 3H), 1.77 - 1.55 (m, 2H), 1.41 (d, J=6.40 Hz, 2H), 1.21 (s, 6H).	398.1	E	
I-198		(400 MHz, DMSO-d6): 7.83 (br, 1H), 7.58-7.53 (m, 2H), 7.36-7.33 (m, 1H), 6.57-6.49 (m, 1H), 6.14-6.09 (m, 1H), 5.67-5.63 (m, 1H), 3.65-3.37 (m, 4H), 3.28-3.20 (m, 2H), 3.02-2.85 (m, 1H), 2.04-1.70 (m, 2H), 1.27-1.22 (m, 6H).	369.1	E	
I-199		(DMSO-d6, 400MHz): 7.70-7.47 (m, 3H), 7.36 (dd, J=8.4, 1.6 Hz, 1H), 6.88-6.64 (m, 1H), 6.13 (t, J=15.2 Hz, 1H), 5.72 (dd, J=10.4, 2.0 Hz, 1H), 4.40 (d, J=12.4 Hz, 1H), 4.10-3.78 (m, 4H), 3.55-3.42 (m, 2H), 3.34-3.12 (m, 4H), 2.99 (d, J=10.0 Hz, 1H), 2.72-2.56 (m, 1H), 1.24 (s, 6H).	385.1	E	

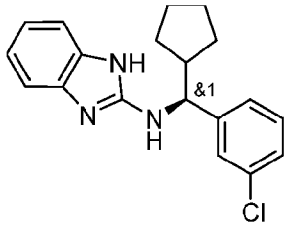
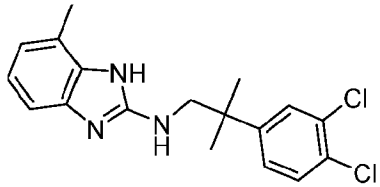
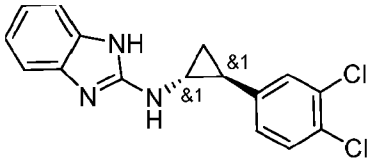
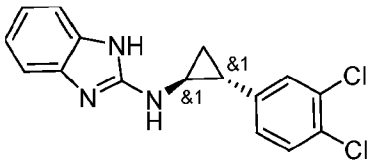
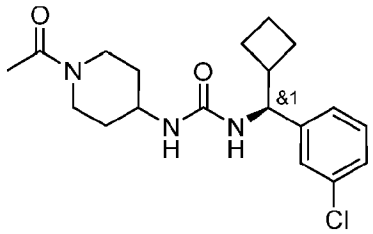
I-200		(DMSO-d6, 400MHz): 7.73-7.46 (m, 3H), 7.35 (d, J=7.6 Hz, 1H), 6.75 (d, J=10.4 Hz, 1H), 6.23-5.99 (m, 1H), 5.71 (d, J=10.0 Hz, 1H), 4.39 (d, J=12.0 Hz, 1H), 4.09-3.74 (m, 4H), 3.55-3.41 (m, 3H), 3.25-2.86 (m, 2H), 2.61 (s, 1H), 1.22 (s, 6H).	385.1	E	
I-201		(DMSO-d6, 400MHz): 7.66-7.47 (m, 3H), 7.33 (dd, J=8.4, 2.0 Hz, 1H), 3.79-3.69 (m, 4H), 3.29 (d, J=6.0 Hz, 2H), 1.92 (d, J=7.2 Hz, 2H), 1.67-1.43 (m, 3H), 1.40-1.27 (m, 1H), 1.40-1.27 (m, 2H), 1.26-1.20 (m, 7H), 1.20-1.10 (m, 3H).	358.1	E	
I-202		(400 MHz, DMSO-d6): 7.83 (br, 1H), 7.56-7.53 (m, 2H), 7.36-7.33 (m, 1H), 6.57-6.49 (m, 1H), 6.14-6.09 (m, 1H), 5.67-5.63 (m, 1H), 3.65-3.37 (m, 4H), 3.28-3.20 (m, 2H), 3.02-2.85 (m, 1H), 2.04-1.70 (m, 2H), 1.27-1.22 (m, 6H).	369.1	E	
I-203		(DMSO-d6, 400MHz): 7.69-7.46 (m, 3H), 7.32 (dd, J=8.4, 2.4 Hz, 1H), 3.33-3.17 (m, 3H), 1.85 (d, J=6.4 Hz, 2H), 1.71 (d, J=10.0 Hz, 2H), 1.38 (d, J=10.8 Hz, 3H), 1.23 (s, 6H), 1.10-0.93 (m, 2H), 0.85-0.68 (m, 2H).	358.1	E	
I-204		(400 MHz, DMSO-d6) ppm 7.07-7.54 (m, 4H), 6.44 (s, 1H), 5.89 (s, 1H), 4.42 (s, 1H), 4.08 (s, 1H), 3.62-3.66 (m, 1H), 3.06 (d, J=8.4 Hz, 1H), 2.71 (s, 1H), 2.02-2.19 (m, 1H), 1.96 (s, 3H), 0.89-1.82 (m, 13H).	378.2	E	

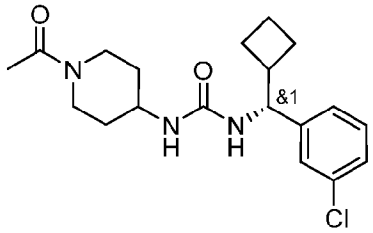
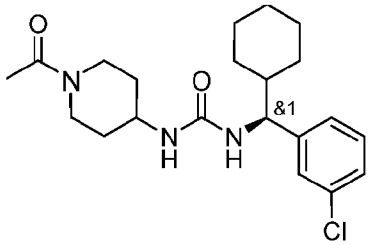
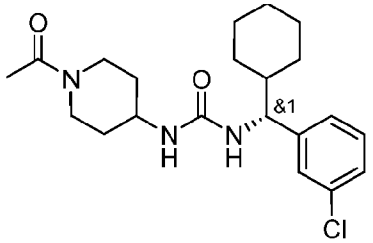
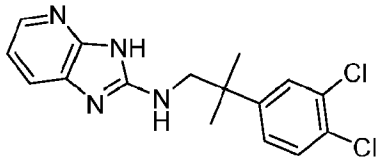
I-205		(400 MHz, DMSO-d6) ppm 7.18-7.39 (m, 4H), 6.41 (d, J=8.38 Hz, 1H), 5.85 (s, 1H), 4.42-4.47 (m, 1H), 4.11 (d, J=4.4 Hz, 1H), 3.68 (d, J=9.6 Hz, 1H), 3.04-3.12 (m, 1H), 2.70 (d, J=13.6 Hz, 1H), 2.04-2.18 (m, 1H), 1.98 (d, J=2.8 Hz, 3H), 1.06-1.85 (m, 13H).	378.2	D	B
I-206				E	
I-207				E	
I-208				E	B
I-209		(400 MHz, DMSO-d6): ppm 7.94 (d, J=8.0 Hz, 1H), 7.50-7.57 (m, 3H), 7.31-7.35 (m, 1H), 6.12-6.22 (m, 1H), 6.01-6.10 (m, 1H), 5.53-5.57 (m, 1H), 3.46-3.55 (m, 1H), 3.25 (d, J=6.0 Hz, 2H), 2.01-2.11 (m, 1H), 1.80 (d, J=9.6 Hz, 2H), 1.60 (d, J=11.6 Hz, 2H), 1.27-1.41 (m, 2H), 1.22 (s, 6H), 1.06-1.18 (m, 2H).	397.1	E	

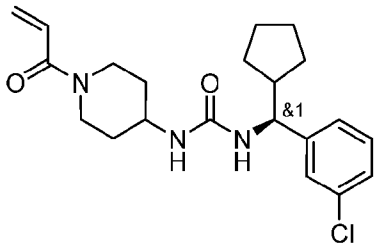
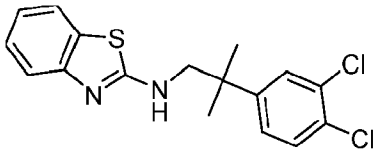
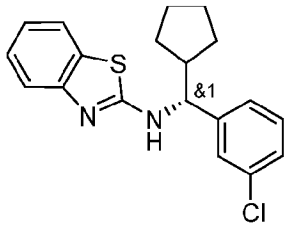
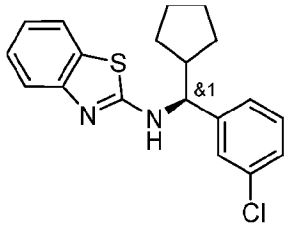
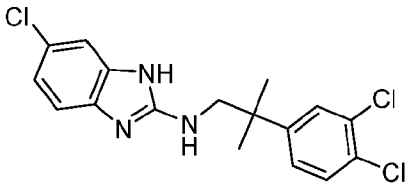
I-210		(400 MHz, DMSO-d6) ppm 7.98 (d, J=7.2 Hz, 1H), 7.52-7.57 (m, 3H), 7.32-7.35 (m, 1H), 6.33-6.41 (m, 1H), 6.03-6.09 (m, 1H), 5.51-5.57 (m, 1H), 3.83 (s, 1H), 3.25 (d, J=6.0 Hz, 2H), 2.14-2.24 (m, 1H), 1.58-1.69 (m, 4H), 1.37-1.51 (m, 4 H), 1.24 (s, 6H).	397.1	E	
I-211		(400 MHz, DMSO-d6) 7.60-7.07 (m, 5H), 4.47 (d, J = 4.0 Hz, 1H), 3.30-3.16 (m, 2H), 1.97-1.83 (m, 2H), 1.74 (s, 2H), 1.61-1.44 (m, 2H), 1.32-1.19 (m, 7H), 1.16-1.03 (m, 1H), 0.99-0.86 (m, 1H), 0.77-0.65 (m, 1H), 0.64-0.49 (m, 1H).	358.1	E	
I-212		(400 MHz, DMSO-d6) 7.60-7.07 (m, 5H), 4.47 (d, J = 4.0 Hz, 1H), 3.30-3.16 (m, 2H), 1.97-1.83 (m, 2H), 1.74 (s, 2H), 1.61-1.44 (m, 2H), 1.32-1.19 (m, 7H), 1.16-1.03 (m, 1H), 0.99-0.86 (m, 1H), 0.77-0.65 (m, 1H), 0.64-0.49 (m, 1H).	358.1	E	
I-213		(400 MHz, DMSO-d6) 7.52-7.48 (m, 3H), 7.36-7.30 (m, 1H), 4.26 (d, J = 4.0 Hz, 1H), 3.76 (s, 1H), 3.33-3.29 (m, 1H), 3.25-3.15 (m, 1H), 1.99 (d, J = 4.0 Hz, 1H), 1.87 (d, J = 8.0 Hz, 2H), 1.54-1.37 (m, 3H), 1.36-1.16 (m, 9H), 1.11-0.99 (m, 1H), 0.82-0.69 (m, 1H).	358.1	E	
I-214		(400 MHz, DMSO-d6) 7.52-7.48 (m, 3H), 7.36-7.30 (m, 1H), 4.26 (d, J = 4.0 Hz, 1H), 3.76 (s, 1H), 3.33-3.29 (m, 1H), 3.25-3.15 (m, 1H), 1.99 (d, J = 4.0 Hz, 1H), 1.87 (d, J = 8.0 Hz, 2H), 1.54-1.37 (m, 3H), 1.36-1.16 (m, 9H), 1.11-0.99 (m, 1H), 0.82-0.69 (m, 1H).	358.1	E	
I-215				E	

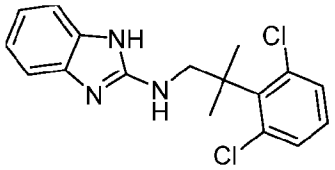
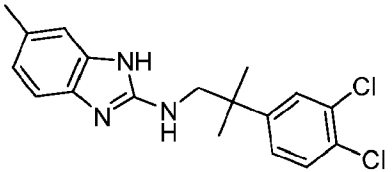
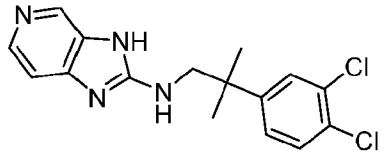
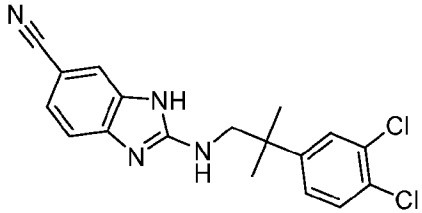
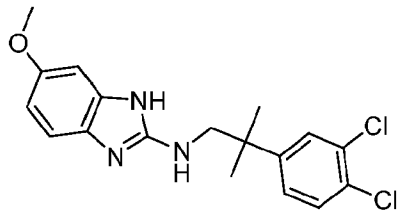
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I-217				D	
I-218				E	
I-219				E	
I-220				D	
I-221				E	

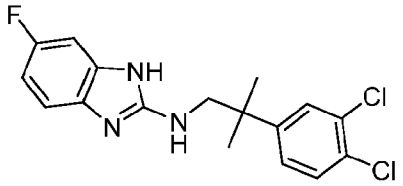
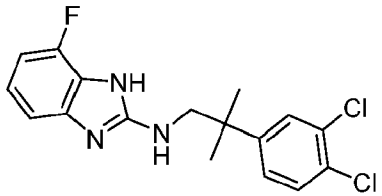
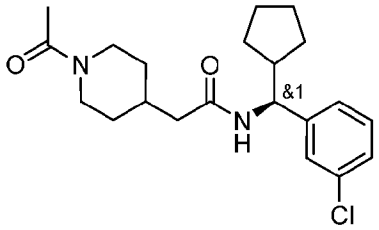
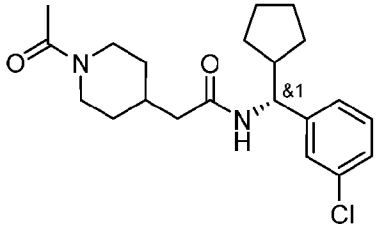
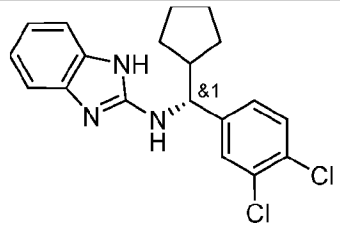
I-222				E	
I-223		(DMSO-d6, 400MHz): 7.55 (d, J = 8.0 Hz, 1H), 7.49 (d, J = 1.6 Hz, 1H), 7.24 (dd, J = 8.4, 2.0 Hz, 1H), 6.39 (d, J = 8.4 Hz, 1H), 5.83 (d, J = 7.6 Hz, 1H), 4.42 (t, J = 8.8 Hz, 1H), 4.20-4.01 (m, 1H), 3.67 (dd, J = 14.0, 3.6 Hz, 1H), 3.60-3.44 (m, 1H), 3.14-2.99 (m, 1H), 2.77-2.61 (m, 1H), 2.10 (t, J = 8.0 Hz, 1H), 1.97 (d, J = 2.4 Hz, 3H), 1.84-1.37 (m, 7H), 1.36-0.98 (m, 5H).	412.2	D	
I-224		(400 MHz, CD3OD-d4) ppm 7.51 (s, 1H), 7.31-7.44 (m, 5H), 7.21-7.25 (m, 2H), 4.42-4.53 (m, 1H), 2.37-2.51 (m, 1H), 1.98-2.09 (m, 1H), 1.42-1.83 (m, 6H), 1.22-1.35 (m, 1H).	326.1	D	
I-225		(DMSO-d6, 400MHz): 7.55 (d, J = 8.4 Hz, 1H), 7.49 (d, J = 2.0 Hz, 1H), 7.24 (dd, J = 8.4, 2.0 Hz, 1H), 6.40 (d, J = 8.4 Hz, 1H), 5.83 (d, J = 7.5 Hz, 1H), 4.42 (t, J = 8.4 Hz, 1H), 4.20-4.03 (m, 1H), 3.67 (d, J = 10.5 Hz, 1H), 3.57-3.41 (m, 1H), 3.17-2.99 (m, 1H), 2.76-2.62 (m, 1H), 2.18-2.05 (m, 1H), 1.97 (d, J = 2.4 Hz, 3H), 1.83-1.37 (m, 7H), 0.99-1.34 (m, 5H).	412.1	E	

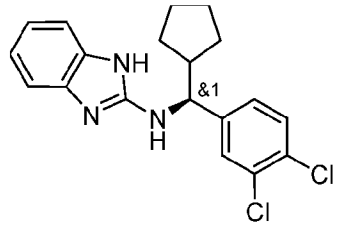
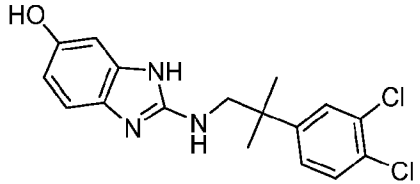
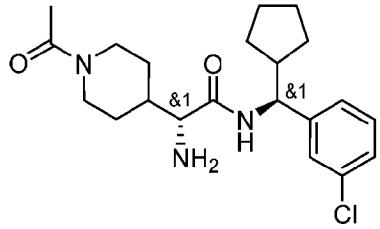
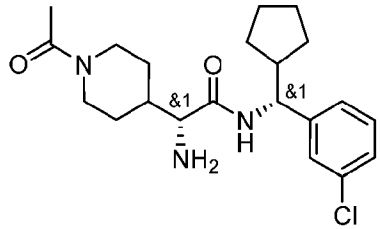
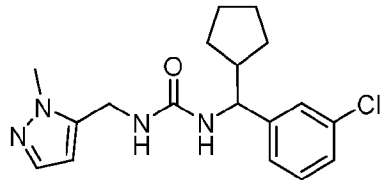
I-226		(400 MHz, CD3OD-d4): ppm 7.51 (s, 1H), 7.34-7.43 (m, 5H), 7.27-7.32 (m, 2H), 4.44 (d, J=9.6 Hz, 1H), 2.40-2.51 (m, 1H), 1.98-2.09 (m, 1H), 1.43-1.83 (m, 6H), 1.22-1.35 (m, 1H).	326.1	E	
I-227		(400 MHz, DMSO-d6) ppm 12.54 (s, 2H), 8.56 (s, 1H), 7.73 (d, J=1.6 Hz, 1H), 7.41-7.61 (m, 2H), 7.16-7.22 (m, 1H), 7.06-7.13 (m, 1H), 7.01 (d, J=7.6 Hz, 1H), 3.73 (d, J=6.4 Hz, 2H), 2.43 (s, 3H), 1.37 (s, 6H).	348.1	E	
I-228		(400 MHz, DMSO-d6): 12.86 (s, 2H), 9.73 (s, 1H), 7.58 (d, J = 8.0 Hz, 1H), 7.47-7.39 (m, 3H), 7.26-7.23 (m, 2H), 7.20-7.17 (m, 1H), 3.15 (d, J = 3.2 Hz, 1H), 2.43-2.38 (m, 1H), 1.52-1.41 (m, 2H).	318.1	E	
I-229		(400 MHz, DMSO-d6): 12.87 (s, 2H), 9.73 (s, 1H), 7.58 (d, J = 8.0 Hz, 1H), 7.46-7.39 (m, 3H), 7.26-7.23 (m, 2H), 7.20-7.17 (m, 1H), 3.15 (d, J − 3.2 Hz, 1H), 2.43-2.38 (m, 1H), 1.52-1.41 (m, 2H).	318	E	
I-230		(400 MHz, DMSO-d6)7.35-7.28 (m, 1H), 7.24-7.21 (m, 2H), 7.18 (d, J = 8.0 Hz, 1H), 6.29 (d, J = 8.0 Hz, 1H), 5.84 (d, J = 8.0 Hz, 1H), 4.58-4.50 (m, 1H), 4.16-4.06 (m, 1H), 3.72-3.61 (m, 1H), 3.59-3.49 (m, 1H), 3.36-3.32 (m, 1H), 3.13-3.00 (m, 1H), 2.75-2.64 (m, 1H), 2.01-1.86 (m, 4H), 1.83-1.60 (m, 7H), 1.30-1.02 (m, 2H).	364.1	E	

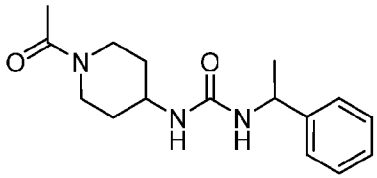
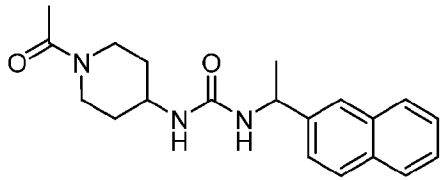
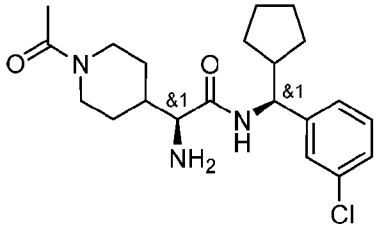
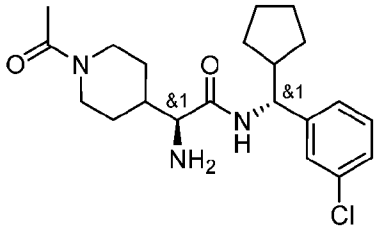
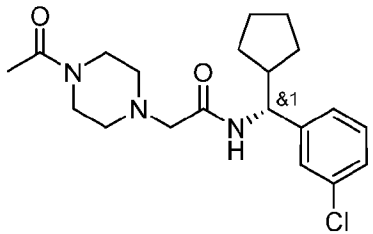
I-231		(400 MHz, DMSO-d6)7.35-7.28 (m, 1H), 7.24-7.21 (m, 2H), 7.18 (d, J = 8.0 Hz, 1H), 6.29 (d, J − 8.0 Hz, 1H), 5.84 (d, J − 8.0 Hz, 1H), 4.58-4.50 (m, 1H), 4.16-4.06 (m, 1H), 3.72-3.61 (m, 1H), 3.59-3.49 (m, 1H), 3.36-3.32 (m, 1H), 3.13-3.00 (m, 1H), 2.75-2.64 (m, 1H), 2.01-1.86 (m, 4H), 1.83-1.60 (m, 7H), 1.30-1.02 (m, 2H).	364.1	E	
I-232		(400 MHz, DMSO-d6)7.36-7.29 (m, 1H), 7.28-7.21 (m, 2H), 7.15 (d, J = 8.0 Hz, 1H), 6.35 (d, J = 8.0 Hz, 1H), 5.82 (d, J = 8.0 Hz, 1H), 4.48-4.39 (m, 1H), 4.10-4.06 (m, 1H), 3.72-3.61 (m, 1H), 3.59-3.51 (m, 1H), 3.14-3.01 (m, 1H), 3.72-3.64 (m, 1H), 1.97 (d, J = 4.0 Hz, 3H), 1.75-1.64 (m, 7H), 1.31-0.82 (m, 8H).	392.2	E	
I-233		(400 MHz, DMSO-d6)7.36-7.29 (m, 1H), 7.28-7.21 (m, 2H), 7.15 (d, J = 8.0 Hz, 1H), 6.35 (d, J = 8.0 Hz, 1H), 5.82 (d, J = 8.0 Hz, 1H), 4.48-4.39 (m, 1H), 4.10-4.06 (m, 1H), 3.72-3.61 (m, 1H), 3.59-3.51 (m, 1H), 3.14-3.01 (m, 1H), 3.72-3.64 (m, 1H), 1.97 (d, J = 4.0 Hz, 3H), 1.75-1.64 (m, 7H), 1.31-0.82 (m, 8H).	392.2	E	
I-234		(400 MHz, DMSO-d6): 11.12-10.53 (m, 1H), 7.96-7.72 (m, 1H), 7.66 (d, J = 1.6 Hz, 1H), 7.57 (d, J = 8.4 Hz, 1H), 7.48-7.31 (m, 2H), 7.03-6.48 (m, 2H), 3.57 (s, 2H), 1.32 (s, 6H).	335	E	

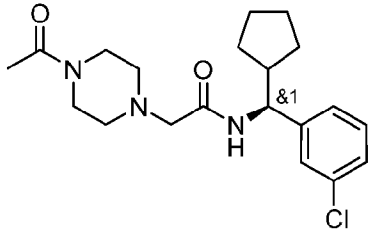
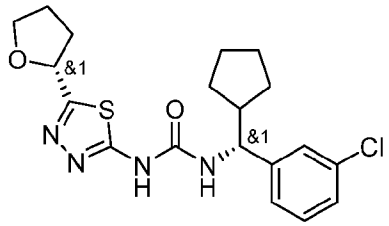
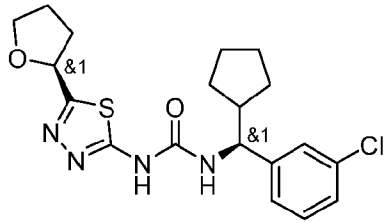
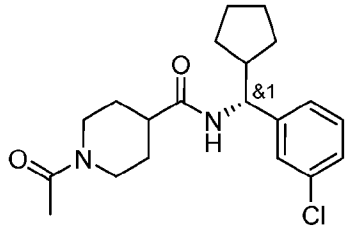
I-235		(400 MHz, DMSO-d6): 7.34-7.19 (m, 4H), 6.82-6.75 (m, 1H), 6.39-6.36 (m, 1H), 6.10-6.05 (m, 1H), 5.82-5.80 (m, 1H), 5.67-5.62 (m, 1H), 4.46-4.41 (m, 1H), 4.10-4.20 (m, 1H), 3.91-3.86 (m, 1H), 3.60-3.52 (m, 1H), 3.15-3.11 (m, 1H), 2.86-2.74 (m, 1H), 2.16-2.05 (m, 1H), 1.77-1.43 (m, 7H), 1.35-1.08 (m, 5H).	390.2	D	
I-236		(400 MHz, DMSO-d6): 7.80-7.77 (m, 1H), 7.66-7.64 (m, 1H), 7.63-7.60 (m, 1H), 7.56-7.54 (m, 1H), 7.43-7.40 (m, 1H), 7.35-7.33 (m, 1H), 7.21-7.17 (m, 1H), 7.01-6.97 (m, 1H), 3.67-3.64 (m, 2H), 1.34 (s, 6H).	350.8	E	
I-237		(400 MHz, DMSO-d6): 8.61-8.59 (m, 1H), 7.65-7.63 (m, 1H), 7.48 (s, 1H), 7.40-7.27 (m, 4H), 7.22-7.17 (m, 1H), 7.01-6.97 (m, 1H), 4.75-7.68 (m, 1H), 2.30-2.22 (m, 1H), 1.87-1.79 (m, 1H), 1.68-1.16 (m, 7H).	342.9	E	
I-238		(400 MHz, DMSO-d6): 8.61-8.59 (m, 1H), 7.65-7.63 (m, 1H), 7.48 (s, 1H), 7.42-7.27 (m, 4H), 7.22-7.17 (m, 1H), 7.01-6.97 (m, 1H), 4.75-7.68 (m, 1H), 2.30-2.22 (m, 1H), 1.90-1.79 (m, 1H), 1.68-1.16 (m, 7H).	342.9	E	
I-239		(400 MHz, DMSO-d6) ppm 12.37-12.97 (m, 1H), 8.93 (s, 1H), 7.72 (d, J=2.4 Hz, 1H), 7.60 (d, J=8.4 Hz, 1H), 7.46-7.50 (m, 1H), 7.41 (d, J=1.6 Hz, 1H), 7.37 (d, J=8.4 Hz, 1H), 7.24-7.27 (m, 1H), 3.62 (d, J=6.4 Hz, 2H), 1.36 (s, 6H).	368	E	

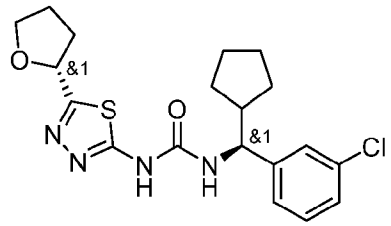
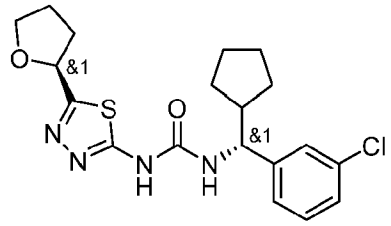
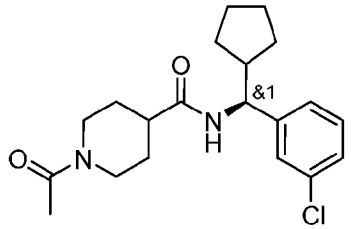
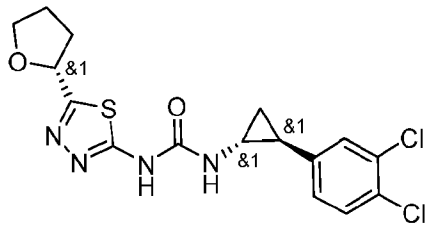
I-240		(400 MHz, DMSO-d6) ppm 12.44 (s, 1H), 8.79 (s, 1H), 7.47 (d, J=8.0 Hz, 2H), 7.36-7.41 (m, 2H), 7.22-7.30 (m, 3H), 4.09 (d, J=6.0 Hz, 2H), 1.76 (s, 6H).	334	D	
I-241		(400 MHz, DMSO-d6) 12.42 (s, 1H), 8.78-8.71 (m, 1H), 7.72 (d, J = 4.0 Hz, 1H), 7.58 (d, J = 6.0 Hz, 1H), 7.51-7.45 (m, 1H), 7.25 (d, J = 8.0 Hz, 1H), 7.17 (s, 1H), 7.03 (d, J = 8.0 Hz, 1H), 3.62 (d, J = 8.0 Hz, 2H), 2.37 (s, 3H), 1.36 (s, 6H).	348.1	D	
I-242		(400 MHz, DMSO-d6): 14.40 (s, 1H), 8.52 (s, 1H), 8.25 (d, J = 6.4 Hz, 2H), 7.68 (d, J = 2.4 Hz, 1H), 7.59-7.52 (m, 2H), 7.47-7.44 (m, 1H), 3.63-3.60 (m, 2H), 1.35 (s, 6H).	335.1	D	
I-243		(400 MHz, DMSO-d6): 13.94-11.92 (m, 1H), 9.21 (s, 1H), 7.80 (d, J = 1.2 Hz, 1H), 7.73 (d, J = 2.4 Hz, 1H), 7.67-7.64 (m, 1H), 7.61-7.56 (m, 1H), 7.54-7.47 (m, 2H), 3.67 (d, J = 6.4 Hz, 2H), 1.37 (s, 6H).	359.1	D	
I-244		(400 MHz, DMSO-d6): 12.48 (s, 2H), 8.79-8.75 (m, 1H), 7.73 (d, J = 2.4 Hz, 1H), 7.60 (d, J = 8.40 Hz, 1H), 7.51-7.48 (m, 1H), 7.28 (d, J = 8.8 Hz, 1H), 6.94 (d, J = 2.4 Hz, 1H), 6.83-6.81 (m, 1H), 3.78 (s, 3H), 3.63 (d, J = 6.4 Hz, 2H), 1.37 (s, 6H).	364	D	

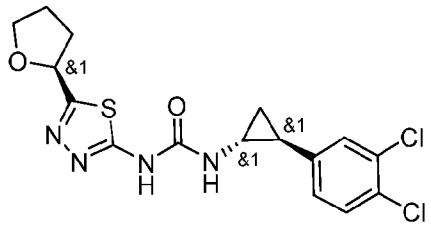
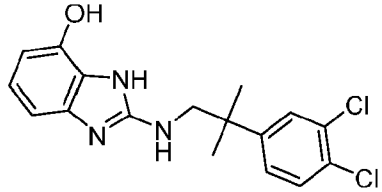
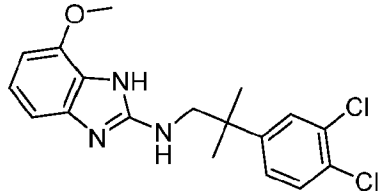
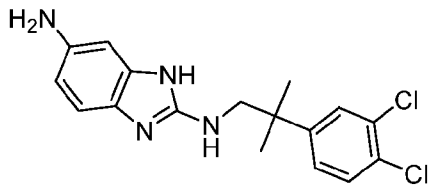
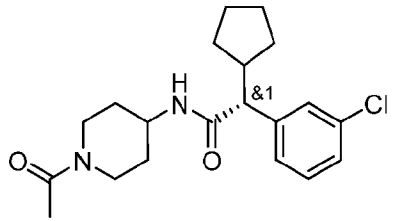
I-245		(400 MHz, DMSO-d6): 12.69 (s, 2H), 8.95 (s, 1H), 7.73 (d, J = 2.4 Hz, 1H), 7.60 (d, J = 8.4 Hz, 1H), 7.51-7.48 (m, 1H), 7.39-7.36 (m, 1H), 7.26-7.23 (m, 1H), 7.11-7.03 (m, 1H), 3.64 (d, J = 6.38 Hz, 2H), 1.37 (s, 6H).	352.1	D	
I-246		(400 MHz, DMSO-d6): 13.13 (s, 2H), 9.01 (s, 1H), 7.72 (d, J = 2.4 Hz, 1H), 7.59- 7.54 (m, 1H), 7.51-7.46 (m, 1H), 7.26-7.17 (m, 2H), 7.15-7.08 (m, 1H), 3.69 (d, J = 6.8 Hz, 2H), 1.37 (s, 6H).	352.1	D	
I-247		(400 MHz, DMSO-d6): 8.35-8.32 (m, 1H), 7.36-7.15 (m, 4H), 4.58-4.54 (m, 1H), 4.30-4.24 (m, 1H), 3.77-3.70 (m, 1H), 2.99-2.92 (m, 1H), 2.47-2.44 (m, 1H), 2.20-2.12 (m, 1H), 2.05-2.03 (m, 2H), 1.96 (s, 3H), 1.92-1.81 (m, 1H), 1.75-1.68 (m, 1H), 1.60-1.36 (m, 6H), 1.29-1.25 (m, 2H), 1.14-0.88 (m, 3H).	377.2	D	
I-248		(400 MHz, DMSO-d6): 8.35-8.32 (m, 1H), 7.47-7.24 (m, 4H), 4.58-4.54 (m, 1H), 4.30-4.24 (m, 1H), 3.77-3.70 (m, 1H), 2.99-2.92 (m, 1H), 2.47-2.44 (m, 1H), 2.20-2.12 (m, 1H), 2.05-2.03 (m, 2H), 1.96 (s, 3H), 1.92-1.81 (m, 1H), 1.75-1.68 (m, 1H), 1.62-1.36 (m, 6H), 1.30-1.25 (m, 2H), 1.14-0.88 (m, 3H).	377.2	E	
I-249		(400 MHz, DMSO-d6): 10.72 (s, 1H), 7.71 (d, J = 1.6 Hz, 1H), 7.56 (d, J = 8.4 Hz, 1H), 7.44-7.41 (m, 1H), 7.34 (d, J = 8.8 Hz, 1H), 7.10-7.07 (m, 2H), 6.85-6.83 (m, 2H), 4.60-4.55 (m, 1H), 2.33-2.24 (m, 1H), 1.84 - 1.80 (m, 1H), 1.60-1.11 (m, 7H).	360.1	D	

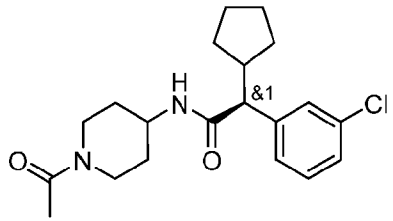
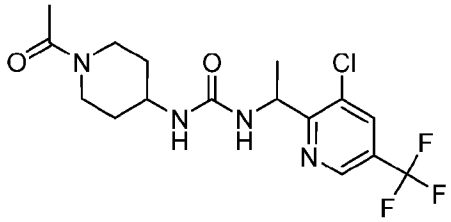
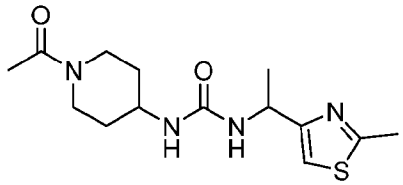
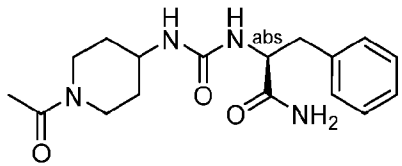
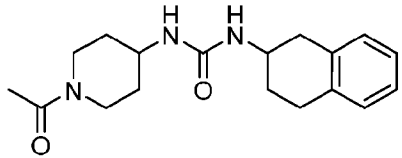
I-250		(400 MHz, DMSO-d6): 10.72 (s, 1H), 7.71 (d, J = 1.6 Hz, 1H), 7.56 (d, J = 8.4 Hz, 1H), 7.44-7.41 (m, 1H), 7.34 (d, J = 8.8 Hz, 1H), 7.10-7.07 (m, 2H), 6.85-6.83 (m, 2H), 4.60-4.55 (m, 1H), 2.33-2.24 (m, 1H), 1.84 - 1.80 (m, 1H), 1.60-1.11 (m, 7H).	360.1	D	
I-251		(400 MHz, DMSO-d6): 12.37 (s, 2H), 9.54 (s, 1H), 8.73-8.70 (m, 1H), 7.73 (d, J = 2.4 Hz, 1H), 7.63-7.56 (m, 1H), 7.52-7.46 (m, 1H), 7.16 (d, J = 8.8 Hz, 1H), 6.82 (d, J = 2.4 Hz, 1H), 6.66-6.63 (m, 1H), 3.61 (d, J − 6.4 Hz, 2H), 1.36 (s, 6 H).	350.1	D	
I-252		(400 MHz, DMSO-d6): 9.25-9.21 (m, 1H), 8.27 (br, 3H), 7.38-7.27 (m, 4H), 4.55-4.51 (m, 1H), 4.35-4.15 (m, 1H), 3.80-3.70 (m, 2H), 2.87-2.79 (m, 1H), 2.35-2.18 (m, 2H), 1.92-1.90 (m, 3H), 1.85-1.79 (m, 1H), 1.59-0.92 (m, 12H).	392.2	E	
I-253		(400 MHz, DMSO-d6): 9.23-9.18 (m, 1H), 8.26-8.05 (m, 3H), 7.44-7.28 (m, 4H), 4.61-4.53 (m, 1H), 4.42-4.25 (m, 1H), 3.92-3.88 (m, 1H), 3.76-3.75 (m, 1H), 2.99-2.94 (m, 1H), 2.41-2.14 (m, 2H), 1.98 (s, 3H), 1.94-1.90 (m, 1H), 1.82-1.01 (m, 12H).	392.2	E	
I-254			347.34	D	

I-255			290.381	E	
I-256				E	
I-257				E	
I-258		(400 MHz, DMSO-d6): 8.33-8.30 (m, 1H), 7.39-7.26 (m, 4H), 4.57-4.53 (m, 1H), 4.37-4.34 (m, 1H), 3.82-3.78 (m, 1H), 2.99-2.87 (m, 2H), 2.41-2.17 (m, 1H), 1.96 (s, 3H), 1.75-1.41 (m, 10H), 1.28-0.99 (m, 6H).	392.2	E	
I-259		(400 MHz, DMSO-d6): 9.17-9.13 (m, 1H), 8.23 (br, 3H), 7.38-7.27 (m, 4H), 4.58-4.52 (m, 1H), 4.29-4.26 (m, 1H), 3.80-3.74 (m, 2H), 2.89-2.80 (m, 1H), 2.35-2.18 (m, 2H), 1.94-1.91 (m, 3H), 1.85-1.76 (m, 1H), 1.61-1.02 (m, 12H).	392.2	E	

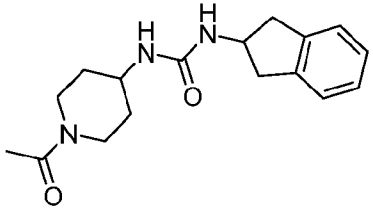
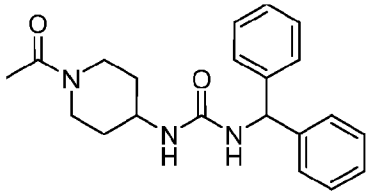
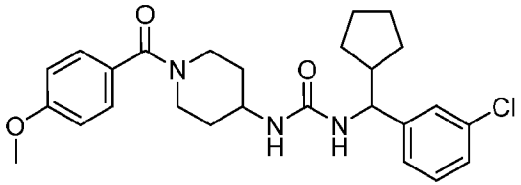
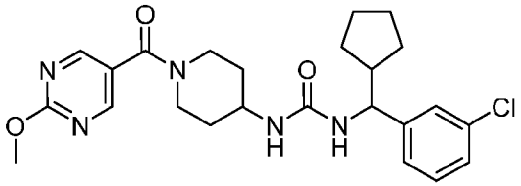
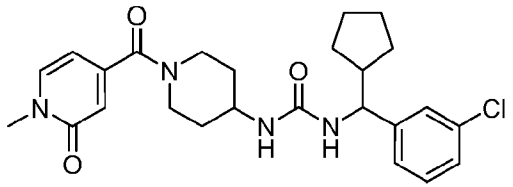
I-260		(400 MHz, DMSO-d6): 8.25-8.22 (m, 1H), 7.43 (s, 1H), 7.36-7.27 (m, 3H), 4.58-4.53 (m, 1H), 3.46-3.40 (m, 4H), 3.02-2.91 (m, 1H), 2.45-2.27 (m, 5H), 1.98 (s, 3H), 1.82-1.71 (m, 1H), 1.60-1.43 (m, 4H), 1.28-1.21 (m, 2H), 1.15-1.04 (m, 1H).	378.2	E	
I-261		(400 MHz, DMSO-d6): 10.53 (br, 1H), 9.45-9.37 (m, 1H), 7.44 (s, 1H), 7.38-7.29 (m, 3H), 4.90-4.41 (m, 5H), 4.10-3.97 (m, 3H), 3.39-3.02 (m, 3H), 2.28-2.18 (m, 1H), 1.78-1.70 (m, 1H), 1.62-1.44 (m, 4H), 1.35-1.26 (m, 2H), 1.15-1.06 (m, 1H).	378.2	E	
I-262		(400 MIIz, DMSO-d6) 8.20 (s, 1II), 7.40 (s, 1II), 7.35-7.22 (m, 3H), 5.13-5.04 (m, 1H), 4.51-4.43 (m, 1H), 3.98-3.70 (m, 2H), 2.30-2.22 (m, 1H), 2.10-1.88 (m, 4H), 1.74-1.63 (m, 1H), 1.61-1.39 (m, 4H), 1.35-1.20 (m, 2H), 1.16-1.02 (m, 1H).	407.1	E	
I-263		(400 MHz, DMSO-d6) 8.20 (s, 1H), 7.40 (s, 1H), 7.35-7.22 (m, 3H), 5.13-5.04 (m, 1H), 4.51-4.43 (m, 1H), 3.98-3.70 (m, 2H), 2.30-2.22 (m, 1H), 2.10-1.88 (m, 4H), 1.74-1.63 (m, 1H), 1.61-1.39 (m, 4H), 1.35-1.20 (m, 2H), 1.16-1.02 (m, 1H).	407.1	E	

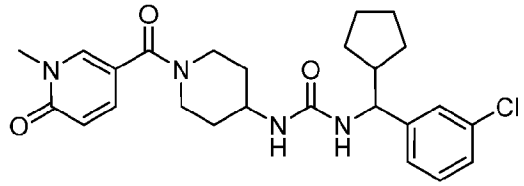
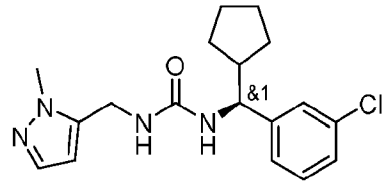
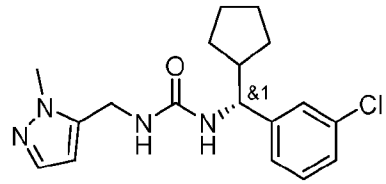
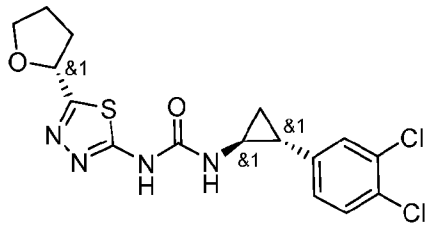
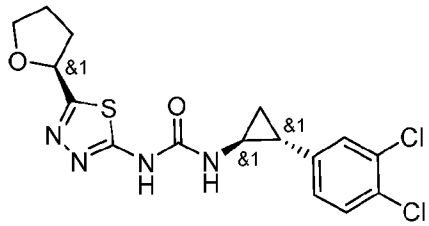
I-264		(400 MHz, DMSO-d6): 8.30-8.28 (m, 1H), 7.38-7.26 (m, 4H), 4.58-4.53 (m, 1H), 4.37-4.30 (m, 1H), 3.83-3.77 (m, 1H), 3.05-2.98 (m, 1H), 2.41-2.39 (m, 1H), 2.25-2.10 (m, 1H), 1.99-1.96 (m, 3H), 1.75-1.09 (m, 13H).	363	E	
I-265		(400 MHz, DMSO-d6) 8.20 (s, 1H), 7.40 (s, 1H), 7.35-7.22 (m, 3H), 5.13-5.04 (m, 1H), 4.51-4.43 (m, 1H), 3.98-3.70 (m, 2H), 2.30-2.22 (m, 1H), 2.10-1.88 (m, 4H), 1.74-1.63 (m, 1H), 1.61-1.39 (m, 4H), 1.35-1.20 (m, 2H), 1.16-1.02 (m, 1H).	407.1	E	
I-266		(400 MHz, DMSO-d6) 8.20 (s, 1H), 7.40 (s, 1H), 7.35-7.22 (m, 3H), 5.13-5.04 (m, 1H), 4.51-4.43 (m, 1H), 3.98-3.70 (m, 2H), 2.30-2.22 (m, 1H), 2.10-1.88 (m, 4H), 1.74-1.63 (m, 1H), 1.61-1.39 (m, 4H), 1.35-1.20 (m, 2H), 1.16-1.02 (m, 1H).	407.1	D	
I-267		(400 MHz, DMSO-d6): 8.30-8.28 (m, 1H), 7.38-7.26 (m, 4H), 4.58-4.53 (m, 1H), 4.37-4.30 (m, 1H), 3.83-3.77 (m, 1H), 3.05-2.98 (m, 1H), 2.41-2.40 (m, 1H), 2.25-2.10 (m, 1H), 1.99-1.96 (m, 3H), 1.75-1.00 (m, 13H).	363	E	

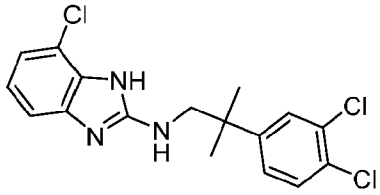
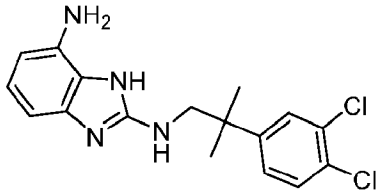
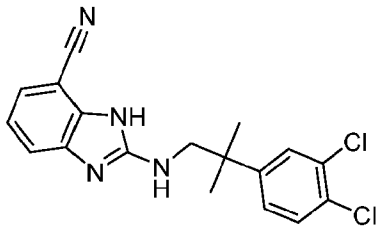
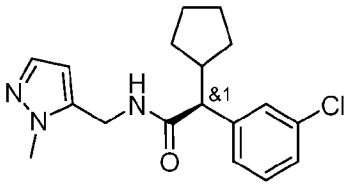
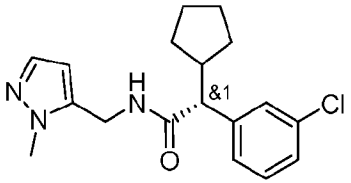
I-268		(400 MHz, CDCl3) 7.35 (d, J = 8.0 Hz, 1H), 7.30 (d, J = 4.0 Hz, 1H), 7.09-7.03 (m, 1H), 6.45 (s, 1H), 5.30-5.21 (m, 1H), 4.13-3.91 (m, 2H), 2.94 (s, 1H), 2.52-2.38 (m, 1H), 2.21-2.02 (m, 4H), 1.35-1.26 (m, 2H).	399	E	
I-269		(400 MHz, CDCl3) 7.35 (d, J = 8.0 Hz, 1H), 7.30 (d, J = 4.0 Hz, 1H), 7.09-7.03 (m, 1H), 6.45 (s, 1H), 5.30-5.21 (m, 1H), 4.13-3.91 (m, 2H), 2.94 (s, 1H), 2.52-2.38 (m, 1H), 2.21-2.02 (m, 4H), 1.35-1.26 (m, 2H).	399	D	
I-270		(400 MHz, DMSO-d6) ppm 12.51 (s, 2H), 10.43 (s, 1H), 8.62 (d, J=4.4 Hz, 1H), 7.72 (d, J=2.0 Hz, 1H), 7.60 (d, J=8.8 Hz, 1H), 7.47-7.50 (m, 1H), 6.99-7.07 (m, 1H), 6.84 (d, J=8.0 Hz, 1H), 6.70 (d, J=8.0 Hz, 1H), 3.64 (d, J=6.4 Hz, 2H), 1.36 (s, 6H).	350.1	D	
I-271		(400 MHz, DMSO-d6) ppm 12.31-12.92 (m, 2H), 8.63 (s, 1H), 7.71 (d, J=2.0 Hz, 1H), 7.59 (d, J=8.4 Hz, 1H), 7.46-7.49 (m, 1H), 7.15-7.22 (m, 1H), 7.00 (d, J=7.6 Hz, 1H), 6.91 (d, J=8.4 Hz, 1H), 3.95 (s, 3H), 3.65 (d, J=6.4 Hz, 2H), 1.35 (s, 6H).	364.1	D	
I-272		(400 MHz, DMSO-d6) ppm 9.58-10.38 (m, 1H), 7.64 (d, J=2.4 Hz, 1H), 7.57 (d, J=8.4 Hz, 1H), 7.41-7.44 (m, 1H), 6.78 (d, J=8.0 Hz, 1H), 6.40 (d, J=2.0 Hz, 1H), 6.18 (d, J=7.6 Hz, 1H), 5.94 (s, 1H), 4.41 (s, 2H), 3.48 (d, J=6.0 Hz, 2H), 1.31 (s, 6H).	349.1	E	

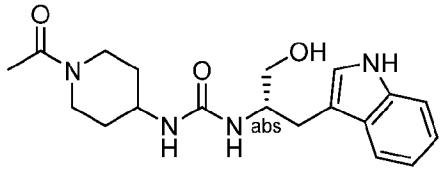
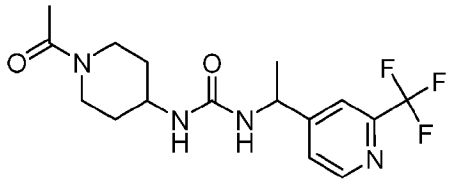
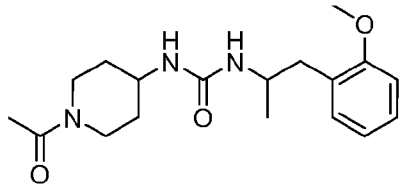
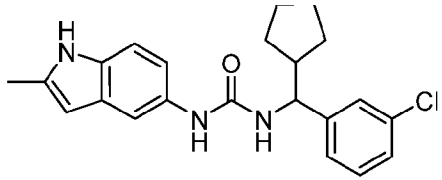
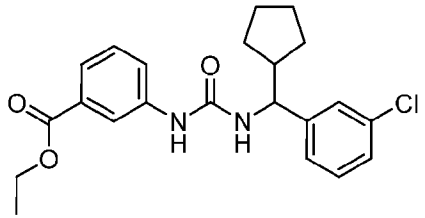
I-273		(DMSO-d6, 400MHz): 8.02 (d, J = 7.3 Hz, 1H), 7.40 (s, 1H), 7.36-7.25 (m, 3H), 4.23-4.06 (m, 1H), 3.82-3.59 (m, 2H), 3.15 (d, J = 11.2 Hz, 1H), 3.12-3.01 (m, 1H), 2.80-2.62 (m, 1H), 2.48-2.38 (m, 1H), 2.34 (s, 1H), 1.98 (d, J = 7.6 Hz, 3H), 1.87-1.67 (m, 2H), 1.67-1.40 (m, 5H), 1.38-1.28 (m, 1H), 1.32 (dd, J = 12.4, 5.6 Hz, 1H), 1.27-1.07 (m, 3H), 1.36-1.04 (m, 1H), 0.99-0.84 (m, 1H).	363.1	E	
I-274				E	
I-275				E	
I-276				E	
I-277				E	

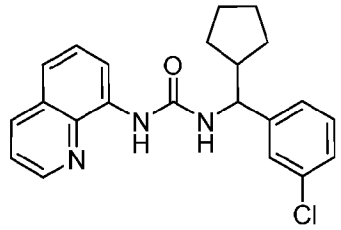
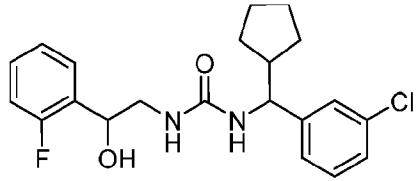
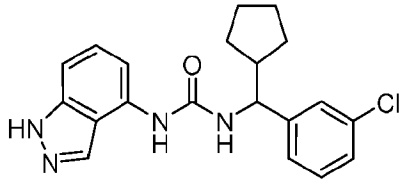
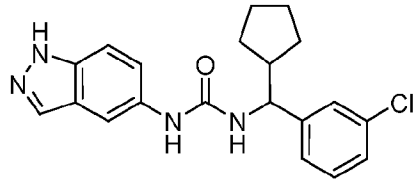
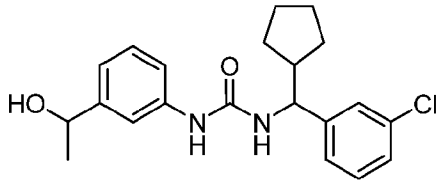
I-278			E	
I-279			E	
I-280			E	
I-281			E	
I-282			E	
I-283			E	

I-284				E	
I-285			352.45	E	
I-286				D	
I-287				E	
I-288				D	

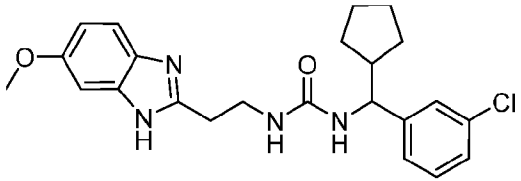
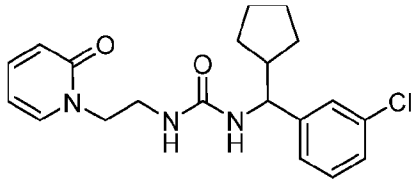
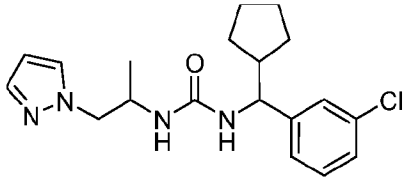
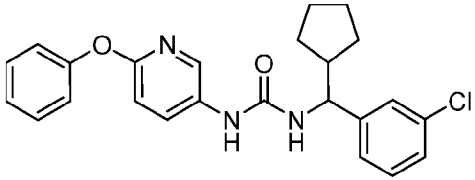
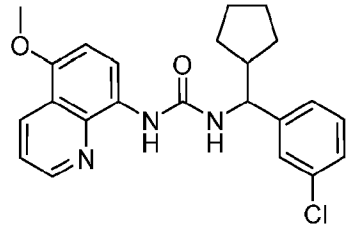
I-289				E	
I-290		(400 MHz, DMSO-d6) ppm 7.20 - 7.36 (m, 5 H), 6.64 (d, J=7.2 Hz, 1 H), 6.30 (s, 1 H), 6.05 (s, 1 H), 4.43 - 4.48 (m, 1 H), 4.22 (d, J=3.2 Hz, 2 H), 3.70 (s, 3 H), 2.07 - 2.18 (m, 1 H), 1.40 - 1.70 (m, 5 H), 1.23 - 1.37 (m, 2 H), 1.08 - 1.18 (m, 1 H).	347.1	E	
I-291		(400 MHz, DMSO-d6) ppm 7.30 - 7.35 (m, 3 H), 7.21 - 7.27 (m, 2 H), 6.70 (d, J=7.6 Hz, 1 H), 6.34 (s, 1 H), 6.06 (s, 1 H), 4.41 - 4.49 (m, 1 H), 4.22 (d, J=3.2 Hz, 2 H), 3.71 (s, 3 H), 2.07 - 2.18 (m, 1 H), 1.40 - 1.68 (m, 5 H), 1.23 - 1.37 (m, 2 H), 1.05 - 1.19 (m, 1 H).	347.1	D	
I-292		(400 MHz, CDCl3) 12.21 (s, 1H), 7.35 (d, J = 8.0 Hz, 1H), 7.29 (d, J = 4.0 Hz, 1H), 7.09-7.03 (m, 1H), 6.62 (s, 1H), 5.30-5.22 (m, 1H), 4.12-3.91 (m, 2H), 2.94 (s, 1H), 2.51-2.39 (m, 1H), 2.23-2.01 (m, 4H), 1.36-1.25 (m, 2H).	399	E	
I-293		(400 MHz, CDCl3) 12.21 (s, 1H), 7.35 (d, J = 8.0 Hz, 1H), 7.29 (d, J = 4.0 Hz, 1H), 7.09-7.03 (m, 1H), 6.62 (s, 1H), 5.30-5.22 (m, 1H), 4.12-3.91 (m, 2H), 2.94 (s, 1H), 2.51-2.39 (m, 1H), 2.23-2.01 (m, 4H), 1.36-1.25 (m, 2H).	399	E	

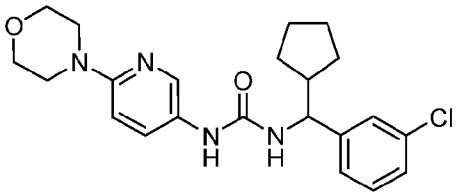
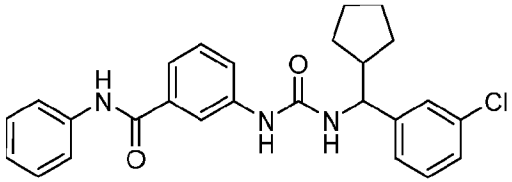
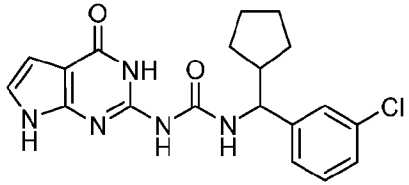
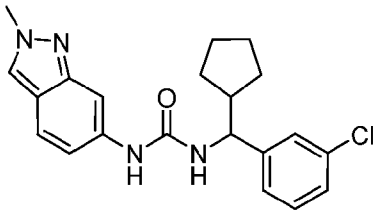
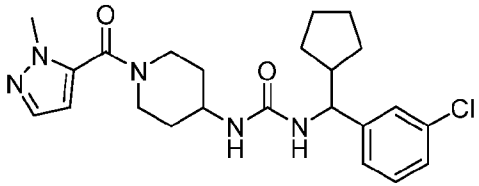
I-294		(400 MHz, DMSO-d6) 12.86 (s, 1H), 8.68 (s, 1H), 7.70 (d, J = 4.0 Hz, 1H), 7.57 (d, J = 8.0 Hz, 1H), 7.50-7.45 (m, 1H), 7.34 (d, J = 8.0 Hz, 1H), 7.28 (d, J = 8.0 Hz, 1H), 7.24-7.18 (m, 1H),3.70 (d, J = 4.0 Hz, 2H), 1.37 (s, 6H).	368	D	
I-295		(400 MHz, DMSO-d6) 12.78 (s, 1H), 12.20 (m, 1H), 8.45-8.63 (m, 1H), 7.75 (d, J = 2.0 Hz, 1H), 7.58 (d, J = 8.0 Hz, 1H), 7.54-7.48 (m, 1H), 7.10-6.90 (m, 1H), 6.63 (d, J = 8.0 Hz, 1H), 6.51 (d, J = 8.0 Hz, 2H), 3.70 (d, J = 8.0 Hz, 1H), 1.37 (s, 6H).	349.1	D	
I-296		(400 MHz, DMSO-d6) 8.56 (s, 1H), 7.70 (d, J = 4.0 Hz, 1H), 7.64-7.54 (m, 3H), 7.50-7.44 (m, 1H), 7.31-7.22 (m, 1H), 3.67 (d, J = 8.0 Hz, 2H), 1.37 (s, 6H).	359.1	D	
I-297		(DMSO-d6, 400MHz): 8.53 (t, J=5.2 Hz, 1H), 7.56-7.18 (m, 5H), 6.00 (d, J=0.8 Hz, 1H), 4.49-4.15 (m, 2H), 3.65 (s, 3H), 3.24 (d, J=11.2 Hz, 1H), 2.48-2.45 (m, 1H), 1.80-1.67 (m, 1H), 1.66-1.39 (m, 4H), 1.38-1.26 (m, 1H), 1.24-1.10 (m, 1H), 1.01-0.84 (m, 1H).	332.2	E	
I-298		(DMSO-d6, 400MHz): 8.55 (t, J=5.6 Hz, 1H), 7.47-7.21 (m, 5H), 6.00 (d, J=1.6 Hz, 1H), 4.44-4.16 (m, 2H), 3.65 (s, 4H), 3.25 (d, J=11.2 Hz, 1H), 2.50-2.42 (m, 2H), 1.81-1.67 (m, 1H), 1.66-1.38 (m, 4H), 1.37-1.26 (m, 1H), 1.24-1.09 (m, 1H), 1.00-0.84 (m, 1H).	332.1	E	

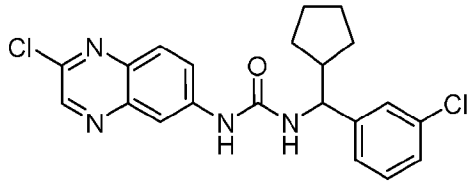
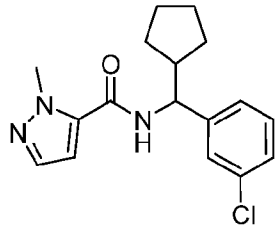
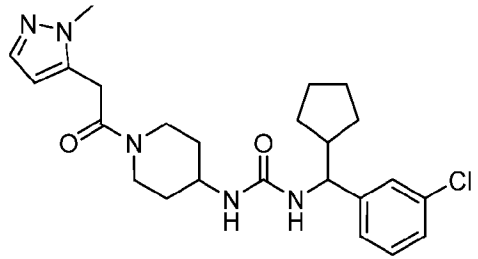
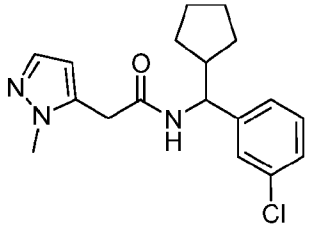
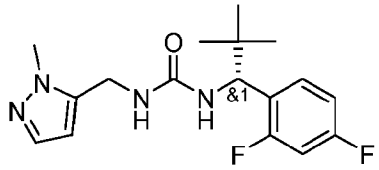
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I-300				E	
I-301				E	
I-302				E	
I-303				E	

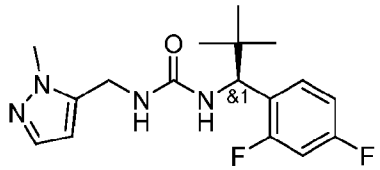
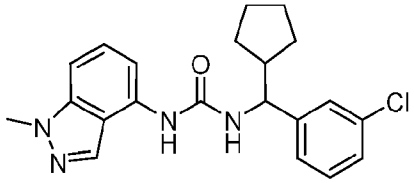
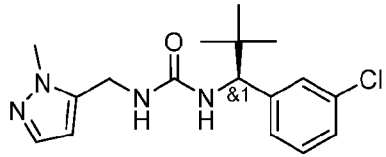
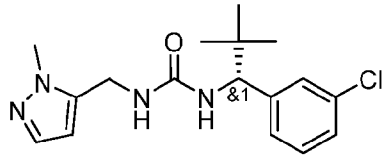
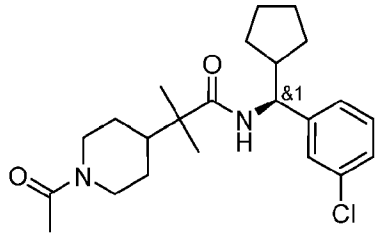
I-304				D	
I-305				E	
I-306				D	
I-307				D	
I-308				D	

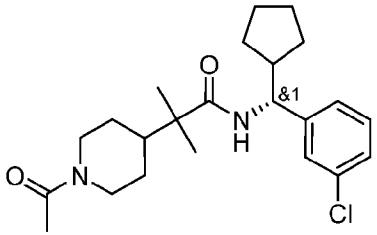
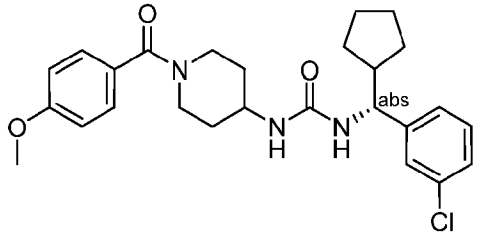
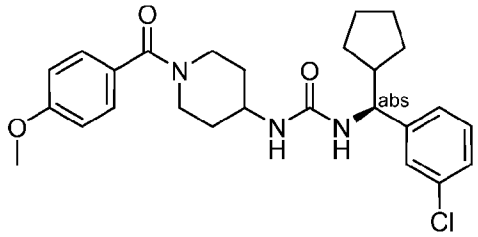
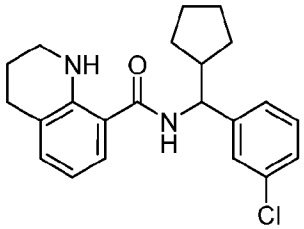
I-309			D
I-310			E
I-311			D
I-312			D
I-313			D

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I-318				E	

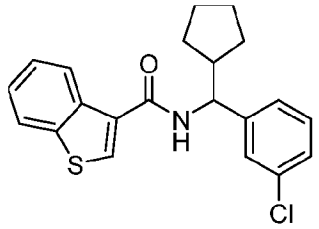
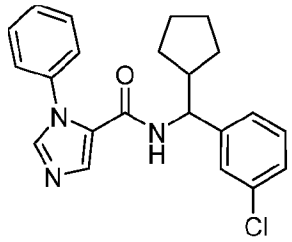
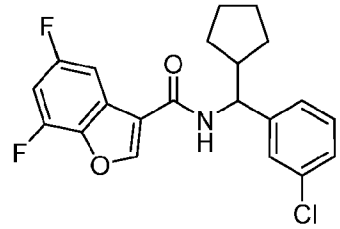
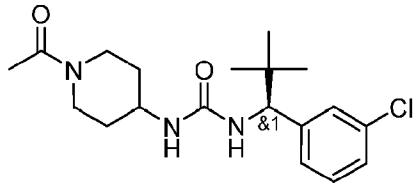
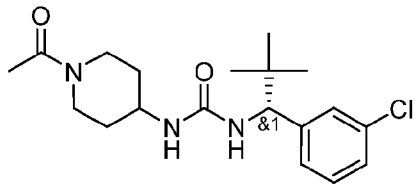
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I-320				E	
I-321				D	
I-322				D	
I-323				D	

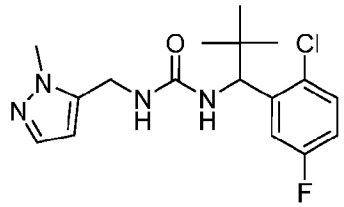
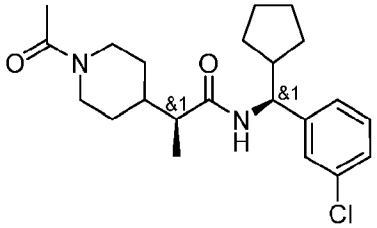
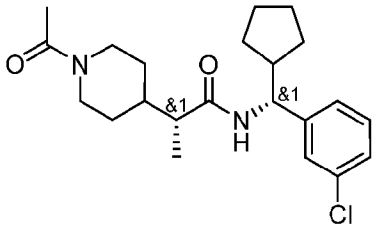
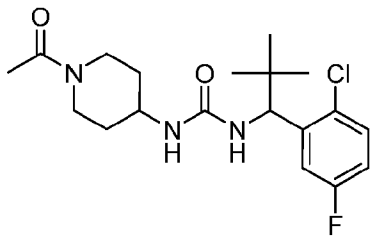
I-324				D	
I-325				E	
I-326				E	
I-327				E	
I-328				E	

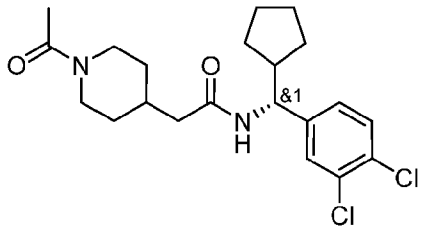
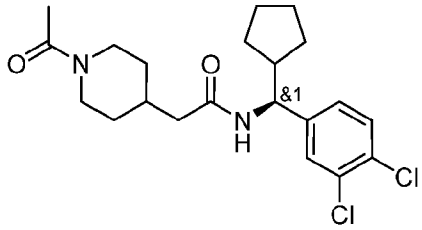
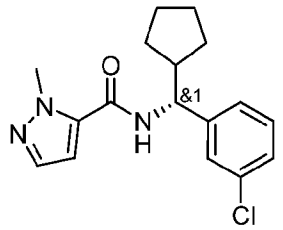
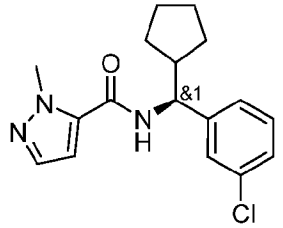
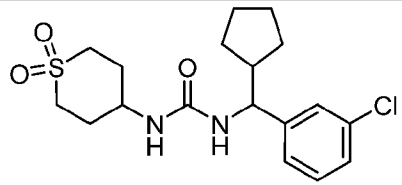
I-329				D	
I-330				D	
I-331		(400 MHz, DMSO-d6): 7.23-7.21 (m, 1H), 7.20-7.13 (m, 3H), 7.07-7.05 (m, 1H), 6.05-6.04 (m, 1H), 4.42 (s, 1H), 4.26-4.24 (m, 2H), 3.65 (s, 3H), 0.82 (s, 9H).	335.1	E	
I-332		(400 MHz, DMSO-d6): 7.35-7.34 (m, 1H), 7.32-7.24 (m, 3H), 7.18-7.16 (m, 1H), 6.17-6.15 (m, 1H), 4.54 (s, 1H), 4.38-4.36 (m, 2H), 3.77 (s, 3H), 0.93 (s, 9H).	335.2	E	
I-333		(400 MHz, DMSO-d6)7.86-7.78 (m, 1H), 7.40 (d, J = 4.0 Hz, 1H), 7.35-7.22 (m, 3H), 4.52-4.31 (m, 2H), 3.89-3.70 (m, 1H), 2.93-2.78 (m, 1H), 2.39-2.23 (m, 2H), 1.94 (d, J = 8.0 Hz, 3H), 1.87-1.75 (m, 2H), 1.66-1.38 (m, 5H), 1.30-1.15 (m, 3H), 1.14-0.89 (m, 9H).	405.2	E	

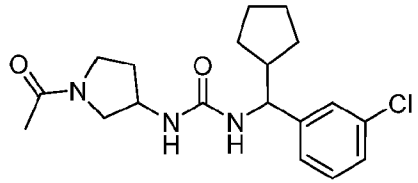
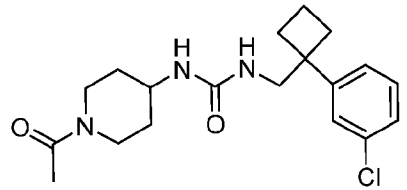
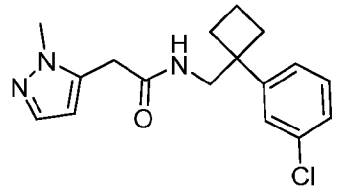
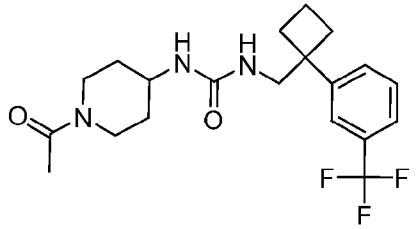
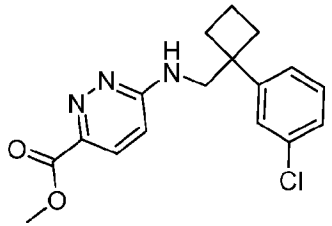
I-334		(400 MHz, DMSO-d6)7.86-7.78 (m, 1H), 7.40 (d, J = 4.0 Hz, 1H), 7.35-7.22 (m, 3H), 4.52-4.31 (m, 2H), 3.89-3.70 (m, 1H), 2.93-2.78 (m, 1H), 2.39-2.23 (m, 2H), 1.94 (d, J = 8.0 Hz, 3H), 1.87-1.75 (m, 2H), 1.66-1.38 (m, 5H), 1.30-1.15 (m, 3H), 1.14-0.89 (m, 9H).	405.2	E	
I-335				D	
I-336				D	
I-337				E	

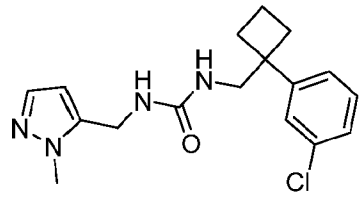
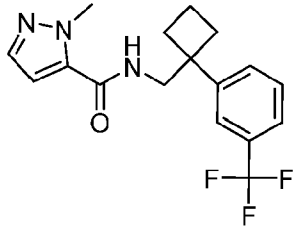
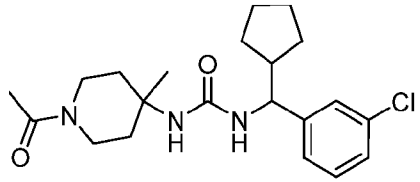
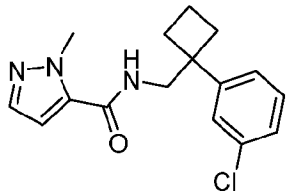
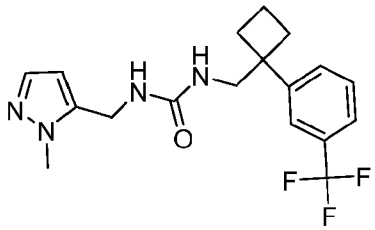
I-338			E	
I-339			E	
I-340			E	
I-341			E	

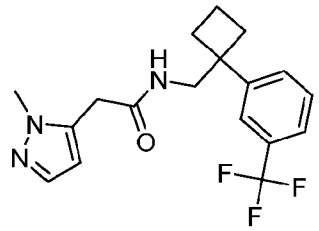
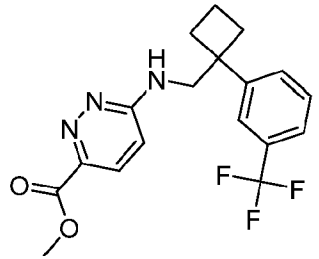
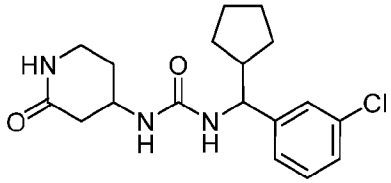
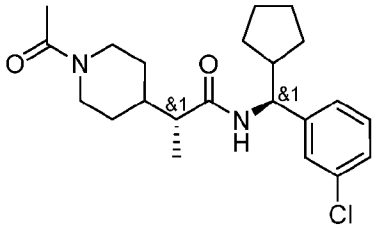
I-342				E	
I-343				E	
I-344				E	
I-345		(400 MHz, Methanol-d4): 7.20-7.12 (m, 3H), 7.05-7.03 (m, 1H), 4.41-4.40 (m, 1H), 4.21-4.16 (m, 1H), 3.75-3.68 (m, 1H), 3.60-3.55 (m, 1H), 3.15-3.05 (m, 1H), 2.79-2.70 (m, 1H), 1.99-1.98 (d, J = 4.4, 3H), 1.88-1.70 (m, 2H), 1.31-1.09 (m, 2H), 0.81 (s, 9H).	366.1	E	
I-346		(400 MHz, Methanol-d6): 7.32-7.24 (m, 3H), 7.18-7.15 (m, 1H), 4.52 (s, 1H), 4.35-4.28 (m, 1H), 3.86-3.80 (m, 1H), 3.72-3.67 (m, 1H), 3.27-3.17 (m, 1H), 2.91-2.82 (m, 1H), 2.11-2.10 (d, J = 4.4, 3H), 2.00-1.82 (m, 2H), 1.42-1.21 (m, 2H), 0.93 (s, 9H).	366.1	E	

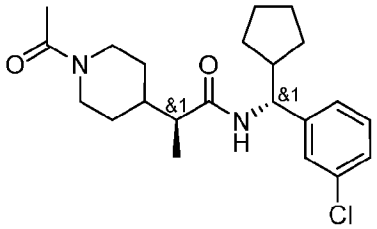
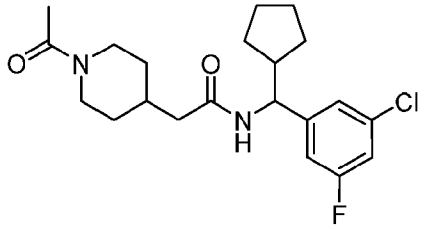
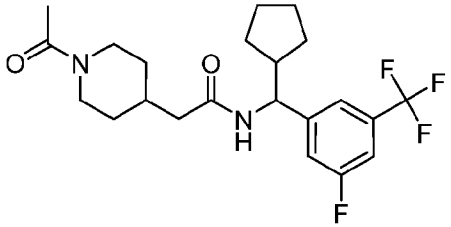
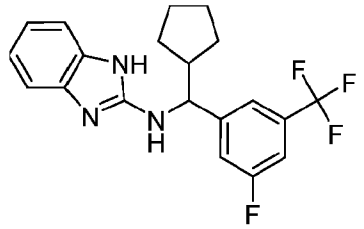
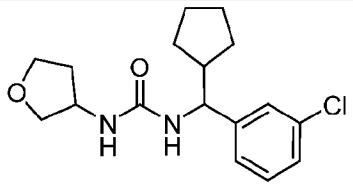
I-347		(400 MHz, Methanol-d4): 7.75-7.74 (m, 1H), 7.30-7.27 (m, 2H), 7.11-7.06 (m, 1H), 6.39-6.38 (m, 1H), 4.93-4.92 (m, 1H), 4.42 (s, 2H), 3.92 (s, 3H), 0.96 (s, 9H).	353.1	D	
I-348		(400 MHz, DMSO-d6) 8.27 (d, J = 8.0 Hz, 1H), 7.40-7.29 (m, 2H), 7.29-7.21 (m, 2H), 4.6-4.41 (m, 1H), 4.35-4.12 (m, 1H), 3.78-3.57 (m, 1H), 2.95-2.75 (m, 1H), 2.47-2.36 (m, 1H), 2.36-2.24 (m, 1H), 2.21-2.04 (m, 2H), 1.92 (d, J = 8.0 Hz, 3H), 1.79-1.39 (m, 7H), 1.31-1.08 (m, 3H), 1.03-0.79 (m, 5H).	391.2	E	
I-349		(400 MHz, DMSO-d6) 8.27 (d, J = 8.0 Hz, 1H), 7.40-7.29 (m, 2H), 7.29-7.21 (m, 2H), 4.6-4.41 (m, 1H), 4.35-4.12 (m, 1H), 3.78-3.57 (m, 1H), 2.95-2.75 (m, 1H), 2.47-2.36 (m, 1H), 2.36-2.24 (m, 1H), 2.21-2.04 (m, 2H), 1.92 (d, J = 8.0 Hz, 3H), 1.79-1.39 (m, 7H), 1.31-1.08 (m, 3H), 1.03-0.79 (m, 5H).	391.2	E	
I-350		(400 MHz, Methanol-d4): 7.30-7.24 (m, 2H), 7.10-7.03 (m, 1H), 1.87-4.83 (m, 1H), 4.34-4.28 (m, 1H), 3.88-3.82 (m, 1H), 3.73-3.68 (m, 1H), 3.29-3.19 (m, 1H), 2.94-2.86 (m, 1H), 2.13-2.10 (d, J = 4.0, 3H), 2.04-1.83 (m, 2H), 1.45-1.23 (m, 2H), 0.95 (s, 9H).	384.1	E	

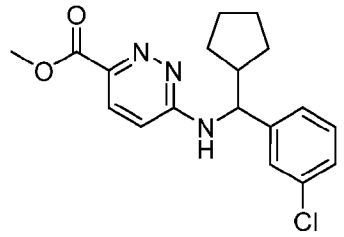
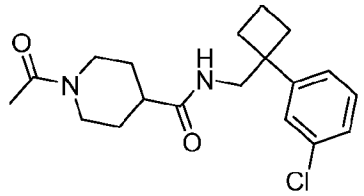
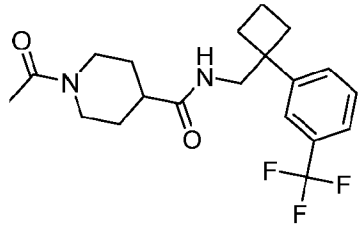
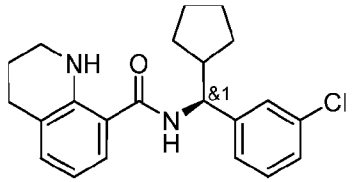
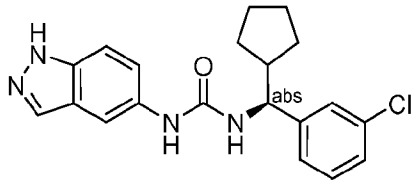
I-351		(400 MHz, DMSO-d6): 8.40 (d, J = 8.4 Hz 1H), 7.57~7.53 (m, 2H), 7.30~7.26 (m, 1H), 4.56~4.51 (m, 1H), 4.29~4.23 (m, 1H), 3.76~3.57 (m, 4H), 2.99~2.92 (m, 1H), 2.17~2.02 (m, 3H), 1.96 (s, 3H), 1.88~1.72 (m, 2H), 1.61~1.40 (m, 5H), 1.30~1.22 (m, 2H), 1.10~1.00 (m, 2H).	411.1	E	
I-352		(400 MHz, DMSO-d6): 8.40 (d, J = 8.0 Hz 1H), 7.57~7.53 (m, 2H), 7.30~7.26 (m, 1H), 4.56~4.51 (m, 1H), 4.29~4.23 (m, 1H), 3.76~3.57 (m, 4H), 2.99~2.92 (m, 1H), 2.17~2.02 (m, 3H), 1.96 (s, 3H), 1.88~1.72 (m, 2H), 1.61~1.40 (m, 5H), 1.30~1.22 (m, 2H), 1.10~1.00 (m, 2H).	411.2	E	
I-353		(400 MHz, DMSO-d6): 8.84 (d, J = 8.4 Hz 1H), 7.48~7.45 (m, 2H), 7.34~7.36 (m, 2H), 7.31~7.28 (m, 1H), 6.92 (d, J = 2.0 Hz 1H), 4.69~4.64 (m, 1H), 3.97 (s, 3H), 2.39~2.31 (m, 1H), 1.86~1.82 (m, 1H), 1.62~1.45 (m, 5H), 1.32~1.32 (m, 2H), 1.14~1.10 (m, 1H).	318.1	E	
I-354		(400 MHz, CDCl3-d6): 7.37 (d, J = 2.0 Hz 1H), 7.23 (s, 1H), 7.20 (s, 1H), 7.20~7.17 (m, 1H), 7.17~7.13(m, 1H), 6.44 (d, J = 2.0 Hz, 1H), 6.18~6.18 (m, 1H), 4.77~4.72 (m, 1H), 4.06 (s, 3H), 2.25~2.20 (m, 1H), 1.82~1.77 (m, 1H), 1.65~1.53 (m, 3H), 1.48~1.35 (m, 3H), 1.19~1.11 (m, 1H).	318.1	E	
I-355		(400 MHz, DMSO-d6): 7.34~7.20 (m, 4H), 6.36 (d, J = 8.8 Hz, 1H), 6.04 (d, J = 7.6 Hz, 1H), 4.45~4.40 (m, 1H), 3.50~3.47 (m, 2H), 3.20~3.15 (m, 1H), 3.01~2.96 (m, 2H), 2.16~1.98 (m, 3H), 1.84~1.77 (m, 2H),	385.1	E	

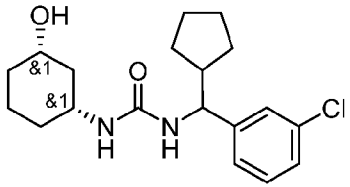
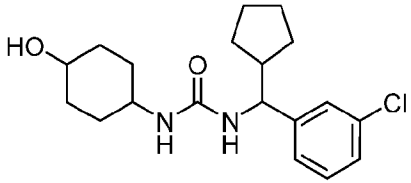
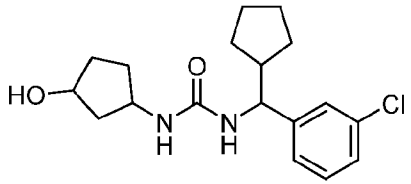
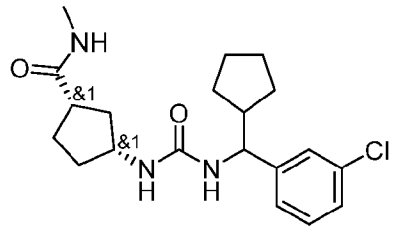
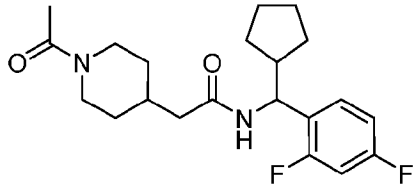
		1.67~1.41 (m, 5H), 1.33~1.23 (m, 2H), 1.14~1.08(m, 1H).			
I-356		(400 MHz, DMSO-d6) ppm 7.19 - 7.36 (m, 4 H), 6.57 (s, 1 H), 4.43 (d, J=8.0 Hz, 1 H), 3.96 - 4.32 (m, 1 H), 3.47 - 3.65 (m, 1 H), 3.23 - 3.46 (m, 2 H), 2.94 - 3.17 (m, 1 H), 1.94 - 2.18 (m, 2 H), 1.86 - 1.94 (m, 3 H), 1.02 - 1.81 (m, 9 H).	364.1	E	
I-357				E	
I-358				D	
I-359				E	
I-360				E	

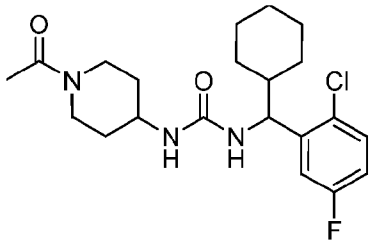
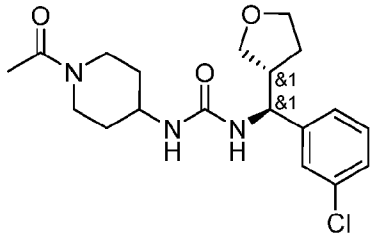
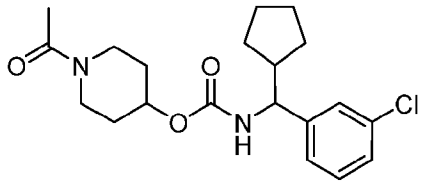
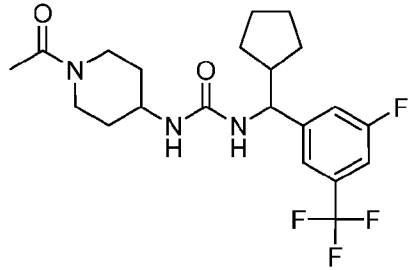
I-361				E	
I-362				E	
I-363				D	
I-364				E	
I-365				E	

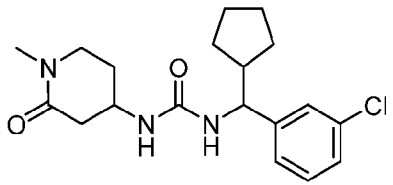
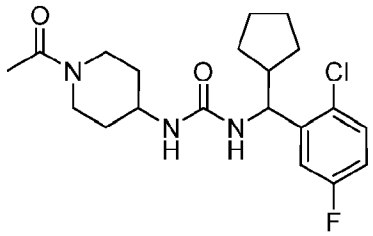
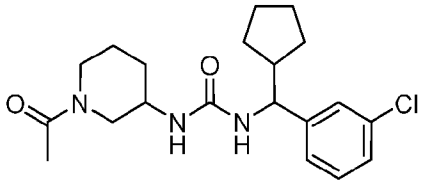
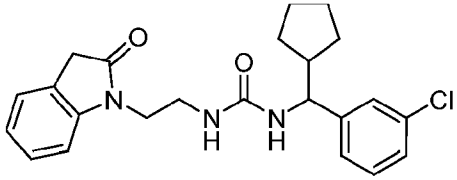
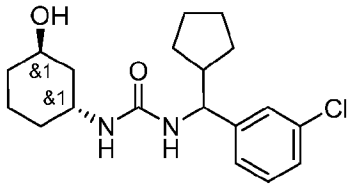
I-366				E	
I-367				E	
I-368		(400 MHz, DMSO-d6): 7.50 (d, 1H), 7.36~7.25 (m, 3H), 7.23~7.20 (m, 1H), 6.43 (d, J = 3.6 Hz, 1H), 5.97~5.93 (m, 1H), 4.47~4.42 (m, 1H), 2.17~2.07 (m, 2H), 2.04~1.91 (m, 2H), 1.84~1.72 (m, 2H), 1.66~1.40 (m, 6H), 1.34~1.25 (m, 3H), 1.16~1.09 (m, 1H).	350.1	E	
I-369		(400 MHz, DMSO-d6) 8.27 (d, J = 8.0 Hz, 1H), 7.40-7.29 (m, 2H), 7.29-7.21 (m, 2H), 4.6-4.50 (m, 1H), 4.40-4.27 (m, 1H), 3.85-3.73 (m, 1H), 3.02-2.87 (m, 1H), 2.38-2.46 (m, 1H), 2.21-2.03 (m, 2H), 1.96 (d, J = 4.0 Hz, 3H), 1.76-1.44 (m, 8H), 1.30-1.19 (m, 2H), 1.11-0.83 (m, 6H).	391.2	E	

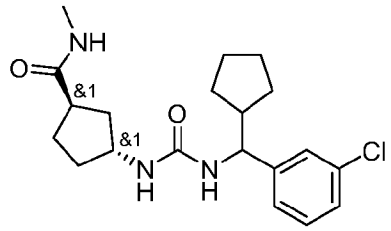
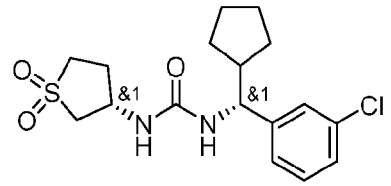
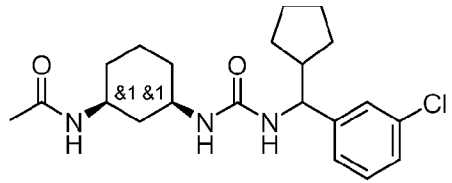
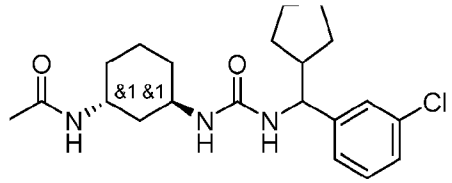
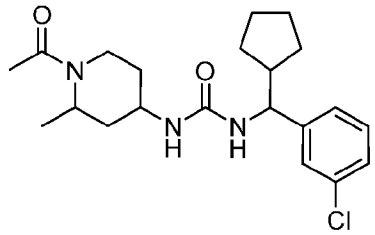
I-370		(400 MHz, DMSO-d6) 8.27 (d, J = 8.0 Hz, 1H), 7.40-7.29 (m, 2H), 7.29-7.21 (m, 2H), 4.6-4.50 (m, 1H), 4.40-4.27 (m, 1H), 3.85-3.73 (m, 1H), 3.02-2.87 (m, 1H), 2.38-2.46 (m, 1H), 2.21-2.03 (m, 2H), 1.96 (d, J = 4.0 Hz, 3H), 1.76-1.44 (m, 8H), 1.30-1.19 (m, 2H), 1.11-0.83 (m, 6H).	391.1	D	
I-371		(400 MHz, DMSO-d6) 8.40 (d, J = 8.0 Hz, 1H), 7.280-7.21 (m, 2H), 7.15 (d, J = 8.0 Hz, 1H), 4.63-4.53 (m, 1H), 4.35-4.20 (m, 1H), 3.77-3.66 (m, 1H), 3.01-2.89 (m, 1H), 2.47-2.42 (m, 1H), 2.21-2.02 (m, 3H), 1.95 (s, 3H), 1.90-1.66 (m, 2H), 1.62-1.40 (m, 6H), 1.29-0.90 (m, 5H).	395.2	D	
I-372		(400 MHz, DMSO-d6) 8.47-8.41 (m, 1H), 7.57-7.46 (m, 3H), 4.73-4.65 (m, 1H), 4.33-4.21 (m, 1H), 3.78-3.66 (m, 1H), 3.01-2.89 (m, 1H), 2.48-2.41 (m, 1H), 2.21-2.03 (m, 3H), 1.96 (s, 3H), 1.90-1.69 (m, 2H), 1.62-1.40 (m, 6H), 1.31-0.90 (m, 5H).	429.2	D	
I-373		(400 MHz, DMSO-d6) 12.95 (s, 2H), 9.88 (d, J = 8.0 Hz, 1H), 7.76-7.89 (m, 2H), 7.63 (d, J = 8.0 Hz, 1H), 7.45-7.34 (m, 2H), 7.28-7.17 (m, 2H), 1.96-1.81 (m, 1H), 1.73-1.08 (m, 8H).	378.1	D	
I-374		(400 MHz, DMSO-d6) ppm 7.16 - 7.40 (m, 4 H), 6.39 (d, J=8.8 Hz, 1 H), 6.05 (d, J=7.2 Hz, 1 H) 4.41 - 4.46 (m, 1 H), 4.00 - 4.12 (m, 1 H), 3.61 - 3.78 (m, 3 H), 3.36 - 3.40(m, 1 H), 3.28 - 3.33 (m, 1 H), 1.96 - 2.19 (m, 2 H), 1.54 - 1.67 (m, 3	323.1	D	

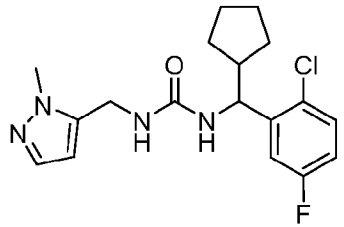
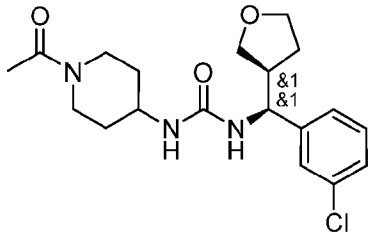
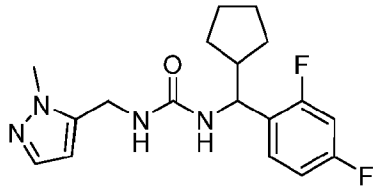
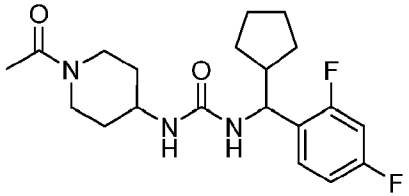
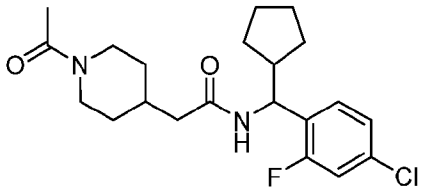
		H), 1.39 - 1.51 (m, 2 H), 1.23 - 1.36 (m, 2 H), 1.05 - 1.19 (m, 1 II).			
I-375				E	
I-376				E	
I-377				E	
I-378				E	
I-379				D	

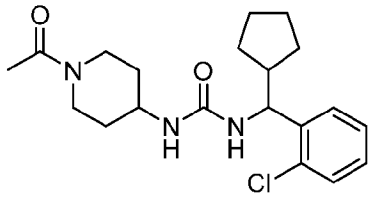
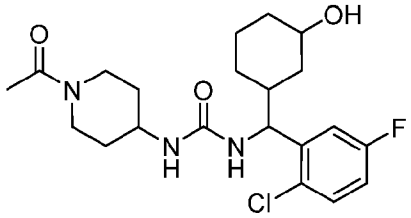
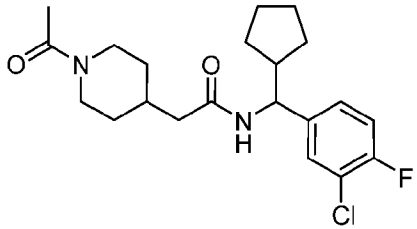
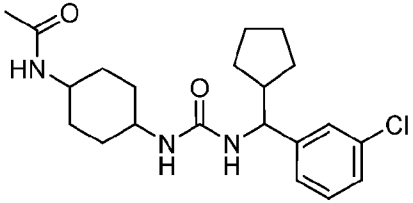
I-380		(400 MHz, DMSO-d6) ppm 7.36-7.16 (m, 4H), 6.31 (d, J = 9.2 Hz, 1H), 5.72 (s, 1H), 4.50-4.38 (m, 1H), 3.76 (s, 2H), 2.15-2.05 (m, 1H), 1.65-1.09 (m, 16H).	351.1	E	
I-381		(400 MHz, DMSO-d6) ppm 7.37-7.15 (m, 4H), 6.33 (d, J = 8.8 Hz, 1H), 5.64 (s, 1H), 4.44-4.39 (m, 1H), 3.23 (d, J = 10.4 Hz, 2H), 2.16-2.05 (m, 1H), 173-1.05 (m, 16H).	351.1	E	
I-382		(400 MHz, DMSO-d6) ppm 7.36-7.17 (m, 4H), 6.50-6.47 (m, 1H), 5.83 (d, J = 8.0 Hz, 1H), 4.67 (s, 1H), 4.48-4.38 (m, 1H), 4.11-4.01 (m, 1H), 3.85 (d, J = 6.4 Hz, 1H), 2.13-1.90 (m, 2H), 1.84-1.70 (m, 1H), 1.62-1.07 (m, 12H).	337.1	E	
I-383		(400 MHz, DMSO-d6) 776 (m, 1H), 7.34-7.16 (m, 4H), 6.50-6.41 (m, 1H), 5.99-5.89 (m, 1H), 4.45-4.34 (m, 1H), 3.90-3.79 (m, 1H), 2.58-2.54 (m, 3H), 2.16-1.89 (m, 2H), 1.72-1.23 (m, 13H), 1.16-1.03 (m, 1H).	378.1	E	
I-384		(400 MHz, DMSO-d6) 8.43 (d, J = 8.0Hz, 1H), 7.49-7.39 (m, 1H), 7.18-7.00 (m, 2H), 4.88-4.78 (m, 1H), 4.30-4.19 (m, 1H), 3.76-3.66 (m, 1H), 3.01-2.88 (m, 1H), 2.48-2.39 (m, 1H),2.23-2.13 (m, 1H),2.07-1.99 (m, 2H), 1.95 (s, 3H), 1.90-1.70 (m, 2H), 1.61-1.39 (m, 6H), 1.33-1.22 (m, 2H), 1.11-0.88 (m, 3H).	379.2	E	

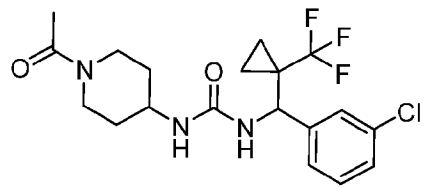
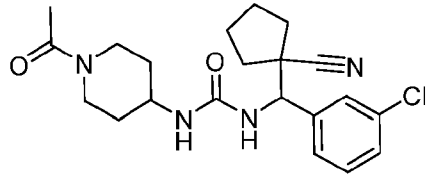
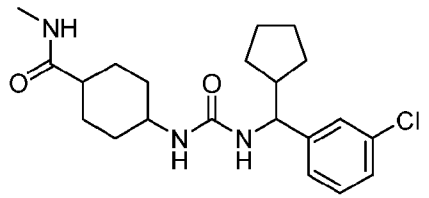
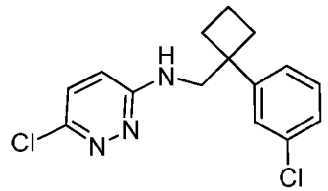
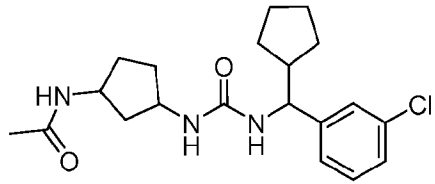
I-385		(400 MHz, DMSO-d6) 7.48-7.38 (m, 1H), 7.15-7.06 (m, 2H), 6.43 (d, J = 8.0Hz, 1H), 5.89 (d, J = 8.0Hz, 1H), 4.92-4.82 (m, 1H), 4.17-4.04 (m, 1H), 3.73-3.61 (m, 1H), 3.57-3.47 (m, 1H), 3.12-3.03 (m, 1H), 2.77-2.64 (m, 1H), 1.97 (d, J = 8.0Hz, 3H), 1.75-1.55 (m, 7H), 1.37-1.10 (m, 8H).	410.1	E	
I-386		(DMSO-d6, 400MHz): 7.45-7.19 (m, 4H), 6.51 (d, J = 8.8 Hz, 1H), 5.88 (d, J = 7.6 Hz, 1H), 4.57 (t, J = 8.8 Hz, 1H), 4.12 (d, J = 4.4 Hz, 1H), 3.80-3.72 (m, 2H), 3.71-3.66 (m, 1H), 3.65-3.58 (m, 2H), 3.57-3.48 (m, 2H), 3.48-3.44 (m, 1H), 3.47-3.42 (m, 3H), 3.30-3.18 (m, 2H), 3.14-3.01 (m, 1H), 2.79-2.63 (m, 2H), 2.63-2.54 (m, 1H), 2.63-2.54 (m, 1H), 1.98 (d, J = 2.8 Hz, 3H), 1.92-1.83 (m, 1H), 1.93-1.82 (m, 1H), 1.82-1.61 (m, 3H), 1.32-1.00 (m, 3H).	380.1	E	
I-387		(400 MHz, DMSO-d6) ppm 7.79 (d, J = 9.2 Hz, 1H), 7.41-7.26 (m, 4H), 4.70-4.61 (m, 1H), 4.29-4.24 (m, 1H), 3.94-3.86 (m, 1H), 3.67-3.60 (m, 1H), 3.28-3.16 (m, 1H), 3.10-2.95 (m, 1H), 2.23-2.07 (m, 1H), 2.01-1.96 (m, 3H), 1.78-1.03 (m, 12H).	379.1	E	
I-388		(400 MHz, DMSO-d6) 7.53-7.38 (m, 3H), 8.57 (d, J = 8.0 Hz, 1H), 5.97 (s, 1H), 4.59-4.50 (m, 1H), 4.16-4.04 (m, 1H), 3.76-3.60 (m, 1H), 3.13-3.00 (m, 1H), 2.77-2.44 (m, 1H), 2.20-2.05 (m, 1H), 1.97 (d, J = 4.0 Hz, 3H), 1.79-1.11 (m, 13H).	430.1	D	

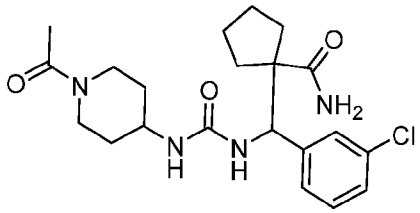
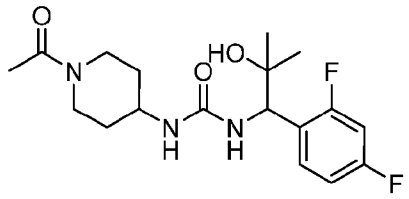
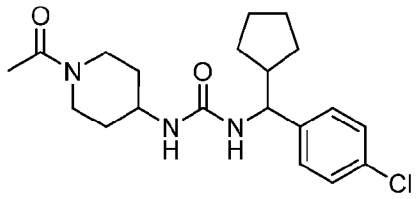
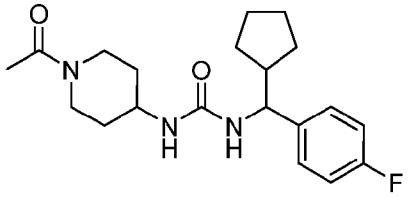
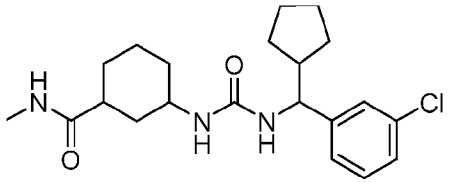
I-389		(400 MHz, MeOD-d6): 7.32~7.28 (m, 2H), 7.24~7.22 (m, 2H), 4.47~4.43 (m, 1H), 3.95~3.93 (m, 1H), 3.39~3.35 (m, 2H), 2.93 (s, 3H), 2.89~2.89 (m, 1H), 2.26~2.18 (m, 2H), 2.09~1.99 (m, 1H), 1.86~1.51 (m, 6H), 1.45~1.37 (m, 2H), 1.22~1.18(m, 1H).	364.1	E	
I-390		(400 MHz, DMSO-d6) 7.45-7.39 (m, 1H), 7.20-7.14 (m, 1H), 7.13-7.07 (m, 1H), 6.44 (d, J = 8.0Hz, 1H), 5.87 (d, J = 8.0Hz, 1H), 4.96-4.89 (m, 1H), 4.16-4.05 (m, 1H), 3.73-3.63 (m, 1H), 3.56-3.45 (m, 1H), 3.13-3.00 (m, 1H),2.76-2.64 (m, 1H),2.21-2.11 (m, 1H), 1.97 (d, J = 4.0 Hz, 3H), 1.83-1.03 (m, 12H).	396.1	E	
I-391		(400 MHz, DMSO-d6): 7.35~7.24 (m, 3H), 7.22~7.19 (m, 1H), 6.52~6.41 (m, 1H), 6.02~5.76 (m, 1H), 4.48~4.41 (m, 1H), 3.54~3.43 (m, 2H), 3.26~3.06 (m, 2H), 2.69~2.60 (m, 1H), 2.15~2.08 (m, 1H), 1.99~1.93 (m, 2H), 1.73~1.20 (m, 12H), 1.19~1.08(m, 1H).	378.2	E	
I-392				E	
I-393		(400 MHz, DMSO-d6) ppm 7.35-7.17 (m, 4H), 6.36 (d, J = 8.8 Hz, 1H), 5.71 (s, 1H), 4.49-4.35 (m, 1H), 3.55-3.45 (m, 2H), 2.14-2.06 (m, 1H), 1.99-1.84 (m, 1H), 1.73-1.40 (m, 8H), 1.35-1.23 (m, 2H), 1.21-1.07 (m, 2H), 1.06-0.84 (m, 3 H).	351.1	E	

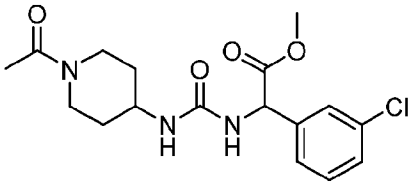
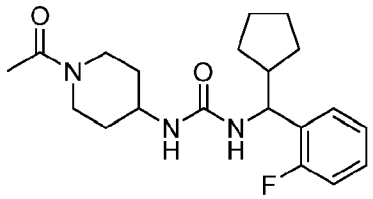
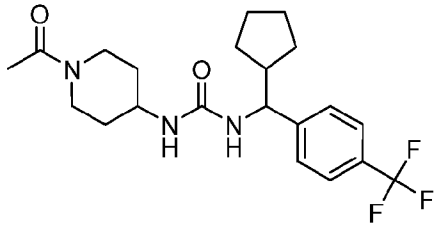
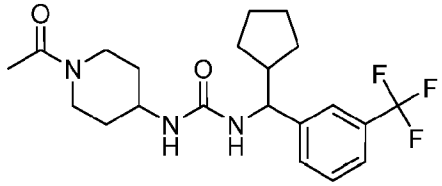
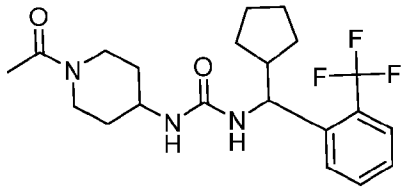
I-394		(400 MHz, DMSO-d6) 7.75-7.65 (m, 1H), 7.37-7.16 (m, 4H), 6.30 (d, J = 8.0Hz, 1H), 5.81 (d, J = 8.0Hz, 1H), 4.47-4.35 (m, 1H), 3.94-3.84 (m, 1H), 2.71-2.59 (m, 1H), 2.57-2.51 (m, 3H), 2.16-2.04 (m, 1H), 1.92-1.72 (m, 3H), 1.66-1.39 (m, 7H), 1.35-1.21 (m, 3H), 1.17-1.05 (m, 1H).	378.1	E	
I-395		(400 MHz, MeOD-d6): 7.32~7.28 (m, 2H), 7.25~7.20 (m, 2H), 4.49~4.40 (m, 2H), 3.45~3.32 (m, 2H), 3.27~3.08 (m, 2H), 2.96~2.85 (m, 1H), 2.53~2.43 (m, 1H), 2.23~2.05 (m, 2H), 1.88~1.79 (m, 1H), 1.70~1.55 (m, 3H), 1.45~1.37 (m, 2H), 1.21~1.15 (m, 1H).	371.1	E	
I-396		(400 MHz, MeOD-d6): 7.32~7.28 (m, 2H), 7.24~7.20 (m, 2H), 4.48~4.44 (m, 1H), 3.95~3.91 (m, 1H), 3.84 (s, 1H), 2.22~2.15 (m, 1H), 1.94 (d, J = 8.8 Hz, 3H), 1.88~1.74 (m, 1H), 1.78~1.48 (m, 11H), 1.46~1.35 (m, 3H), 1.25~1.15 (m, 1H).	392.2	E	
I-397		(400 MHz, MeOD-d6): 7.32~7.27 (m, 2H), 7.24~7.19 (m, 2H), 4.46~4.43 (m, 1H), 3.72~3.63 (m, 1H), 3.53~3.45 (m, 1H), 2.22~2.04 (m, 2H), 1.92~1.76 (m, 7H), 1.69~1.53 (m, 4H), 1.45~1.30 (m, 3H), 1.21~1.15 (m, 1H), 1.10~0.99 (m, 3H).	392.1	E	
I-398		(400 MHz, Methanol-d6): 7.33-7.28 (m, 2H), 7.24-7.21 (m, 2H), 5.02-4.91 (m, 2H), 4.87-4.77 (m, 1H), 4.49-4.43 (m, 1H), 3.78-3.76 (m, 1H), 2.29-2.16 (m, 1H), 2.13 (s, 3H), 1.97-1.79 (m, 3H), 1.68-1.52 (m, 5H),1.47-1.18 (m, 7H).	392.1	E	

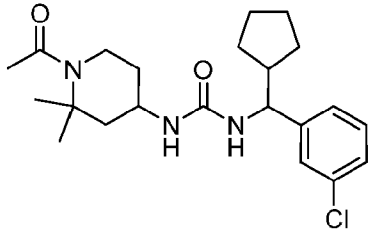
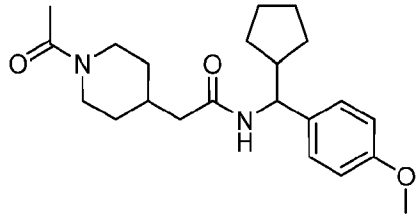
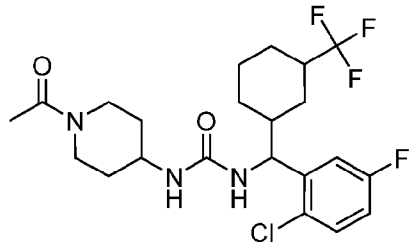
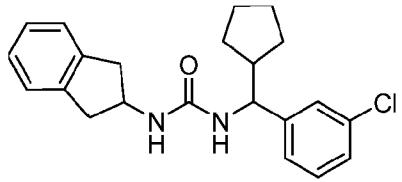
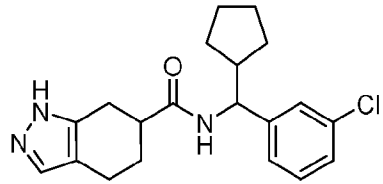
I-399		(400 MHz, DMSO-d6) 7.47-7.38 (m, 1H), 7.26 (d, J = 4.0Hz, 1H), 7.17-7.23 (m, 1H), 7.15-7.06 (m, 1H), 6.54 (d, J = 8.0Hz, 1H), 6.33-6.26 (m, 1H), 6.04 (d, J = 4.0Hz, 1H), 4.99-4.89 (m, 1H), 4.28-4.15 (m, 2H), 3.69 (s, 3H), 2.25-2.13 (m, 1H), 1.65-1.15 (m, 8H).	365	E	
I-400		(DMSO-d6, 400MHz): = 7.47-7.21 (m, 4H), 6.51 (d, J = 8.8 Hz, 1H), 5.87 (d, J = 7.6 Hz, 1H), 4.54 (t, J = 9.2 Hz, 1H), 4.22-4.05 (m, 1H), 3.78-3.70 (m, 2H), 3.68 (d, J = 8.8 Hz, 1H), 3.61-3.53 (m, 2H), 3.52-3.45 (m, 1H), 3.15-3.01 (m, 1H), 2.79-2.64 (m, 1H), 2.61-2.54 (m, 1H), 1.98 (d, J = 2.8 Hz, 3H), 1.83-1.67 (m, 2H), 1.65-1.55 (m, 1H), 1.51-1.38 (m, 1H), 1.32-1.03 (m, 2H).	380.1	E	
I-401		(400 MHz, DMSO-d6) 7.40-7.31 (m, 1H), 7.26 (d, J = 4.0 Hz, 1H), 7.18-7.08 (m, 1H), 7.07-7.00 (m, 1H), 6.59 (d, J = 8.0 Hz, 1H), 6.33-6.27 (m, 1H), 6.04 (d, J = 4.0 Hz, 1H), 4.78-4.67 (m, 1H),4.30-4.14 (m, 2H), 3.69 (s, 3H), 2.21-2.09 (m, 1H), 1.73-1.04 (m, 8H).	349.1	E	
I-402		(400 MHz, DMSO-d6) 7.37-7.29 (m, 1H), 7.18-7.10 (m, 1H), 7.08-7.00 (m, 1H), 6.35 (d, J = 8.0 Hz, 1H), 5.86 (d, J = 8.0 Hz, 1H), 4.76-4.63 (m, 1H), 4.14-4.04 (m, 1H), 3.72-3.60 (m, 1H), 3.58-3.45 (m, 1H), 3.13-3.00 (m, 1H), 2.77-2.64 (m, 1H), 2.19-2.05 (m, 1H), 1.97 (d, J = 4.0 Hz, 3H), 1.82-1.00 (m, 12H).	380.2	E	
I-403		(400 MHz, DMSO-d6) 8.38 (d, J = 8.0 Hz, 1H), 7.45-7.37 (m, 1H), 7.35-7.29 (m, 1H), 7.28-7.24 (m, 1H), 4.87-4.79 (m, 1H), 4.32-4.21 (m, 1H), 3.77-3.67 (m, 1H), 3.01-2.88 (m, 1H), 2.49-2.40 (m, 1H), 2.24-2.00 (m, 3H), 1.95 (s, 3H), 1.90-	395	E	

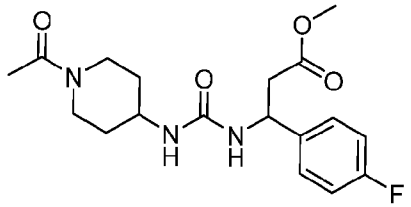
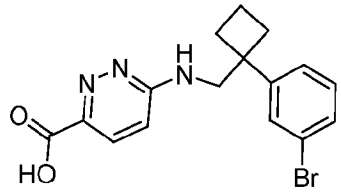
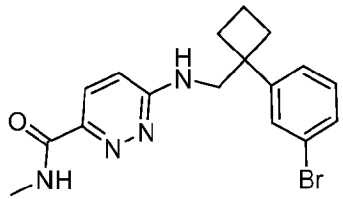
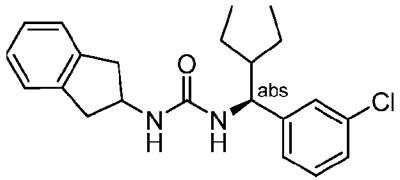
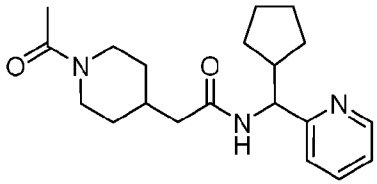
		1.70 (m, 2H), 1.63-1.40 (m, 6H), 1.34-1.23 (m, 2H), 1.11-0.85 (m, 3H).			
I-404		(400 MHz, DMSO-d6) 7.39-7.26 (m, 3H), 7.25-7.17 (m, 1H), 6.41 (d, J = 8.0 Hz, 1H), 5.87 (d, J = 8.0 Hz, 1H), 5.02-4.93 (m, 1H), 4.15-4.03 (m, 1H), 3.72-3.60 (m, 1H), 3.56-3.49 (m, 1H), 3.13-3.00 (m, 1H), 2.77-2.64 (m, 1H), 2.25-2.10 (m, 1H), 1.97 (d, J = 4.0 Hz, 3H), 1.82-1.01 (m, 12H).	378.1	E	
I-405		(400 MHz, DMSO-d6) 7.50-7.40 (m, 1H), 7.16-7.03 (m, 2H), 6.51-6.38 (m, 1H), 5.97-5.82 (m, 1H), 4.98-4.78 (m, 1H), 4.62-4.48 (m, 1H), 4.34-4.24 (m, 1H), 4.19-4.02 (m, 1H), 3.94-3.79 (m, 1H), 3.74-3.60 (m, 1H), 3.11-2.98 (m, 1H), 2.77-2.63 (m, 1H), 1.97 (d, J = 8.0 Hz, 3H), 1.90-0.8 (m, 13H).	426.1	E	
I-406		(400 MHz, DMSO-d6) 8.34 (d, J = 8.0 Hz, 1H), 7.49 (d, J = 8.0 Hz, 1H), 7.38-7.25 (m, 2H), 4.62-4.50 (m, 1H), 4.33-4.20 (m, 1H), 3.80-3.66 (m, 1H), 3.02-2.89 (m, 1H), 2.48-2.40 (m, 1H), 2.20-2.08 (m, 1H), 2.06-1.99 (m, 2H), 1.95 (s, 3H), 1.90-1.68 (m, 2H), 1.63-1.40 (m, 6H), 1.31-1.20 (m, 2H), 1.15-0.85 (m, 3H).	395.1	E	
I-407		(400 MHz, METHANOL-d4) ppm 7.15 - 7.20 (m, 2 H), 7.07 - 7.12 (m, 2 H), 4.29 - 4.38 (m, 1 H), 3.57 - 3.67 (m, 1 H), 3.45 - 3.56 (m, 1 H), 2.01 - 2.13 (m, 1 H), 1.83 (s, 3 H), 1.65 - 1.81 (m, 2 H), 1.38 - 1.61 (m, 11 H), 1.23 - 1.35 (m, 2 H), 1.02 - 1.12 (m, 1 H).	392.1	E	

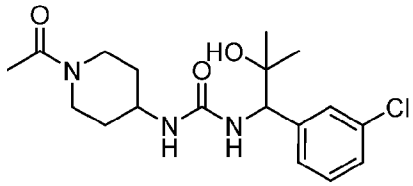
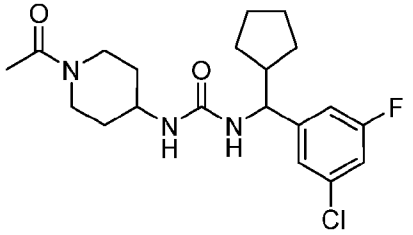
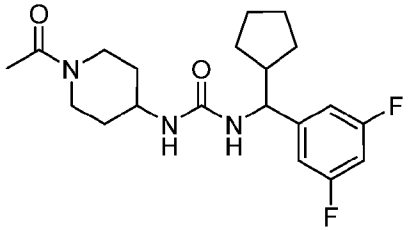
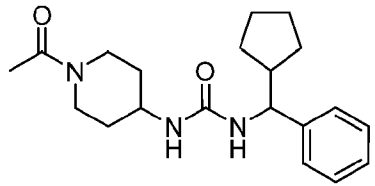
I-408		(400 MHz, DMSO-d6): 7.27-7.39 (m, 4H), 6.66-6.69 (m, 1H), 6.11-6.14 (m, 1H), 4.98-5.02 (m, 1H), 4.07-4.13 (m, 1H), 3.53-3.70 (m, 2H), 3.09-3.13 (m, 1H), 2.74-2.78 (m, 1H), 1.98 (s, 3H), 1.73-1.77 (m, 2H), 1.10-1.30 (m, 3H), 0.98-1.01 (m, 2H), 0.67-0.70 (m, 1H).	418.1	E	
I-409		(400 MHz, DMSO-d6): 7.48-7.38 (m, 4H), 6.86 (d, J = 9.6 Hz, 1H), 6.09 (d, J = 7.6 Hz, 1H), 483 (d, J = 9.2 Hz, 1H), 4.10-4.04 (m, 1H), 3.69-3.52 (m, 2H), 3.14-3.06 (m, 1H), 2.80-2.72 (m, 1H), 2.07-1.64 (m, 12H), 1.52-1.05 (m, 3H).	403.1	E	
I-410		(DMSO-d6, 400MHz): − 7.63 (d, J − 4.4 Hz, 1H), 7.44-7.04 (m, 5H), 6.34 (d, J = 8.4 Hz, 1H), 5.68 (d, J = 8.0 Hz, 1H), 4.56-4.35 (m, 1H), 3.29-3.13 (m, 1H), 2.60-2.53 (m, 5H), 2.20-2.07 (m, 1H), 2.04-1.91 (m, 1H), 1.88-1.24 (m, 14H), 1.18-0.94 (m, 2H).	392.1	E	
I-411				E	
I-412		(400 MHz, DMSO-d6) ppm 7.81 - 7.89 (m, 1 H), 7.19 - 7.36 (m, 4 H), 6.26 - 6.38 (m, 1 H), 5.83 - 5.90 (m, 1 H), 4.40 - 4.47 (m, 1 H), 4.03 - 4.14 (m, 1 H), 3.86 - 3.98 (m, 1 H), 1.87 - 2.18 (m, 3 H), 1.75 - 1.79 (m, 3 H), 1.14 - 1.67 (m, 12 H).	378.2	E	

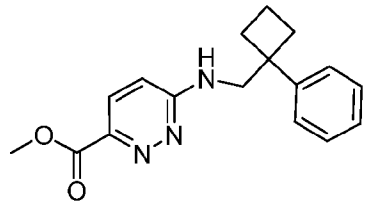
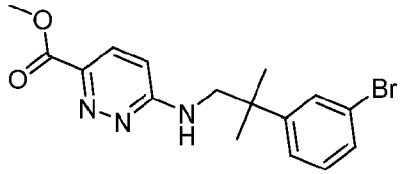
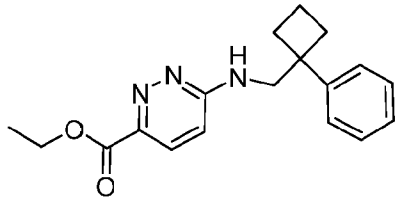
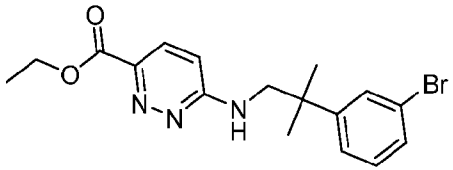
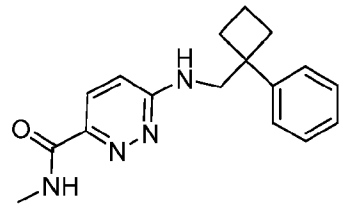
I-413		(400 MHz, DMSO-d6): 7.32-7.25 (m, 3H), 7.18-7.11 (m, 1H), 6.99 (s, 1H), 6.70 (d, J = 8.4 Hz, 1H), 6.35 (d, J = 7.6 Hz, 1H), 4.89 (d, J = 9.2 Hz, 1H), 4.10-4.04 (m, 1H), 3.69-3.63 (m, 1H), 3.54-3.46 (m, 1H), 3.12-3.02 (m, 1H), 2.77-2.67 (m, 1H), 1.97-1.43 (m, 13H), 1.27-1.05 (m, 2H).	421.1	E	
I-414		(400 MHz, DMSO-d6): 7.33-7.36 (m, 1H), 7.02-7.13 (m, 2H), 6.44-6.48 (m, 1H), 6.19-6.22 (m, 1H), 4.78-4.81 (m, 1H), 4.65 (s, 1H), 4.02-4.09 (m, 1H), 3.65-3.69 (m, 1H), 3.51-3.53 (m, 1H), 3.04-3.14 (m, 1H), 2.72-2.81 (m, 1H), 1.97-1.99 (m, 3H), 1.61-1.78 (m, 2H), 1.04-1.27 (m, 5H), 0.94 (s, 3H).	370.1	E	
I-415		(400 MHz, DMSO-d6) 7.36-7.31 (m, 2H), 7.28-7.22 (m, 2H), 6.35 (d, J = 8.0 Hz, 1H), 5.81 (d, J = 8.0 Hz, 1H), 4.48-4.38 (m, 1H), 4.15-4.04 (m, 1H), 3.73-3.61 (m, 1H), 3.58-3.46 (m, 1H), 3.1 - 3.00 (m, 1H), 2.7-2.64 (m, 1H), 2.14-2.04 (m, 1H), 1.97 (d, J = 4.0 Hz, 3H), 1.74-1.07 (m, 12H).	378.1	E	
I-416		(400 MHz, DMSO-d6) 7.30-7.20 (m, 2H), 7.16-7.05 (m, 2H), 6.31 (d, J=8.0 Hz, 1H), 5.77 (d, J=8.0 Hz, 1H), 4.48-4.38 (m, 1H), 4.17-4.05 (m, 1H), 3.72-3.62 (m, 1H), 3.15-3.0 (m, 1H), 2.80-2.63 (m, 1H), 2.16-2.04 (m, 1H), 1.97 (d, J=3.00 Hz, 3H), 1.03 - 1.81 (m, 13H).	362.2	E	
I-417		(400 MHz, DMSO-d6) 7.71-7.52 (m, 1H), 7.36-7.15 (m, 4H), 6.42-6.28 (m, 1H), 5.96-5.64 (m, 1H), 4.49-4.36 (m, 1H), 3.31-3.20 (m, 1H), 2.56 - 2.51 (m, 3H). 2.32-1.98 (m, 2H), 1.77-0.91 (m, 16H).	391.2	E	

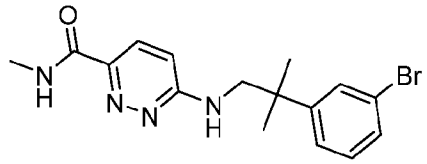
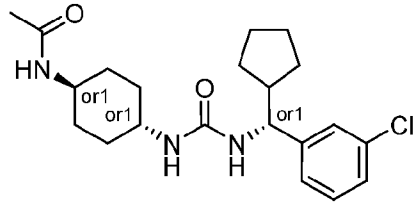
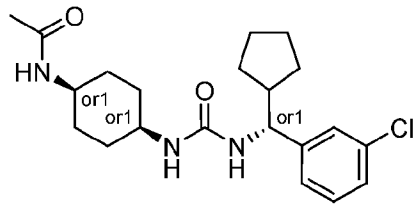
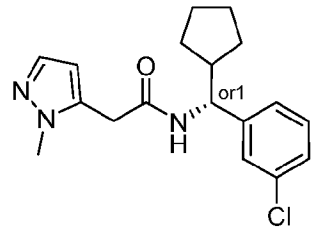
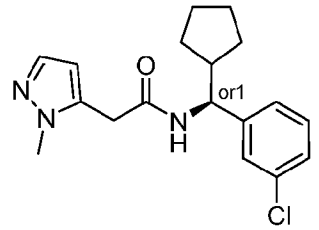
I-418		(400 MHz, DMSO-d6) 7.46-7.37 (m, 3H), 7.35-7.28 (m, 1H), 7.04-6.78 (m, 1H), 6.33 (s, 1H), 5.32 (s, 1H), 4.13-3.99 (m, 1H), 3.74-3.64 (m, 1H), 3.62 (s, 3H), 3.60-3.53 (m, 1H), 3.18-3.04 (m, 1H), 2.85-2.72 (m, 1H), 1.98 (s, 3H), 1.84-1.63 (m, 2H), 1.32-1.01 (m, 2H).	368.1	E	
I-419		(400 MHz, DMSO-d6) 7.34-7.21 (m, 2H), 7.18-7.08 (m, 2H), 6.41 (d, J = 8.0 Hz, 1H), 5.95 (d, J = 8.0 Hz, 1H), 4.80-4.72 (m, 1H), 4.14-4.03 (m, 1H), 3.72-3.60 (m, 1H), 3.58-3.47 (m, 1H), 3.15-3.02 (m, 1H), 2.80-2.66 (m, 1H), 2.20-2.06 (m, 1H), 1.97 (d, J=4.0 Hz, 3H), 1.80-1.08 (m, 12H).	362.2	E	
I-420		(400 MHz, DMSO-d6) 7.65 (d, J = 8.0 Hz, 2H), 7.45 (d, J = 8.0 Hz, 2H), 6.45 (d, J = 8.0 Hz, 1H), 5.86 (d, J = 8.0 Hz, 1H), 4.56-4.46 (m 1H), 4.16-4.05 (m, 1H), 3.73-3.60 (m, 1H), 3.58-3.64 (m, 1H), 3.14-3.00 (m, 1H), 2.76-2.65 (m, 1H), 2.20-2.05(m, 1H), 1.97 (d, J = 4.0 Hz, 3H), 1.74-1.06 (m, 12H).	412.2	E	
I-421		(400 MHz, DMSO-d6) 7.61-7.49 (m, 4H), 6.46 (d, J = 8.0 Hz, 1H), 5.83 (d, J = 8.0 Hz, 1H), 4.58-4.48 (m, 1H), 4.16-4.06 (m, 1H), 3.73-3.60 (m, 1H), 3.59-3.46 (m, 1H), 3.14-2.98 (m, 1H), 2.76-2.62 (m, 1H), 2.19-2.08 (m, 1H), 1.97 (d, J − 4.0 Hz, 3H), 1.81-1.39 (m, 7H), 1.33-1.05 (m, 5H).	412.1	E	
I-422		(400 MHz, DMSO-d6) 7.70-7.62 (m, 2H), 7.57 (d, J = 8.0 Hz, 1H), 7.46-7.39 (m, 1H), 6.35 (d, J = 8.0 Hz, 1H), 5.79 (d, J = 8.0 Hz, 1H), 5.05-4.95 (m, 1H), 4.17-4.04 (m, 1H), 3.74-3.60 (m, 1H), 3.57-3.49 (m, 1H), 3.13-3.00 (m, 1H), 2.76-2.63 (m, 1H), 2.24-2.13 (m, 1H), 1.97 (d, J = 4.0 Hz, 3H), 1.73-1.06 (m, 12H).	412.2	D	

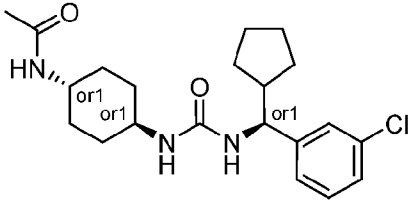
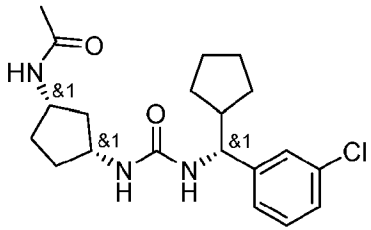
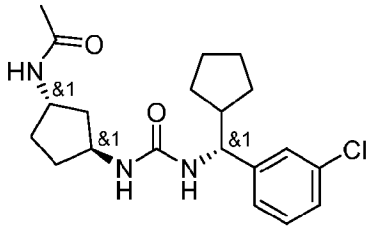
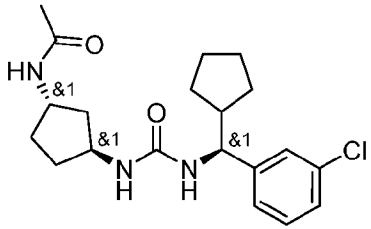
I-423		(400 MHz, DMSO-d6) ppm 7.19 - 7.37 (m, 4 H), 6.37 - 6.41 (m, 1 H), 5.78 (d, J=7.6 Hz, 1 H), 4.39 - 4.45 (m, 1 H), 3.50 - 3.65 (m, 2 H), 3.08 - 3.17 (m,1 H), 2.05 - 2.18 (m, 1 H), 1.95 (d, J=3.2 Hz, 3 H), 1.00 - 1.76 (m, 18 H).	406.1	E	
I-424		(DMSO-d6, 400 MHz) 8.19 (1H, d, J=8.9 Hz), 7.24-7.16 (2H, m), 6.89-6.81 (2H, m), 4.57-4.47 (1H, m), 4.27 (1H, t, J=12.7 Hz), 3.72 (4H, s), 3.02-2.89 (1H, m), 2.51-2.41 (1H, m), 2.16 (1H, h, J=8.0 Hz), 2.13-1.98 (2H, m), 1.96 (3H, d, J=1.1 Hz), 1.87 (1H, s), 1.76-1.67 (1H, m), 1.66-1.36 (6H, m), 1.35-1.20 (2H, m), 1.12-1.01 (2H, m), 1.00-0.85 (1H, m)	373.2	E	
I-425		(400 MHz, Methanol-d6): 7.48-7.45 (m, 1H), 7.32-7.23 (m, 2H), 6.54-6.39 (m, 1H), 5.91-5.89 (m, 1H), 5.25-4.93 (m, 1H), 4.25-4.10 (m, 1H), 3.70-3.66 (m, 1H), 3.12-3.03 (m, 1H), 2.76-2.67 (m, 1H), 2.25-2.14 (m, 1H), 1.98-1.97 (m, 3H), 1.80-1.63 (m, 6H), 1.39-1.00 (m, 8H).	378.2	E	
I-426				E	
I-427				E	

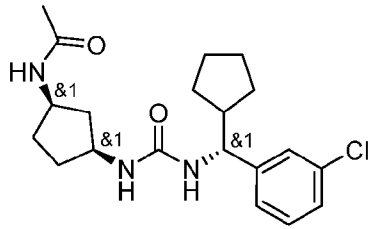
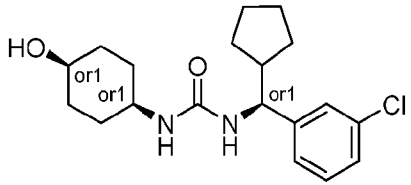
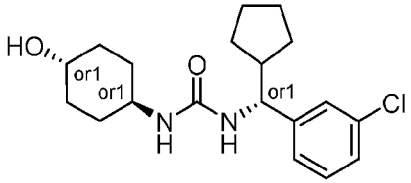
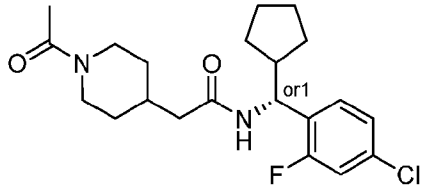
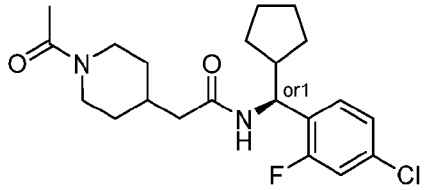
I-428				D	D
I-429				D	
I-430		(400 MHz, DMSO) δ 8.66 (q, J − 4.7 Hz, 1H), 7.64 (d, J = 9.3 Hz, 1H), 7.32 (tt, J = 3.3, 1.6 Hz, 3H), 7.26 – 7.19 (m, 1H), 7.17 (dt, J = 7.7, 1.4 Hz, 1H), 6.84 (d, J = 9.0 Hz, 1H), 3.84 (d, J = 6.1 Hz, 2H), 2.76 (d, J = 4.8 Hz, 3H), 2.35 – 2.18 (m, 4H), 2.08 (dt, J = 11.2, 8.5 Hz, 1H), 1.80 (dtd, J = 11.1, 8.9, 4.4 Hz, 1H).	375.3	E	
I-431				E	
I-432		(400 MHz, DMSO-d6) 8.50 (dd, J = 4.9, 1.8 Hz, 1H), 8.27 (d, J = 8.8 Hz, 1H), 7.73 (td, J = 7.7, 1.9 Hz, 1H), 7.31 (d, J = 7.8 Hz, 1H), 7.23 (ddd, J = 7.6, 4.8, 1.2 Hz, 1H), 4.73 (t, J = 9.0 Hz, 1H), 4.27 (t, J = 13.0 Hz, 1H), 3.73 (t, J = 12.9 Hz, 1H), 3.02-2.89 (m, 1H), 2.46 (ddd, J = 12.7, 9.6, 2.8 Hz, 1H), 2.33 (h, J = 8.3 Hz, 1H), 2.16-2.00 (m, 2H), 1.96 (d, J = 1.4 Hz, 3H), 1.87 (s, 1H), 1.78-1.62 (m, 1H), 1.62-1.37 (m, 6H), 1.36-1.20	344.15	E	

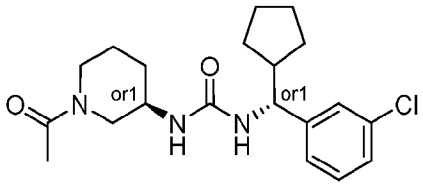
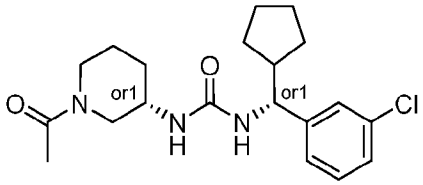
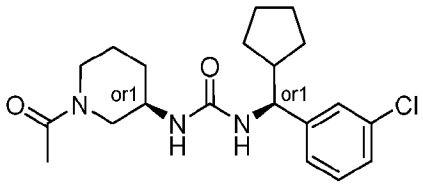
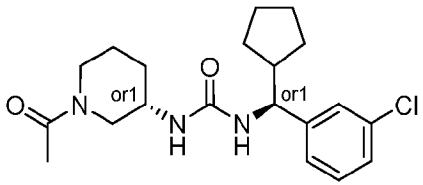
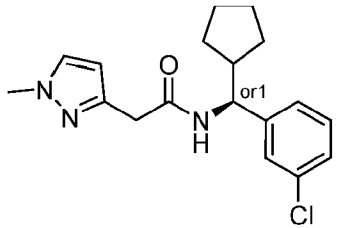
		(m, 2H), 1.19-1.10 (m, 1H), 1.09-0.99 (m, 1H), 0.93 (td, J = 12.3, 4.2 IIz, 1II)			
I-433		(400 MHz, DMSO-d6) 7.34 - 7.19 (m, 4H), 6.59 (s, 1H), 4.46 (s, 1H), 4.05-3.91 (m, 2H), 3.71 - 3.59 (m, 1H), 3.57 - 3.48 (m, 1 H), 3.16-3.02 (m, 1H), 2.86-2.71 (m, 1H), 1.97 (d, J=4.0 Hz, 3H), 1.82-1.57 (m, 2H), 1.29-0.99 (m, 5H), 0.95 (s, 5H).	368.1	E	
I-434		(400 MHz, DMSO-d6) 7.26-7.21 (m, 1H), 7.18 (s, 1H), 7.13-7.06 (m, 1H), 6.43 (d, J = 8.0 Hz, 1H), 5.87 (d, J = 8.0 Hz, 1H), 4.49-4.40 (m, 1H), 4.17-4.06 (m, 1H), 3.74-3.62 (m, 1H), 3.57-3.48 (m, 1H), 3.12-3.01 (m, 1H), 2.76-2.64 (m, 1H), 2.17-2.04 (m, 1H), 1.97 (d, J = 4.0 Hz, 3H), 1.17 - 1.10 (m, 12H)	396.1	E	
I-435		(400 MHz, DMSO-d6) 7.07-6.90 (m, 3H), 6.38 (d, J = 8.0 IIz, 1II), 5.84 (d, J = 8.0 IIz, 1II), 4.52-4.40 (m, 1H), 4.16-4.06 (m, 1H), 3.73-3.63 (m, 1H), 3.58-3.49 (m, 1H), 3.13-3.01 (m, 1H), 2.75-2.65 (m, 1H), 2.16-2.05 (m, 1H), 1.97 (d, J =4.0 Hz, 3H), 1.74 - 1.10 (m, 12H).	380.2	E	
I-436		(400 MHz, DMSO-d6) 7.32-7.26 (m, 2H), 7.25-7.16 (m, 3H), 6.31 (d, J = 8.0 Hz, 1H), 5.79 (d, J = 8.0 Hz, 1H), 4.50-4.39 (m, 1H), 4.14-4.04 (m, 1H), 3.72-3.61 (m, 1H), 3.58-3.48 (m, 1H), 3.14-3.01 (m, 1H), 2.77-2.65 (m, 1H), 2.18-2.05 (m, 1II), 1.97 (d, J =4.0 IIz, 3II), 1.74 - 1.08 (m, 12H).	344.2	E	

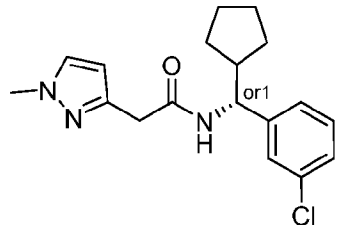
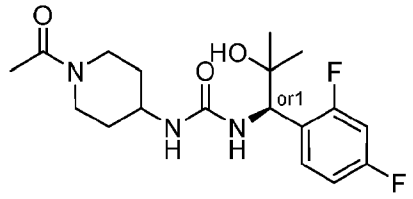
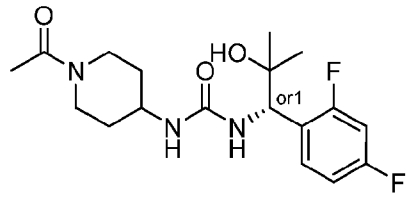
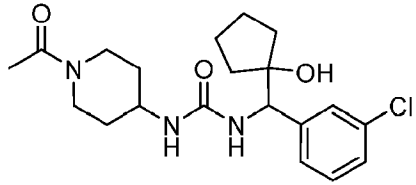
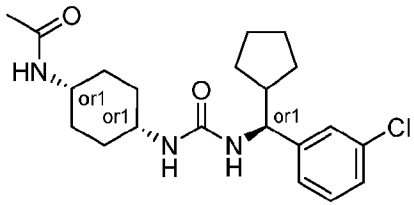
I-437			298.38	E	
I-438			364.3	E	
I-439			312.39	E	
I-440			370.3	E	
I-441		(400 MHz, DMSO-d6) ppm 8.69 (d, J = 4.4 Hz, 1H), 7.62 (d, J = 9.2 Hz, 1H), 7.12-7.32 (m, 6H), 6.81 (d, J = 8.0 Hz, 1H), 3.83 (d, J = 5.6 Hz, 2H), 2.78 (d, J = 4.8 Hz, 3H), 2.21-2.39 (m, 4H), 2.03-2.15 (m, 1H), 1.75-1.86 (m, 1H).	297.1	E	

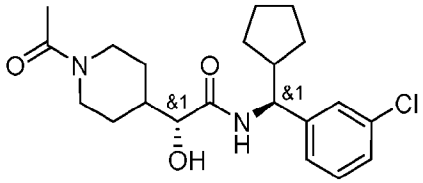
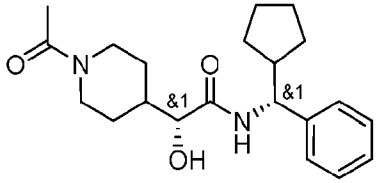
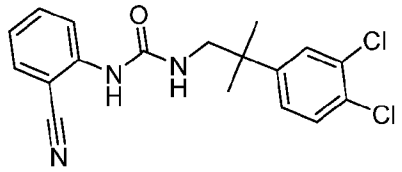
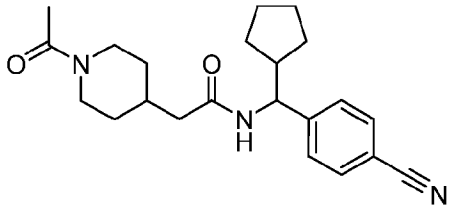
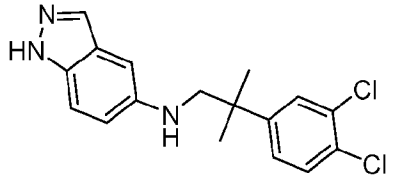
I-442			363.25	E	
I-443		(400 MHz, METHANOL-d4) ppm 7.27 - 7.34 (m, 2 H), 7.19 - 7.25 (m, 1 H), 7.19 - 7.25 (m, 1 H), 4.44 (d, J=9.6 Hz, 1 H), 3.47 - 3.73 (m, 2 H), 2.15- 2.22 (m, 1 H), 1.92 (s, 3 H), 1.82 (d, J=8.0 Hz, 1 H), 1.49 - 1.73 (m, 4 H), 1.18 - 1.41 (m, 10 H), 0.91 (d, J=7.2 Hz, 1 H)	392.1	D	
I-444		(400 MHz, METHANOL-d4) ppm 7.15 - 7.22 (m, 2 H), 7.07 - 7.14 (m, 2 H), 4.35 (d, J=9.2 Hz, 1 H), 3.62 (s, 1 H), 3.52 (s, 1 H), 2.02 - 2.13 (m, 1 H), 1.83 (s, 3 H), 1.68 - 1.73 (m, 1 H), 1.40 - 1.61 (m, 12 H), 1.25 - 1.34 (m, 2 H), 1.03 - 1.14 (m, 1 H).	392.1	E	
I-445		(400 MHz, METHANOL-d4) ppm 7.19 - 7.47 (m, 5 H), 6.10 (br s, 1 H), 3.75 (br s, 3 H), 3.57 - 3.70 (m, 2 H), 2.30 (br d, J=8.0 Hz, 1 H), 1.08 - 1.98 (m, 8 H)	332.1	E	
I-446		(400 MHz, METHANOL-d4) ppm 7.20 - 7.39 (m, 5 H), 6.11 (s, 1 H), 4.56 (br d, J=10.4 Hz, 1 H), 3.75 (s, 3 H), 3.58 - 3.70 (m, 2 H), 2.24 - 2.36 (m, 1 H), 1.83 - 1.94 (m, 1 H), 1.49 - 1.74 (m, 4 H), 1.29 - 1.41 (m, 2 H), 1.06 - 1.20 (m, 1 H)	332.1	E	

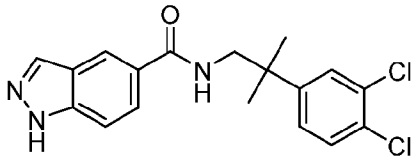
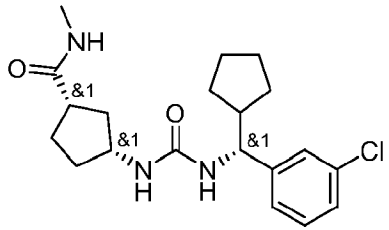
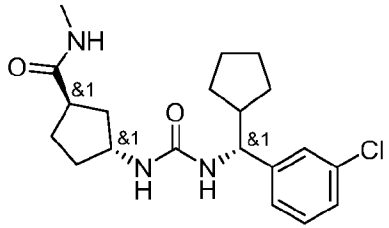
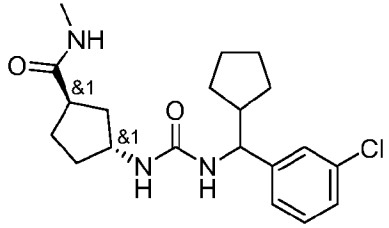
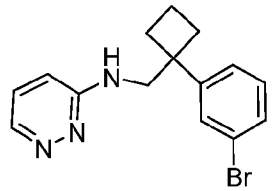
I-447		(400 MHz, METHANOL-d4) ppm 7.27 - 7.33 (m, 2 H), 7.19 - 7.26 (m, 2 H), 4.42 - 4.51 (m, 1 H), 3.69 - 3.80 (m, 1 H), 3.64 (s, 1 H), 2.14 - 2.25 (m, 1 H), 1.95 (s, 3 H), 1.77 - 1.87 (m, 1 H), 1.50 - 1.76 (m, 12 H), 1.38 - 1.48 (m, 2 H), 1.17 - 1.26 (m, 1 H).	392.1	E	
I-448		(400 MHz, METHANOL-d4) ppm 7.27 - 7.33 (m, 2 H), 7.19 - 7.25 (m, 2 H), 4.44 (d, J=9.2 Hz, 1 H), 4.17 - 4.28 (m, 1 H), 4.02 - 4.13 (m, 1 H), 2.14 - 2.25 (m, 1 H), 2.02 - 2.13 (m, 2 H), 1.92 (d, J=4.8 Hz, 3 H), 1.50 - 1.88 (m, 7 H), 1.37 - 1.49 (m, 4 H), 1.14-1.24 (m, 1 H).	378.1	E	
I-449		(400 MHz, METHANOL-d4) ppm 7.26 - 7.33 (m, 2 H), 7.20 - 7.26 (m, 2 H), 4.44 (d, J=9.2 Hz, 1 H), 4.05 (d, J=4.8 Hz, 1 H), 3.90-3.95 (m, 1 H), 2.30 - 2.43 (m, 1 H), 2.12 - 2.27 (m, 1 H), 1.95 (d, J=6.8 Hz, 1 H), 1.92 (d, J=4.4 Hz, 3 H), 1.81-1.86 (m, 1 H), 1.47 - 1.76 (m, 6 H), 1.36 - 1.46 (m, 2 H), 1.26 - 1.34 (m, 2 H), 1.15 - 1.22 (m, 1 H).	378.1	E	
I-450		(400 MHz, METHANOL-d4) ppm 7.27 - 7.34 (m, 2 H), 7.18 - 7.25 (m, 2 H), 4.44 (d, J=9.2 Hz, 1 H), 4.18 - 4.25 (m, 1 H), 4.05 - 4.09 (m, 1 H), 2.15 - 2.25 (m, 1 H), 2.02 - 2.14 (m, 2 H), 1.92 (d, J=4.8 Hz, 3 H), 1.50 - 1.86 (m, 7 H), 1.29 - 1.47 (m, 4 H), 1.12 - 1.26 (m, 1 H).	378.1	E	

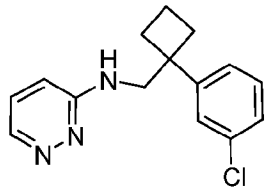
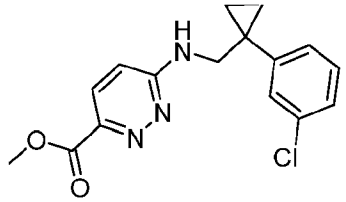
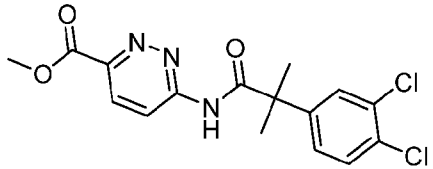
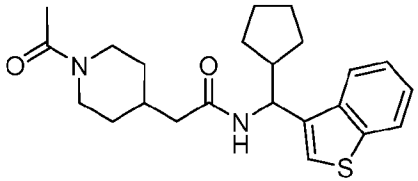
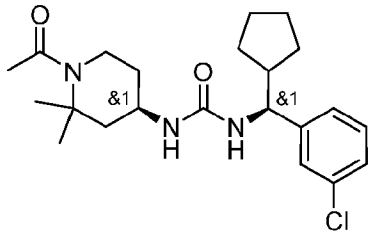
I-451		(400 MHz, METHANOL-d4) ppm 7.27 - 7.38 (m, 2 H), 7.18 - 7.26 (m, 2 H), 4.44 (d, J=9.6 Hz, 1 H), 4.00 - 4.12 (m, 1 H), 3.90-3.95 (m, 1 H), 2.28 - 2.45 (m, 1 H), 2.11 - 2.24 (m, 1 H), 1.94 - 2.00 (m, 1 H), 1.92 (d, J=4.4 Hz, 3 H), 1.81 - 1.86 (m, 1 H), 1.48 - 1.76 (m, 6 H), 1.12 - 1.47 (m, 5 H).	378.1	E	
I-452		(400 MHz, METHANOL-d4) ppm 7.17 - 7.37 (m, 4 H), 4.45 (d, J=9.2 Hz, 1 H), 3.47 - 3.57 (m, 1 H), 3.36 - 3.46 (m, 1 H), 2.23 - 2.13 (m, 1 H), 1.79 - 1.95 (m, 4 H), 1.50 - 1.72 (m, 4 H), 1.29 - 1.44 (m, 5 H), 1.13 - 1.26 (m, 3 H)	351.1	D	
I-453		(400 MHz, METHANOL-d4) ppm 7.18 - 7.35 (m, 4 H), 4.44 (br d, J=8.8 Hz, 1 H), 3.52 (br s, 1 H), 3.40 (br s, 1 H), 2.13 - 2.24 (m, 1 H), 1.15 - 1.99 (m, 16 H)	351.1	E	
I-454		(400 MHz, DMSO-d6) 8.38 (d, J = 8.0 Hz, 1H), 7.44-7.37 (m, 1H), 7.36-7.30 (m, 1H), 7.27 (d, J = 8.0 Hz, 1H), 4.89-4.77 (m, 1H), 4.36-4.18 (m, 1H), 3.82-3.66 (m, 2H), 3.02-2.87 (m, 1H), 2.48-2.40 (m, 1H), 2.26-2.10 (m, 1H), 2.09-1.99 (m, 2H), 1.95 (s, 3H), 1.90-1.71 (m, 2H), 1.64-1.39 (m, 5H), 1.35-1.22 (m, 2H), 1.10-0.86 (m, 3H).	395.1	E	
I-455		(400 MHz, DMSO-d6) 8.38 (d, J = 8.0 Hz, 1H), 7.44-7.37 (m, 1H), 7.36-7.30 (m, 1H), 7.27 (d, J = 8.0 Hz, 1H), 4.89-4.77 (m, 1H), 4.36-4.18 (m, 1H), 3.82-3.66 (m, 2H), 3.02-2.87 (m, 1H), 2.48-2.40 (m, 1H), 2.26-2.10 (m, 1H), 2.09-1.99 (m, 2H), 1.95 (s, 3H), 1.90-1.71 (m, 2H), 1.64-1.39 (m, 5H), 1.35-1.22 (m, 2H), 1.10-0.86 (m, 3H).	395.1	E	

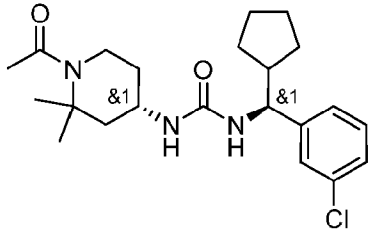
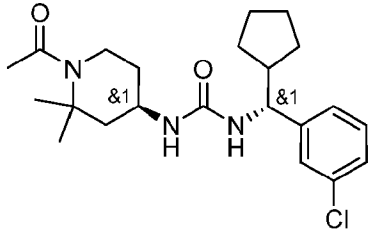
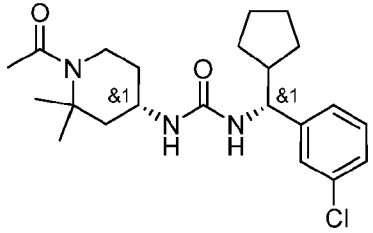
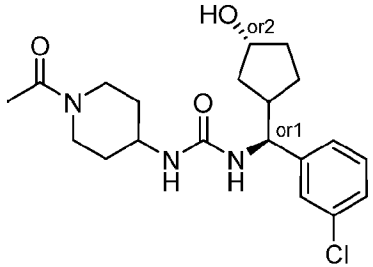
I-456		(400 MHz, DMSO-d6) 7.37-7.13 (m, 4H), 6.54-6.38 (m, 1H), 6.03-5.73 (m, 1H), 4.53-4.35 (m, 1H), 4.03-3.40 (m, 3H), 3.30-2.61 (m, 2H), 2.17-2.04 (m, 1H), 2.00-1.90 (m, 3H), 1.75-1.21 (m, 11H), 1.19-1.03 (m, 1H).	378.1	E	
I-457		(400 MHz, DMSO-d6) 7.39-7.15(m, 4H), 6.53 - 6.40 (m, 1H), 6.06-5.73 (m, 1H), 4.49-4.37 (m, 1H), 3.98-3.48 (m, 2H), 3.24-2.57 (m, 2H), 2.17-2.05 (m, 1H), 1.97 (s, 1H), 1.73 (s, 3H), 1.68-1.21 (m, 11H), 1.18-1.05 (m, 1H).	378.1	E	
I-458		(400 MHz, DMSO-d6) 7.39-7.15(m, 4H), 6.53 - 6.40 (m, 1H), 6.06-5.73 (m, 1H), 4.49-4.37 (m, 1H), 3.98-3.48 (m, 2H), 3.24-2.57 (m, 2H), 2.17-2.05 (m, 1H), 1.97 (s, 1H), 1.73 (s, 3H), 1.68-1.21 (m, 11H), 1.18-1.05 (m, 1H).	378.1	E	
I-459		(400 MHz, DMSO-d6) 7.37-7.13 (m, 4H), 6.54-6.38 (m, 1H), 6.03-5.73 (m, 1H), 4.53-4.35 (m, 1H), 4.03-3.40 (m, 3H), 3.30-2.61 (m, 2H), 2.17-2.04 (m, 1H), 2.00-1.90 (m, 3H), 1.75-1.21 (m, 11H), 1.19-1.03 (m, 1H).	378.1	E	
I-460		(400 MHz, METHANOL-d4) ppm 7.70 (d, J=2.0 Hz, 1 H), 7.20 - 7.40 (m, 4 H), 6.29 (d, J=2.0 Hz, 1 H), 4.60 (d, J=10.0 Hz, 1 H), 3.93 (s, 3 H), 3.57 - 3.72 (m, 2 H), 2.26 - 2.37 (m, 1 H), 1.83 - 1.96 (m, 1 H), 1.52 - 1.75 (m, 4 H), 1.32 - 1.46 (m, 2 H), 1.10 - 1.22 (m, 1 H)	332.1	E	

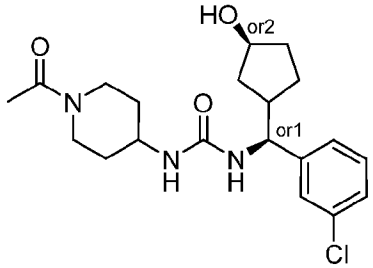
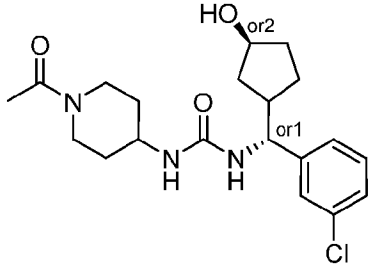
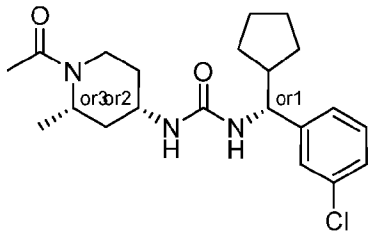
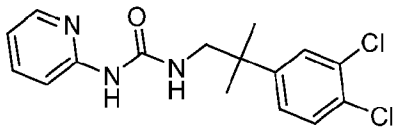
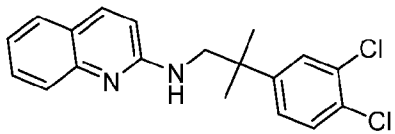
I-461		(400 MHz, METHANOL-d4) ppm 7.53 (d, J=1.2 Hz, 1 H), 7.21 - 7.35 (m, 1 H), 7.21 - 7.35 (m, 3 H), 6.16 (d, J=1.6 Hz, 1 H), 4.60 (d, J=10.0 Hz, 1 H), 3.87 (s, 3 H), 3.50 - 3.61 (m, 2 H), 2.20 - 2.37 (m, 1 H), 1.78 - 1.96 (m, 1 H), 1.51 - 1.71 (m, 4 H), 1.34 - 1.44 (m, 2 H), 1.07 - 1.23 (m, 1 H)	332.1	E	
I-462		(400 MHz, DMSO-d6): 7.33-7.36 (m, 1H), 7.02-7.13 (m, 2H), 6.44-6.48 (m, 1H), 6.19-6.22 (m, 1H), 4.78-4.81 (m, 1H), 4.65 (s, 1H), 4.02-4.09 (m, 1H), 3.65-3.69 (m, 1H), 3.51-3.53 (m, 1H), 3.04-3.14 (m, 1H), 2.72-2.81 (m, 1H), 1.97-1.99 (m, 3H), 1.61-1.78 (m, 2H), 1.04-1.27 (m, 5H), 0.94 (s, 3H).	370.1	E	
I-463		(400 MHz, DMSO-d6): 7.33-7.36 (m, 1H), 7.02-7.13 (m, 2H), 6.44-6.48 (m, 1H), 6.19-6.22 (m, 1H), 4.78-4.81 (m, 1H), 4.65 (s, 1H), 4.02-4.09 (m, 1H), 3.65-3.69 (m, 1H), 3.51-3.53 (m, 1H), 3.04-3.14 (m, 1H), 2.72-2.81 (m, 1H), 1.97-1.99 (m, 3H), 1.61-1.78 (m, 2H), 1.04-1.27 (m, 5H), 0.94 (s, 3H).	370.1	E	
I-464		(DMSO-d6, 400MHz): 7.35 (s, 1H), 7.33-7.22 (m, 3H), 6.50 (d, J = 9.2 Hz, 1H), 6.16 (d, J = 7.6 Hz, 1H), 4.58-4.47 (m, 2H), 4.08 (d, J = 9.6 Hz, 1H), 3.64 (d, J = 9.6 Hz, 2H), 3.52 (s, 4H), 3.18-3.02 (m, 1H), 2.87-2.67 (m, 1H), 1.98 (d, J = 3.8 Hz, 3H), 1.43-1.86 (m, 9.2H), 1.33-0.98 (m, 3H).	394.1	E	
I-465		(400 MHz, METHANOL-d4) ppm 7.27 - 7.32 (m, 2 H), 7.19 - 7.25 (m, 2 H), 4.45 (d, J=9.2 Hz, 1 H), 3.59 (s, 1 H), 3.41 (s, 1 H), 2.11 - 2.28 (m, 1 H), 1.91 (s, 3 H), 1.79 - 1.85 (m, 1 H), 1.49 - 1.71 (m, 4 H), 1.14 - 1.46 (m, 10 H), 0.92 (s, 1 H).	392.1	E	

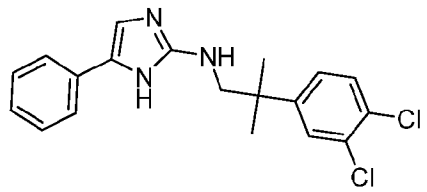
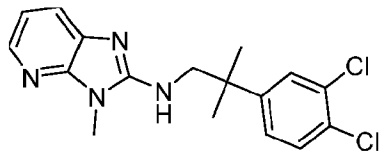
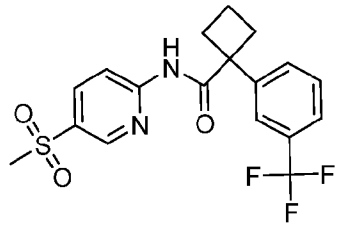
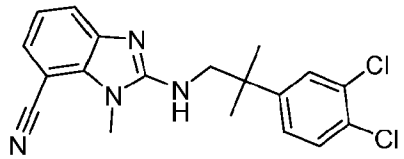
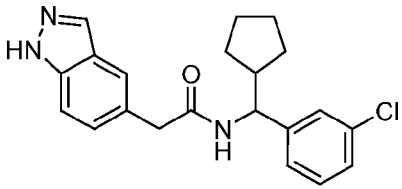
I-466		(400 MHz, DMSO-d6): 8.18-8.23 (m, 1H), 7.43-7.48 (m, 1H), 7.26-7.33 (m, 3H), 5.39-5.54 (m, 1H), 4.49-4.59 (m, 1H), 4.36-4.40 (m, 1H), 3.69-3.83 (m, 2H), 2.91-2.97 (m, 1H), 2.36-2.41 (m, 2H), 1.94-1.97 (m, 3H), 1.65-1.76 (m, 2H), 1.06-1.60 (m, 11H).	393.1	E	
I-467		(400 MHz, DMSO-d6): 8.04-8.10 (m, 1H), 7.20-7.36 (m, 5H), 5.36-5.54 (m, 1H), 4.49-4.59 (m, 1H), 4.36-4.40 (m, 1H), 3.69-3.83 (m, 2H), 2.91-2.97 (m, 1H), 2.36-2.41 (m, 2H), 1.94-1.97 (m, 3H), 1.65-1.76 (m, 2H), 1.06-1.60 (m, 11H).	359.1	E	
I-468		(400 MHz, DMSO-d6) 8.47 (s, 1H), 8.03 (d, J = 8.6 Hz, 1H), 7.70 - 7.50 (m, 4H), 7.42 (dd, J = 8.5, 2.3 Hz, 1H), 7.08 (td, J = 7.6, 1.1 Hz, 1H), 6.81 (t, J = 6.0 Hz, 1H), 3.37 (d, J = 6.0 Hz, 2H) 1.28 (s, 6H).	362	E	
I-469		(Chloroform-d, 400 MHz) 7.63 (2H, d, J=8.1 Hz), 7.41 (2H, dd, J=8.3, 3.2 Hz), 6.04 (1H, t, J=7.1 Hz), 4.80-4.70 (1H, m), 4.60 (1H, t, J=14.2 Hz), 3.78 (1H, t, J=13.6 Hz), 3.11-2.97 (1H, m), 2.60-2.46 (1H, m), 2.22 (1H, h, J=8.5 Hz), 2.15-2.05 (6H, m), 1.91-1.76 (2H, m), 1.71 (2H, d, J=18.0 Hz), 1.55 (3H, dd, J=19.3, 9.6 Hz), 1.42 (2H, hept, J=8.0, 7.2 Hz), 1.17-1.01 (3H, m)	368.15	E	
I-470		(400 MHz, DMSO-d6) 12.58 (s, 1H), 7.73 (s, 1H), 7.65 (d, J = 2.2 Hz, 1H), 7.55 (d, J = 8.5 Hz, 1H), 7.43 (dd, J = 8.5, 2.3 Hz, 1H), 7.22 (d, J = 8.9 Hz, 1H), 6.87 (dd, J = 8.9, 2.1 Hz, 1H), 6.68 (d, J = 2.1 Hz, 1H), 4.98 (t, J = 6.0 Hz, 1H), 3.22 (d, J = 6.0 Hz, 2H), 1.37 (s, 6H).	334.15	E	

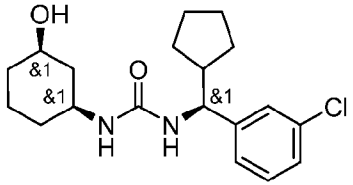
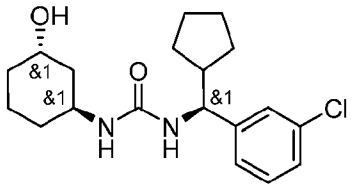
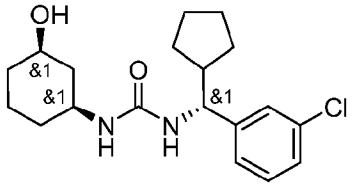
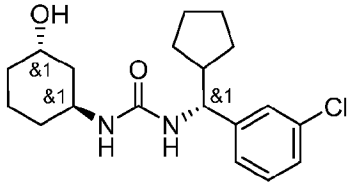
I-471		(400 MHz, DMSO-d6) 13.25 (s, 1H), 8.31-8.21 (m, 2H), 8.19 (s, 1H), 7.76 (dd, J = 8.7, 1.5 Hz, 1H), 7.63 (d, J = 2.3 Hz, 1H), 7.55 (d, J = 8.5 Hz, 2H), 7.41 (dd, J = 8.5, 2.3 Hz, 1H), 3.49 (d, J = 6.2 Hz, 2H), 1.33 (s, 6H).	362	E	
I-472		(400 MHz, DMSO-d6) 776 (m, 1H), 7.34-7.16 (m, 4H), 6.50-6.41 (m, 1H), 5.99-5.89 (m, 1H), 4.45-4.34 (m, 1H), 3.90-3.79 (m, 1H), 2.58-2.54 (m, 3H), 2.16-1.89 (m, 2H), 1.72-1.23 (m, 13H), 1.16-1.03 (m, 1H).	378.1	E	
I-473		(400 MHz, DMSO-d6) 776 (m, 1H), 7.34-7.16 (m, 4H), 6.50-6.41 (m, 1H), 5.99-5.89 (m, 1H), 4.45-4.34 (m, 1H), 3.90-3.79 (m, 1H), 2.58-2.54 (m, 3H), 2.16-1.89 (m, 2H), 1.72-1.23 (m, 13H), 1.16-1.03 (m, 1H).	378.1	E	
I-474		(400 MHz, DMSO-d6) 776 (m, 1H), 7.34-7.16 (m, 4H), 6.50-6.41 (m, 1H), 5.99-5.89 (m, 1H), 4.45-4.34 (m, 1H), 3.90-3.79 (m, 1H), 2.58-2.54 (m, 3H), 2.16-1.89 (m, 2H), 1.72-1.23 (m, 13H), 1.16-1.03 (m, 1H).	378.1	E	
I-475			318.24	E	

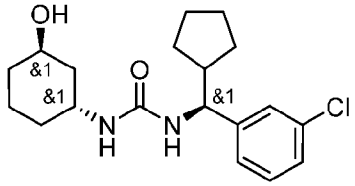
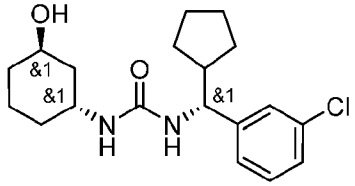
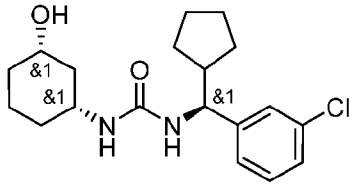
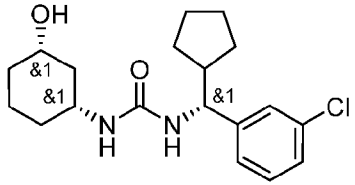
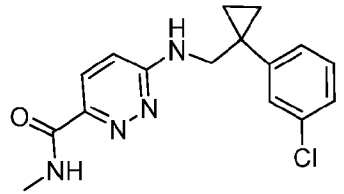
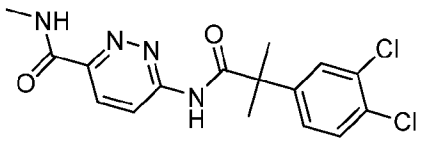
I-476			274.33	E	
I-477			318.24	E	
I-478			368.25	E	
I-479		(400 MHz, DMSO-d6) 8.24 (s, 1H),7.958 (s, 2H), 7.60 (s, 1H), 7.36 (m, 2H), 5.12 (m, 2H), 4.25 (m, 1H), 3.69 (s, 1H), 2.93 (s, 1H), 2.07-1.88 (m, 8H), 1.78-1.38 (m, 8H), 1.28-0.79 (m, 3H).	399.1	D	
I-480		(400 MHz, METHANOL-d4) ppm 7.16 - 7.21 (m, 2 H), 7.08 - 7.14 (m, 2 H), 4.30 - 4.38 (m, 1 H), 3.66 - 3.76 (m, 1 H), 3.49 - 3.57 (m, 1 H), 1.92 - 2.14 (m, 5 II), 1.66 - 1.78 (m, 1 II), 1.38 - 1.64 (m, 9 H), 1.16 - 1.35 (m, 7 H), 1.02 - 1.13 (m, 1 H).	406.2	D	

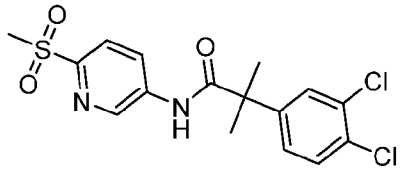
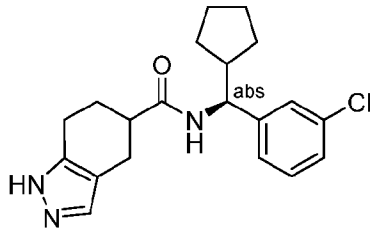
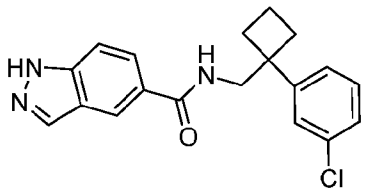
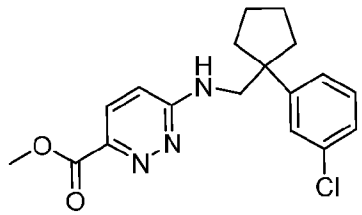
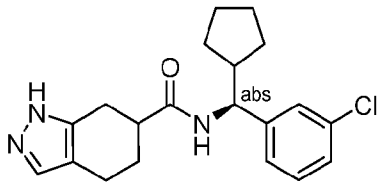
I-481		(400 MHz, METHANOL-d4) ppm 7.28 - 7.33 (m, 2 H), 7.19 - 7.26 (m, 2 H), 4.45 (d, J=9.2 Hz, 1 H), 3.77 - 3.91 (m, 1 H), 3.63 -3 .70 (m, 1 H) 2.10 - 2.26 (m, 2 H), 2.07 (s, 3 H), 1.78 - 1.89 (m, 1 H), 1.51 - 1.71 (m, 9 H), 1.27 - 1.50 (m, 7 II), 1.14 - 1.24 (m, 1 II).	406.1	E	
I-482		(400 MHz, METHANOL-d4) ppm 7.16 - 7.21 (m, 2 H), 7.08 - 7.14 (m, 2 H), 4.33 (d, J=9.2 Hz, 1 H), 3.66 - 3.77 (m, 1 H), 3.51 - 3.58 (m, 1 H), 1.99 - 2.21 (m, 2 H), 1.95 (s, 3 H), 1.67 - 1.76 (m, 1 H), 1.39 - 1.62 (m, 9 H), 1.25 - 1.34 (m, 6 H), 1.19 (s, 1 H), 1.03 - 1.14 (m, 1 H).	406.2	E	
I-483		(400 MHz, METHANOL-d4) ppm 7.27 - 7.34 (m, 2 H), 7.19 - 7.26 (m, 2 H), 4.45 (d, J=9.2 Hz, 1 H), 3.78 - 3.88 (m, 1 H), 3.61 - 3.68 (m, 1 H), 2.14 - 2.25 (m, 1 H), 2.06 (s, 3 H), 1.79 - 1.88 (m, 1 H), 1.60 - 1.77 (m, 5 H), 1.56 (s, 5 H), 1.29 - 1.47 (m, 7 H), 1.13 - 1.25 (m, 1 H).	406.1	E	
I-484		(400 MIIz, DMSO-d6) 7.35-7.15(m, 4II), 6.40 (d, J = 8.0 Hz, 1H), 5.87 (d, J = 8.0 Hz, 1H), 4.61-4.44 (m, 2H), 4.16-3.99 (m, 2H), 3.72-3.45 (m, 2H), 3.13-3.01 (m, 1H), 2.77-2.63 (m, 1H), 2.19-2.05 (m, 1H), 1.97 (d, J = 4.0 Hz, 3H), 1.89 - 1.05 (m, 10H).	394.1	E	

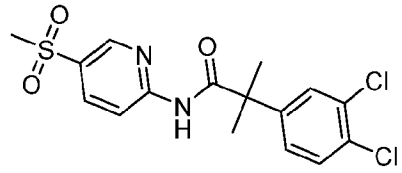
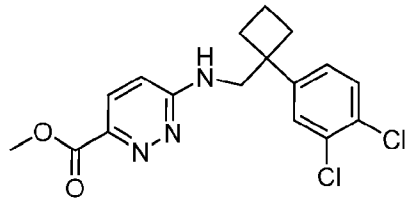
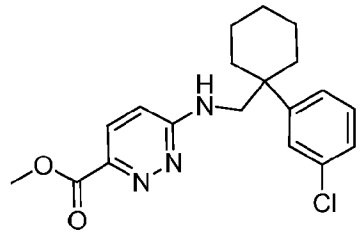
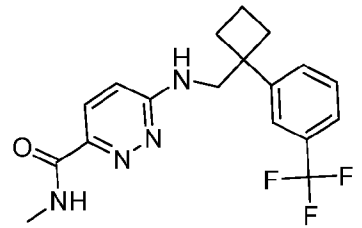
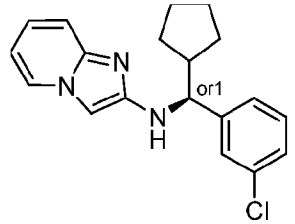
I-485		(400 MHz, DMSO-d6) 7.35-7.18(m, 4H), 6.37 (d, J = 8.0 Hz, 1H), 5.82 (d, J = 8.0 Hz, 1H), 4.49-4.36 (m, 2H), 4.11 (s, 2H), 3.75-3.60 (m, 1H), 3.56-3.49 (m, 1H), 3.15-3.00 (m, 1H), 2.79-2.63 (m, 1H), 2.43-2.26 (m, 1H), 1.97 (s, 3H), 1.79 - 1.06 (m, 10H).	394.1	E	
I-486		(400 MHz, DMSO-d6) 7.36-7.14(m, 4H), 6.36 (d, J = 8.0 Hz, 1H), 5.83 (d, J = 8.0 Hz, 1H), 4.56-4.43 (m, 2H), 4.16-3.92 (m, 2H), 3.75-3.61 (m, 1H), 3.57-3.53 (m, 1H), 3.12-3.02 (m, 1H), 2.77-2.63 (m, 1H), 2.17-2.05 (m, 1H), 1.97 (d, J = 4.0 Hz, 3H), 1.80 - 1.46 (m, 7H), 1.27-1.01 (m, 3H).	394.1	E	
I-487		(400 MHz, Methanol-d6): 7.34-7.19 (m, 4H), 6.44-6.42 (m, 1H), 5.93-5.91 (m, 1H), 4.49-4.43 (m, 1H), 4.13-3.62 (m, 2H), 3.47-3.37 (m, 2H), 2.14-2.06 (m, 1H), 1.97 (s, 3H), 1.80-1.44 (m, 9H), 1.39-1.18 (m, 3H), 1.16-1.11 (m, 3H).	392.1	E	
I-488		(400 MHz, DMSO-d6) 9.18 (s, 1H), 8.24 (s, 1H), 7.98 - 7.92 (m, 1H), 7.68 - 7.56 (m, 3H), 7.42 (dd, J = 8.5, 2.3 Hz, 1H), 7.23 (d, J = 8.4 Hz, 1H), 6.89 (ddd, J = 7.3, 5.0, 1.0 Hz, 1H), 3.42 (d, J = 5.9 Hz, 2H), 1.30 (s, 6H).	338	E	
I-489		(400 MHz, DMSO-d6) 7.78 (d, J = 8.9 Hz, 1H), 7.68 (d, J = 2.2 Hz, 1H), 7.61 - 7.51 (m, 2H), 7.51 - 7.40 (m, 3H), 7.12 (ddd, J = 8.0, 6.6, 1.6 Hz, 1H), 6.84 - 6.72 (m, 2H), 3.71 (d, J = 5.8 Hz, 2H), 1.36 (s, 6H).	345	D	

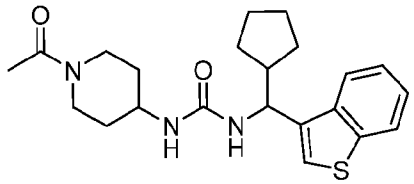
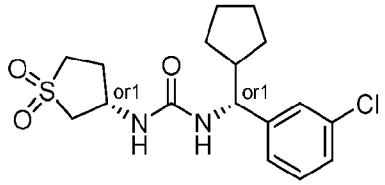
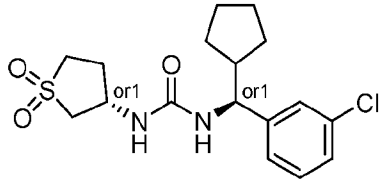
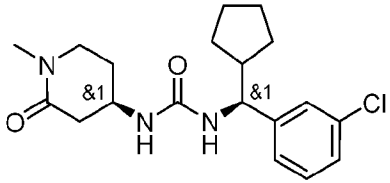
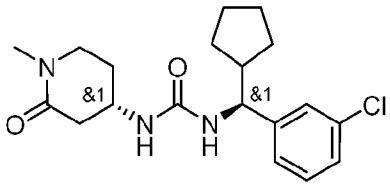
I-490		(400 MHz, DMSO-d6) 10.19 (s, 1H), 7.65 (d, J = 2.3 Hz, 1H), 7.57 (d, J = 8.5 Hz, 3H), 7.43 (dd, J = 8.5, 2.3 Hz, 1H), 7.27 (t, J = 7.7 Hz, 2H), 7.12 - 7.04 (m, 1H), 6.98 (s, 1H), 5.46 (s, 1H), 3.45 (s, 2H), 1.32 (s, 6H).	360.05	E	
I-491		(400 MHz, DMSO-d6) 7.85 (dd, J = 5.0, 1.4 Hz, 1H), 7.66 (d, J = 2.2 Hz, 1H), 7.53 (d, J = 8.5 Hz, 1H), 7.43 (ddd, J = 8.5, 5.1, 1.9 Hz, 2H), 6.94 (dd, J = 7.7, 5.0 Hz, 1H), 6.79 (t, J = 6.3 Hz, 1H), 3.65 (d, J = 6.3 Hz, 2H), 3.53 (s, 3H), 1.34 (s, 6H).	349.05	E	
I-492		(400 MHz, DMSO-d6) 10.90 (s, 1H), 8.77 (dd, J = 2.2, 1.1 Hz, 1H), 8.32 - 8.24 (m, 2H), 7.91 (s, 1H), 7.75 (d, J = 7.0 Hz, 1H), 7.66 - 7.56 (m, 2H), 3.24 (s, 3H), 2.92 (dt, J = 12.2, 8.3 Hz, 2H), 2.56 (d, J = 8.8 Hz, 1H), 1.93 - 1.78 (m, 2H).	399.05	E	
I-493		(400 MHz, DMSO-d6)7.66 (d, J = 2.3 Hz, 1H), 7.54 (d, J = 8.5 Hz, 1H), 7.50-7.38 (m, 2H), 7.26 (dd, J = 7.8, 1.1 Hz, 1H), 7.07 (t, J = 7.8 Hz, 1H), 6.83 (t, J = 6.3 Hz, 1H), 3.73 (s, 3H), 3.64 (d, J = 6.2 Hz, 2H), 1.33 (s, 6H).	373.15	D	
I-494		(400 MHz, d6-DMSO) 12.96 (br s, 1H), 8.57 (d, J = 8.7 Hz, 1H), 7.98 (s, 1H), 7.55 (s, 1H), 7.43 (d, J = 8.4 Hz, 1H), 7.37 (dd, J = 1.6, 1.6 Hz, 1H), 7.34 - 7.20 (m, 4H), 4.55 (app t, J = 9.1 Hz, 1H), 3.54 (d, J = 14.0 Hz, 1H), 3.48 (d, J = 13.9 Hz, 1H), 2.25 - 2.12 (m, 1H), 1.75 - 1.66 (m, 1H), 1.58 - 1.37 (m, 4H), 1.30 - 1.21 (m, 2H), 1.13 - 1.02 (m, 1H).	368.4	D	

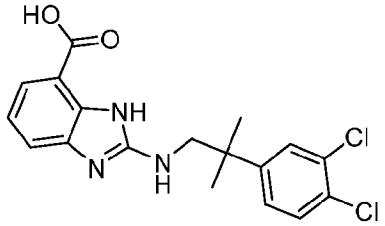
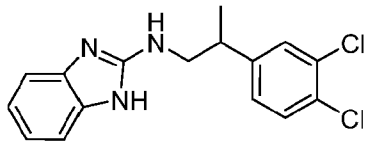
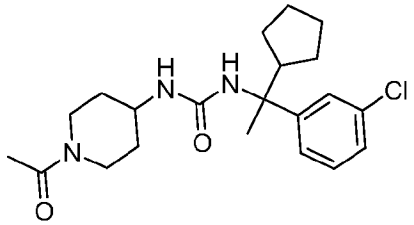
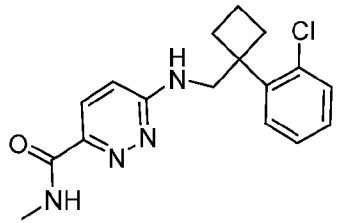
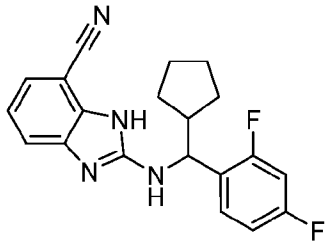
I-495		(400 MHz, METHANOL-d4) ppm 7.11-7.41 (m, 4H), 4.46 (d, J = 9.2 Hz, 1H), 3.85-4.01 (m, 2H), 2.12-2.29 (m, 1H), 1.20-1.82 (m, 16H).	351.1	E	
I-496		(400 MHz, METHANOL-d4) ppm 7.19-7.34 (m, 4H), 4.46 (d, J = 9.2 Hz, 1H), 3.86-3.97 (m, 2H), 2.14-2.24 (m, 1H), 1.51-1.83 (m, 12H), 1.30-1.45 (m, 3H), 1.16-1.25 (m, 1H), 1.16-1.25 (m, 1H).	351.1	E	
I-497		(400 MHz, METHANOL-d4) ppm 7.13-7.48 (m, 4H), 4.47 (s, 1H), 3.92 (s, 2H), 2.20 (s, 1H), 1.22-1.94 (m, 16H).	351.1	E	
I-499		(400 MHz, METHANOL-d4) ppm 7.12-7.14 (m, 1H), 6.97-7.35 (m, 3H), 4.35 (s, 1H), 3.81 (s, 2H), 2.07 (d, J = 6.8 Hz, 1H), 1.07-1.69 (m, 16H).	351.1	E	

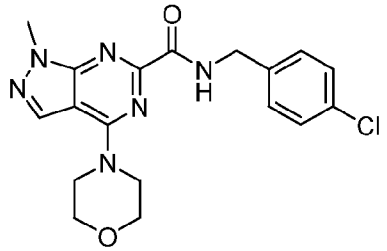
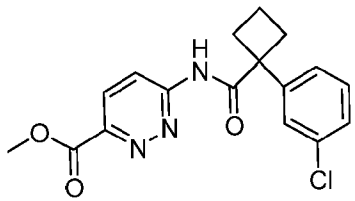
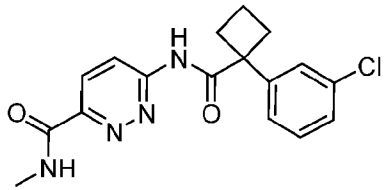
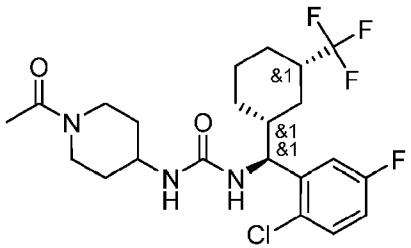
I-500		(400 MHz, METHANOL-d4) ppm 7.09-7.58 (m, 4H), 4.45 (d, J=8.8 Hz, 1H), 3.48-3.67 (m, 2H), 2.03-2.26 (m, 1H), 1.06-1.86 (m, 16H).	351.1	E	
I-501		(400 MHz, METHANOL-d4) ppm 7.14-7.50 (m, 4H), 4.47 (s, 1H), 3.59 (s, 2H), 0.91-2.31 (m, 17H).	351.1	E	
I-502		(400 MHz, METHANOL-d4) ppm 7.06-7.61 (m, 4H), 7.06-7.61 (m, 1H), 4.45 (d, J=8.0 Hz, 2H), 0.93-2.21 (m, 17H).	351.1	E	
I-503		(400 MHz, METHANOL-d4) ppm 7.07-7.22 (m, 4H), 4.32 (d, J = 9.2 Hz, 1H), 3.29-3.52 (m, 2H), 1.93-2.10 (m, 2H), 1.39-1.78 (m, 7H), 1.16-1.35 (m, 4H), 0.88-1.11 (m, 4H).	351.1	E	
I-504			317.29	E	
I-505			367.3	E	

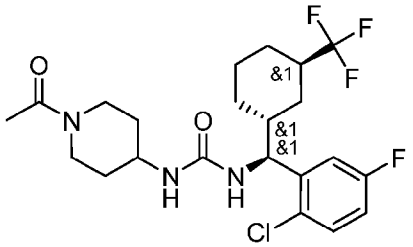
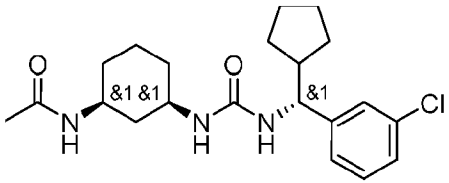
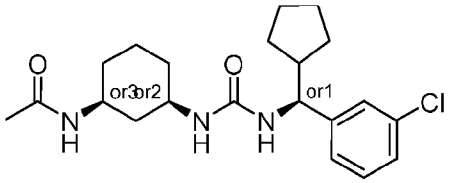
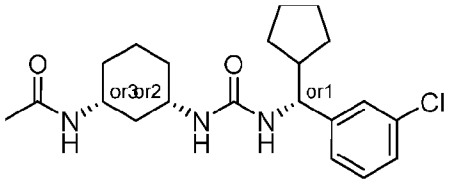
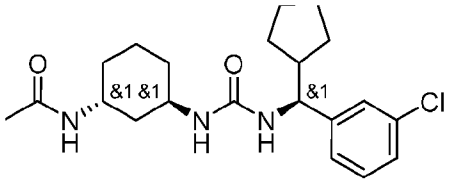
I-506			387.21	E	
I-507				E	
I-508				E	
I-509			346.29	D	
I-510				E	

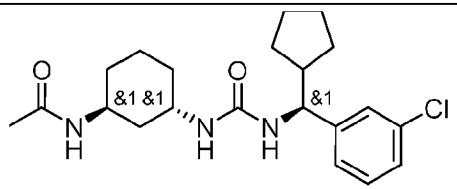
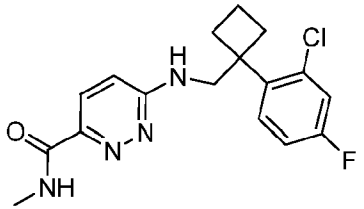
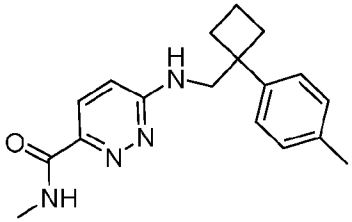
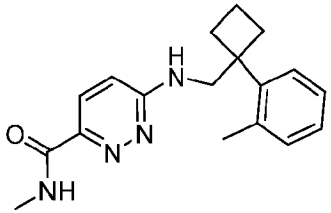
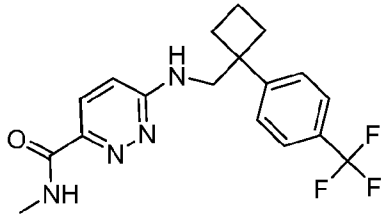
I-511				E	
I-512			366.35	E	
I-513			360.34	E	
I-514		(400 MHz, DMSO-d6) 8.65 (d, J = 4.8 Hz, 1H), 7.61 (d, J = 9.2 Hz, 1H), 7.41-7.53 (m, 4H), 7.30 (s, 1H), 6.77 (d, J = 8.0 Hz, 1H), 3.89 (d, J = 6.0 Hz, 2H), 2.77 (d, J = 4.8 Hz, 3H), 2.34-2.44 (m, 2H), 2.23-2.33 (m, 2H), 2.06-2.19 (m, 1H), 1.75-1.89 (m, 1H).	365.1	E	
I-515		(400 MIIz, METIIANOL-d4) ppm 8.40 - 8.64 (m, 1 H), 8.16-8.21 (m, 1 H), 7.13 - 7.74 (m, 7 H), 4.11 (d, J=9.6 Hz, 1 H), 2.26 - 2.58 (m, 1 H), 1.94 - 2.16 (m, 1 H), 1.39 - 1.76 (m, 6 H), 1.14 - 1.35 (m, 1 H).	326.1	E	

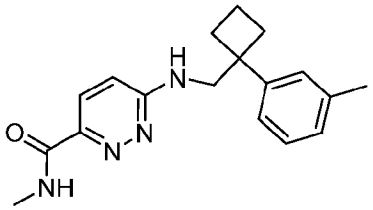
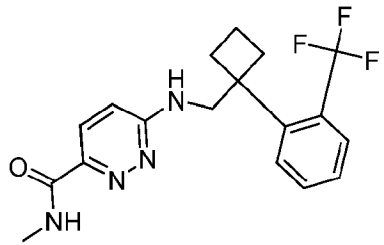
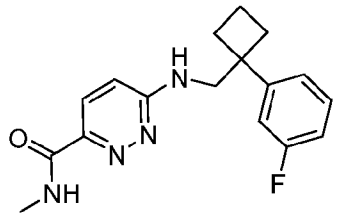
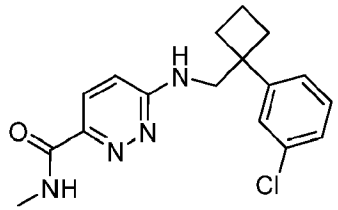
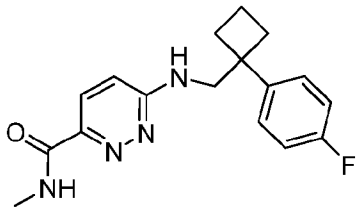
I-516		(400 MHz, DMSO-d6) 7.99-7.88 (m, 2H),7.51 (s, 1H), 7.42-7.29 (m, 2H), 6.22 (d, J = 8.0 Hz, 1H), 5.76(d, J = 8.0 Hz, 1H), 5.01-4.89 (m, 1H), 4.16-4.01 (m, 1H), 3.71-3.61 (m, 2H), 3.15-3.01 (m, 1H), 2.79-2.64 (m, 1H), 1.96 (d, J = 4.0 Hz, 3H), 1.80-1.42 (m, 10H), 1.23-1.05 (m, 3H).	400.1	E	
I-517		(400 MHz, DMSO-d6) 7.38-7.17 (m, 4H), 6.66 (d, J = 8.0 Hz, 1H), 6.26 (d, J = 8.0 Hz, 1H), 4.49-4.40 (m, 1H), 4.36-4.24 (m, 1H), 4.06 (s, 1H), 3.22-3.17 (m, 1H), 3.15-3.09 (m, 1H), 2.88-2.78 (m, 1H), 2.41-2.26 (m, 1H), 2.20-2.08 (m, 1H), 2.05-1.93 (m, 1H), 1.73-1.41 (m, 5H), 1.35-1.25 (m, 2H), 1.17-1.05 (m, 1H).	371	D	
I-518		(400 MHz, DMSO-d6) 7.38-7.17 (m, 4H), 6.66 (d, J = 8.0 Hz, 1H), 6.28 (d, J = 8.0 Hz, 1H), 4.46-4.36 (m, 1H), 4.33-4.20 (m, 1H), 3.24-3.15 (m, 1H), 3.13-3.02 (m, 1H), 2.91-2.81 (m, 1H), 2.36-2.25 (m, 1H), 2.19-2.05 (m, 1H), 2.03-1.88 (m, 1H), 1.71-1.37 (m, 6H), 1.34-1.23 (m, 2H), 1.16-0.99 (m, 1H).	371	E	
I-519		(400 MHz, DMSO-d6) 7.38-7.14 (m, 4H), 6.42 (d, J = 8.0 Hz, 1H), 5.96 (d, J = 8.0 Hz, 1H), 4.50-4.35 (m, 1H), 3.84-3.70 (m, 1H), 3.28-3.14 (m, 2H), 2.79 (s, 3H), 2.48-2.38 (m, 1H), 2.18-1.99 (m, 2H), 1.90-1.80 (m, 1H), 1.66-1.40 (m, 6H), 1.36-1.22 (m, 2H), 1.18-1.06 (m, 1H).	364	D	
I-520		(400 MHz, DMSO-d6) 7.37-7.17 (m, 4H), 6.41 (d, J = 8.0 Hz, 1H), 5.93 (d, J = 8.0 Hz, 1H), 4.48-4.38 (m, 1H), 3.81-3.70 (m, 1H), 3.26-3.16 (m, 2H), 2.79 (s, 3H), 2.45-2.35 (m, 1H), 2.18-1.97 (m, 2H), 1.96-1.84 (m, 1H), 1.70-1.42 (m, 6H), 1.36-1.22 (m, 2H), 1.16-1.05 (m, 1H).	364	E	

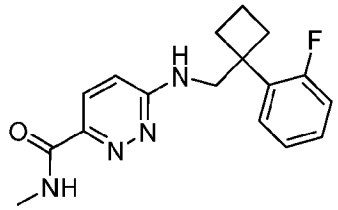
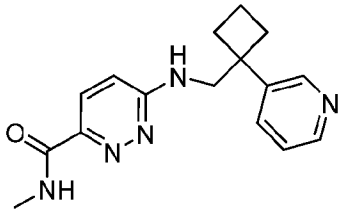
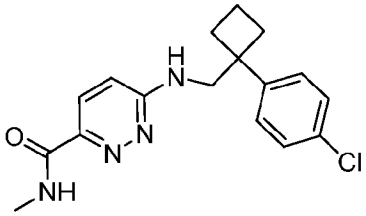
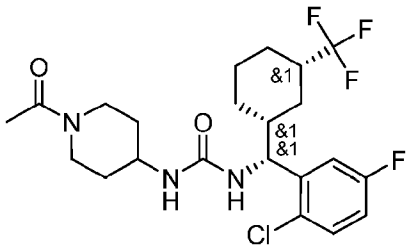
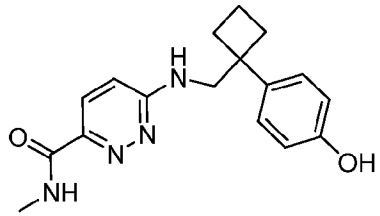
I-521		(400 MHz, DMSO-d6) 10.65 (s, 1H), 7.67 (d, J = 2.2 Hz, 1H), 7.59 (d, J = 8.5 Hz, 1H), 7.45 (dd, J = 8.5, 2.3 Hz, 1H), 7.36 (d, J = 7.7 Hz, 1H), 7.29 (d, J = 7.7 Hz, 1H), 6.93 (t, J = 7.8 Hz, 1H), 6.31 (s, 1H), 3.62 (d, J = 6.0 Hz, 2H), 1.34 (s, 6H).	378.1	D	
I-522		(400 MHz, DMSO-d6) 10.59 (s, 1H), 7.70 - 7.43 (m, 2H), 7.27 (dd, J = 8.3, 2.0 Hz, 1H), 7.11 (d, J = 8.0 Hz, 2H), 6.85 (d, J = 11.7 Hz, 2H), 6.55 (t, J = 5.9 Hz, 1H), 3.45 (h, J = 6.9 Hz, 2H), 3.16 (p, J = 7.1 Hz, 1H), 1.24 (d, J = 7.0 Hz, 3H).	320.05	E	
I-523			414.47	E	
I-524		(400 MHz, Methanol-d6): 8.68-8.66 (m, 1H), 8.47 (br, 1H), 7.84-7.81 (m, 1H), 7.36-7.11 (m, 5H), 4.25-4.06 (m, 2H), 2.78-2.77 (m, 3H), 2.45-2.33 (m, 4H), 2.23-2.08 (m, 1H), 1.90-1.79 (m, 1H).	331	D	
I-525		(400 MHz, dmso) 11.15 (br. s, 1H), 7.92 (d, J = 9.1 Hz, 1H), 7.64 - 7.53 (m, 1H), 7.35 (d, J = 7.7 Hz, 1H), 7.24 (d, J = 7.8 Hz, 1H), 7.22 - 7.15 (m, 1H), 7.11 - 7.05 (m, 1H), 6.91 (t, J = 7.8 Hz, 1H), 4.96 (t, J = 9.3 Hz, 1H), 2.41 - 2.30 (m, 1H), 1.86 - 1.75 (m, 1H), 1.71 - 1.33 (m, 6H), 1.24 - 1.13 (m, 1H). Tautomers peaks from the benzimidazole observed.	353.3	D	

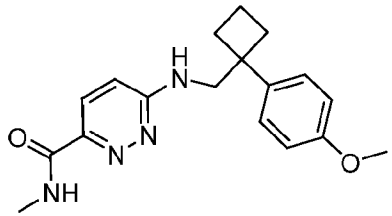
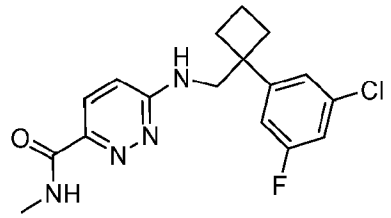
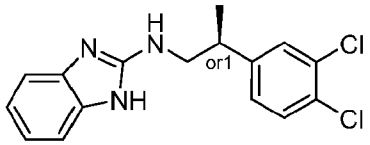
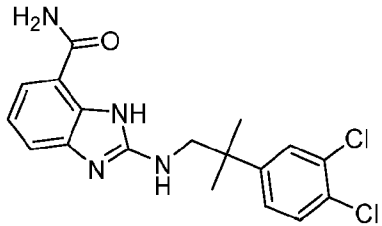
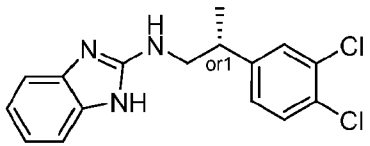
I-526				E	
I-527			346.29	E	
I-528			345.29	E	
I-529		(400 MHz, Methanol-d6): 7.48-7.45 (m, 1H), 7.32-7.29 (m, 1H), 7.18-7.13 (m, 1H), 6.40-6.37 (m, 1H), 5.91-5.87 (m, 1H), 5.25-5.21 (m, 1H), 4.11-4.08 (m, 1H), 3.68-3.54 (m, 2H), 3.16-3.06 (m, 1H), 2.76-2.60 (m, 2H), 2.25-2.14 (m, 1H), 1.98-1.97 (m, 3H), 1.89-1.00 (m, 13H).	478.1	E	

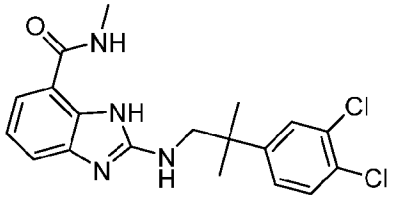
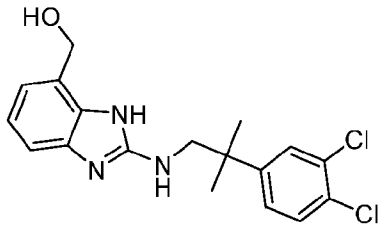
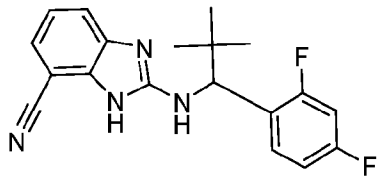
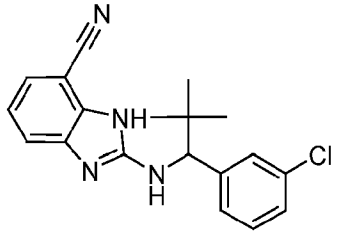
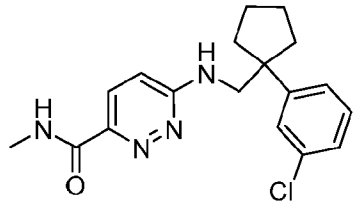
I-530		(400 MHz, Methanol-d6): 7.48-7.45 (m, 1H), 7.32-7.13 (m, 2H), 6.54-6.37 (m, 1H), 5.89-5.87 (m, 1H), 5.25-4.93 (m, 1H), 4.25-4.10 (m, 1H), 3.67-3.51 (m, 2H), 3.12-3.03 (m, 1H), 2.76-2.67 (m, 1H), 2.25-2.14 (m, 1H), 1.98-1.97 (m, 3H), 1.86-1.63 (m, 6H), 1.37-1.00 (m, 7H).	478.1	E	
I-531		(400 MHz, DMSO-d6) 7.77-7.61 (m, 1H), 7.37-7.15 (m, 4H), 6.31 (d, J = 8.0 Hz, 1H), 5.69 (d, J = 8.0 Hz, 1H), 4.49-4.33 (m, 1H), 3.54-3.42 (m, 2H), 2.18-2.03 (m, 1H), 1.96-0.80 (m, 19H).	392.1	E	
I-532		(400 MHz, DMSO-d6) 7.70 (d, J = 8.0 Hz, 1 H), 7.38-7.11 (m, 4H), 6.29 (d, J = 8.0 Hz, 1H), 5.68 (d, J = 8.0 Hz, 1H), 4.50-4.34 (m, 1H), 3.51-3.39 (m, 2H), 2.17-2.04 (m, 1H), 1.96-1.87 (m, 1H), 1.76 (s, 3H), 1.70-1.41 (m, 8H), 1.31-1.14 (m, 4H), 0.99-0.84 (m, 3H).	392.1	E	
I-533		(400 MHz, DMSO-d6) 7.68 (d, J = 8.0 Hz, 1 H), 7.34-7.17 (m, 4H), 6.30 (d, J = 8.0 Hz, 1H), 5.69 (d, J = 8.0 Hz, 1H), 4.46-4.36 (m, 1H), 3.50-3.41 (m, 2H), 2.16-2.03 (m, 1H), 1.89-1.80 (m, 1H), 1.77-1.43 (m, 12H), 1.35-1.19 (m, 4H), 0.97-0.84 (m, 2H).	392.1	E	
I-534		(400 MHz, DMSO-d6) 7.80-7.64 (m, 1H), 7.40-7.11 (m, 4H), 6.37 (d, J = 8.0 Hz, 1H), 5.96 (d, J = 8.0 Hz, 1H), 4.54-4.37 (m, 1H), 3.94-3.65 (m, 2H), 2.18-1.99 (m, 1H), 1.84-1.73 (m, 3H), 1.64-1.13 (m, 16H), 1.67-1.10 (m, 1H).	392.1	E	

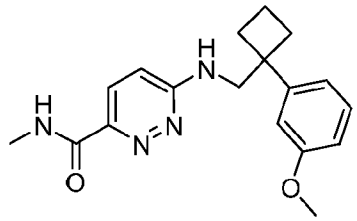
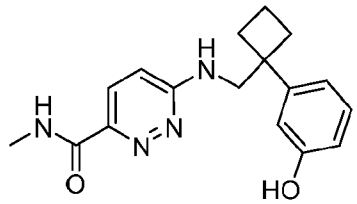
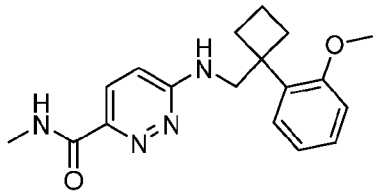
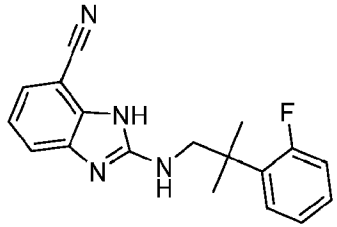
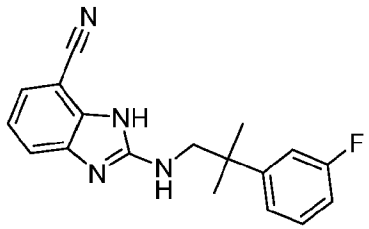
I-535		(400 MHz, DMSO-d6) 7.79-7.64 (m, 1H), 7.36-7.15 (m, 4H), 6.36 (d, J = 8.0 Hz, 1H), 5.94 (d, J = 8.0 Hz, 1H), 4.49-4.40 (m, 1H), 3.89-3.69 (m, 2H), 2.17-2.04 (m, 1H), 1.78 (d, J = 8.0Hz, 3H), 1.63-1.13 (m, 16H).	392.1	E	
I-536		(400 MHz, DMSO-d6): 8.96 (br, 1H), 8.68 (d, J = 4.0 Hz, 1H), 7.91 (d, J = 9.6 Hz, 1H), 7.54-7.44 (m, 1H), 7.31-7.22 (m, 2H), 7.16-7.07 (m, 1H), 4.12-3.99 (m, 2H), 2.77 (d, J = 4.4 Hz, 3H), 2.46-2.33 (m, 4H), 2.25-2.15 (m, 1H), 1.85-1.73 (m, 1H).	348.9	E	
I-537		(400 MHz, METHANOL-d4) 7.55-8.17 (m, 2H), 7.03-7.18 (m, 4H), 3.92 (s, 2H), 2.92 (s, 3H), 2.36-2.53 (m, 4H), 2.24 (s, 4H), 1.91-2.07 (m, 1H)	311.1	E	
I-538		(400 MHz, METHANOL-d4) 7.59-8.19 (m, 2H), 6.90-7.13 (m, 4H), 4.05 (s,2H), 2.92 (s, 3H), 2.43-2.65 (m, 4H), 2.25-2.36 (m, 4H), 1.92-2.06 (m, 1H).	311.1	E	
I-539		(400 MHz, DMSO-d6) 8.69 (d, J = 4.8 Hz, 1H), 7.64 (d, J = 8.8 Hz, 3H), 7.39 (d, J = 8.0 Hz, 2H), 7.24 (s, 1H), 6.81 (d, J = 9.2 Hz, 1H), 3.90 (d, J=6.0 Hz, 2H), 2.78 (d, J = 4.8 Hz, 3H), 2.24-2.41 (m, 4H), 2.08-2.19 (m, 1H), 1.77-1.88 (m, 1H).	365.1	E	

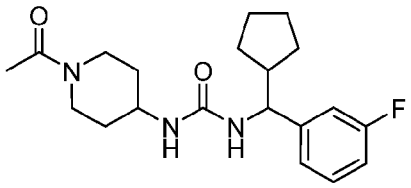
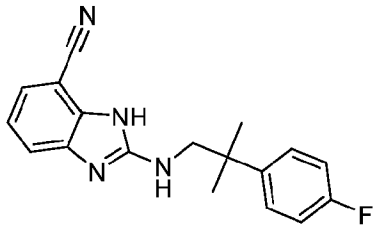
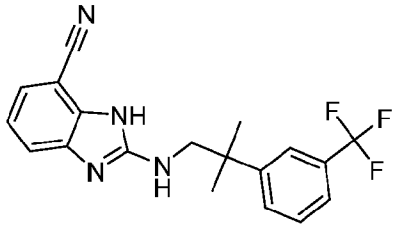
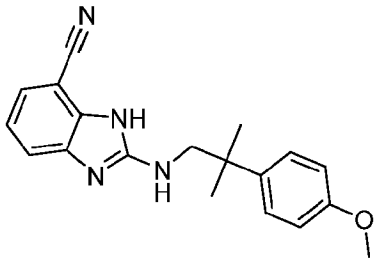
I-540		(400 MHz, METHANOL-d4) 8.10 (d, J = 9.2 Hz, 1H), 7.83 (s, 1H), 7.63 (d, J = 9.6 Hz, 1H), 6.94-7.19 (m, 4H), 3.93 (s, 2H), 2.92 (s, 3H), 2.37-2.55 (m, 4H), 2.19-2.32 (m, 4H), 1.92-2.06 (m, 1H).	311.1	E	
I-541		(400 MHz, DMSO-d6) 8.68 (d, J = 4.8 Hz, 1H), 7.56-7.65 (m, 2H), 7.42-7.52 (m, 1H), 7.27-7.39 (m, 2H), 7.15 (d, J = 8.0 Hz, 1H), 6.74 (d, J = 8.8 Hz, 1H), 4.04 (d, J = 6.0 Hz, 2H), 2.75 (d, J = 4.8 Hz, 3H), 2.31-2.49 (m, 4H), 2.04-2.20 (m, 1H), 1.68-1.85 (m, 1H).	365.1	E	
I-542		(400 MHz, DMSO-d6) 8.71-8.69 (m, 1H), 7.65-7.62 (m, 1H), 7.35-7.29 (m, 1H), 7.25-7.21 (m, 1H), 7.05-6.94 (m, 3H), 6.85-6.81 (m, 1H), 3.88-3.85 (m, 2H), 2.79-2.77 (m, 3H), 2.35-2.22 (m, 4H), 2.15-2.04 (m, 1H), 1.85-1.77 (m, 1H).	314.9	E	
I-543		(400 MHz, DMSO-d6) ppm 8.65 (d, J=4.4 Hz, 1H), 7.85 (d, J=9.6 Hz, 1H), 7.27 - 7.36 (m, 2H), 7.17 - 7.26 (m, 3H), 3.90 (d, J=5.2 Hz, 2H), 2.79 (d, J=4.8 Hz, 3H), 2.26 - 2.39 (m, 4H), 2.06 - 2.20 (m, 1H), 1.77 - 1.88 (m, 1H).	331	E	
I-544		(400 MHz,DMSO-d6): 8.75~8.65 (m, 1H), 7.67~7.60 (m, 1H), 7.26~7.16 (m, 3H), 7.14~7.05 (m, 2H), 6.84~6.76 (m, 1H), 3.83 (d, J = 5.6 Hz, 1H), 2.78 (d, J = 4.8 Hz, 3H), 2.36~2.20 (m, 4H), 2.13~2.04 (m, 1H), 1.85~1.75 (m, 1H), 1.89~1.78 (m, 1H).	314.9	E	

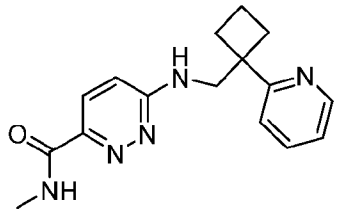
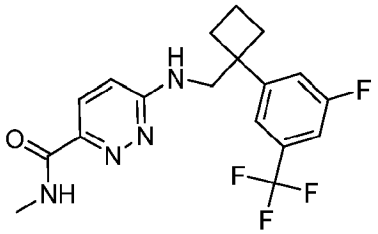
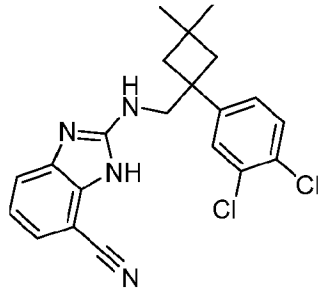
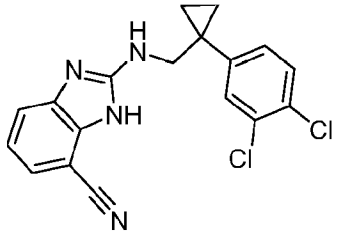
I-545		(400 MHz,DMSO-d6): 8.75~8.67 (m, 1H), 7.65~7.55 (m, 1H), 7.33~7.25 (m, 1H), 7.22~7.14 (m, 1H), 7.13~7.00 (m, 3H), 6.78 (d, J = 4.4 Hz, 1H), 4.00~3.93 (m, 2H), 2.77 (d, J = 4.8 Hz, 3H), 2.40~2.28 (m, 4H), 2.21~2.06 (m, 1H), 1.89~1.78 (m, 1H).	315	E	
I-546		(400MHz, D2O) − 8.67 (s, 1H), 8.56 (d, J−5.8 Hz, 1H), 8.47 (br d, J=8.0 Hz, 1H), 8.07 - 7.86 (m, 2H), 7.47 (d, J=9.6 Hz, 1H), 3.95 (s, 2H), 2.82 (s, 3H), 2.52 - 2.31 (m, 4H), 2.25 - 2.11 (m, 1H), 1.99 - 1.89 (m, 1H)	298.1	E	
I-547		(400 MHz, DMSO-d6) ppm 8.65 (d, J=4.4 Hz, 1H), 7.86 (d, J=9.2 Hz, 1H), 7.27 - 7.38 (m, 3H), 7.22 - 7.27 (m, 2H), 3.88 (d, J=5.2 Hz, 2H), 2.79 (d, J=4.4 Hz, 3H), 2.21 - 2.35 (m, 4H), 2.06 - 2.17 (m, 1H), 1.71 - 1.88 (m, 1H).	331	E	
I-548		(400 MHz, DMSO-d6): 7.49-7.45 (m, 1H), 7.17-7.12 (m, 2H), 6.56-6.53 (m, 1H), 5.92-5.90 (m, 1H), 5.05-4.93 (m, 1H), 4.12-4.10 (m, 1H), 3.72-3.65 (m, 2H), 3.12-3.03 (m, 1H), 2.76-2.67 (m, 1H), 2.25-2.20 (m, 1H), 1.99-1.97 (m, 3H), 1.80-1.65 (m, 6H), 1.40-0.98 (m, 8H).	478.1	E	
I-549		(400 MHz, DMSO-d6): 9.15 (s, 1H), 8.68-8.70 (m, 1H), 7.61-7.64 (m, 1H), 7.12 (s, 1H), 6.97-7.00 (m, 2H), 6.80-6.83 (m, 1H), 6.66-6.69 (m, 2H), 3.74-3.78 (m, 2H), 2.77-2.79 (m, 3H), 2.22-2.26 (m, 4H), 2.17-2.21 (m, 1H), 1.77-1.79 (m, 1H).	313.1	E	

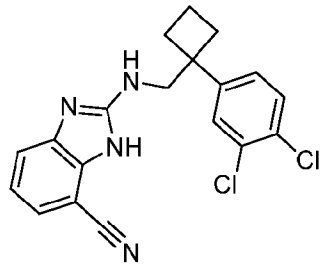
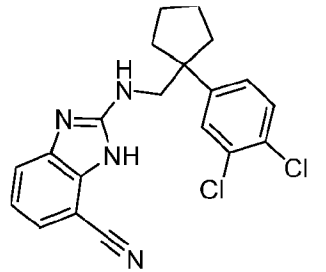
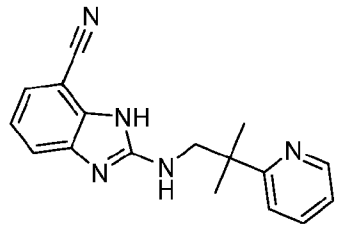
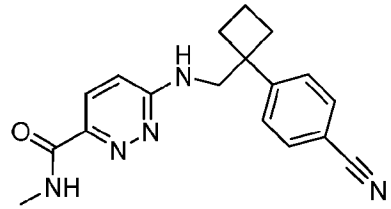
I-550		(400 MHz, DMSO-d6): 9.60-9.70 (m, 1H), 8.55-8.65 (m, 1H), 7.90-7.99 (m, 1H), 7.70-7.79 (m, 1H), 7.09-7.20 (m, 2H), 6.70-6.83 (m, 2H), 3.90 (s, 2H), 3.67 (s, 3H), 2.78-2.80 (m, 3H), 2.25-2.33 (m, 4H), 2.12-2.17 (m, 1H), 1.81-2.01 (m, 1H).	327.1	E	
I-551		(400 MHz, DMSO-d6): 8.94 (br, 1H), 8.65 (d, J = 4.4 IIz, 1II), 7.92 (d, J = 9.2 IIz, 1II), 7.48 (d, J = 8.8 Hz, 1H), 7.22-7.18 (m, 1H), 7.15-7.04 (m, 2H), 3.92 (d, J − 5.2 Hz, 2H), 2.78 (d, J − 4.8 Hz, 3H), 2.37-2.25 (m, 4H), 2.17-2.07 (m, 1H), 1.86-1.74 (m, 1H).	348.9	D	
I-552		(400 MHz, Chloroform-d) 7.30- 7.19 (m, 4H), 7.07 (dd, J = 5.9, 3.2 Hz, 2H), 6.90 (dd, J = 8.2, 2.2 Hz, 1H), 4.88 (s, 1H), 3.67 (dd, J = 13.1, 5.8 Hz, 1H), 3.38 (dd, J = 13.1, 8.9 Hz, 1H), 3.02 (dq, J = 8.8, 6.7 Hz, 1H), 1.21 (d, J = 7.0 Hz, 3H).	320.05	D	
I-553		(400 MHz, DMSO-d6) 10.84 (s, 1H), 9.21 (s, 1H), 7.66 (d, J = 2.3 Hz, 1H), 7.61 - 7.50 (m, 2H), 7.46 - 7.37 (m, 2H), 7.25 (dd, J = 7.7, 1.2 Hz, 1H), 6.97 - 6.86 (m, 2H), 3.60 (dd, J = 14.3, 6.2 Hz, 2H), 1.34 (d, J = 6.7 Hz, 6H).	377.25	D	
I-554		(400 MHz, Chloroform-d) 7.27 (d, J = 6.6 Hz, 2H), 7.27 - 7.22 (m, 2H), 7.07 (dd, J = 5.8, 3.2 Hz, 2H), 6.94 (dd, J = 8.3, 2.1 Hz, 1H), 4.79 (s, 1H), 3.71 (dd, J = 13.1, 5.8 Hz, 1H), 3.40 (dd, J = 13.0, 8.9 Hz, 1H), 3.04 (dt, J = 9.0, 6.6 Hz, 1H), 1.24 (d, J = 7.0 Hz, 3H).	320.05	D	

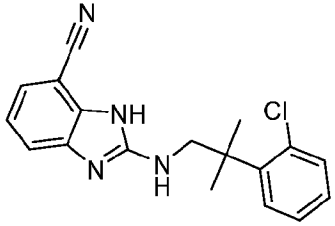
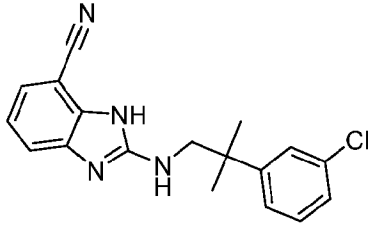
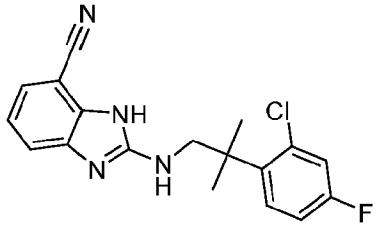
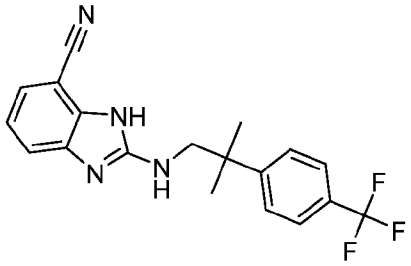
I-555		(400 MHz, DMSO-d6) 7.69 (d, J = 2.3 Hz, 1H), 7.60 (d, J = 8.3 Hz, 2H), 7.47 (dd, J = 8.5, 2.3 Hz, 1H), 7.36 (s, 2H), 3.63 (d, J = 6.2 Hz, 2H), 3.54 (dd, J = 16.9, 11.1 Hz, 1H), 2.87 (d, J = 4.1 Hz, 3H), 1.36 (s, 6H).	391.15	E	
I-556		(400 MHz, DMSO-d6) 10.47 (s, 1H), 7.67 (dd, J = 6.7, 2.2 Hz, 1H), 7.58 (t, J = 8.4 Hz, 1H), 7.44 (dd, J = 8.6, 2.3 Hz, 1H), 7.01 (dd, J = 21.9, 7.7 Hz, 1H), 6.81 (dt, J = 14.6, 7.5 Hz, 1H), 6.71 (d, J = 7.5 Hz, 1H), 6.39 (t, J = 6.2 Hz, 1H), 5.20 (t, J = 5.4 Hz, 1H), 4.73 (d, J = 5.7 Hz, 1H), 4.63 (d, J = 5.5 Hz, 1H), 3.59 (d, J = 6.2 Hz, 1H), 3.53 (d, J = 6.3 Hz, 1H), 1.33 (d, J = 1.3 Hz, 6H).	364.1	D	
I-557		(400 MHz, dmso) 11.01 (br. s, 1H), 7.86 (d, J = 10.1 Hz, 1H), 7.55 (dd, J = 15.2, 8.5 Hz, 1H), 7.39 (dd, J = 7.7, 0.8 Hz, 1H), 7.27 - 7.17 (m, 2H), 7.11 (app. td, J = 8.3, 2.2 Hz, 1H), 6.91 (t, J = 7.8 Hz, 1H), 5.09 (d, J = 10.1 Hz, 1H), 0.96 (s, J = 4.4 Hz, 9H). Partial formate salt	341.2	D	
I-558		(400 MHz, dmso) 11.19 (br. s, 1H), 8.03 (d, J = 10.3 Hz, 1H), 7.49 (d, J = 0.9 Hz, 1H), 7.41 - 7.35 (m, 3H), 7.34 - 7.28 (m, 1H), 7.24 (d, J = 7.7 Hz, 1H), 6.91 (t, J = 7.8 Hz, 1H), 4.72 (d, J = 10.2 Hz, 1H), 0.95 (s, 9H). Partial formate salt	339.2	D	D
I-559			345.34	E	

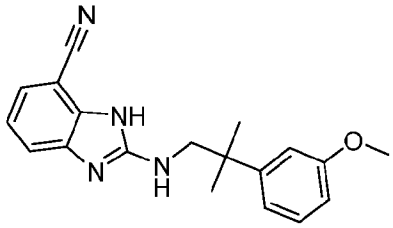
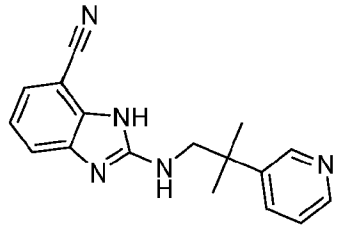
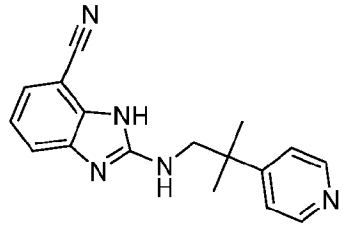
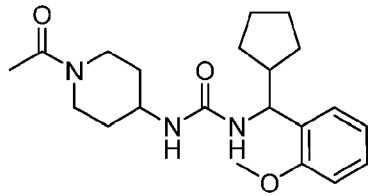
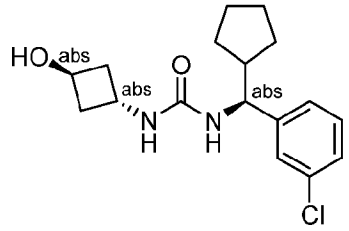
I-560		(400 MHz, DMSO-d6) 8.73-8.64 (m, 1H), 7.62 (d, J = 8.0 Hz, 1H), 7.24-7.11 (m, 2H), 6.87-6.66 (m, 4H), 3.81 (d, J = 4.0 Hz, 2H), 3.71 (s, 3H), 2.77 (d, J = 4.0 Hz, 3H), 2.36-2.19 (m, 4H), 2.14-1.99 (m, 1H), 1.84-1.72 (m, 1H).	327.1	E	
I-561		(400 MHz, DMSO-d6) 9.22 (s, 1H), 8.73-8.64 (m, 1H), 7.62 (d, J = 8.0 Hz, 1H), 7.23-7.11 (m, 1H), 7.10-7.02 (m, 1H), 6.90-6.76 (m, 1H), 6.63-6.53 (m, 3H), 3.78 (d, J = 4.0 Hz, 2H), 2.77 (d, J = 4.0 Hz, 3H), 2.31-2.16 (m, 4H), 2.12-1.97 (m, 1H), 1.84-1.71(m, 1H).	313.1	E	
I-562		(400 MHz,DMSO-d6): 8.70~8.67 (m, 1H), 7.60 (d, J = 9.6 Hz, 1H), 7.17~7.10 (m, 1H), 7.07~7.01 (m, 1H), 7.00~6.95 (m, 1H), 6.93~6.89 (m, 1H), 6.87~6.81 (m, 3H), 6.78~6.71 (m, 1H), 3.94~3.86 (m, 2H), 3.77 (s, 3H), 2.78 (d, J = 4.8 Hz, 1H), 2.36~2.20 (m, 4H), 2.15~2.01 (m, 1H), 1.81~1.70 (m, 1H).	327.1	E	
I-563		(400 MHz, DMSO-d6) 10.95 (s, 1H), 7.47 - 7.21 (m, 4H), 7.21 - 7.10 (m, 2H), 7.06 (s, 1H), 6.91 (t, J = 7.7 Hz, 1H), 3.70 (d, J = 6.2 Hz, 2H), 1.41 (s, 6H).	309.15	E	
I-564		(400 MHz, DMSO-d6) 10.96 (s, 1H), 7.43 - 7.33 (m, 2H), 7.33 - 7.22 (m, 3H), 7.13 - 6.99 (m, 2H), 6.91 (t, J = 7.7 Hz, 1H), 3.57 (d, J = 6.2 Hz, 2H), 1.34 (s, 6H).	309.15	E	

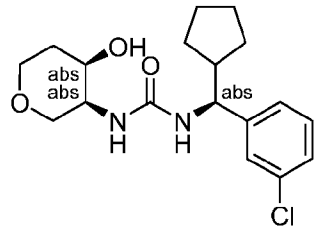
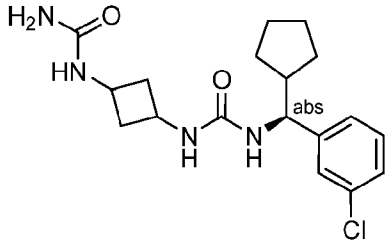
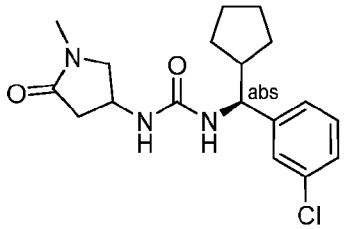
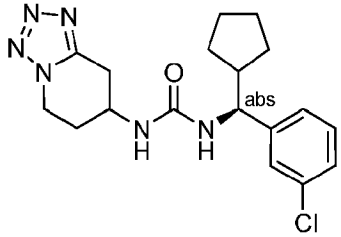
I-565		(400 MHz, DMSO-d6) ppm 7.35-7.29 (m, 1H), 7.08-6.98 (m, 3H), 6.35-6.33 (d, 1H), 5.80-5.79 (d, 1H), 4.48-4.43 (m, 1H), 4.11-4.10 (m, 1H), 3.67-3.65 (m, 1H), 3.55-3.51 (m, J=4.0 Hz, 1H), 3.10-3.02 (m, 1H), 2.73-2.66 (m, 1H), 2.14-2.08 (m, 1H), 1.97 (s, 3H), 1.72-1.44 (m, 7H), 1.33-1.07 (m, 5H).	362.1	E	
I-566		(400 MHz, DMSO-d6) 10.96 (s, 1H), 7.54 -7.44 (m, 2H), 7.35 (d, J = 7.7 Hz, 1H), 7.25 (dd, J = 7.9, 1.1 Hz, 1H), 7.20 - 7.09 (m, 2H), 7.04 (s, 1H), 6.92 (t, J = 7.8 Hz, 1H), 3.55 (d, J = 6.2 Hz, 2H), 1.34 (s, 6H).	309.15	E	
I-567		(400 MHz, DMSO-d6) 10.95 (s, 1H), 7.82 - 7.73 (m, 2H), 7.61 - 7.52 (m, 2H), 7.34 (dd, J = 7.7, 1.1 Hz, 1H), 7.25 (dd, J = 7.8, 1.1 Hz, 1H), 7.15 (t, J = 6.2 Hz, 1H), 6.90 (t, J = 7.8 Hz, 1H), 3.62 (d, J = 6.2 Hz, 2H), 1.39 (s, 6H).	359.15	E	
I-568		(400 MHz, DMSO-d6) 8.30 (s, 1H), 7.54 (dd, J = 17.0, 7.8 Hz, 2H), 7.42 - 7.34 (m, 2H), 7.21 (t, J = 7.9 Hz, 1H), 6.92 - 6.84 (m, 2H), 3.70 (s, 3H), 3.59 (d, J = 6.2 Hz, 2H), 1.34 (s, 6H).	321.15	E	

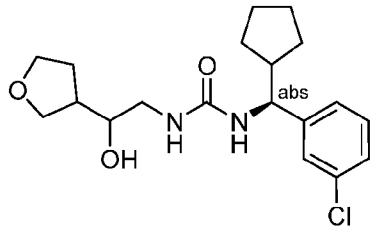
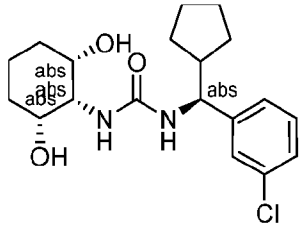
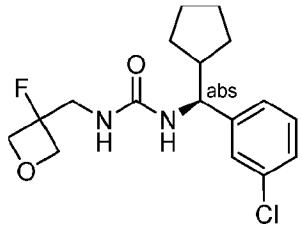
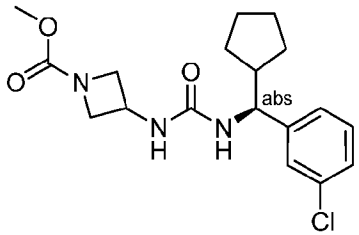
I-569		(400 MHz, DMSO-d6) ppm 8.69 (d, J=4.4 Hz, 1H), 8.51-8.53 (m, 1H), 7.67-7.72 (m, 1H), 7.63 (d, J=9.2 Hz, 1H), 7.31 (d, J=7.6 Hz, 1H), 7.14 - 7.24 (m, 2H), 6.81 (d, J=8.8 Hz, 1H), 3.95 (d, J=5.2 Hz, 2H), 2.78 (d, J=4.8 Hz, 3H), 2.36 - 2.44 (m, 2H), 2.24 - 2.31 (m, 2H), 2.01 - 2.14 (m, 1H), 1.76 - 1.86 (m, 1H).	298.1	E	
I-570		(400 MHz, DMSO-d6) 8.66-8.64 (m, 1H), 7.63-7.61 (m, 1H), 7.42-7.40 (m, 1H), 7.34-7.28 (m, 3H), 6.80-6.77 (m, 1H), 3.93-3.90 (m, 2H), 2.79-2.77 (m, 3H), 2.39-2.27 (m, 4H), 2.14-2.11 (m, 1H), 1.85-1.77 (m, 1H).	383	D	
I-571		(400 MHz, DMSO-d6) 10.98 (s, 1H), 7.60 - 7.47 (m, 2H), 7.36 - 7.18 (m, 4H), 6.90 (t, J = 7.8 Hz, 1H), 3.58 (d, J = 6.3 Hz, 2H), 2.31 (d, J = 12.5 Hz, 2H), 2.14 (d, J − 12.4 Hz, 2H), 1.20 (s, 3H), 0.93 (s, 3H).	399.05	D	
I-572		(400 MHz, DMSO-d6) 11.05 (s, 1H), 7.61 (d, J − 2.1 Hz, 1H), 7.53 (d, J = 8.4 Hz, 1H), 7.37 - 7.30 (m, 3H), 7.26 (dd, J = 7.8, 1.1 Hz, 1H), 6.93 (t, J = 7.7 Hz, 1H), 3.61 (d, J = 5.8 Hz, 2H), 1.07 - 1.02 (m, 2H), 0.93 - 0.84 (m, 2H).	357.05	E	

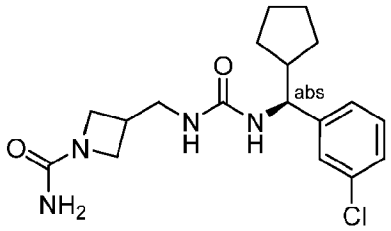
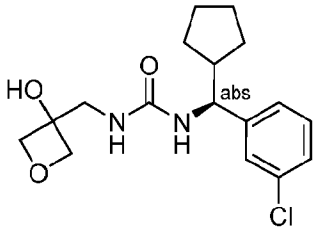
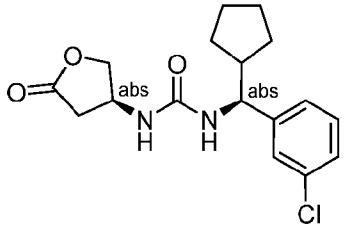
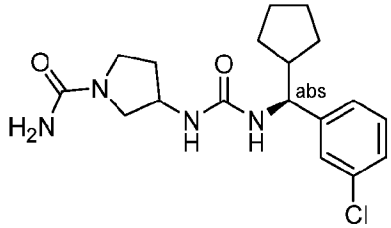
I-573		(400 MHz, DMSO-d6) 10.96 (s, 1H), 7.53 (d, J = 8.3 Hz, 1H), 7.42 (d, J = 2.1 Hz, 1H), 7.32 (dd, J = 7.7, 1.1 Hz, 1H), 7.24 (dd, J = 7.8, 1.1 Hz, 1H), 7.21 - 7.13 (m, 2H), 6.90 (t, J = 7.8 Hz, 1H), 3.70 (d, J = 6.2 Hz, 2H), 2.39 - 2.19 (m, 4H), 2.11 (q, J = 9.1, 8.6 Hz, 1H), 1.81 (ddq, J = 13.5, 9.0, 4.1 Hz, 1H).	371.1	C	C
I-574		(400 MHz, DMSO-d6) 10.88 (s, 1H), 7.59 - 7.50 (m, 2H), 7.40 - 7.30 (m, 2H), 7.24 (dd, J = 7.8, 1.1 Hz, 1H), 7.05 - 6.83 (m, 2H), 3.55 (d, J = 6.2 Hz, 2H), 2.10 - 1.97 (m, 2H), 1.90 - 1.75 (m, 4H), 1.64 (d, J = 3.4 Hz, 2H).	385.05	D	
I-575		(400 MHz, DMSO-d6) 8.57 (ddd, J = 4.8, 1.9, 0.9 Hz, 1H), 7.77 (td, J = 7.7, 1.9 Hz, 1H), 7.49 (dd, J = 8.0, 1.1 Hz, 1H), 7.37 (dd, J = 7.7, 1.1 Hz, 1H), 7.27 (t, J = 3.5 Hz, 1H), 7.25-7.22 (m, 1H), 7.17-6.98 (m, 3H), 6.93 (t, J = 7.8 Hz, 1H), 3.71 (d, J = 6.1 Hz, 2H), 1.36 (s, 6H).	292.15	E	
I-576		(400 MHz, DMSO-d6): 8.66-8.64 (m, 1H), 8.12 (br, 1H), 7.80-7.73 (m, 3H), 7.42-7.39 (m, 2H), 7.14-7.12 (m, 1H), 3.93-3.91 (m, 2H), 2.80-2.78 (m, 3H), 2.37-2.26 (m, 3H), 2.19-2.08 (m, 1H), 1.90-1.76 (m, 1H).	322.1	E	

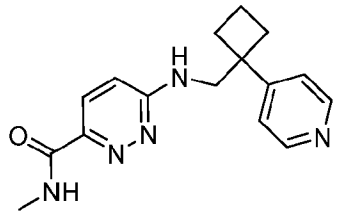
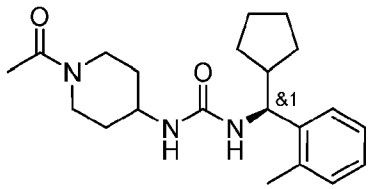
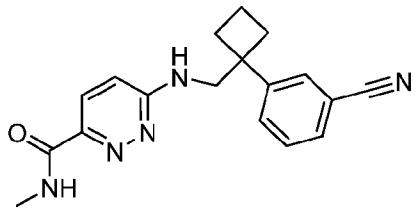
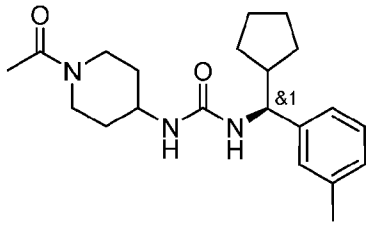
I-577		(400 MHz, DMSO-d6) 10.90 (s, 1H), 7.50 (dd, J = 7.8, 1.8 Hz, 1H), 7.43 (dd, J = 7.7, 1.7 Hz, 1H), 7.39 - 7.22 (m, 4H), 6.93 (dt, J = 15.6, 6.8 Hz, 2H), 3.91 (d, J = 6.0 Hz, 2H), 1.51 (s, 6H).	325.05	E	
I-578		(400 MHz, DMSO-d6) 10.97 (s, 1H), 7.49 (t, J = 2.0 Hz, 1H), 7.43 (dt, J = 8.0, 1.5 Hz, 1H), 7.36 (t, J = 7.7 Hz, 2H), 7.31 - 7.22 (m, 2H), 7.10 (s, 1H), 6.91 (t, J = 7.8 Hz, 1H), 3.58 (d, J = 6.2 Hz, 2H), 1.34 (s, 6H).	325.05	D	
I-579		(400 MHz, DMSO-d6) 10.90 (s, 1H), 7.51 (dd, J = 9.0, 6.3 Hz, 1H), 7.43 - 7.32 (m, 2H), 7.28 - 7.15 (m, 2H), 6.98 (s, 1H), 6.91 (t, J = 7.8 Hz, 1H), 3.89 (d, J = 6.1 Hz, 2H), 1.50 (s, 6H).	343.05	E	
I-580		(400 MHz, DMSO-d6) 10.94 (s, 1H), 7.69 (s, 4H), 7.35 (dd, J = 7.7, 1.1 Hz, 1H), 7.25 (dd, J = 7.8, 1.1 Hz, 1H), 7.07 (s, 1H), 6.91 (t, J = 7.8 Hz, 1H), 3.61 (d, J = 6.2 Hz, 2H), 1.38 (s, 6H).	359.15	E	

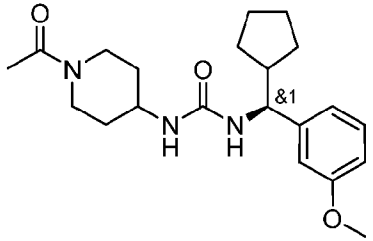
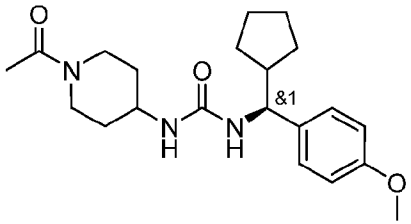
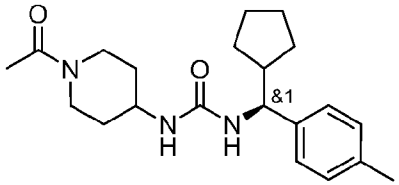
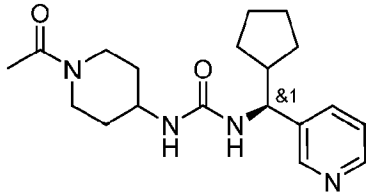
I-581		(400 MHz, DMSO-d6) 10.94 (s, 1H), 7.34 (d, J = 7.7 Hz, 1H), 7.28 - 7.20 (m, 2H), 7.06 - 6.95 (m, 3H), 6.90 (t, J = 7.8 Hz, 1H), 6.78 (dd, J = 8.2, 2.4 Hz, 1H), 3.75 (s, 3H), 3.57 (d, J = 6.2 Hz, 2H), 1.33 (s, 6H).	321.1	E	
I-582		(400 MHz, DMSO-d6) 10.96 (s, 1H), 8.69 (dd, J = 2.6, 0.9 Hz, 1H), 8.41 (dd, J = 4.7, 1.6 Hz, 1H), 7.86 (ddd, J = 8.1, 2.6, 1.6 Hz, 1H), 7.40 - 7.30 (m, 2H), 7.26 - 7.12 (m, 2H), 6.91 (t, J = 7.8 Hz, 1H), 3.60 (d, J = 6.2 Hz, 2H), 1.38 (s, 6H).	292.1	E	
I-583		(400 MHz, DMSO-d6) 10.95 (s, 1H), 8.53 - 8.44 (m, 2H), 7.48 - 7.41 (m, 2H), 7.35 (dd, J = 7.7, 1.1 Hz, 1H), 7.25 (dd, J = 7.8, 1.1 Hz, 1H), 7.11 (t, J = 6.2 Hz, 1H), 6.91 (t, J = 7.8 Hz, 1H), 3.60 (d, J = 6.2 Hz, 2H), 1.34 (s, 6H).	292.05	E	
I-584		(400 MHz, DMSO-d6): 7.12-7.19 (m, 2H), 6.88-6.97 (m, 2H), 6.17-6.20 (m, 1H), 5.91-5.94 (m, 1H), 4.81-4.86 (m, 1H), 4.07-4.13 (m, 1H), 3.80 (s, 3H), 3.64-3.70 (m, 1H), 3.52-3.55 (m, 1H), 3.04-3.13 (m, 1H), 2.69-2.78 (m, 1H), 2.14-2.25 (m, 1H), 1.97-1.99 (m, 3H), 1.05-1.80 (m, 12H).	374.1	E	
I-585				E	

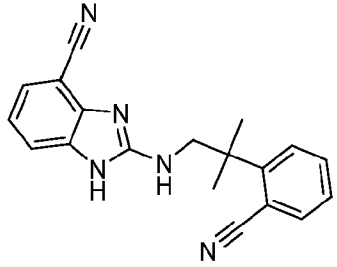
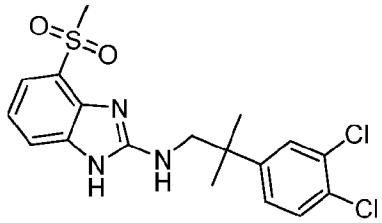
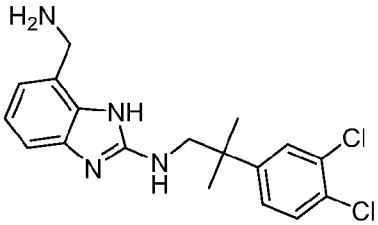
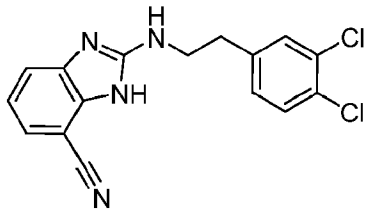
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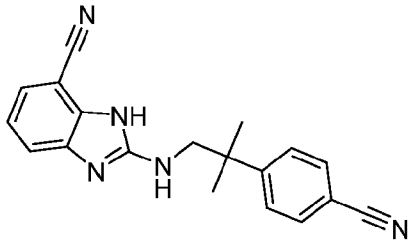
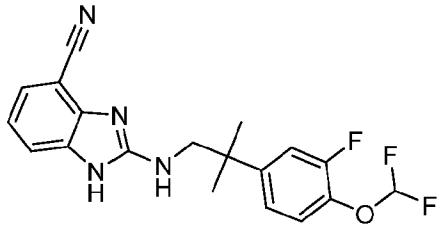
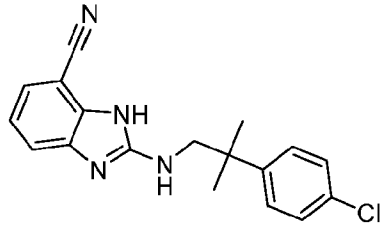
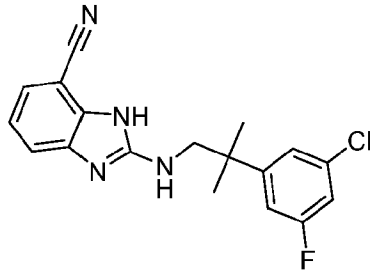
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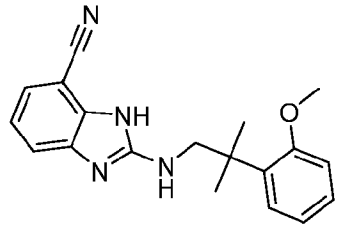
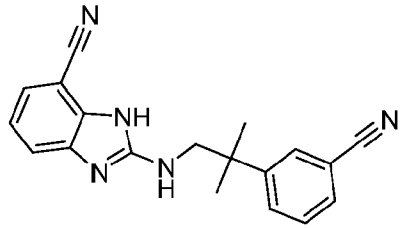
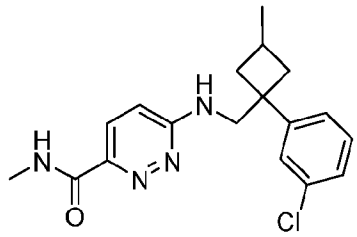
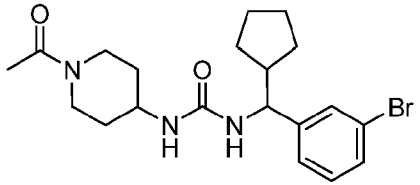
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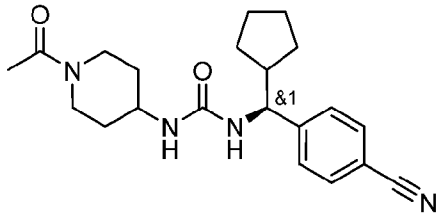
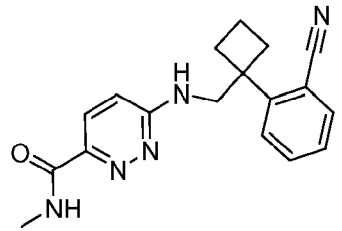
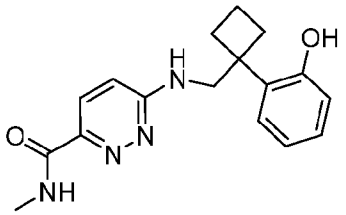
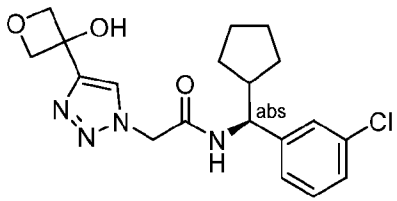
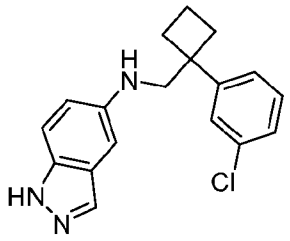
I-598		(400 MHz, DMSO-d6) ppm 8.69 (d, J=4.4 Hz, 1 H), 8.45 (d, J=5.6 Hz, 2 H), 7.64 (d, J=9.2 Hz, 1 H), 7.26 (s, 1 H), 7.18 - 7.22 (m, 2 H), 6.83 (d, J=9.2 Hz, 1 H), 3.90 (d, J=6.0 Hz, 2 H), 2.78 (d, J=4.8 Hz, 3 H), 2.32 - 2.38 (m, 2 H), 2.22 - 2.31 (m, 2 H), 2.06 - 2.17 (m, 1 H), 1.77 - 1.87 (m, 1 H).	298.1	E	
I-599		(400 MHz, DMSO-d6) ppm 7.20 - 7.24 (m, 1 H), 7.13 - 7.18 (m, 1 H), 7.04 - 7.11 (m, 2 H), 6.33 (s, 1 H), 4.72 (br d, J=8.8 Hz, 1 H), 4.05-4.12 (m, 1 H), 3.62 - 3.67 (m, 1 H), 3.47 - 3.57 (m, 1 H), 3.01 - 3.15 (m, 1 H), 2.65 - 2.80 (m, 1 H), 2.34 (s, 3 H), 2.11-2.22 (m, 1 H), 1.97 (d, J=4.4 Hz, 3 H), 0.99 - 1.83 (m, 13 H).	358.1	E	
I-600		(400 MHz, DMSO-d6) ppm 8.67 (d, J = 4.8 Hz, 1H), 7.58-7.68 (m, 3H), 7.44-7.55 (m, 2H), 7.24 (s, 1H), 6.81 (d, J = 9.2 Hz, 1H), 3.89 (d, J = 5.6 Hz, 2H), 2.78 (d, J = 4.8 Hz, 3H), 2.24-2.38 (m, 4H), 2.07-2.19 (m, 1H), 1.76-1.88 (m, 1H).	322.1	E	
I-601		(400 MHz, DMSO-d6) ppm 7.14 - 7.24 (m, 1 H), 6.98 - 7.10 (m, 3 H), 6.35 (s, 1 H), 4.41 (d, J=8.4 Hz, 1 H), 4.00 - 4.17 (m, 1 H), 3.67 - 3.73 (m, 1 H), 3.00 - 3.20 (m, 1 H), 2.65 - 2.83 (m, 1 H), 2.28 (s, 3 H), 2.05-2.14 (m, 1 H), 1.97 (d, J=3.2 Hz, 3 H), 1.35 - 1.87 (m, 8 H), 1.02 - 1.35 (m, 6 H).	358.2	E	

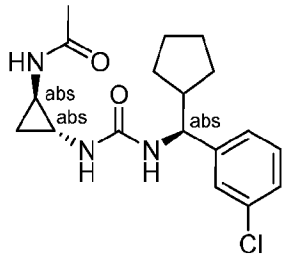
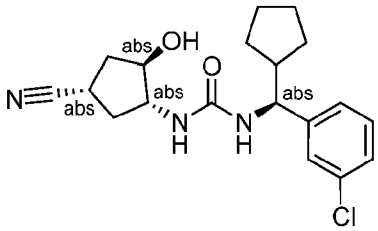
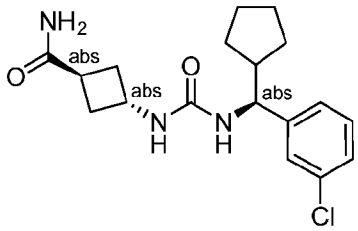
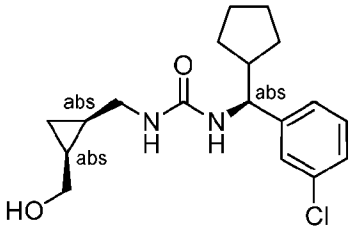
I-602		(400 MHz, DMSO-d6) ppm 7.19-7.23 (m, 1H), 6.74-6.86 (m, 3H), 6.29 (d, J = 9.2 Hz, 1H), 5.78 (d, J = 8.0 Hz, 1H), 4.41-4.46 (m, 1H), 4.04-4.18 (m, 1H), 3.63-3.78 (m, 4H), 3.49-3.60 (m, 1H), 3.04-3.12 (m, 1H), 2.66-2.77 (m, 1H), 2.05-2.17 (m, 1H), 1.98 (d, J = 3.2 Hz, 3H), 1.41-1.78 (m, 7H), 1.08-1.39 (m, 5H).	374.1	E	
I-603		(400 MHz, DMSO-d6) ppm 7.15 (d, J = 8.8 Hz, 2H), 6.85 (d, J = 8.8 Hz, 2H), 6.23 (d, J = 9.2 Hz, 1H), 5.75 (d, J = 8.0 Hz, 1H), 4.37-4.42 (m, 1H), 4.04 - 4.20 (m, 1H), 3.62-3.76 (m, 4H), 3.50-3.59 (m, 1H), 3.04-3.12 (m, 1H), 2.66-2.79 (m, 1H), 2.04-2.16 (m, 1H), 1.98 (d, J = 3.2 Hz, 3H), 1.42-1.80 (m, 7H), 1.05-1.36 (m, 5H).	374.1	E	
I-604		(400 MHz, DMSO-d6) ppm 7.07 - 7.13 (m, 4 H), 6.27 (d, J=9.2 Hz, 1 H), 5.79 (s, 1 H), 4.40 (s, 1 H), 4.09 (d, J=3.6 Hz, 1 H), 3.66 (s, 1 H), 3.02 - 3.14 (m, 1 H), 2.65 - 2.78 (m, 1 H), 2.26 (s, 3 H), 2.04 - 2.17 (m, 1 H), 1.97 (d, J=3.2 Hz, 3 H), 1.40 - 1.81 (m, 7 H), 1.01 - 1.38 (m, 6 H).	358.1	E	
I-605		(400 MHz, DMSO-d6) 8.52-8.34 (m, 2H), 7.76-7.58 (m, 1H), 7.36-7.26 (m, 1H), 6.43 (d, J = 8.0 Hz, 1H), 5.85 (d, J = 8.0 Hz, 1H), 4.52-4.41 (m, 1H), 4.18-4.04 (m, 1H), 3.73-3.60 (m, 1H), 3.59-3.49 (m, 1H), 3.13-3.00 (m, 1H), 2.77-2.63 (m, 1H), 2.23-2.08 (m, 1H), 1.97 (d, J = 4.0 Hz, 3H), 1.78-1.43 (m, 7H), 1.34-1.05 (m, 5H).	345.1	E	

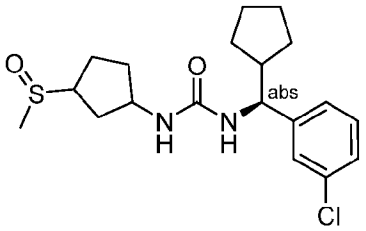
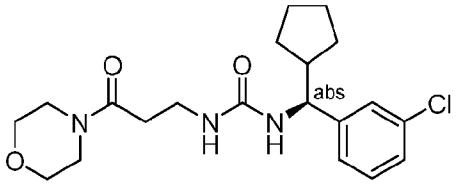
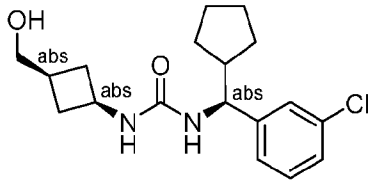
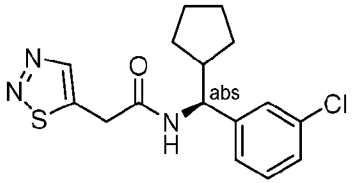
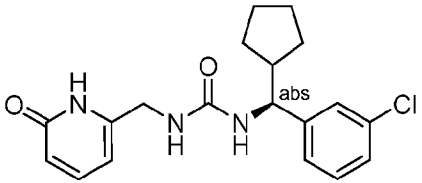
I-606		(400 MHz, DMSO-d6) 13.84 (s, 1H), 10.38 (s, 1H), 8.16 (dd, J = 7.9, 1.3 Hz, 1H), 7.79 (td, J = 7.8, 1.1 Hz, 2H), 7.70 (dd, J = 8.0, 1.3 Hz, 1H), 7.60 (ddd, J = 8.3, 7.4, 1.3 Hz, 1H), 7.40 (dd, J = 7.5, 1.1 Hz, 1H), 7.08 (t, J = 7.7 Hz, 1H), 4.50 (s, 2H), 1.39 (s, 6H).	316.1	E	
I-607		(400 MHz, Chloroform-d)7.62-7.56 (m, 1H), 7.49 (d, J = 2.2 Hz, 1H), 7.39 (dd, J = 8.1, 2.8 Hz, 2H), 7.28 (s, 2H), 7.27-7.18 (m, 2H), 4.81 (s, 1H), 3.69 (d, J = 5.5 Hz, 2H), 1.42 (s, 6H).	412.05	D	
I-608		(400 MHz, DMSO-d6) 8.33 (s, 2H), 7.68 (d, J = 2.2 Hz, 1H), 7.57 (d, J = 8.5 Hz, 1H), 7.45 (dd, J = 8.6, 2.3 Hz, 1H), 7.08 (d, J = 7.5 Hz, 1H), 6.87 (dt, J = 15.0, 7.4 Hz, 3H), 4.12 (s, 2H), 3.58 (d, J = 6.1 Hz, 2H), 1.34 (s, 6H).	363.05	E	
I-609		(400 MHz, DMSO-d6) 11.30 (s, 1H), 7.61 -7.54 (m, 2II), 7.36 (d, J = 7.9 IIz, 2II), 7.31- 7.24 (m, 2H), 6.93 (t, J = 7.7 Hz, 1H), 3.58 (q, J = 6.7 Hz, 2H), 2.92 (t, J = 7.0 Hz, 2H).	331.05	E	

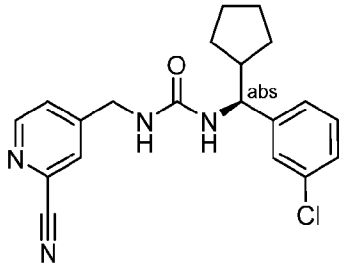
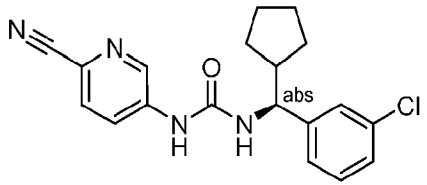
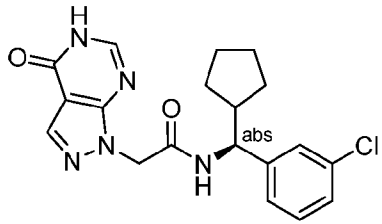
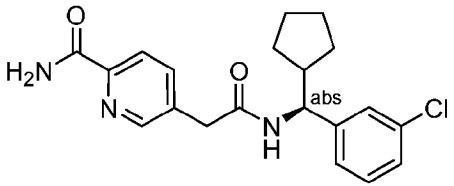
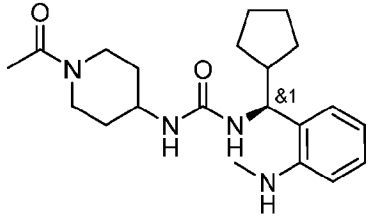
I-610		(400 MHz, DMSO-d6)10.97 (s, 1H), 7.80 (d, J = 8.4 Hz, 2H), 7.67 (d, J = 8.4 Hz, 2H), 7.35 (d, J = 7.7 Hz, 1H), 7.25 (d, J = 7.7 Hz, 1H), 7.12 (s, 1H), 6.92 (t, J = 7.8 Hz, 1H), 3.60 (d, J = 6.2 Hz, 2H), 1.37 (s, 6H).	316.15	E	
I-611		(400 MHz, DMSO-d6)7.53-7.45 (m, 1H), 7.39-7.34 (m, 1H), 7.32 (d, J = 4.8 Hz, 2H), 7.27-7.19 (m, 1H), 7.08 (s, 1H), 6.92 (t, J = 7.8 Hz, 1H), 3.57 (d, J = 6.1 Hz, 2H), 1.34 (s, 6H).	375.1	E	
I-612		(400 MHz, DMSO-d6) 10.94 (s, 1H), 7.52 - 7.44 (m, 2H), 7.42 - 7.32 (m, 3H), 7.25 (dd, J = 7.8, 1.1 Hz, 1H), 7.03 (s, 1H), 6.91 (t, J = 7.8 Hz, 1H), 3.56 (d, J = 6.2 Hz, 2H), 1.34 (s, 6H).	325.05	E	
I-613		(400 MHz, DMSO-d6) 10.98 (s, 1H), 7.35 (dd, J = 4.2, 2.5 Hz, 2H), 7.33 - 7.26 (m, 1H), 7.30 - 7.22 (m, 2H), 7.13 (s, 1H), 6.91 (t, J = 7.8 Hz, 1H), 3.58 (d, J = 6.2 Hz, 2H), 1.34 (s, 6H).	343.05	D	

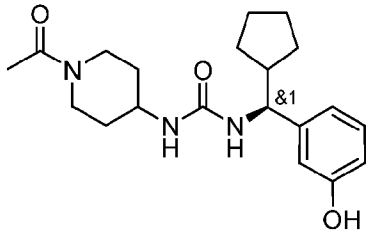
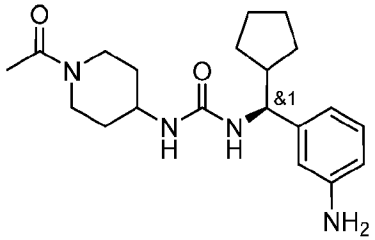
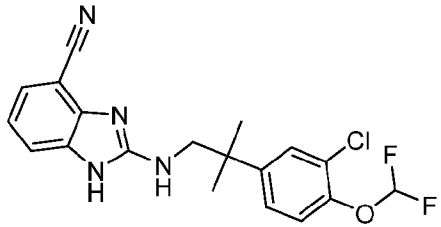
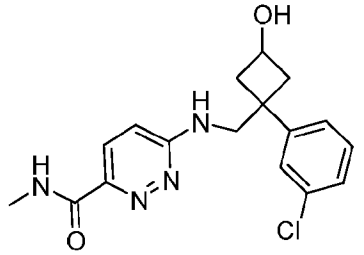
I-614		(400 MHz, DMSO-d6) 10.84 (s, 1H), 7.32 (dd, J = 7.7, 1.1 Hz, 1H), 7.26 - 7.18 (m, 3H), 6.99 (dd, J = 8.1, 1.2 Hz, 1H), 6.89 (q, J = 7.8, 7.1 Hz, 2H), 6.82 - 6.76 (m, 1H), 3.87 - 3.75 (m, 5H), 1.38 (s, 6H).	321.1	E	
I-615		(400 MHz, DMSO-d6) 10.98 (s, 1H), 7.90 (s, 1H), 7.81 (d, J = 8.2 Hz, 1H), 7.67 (d, J = 7.6 Hz, 1H), 7.53 (t, J = 7.9 Hz, 1H), 7.34 (dd, J = 7.7, 1.1 Hz, 1H), 7.25 (dd, J = 7.8, 1.1 Hz, 1H), 7.13 (s, 1H), 6.90 (t, J = 7.8 Hz, 1H), 3.58 (d, J = 6.2 Hz, 2H), 1.36 (s, 6H).	316.2	E	
I-616		(400 MHz, Chloroform-d) 7.90 (dd, J = 9.3, 1.7 Hz, 1H), 7.84 (s, 1H), 7.40 - 7.29 (m, 2H), 7.26 (d, J = 15.3 Hz, 2H), 6.54 (dd, J = 9.3, 3.6 Hz, 1H), 4.75 (s, 1H), 3.74 (d, J = 5.6 Hz, 2H), 3.04 (d, J = 5.1 Hz, 3H), 2.66-2.56 (m, 2H), 2.53 -2.16 (m, 1H), 2.08 - 1.83 (m, 2H), 1.14 (dd, J = 30.5, 6.7 Hz, 3H).	345.15	E	
I-617		(400 MHz, d6-DMSO) 7.42 (br s, 1H), 7.40 - 7.36 (m, 1H), 7.27 - 7.22 (m, 1H), 6.39 (br s, 0.5H), 6.37 (br s, 0.5H), 5.82 (br s, 0.5 H), 5.82 (br s, 0.5 H), 4.43 (d, J = 8.6 Hz, 0.5 H), 4.41 (d, J = 8.6 Hz, 0.5 H), 4.18 - 4.04 (m, 1H), 3.75 - 3.60 (m, 1H), 3.58 - 3.43 (m, 1H), 3.14 - 2.99 (m, 1H), 2.77 - 2.62 (m, 1H), 2.18 - 2.03 (m, 1H), 2.01 (s, 1.5 H) 1.91 (s, 1.5 H), 1.84 - 1.37 (m, 8H), 1.35 - 1.18 (m, 3H), 1.16 - 1.05 (m, 2H). Contains ca. 5% impurity.	422.2	E	

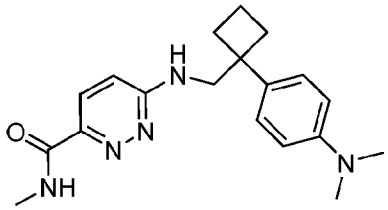
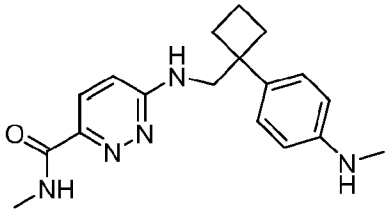
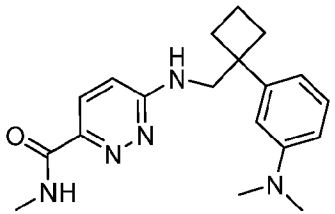
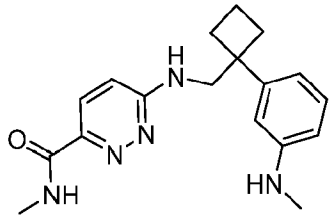
I-618		(400 MHz, DMSO-d6) 7.78-7.76 (m, 2H), 7.46-7.43 (m, 2H), 6.46-6.44 (m, 1H), 5.86-5.84 (m, 1H), 4.53-4.48 (m, 1H), 4.10 (s, 1H), 3.66 (s, 1H), 3.10-3.03 (m, 1H), 2.72-2.69 (m, 1H), 2.12-2.10 (m, 1H), 1.98 (s, 3H), 1.72-1.10 (m, 13H).	369.1	E	
I-619		(400 MHz, MeOD) 8.10-8.07 (m, 1H), 7.67-7.63 (m, 2H), 7.48-7.36 (m, 3H), 4.14 (s, 2H), 2.93 (s, 3H), 2.68-2.56 (m, 4H), 2.38-2.33 (m, 1H), 2.03-2.00-1.77 (m, 1H).	322	E	
I-620		(400 MHz,DMSO-d6): 9.28 (s, 1H), 8.66 (d, J = 4.8 Hz, 1H), 7.61 (d, J = 9.2 Hz, 1H), 7.06 (br, 1H), 7.00~6.90 (m, 2H), 6.80~6.76 (m, 1H), 6.75~6.68 (m, 2H), 3.70 (s, 2H), 2.78 (d, J = 4.8 Hz, 3H), 2.35~2.25 (m, 4H), 2.15~2.00 (m, 1H), 1.80~1.70 (m, 1H).	313.1	E	
I-621				E	
I-622			312.29	D	

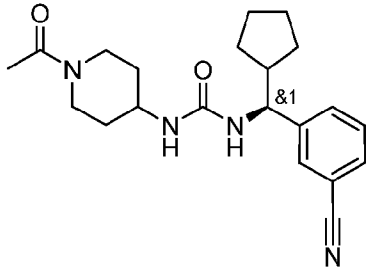
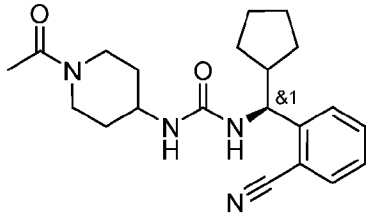
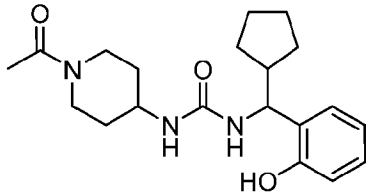
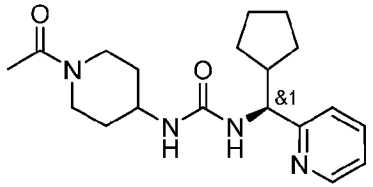
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I-624			362.45	D	
I-625			350.35	D	
I-626			337.39	E	

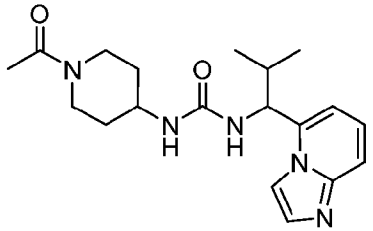
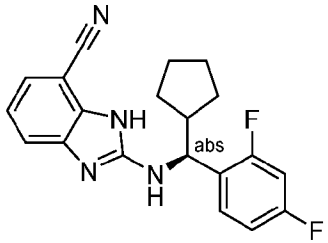
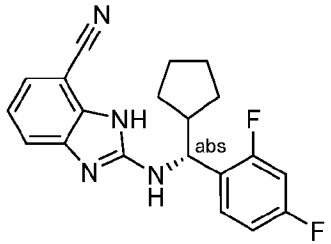
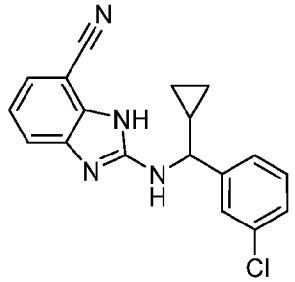
I-627			383.36	E	
I-628				E	
I-629				E	
I-630				D	
I-631				D	

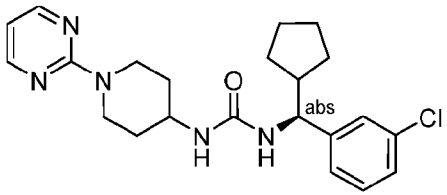
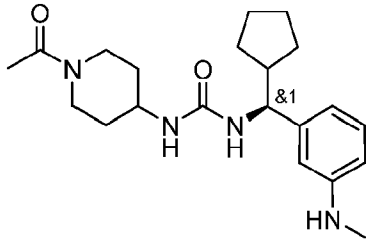
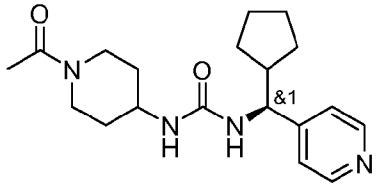
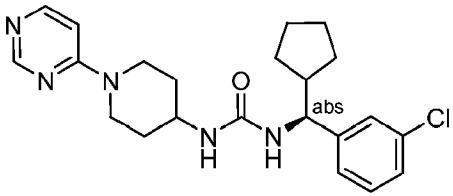
I-632				D	
I-633				D	
I-634				E	
I-635				D	
I-636		(400 MHz, DMSO-d6) ppm 7.01 - 7.12 (m, 2 H), 6.47 - 6.63 (m, 2 H), 6.10 (br d, J=9.29 Hz, 1 H), 5.81 (br d, J=7.78 Hz, 1 H), 5.46 - 5.70 (m, 1 H), 4.52 (br t, J=9.29 IIz, 1 II), 4.10 (br s, 1 II), 3.66 (br s, 1 H), 3.56 - 3.59 (m, 1 H), 3.11 (br t, J=11.04 Hz, 1 H), 2.68 - 2.77 (m, 4 H), 2.37 -	373.2	E	

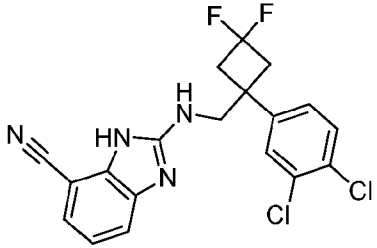
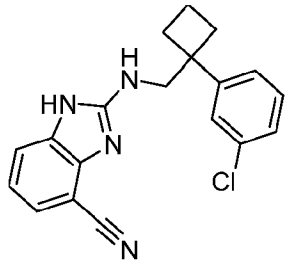
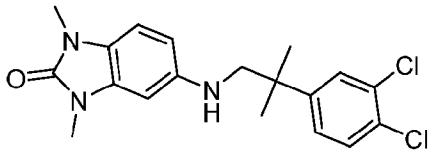
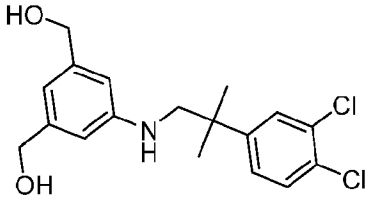
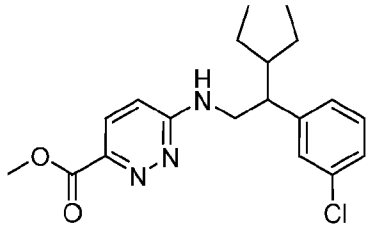
		2.44 (m, 1 H), 1.98 (d, J=3.01 Hz, 3 H), 1.47 - 1.76 (m, 8 II), 0.84 - 1.36 (m, 4 II)			
I-637		(400 MHz,DMSO-d6): 9.25 (s, 1H), 7.10~7.00 (m, 1H), 6.68~6.55 (m, 3H), 6.21 (d, J = 8.8 Hz, 1H), 5.76 (d, J = 7.6 Hz, 1H), 4.40~4.30 (m, 1H), 4.15~4.05 (m, 1H), 3.70~3.60 (m, 1H), 3.57~3.50 (m, 1H), 3.15~3.00 (m, 1H), 2.75~2.65 (m, 1H), 2.15~2.05 (m, 1H), 1.97 (d, J = 2.8 Hz, 3H), 1.80~1.05 (m, 12II).	382	E	
I-638		(400 MHz, DMSO-d6): 6.94-6.90 (m, 1H), 6.42-6.37 (m, 3H), 6.12-6.09 (m, 1H), 5.77-5.74 (m, 1H), 4.95 (br, 2H), 4.30-4.25 (m, 1H), 4.11-4.07 (m, 1H), 3.69-3.64 (m, 1H), 3.57-3.50 (m, 1H), 3.13-3.05 (m, 1H), 2.77-2.67 (m, 1H), 2.13-2.04 (m, 1H), 1.98-1.97 (d, J = 4.4, 3H), 1.74-1.03 (m, 12H).	359.1	E	
I-639		(400 MHz, DMSO-d6) 10.97 (s, 1H), 7.64 (d, J = 2.3 Hz, 1H), 7.48 (dd, J = 8.6, 2.4 Hz, 1H), 7.36 - 7.29 (m, 2H), 7.27- 7.22 (m, 1H), 7.11 (s, 1H), 6.91 (t, J = 7.8 Hz, 1H), 3.57 (d, J = 6.2 Hz, 2H), 1.34 (s, 6H).	391.1	E	
I-640			347.15	E	

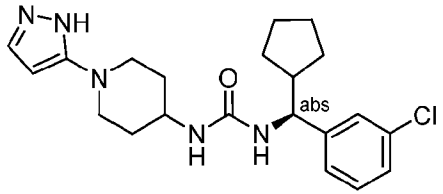
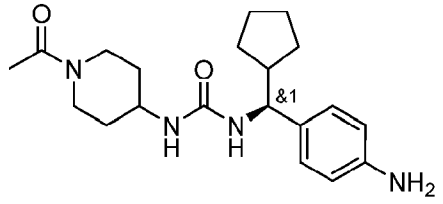
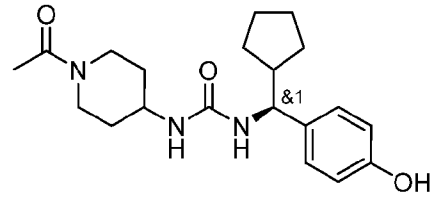
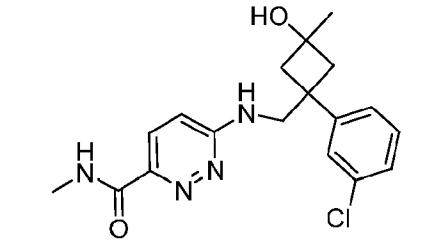
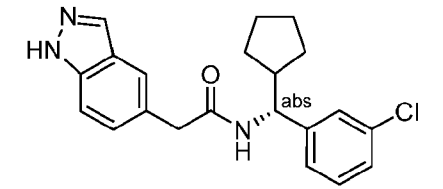
I-641		(DMSO-d6, 400MHz): 8.69 (d, J = 4.8 Hz, 1H), 7.63 (d, J = 9.2 Hz, 1H), 7.09 (s, 1H), 7.03 (d, J = 8.8 Hz, 2H), 6.84 (d, J = 7.6 Hz, 1H), 6.67 (d, J = 8.8 Hz, 2H), 3.75 (d, J = 5.6 Hz, 2H), 2.84 (s, 6H), 2.78 (d, J = 4.8 Hz, 3H), 2.35-2.14 (m, 4H), 2.09-1.95 (m, 1H), 1.83-1.71 (m, 1H).	340.1	E	
I-642		(DMSO-d6, 400MHz): 8.69 (d, J = 4.8 Hz, 1H), 7.63 (d, J = 9.2 Hz, 1H), 7.12-7.03 (m, 1H), 6.95 (d, J = 8.4 Hz, 2H), 6.84 (d, J = 9.2 Hz, 1H), 6.47 (d, J = 8.4 Hz, 2H), 5.41 (d, J = 4.8 Hz, 1H), 3.72 (d, J = 5.6 Hz, 2H), 2.78 (d, J = 4.8 Hz, 3H), 2.64 (d, J = 4.4 Hz, 3H), 2.29-2.12 (m, 4H), 2.08-1.95 (m, 1H), 1.85-1.70 (m, 1H).	326.1	E	
I-643		(DMSO-d6, 400MHz): 8.68 (d, J = 4.8 Hz, 1H), 7.62 (d, J = 9.2 Hz, 1H), 7.10 (t, J = 7.6 Hz, 2H), 6.82 (s, 1H), 6.56-6.46 (m, 3H), 3.80 (d, J = 5.6 Hz, 2H), 2.84 (s, 6H), 2.78 (d, J = 4.8 Hz, 3H), 2.36-2.19 (m, 4H), 2.13-1.99 (m, 1H), 1.86-1.73 (m, 1H).	340.2	E	
I-644		(DMSO-d6, 400MHz): − 8.70 (d, J − 4.8 Hz, 1H), 7.64 (d, J = 9.2 Hz, 1H), 7.12 (s, 1H), 7.01 (t, J = 7.6 Hz, 1H), 6.85 (d, J = 8.4 Hz, 1H), 6.49-6.26 (m, 3H), 5.51 (q, J = 4.8 Hz, 1H), 3.78 (d, J = 5.2 Hz, 2H), 2.79 (d, J = 4.8 Hz, 3H), 2.64 (d, J = 5.2 Hz, 4H), 2.35-2.16 (m, 4H), 2.11-1.96 (m, 1H), 1.86-1.69 (m, 1H).	326.1	E	

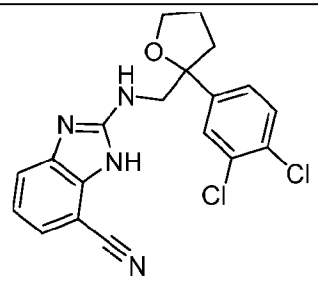
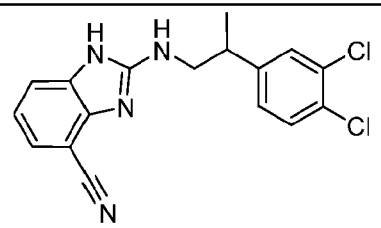
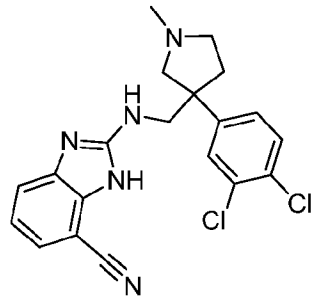
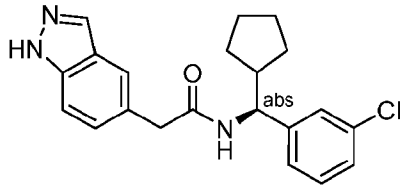
I-645		(400 MHz,DMSO-d6): 7.70~7.65 (m, 2H), 7.62~7.57 (m, 1H), 7.54~7.49 (m, 1H), 6.45 (d, J = 9.4 Hz, 1H), 5.87 (d, J = 7.6 Hz, 1H), 4.51~4.43 (m, 1H), 4.15~4.07 (m, 1H), 3.72~3.62 (m, 1H), 3.12~3.01 (m, 1H), 2.75~2.63 (m, 1H), 2.19~2.06 (m, 1H), 1.97 (d, J = 3.2 Hz, 3H), 1.80~1.05 (m, 13H).	369	E	
I-646		(400 MHz,DMSO-d6): 7.77~7.65 (m, 2H), 7.48~7.37 (m, 2H), 6.56 (d, J = 7.6 Hz, 1H), 5.93 (d, J = 8.0 Hz, 1H), 4.75~4.67 (m, 1H), 4.15~4.05 (m, 1H), 3.72~3.60 (m, 1H), 3.12~3.00 (m, 1H), 2.76~2.64 (m, 1H), 2.20~2.10 (m, 1H), 1.97 (d, J = 4.8 Hz, 3H), 1.82~1.05 (m, 13H).	369.1	E	
I-647		(400 MHz, DMSO-d6): 9.54 (s, 1H), 7.00-7.12 (m, 2H), 6.72-6.78 (m, 2H), 6.22-6.26 (m, 1H), 6.01-6.04 (m, 1H), 4.66-4.72 (m, 1H), 4.07-4.10 (m, 1H), 3.66-3.68 (m, 1H), 3.54-3.55 (m, 1H), 3.05-3.18 (m, 1H), 2.70-2.78 (m, 1H), 2.30-2.37 (m, 1H), 1.97-2.00 (m, 3H), 1.00-1.90 (m, 12H).	360.1	E	
I-648		(400 MHz, DMSO-d6) 8.53-8.44 (m, 1H), 7.76-7.66 (m, 1H), 7.30-7.17 (m, 2H), 6.30 (d, J = 12.0 Hz, 1H), 6.08 (d, J = 8.0 Hz, 1H), 4.65-4.55 (m, 1H), 4.13-4.01 (m, 1H), 3.71-3.60 (m, 1H), 3.59-3.49 (m, 1H), 3.14-3.02 (m, 1H), 2.82-2.65 (m, 1H), 2.28-215 (m, 1H), 1.97 (d, J = 4.0 Hz, 3H), 1.81-1.61 (m, 2H), 1.54-1.07 (m, 10H).	345.1	E	

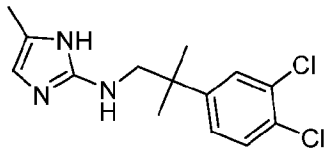
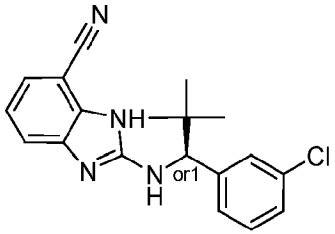
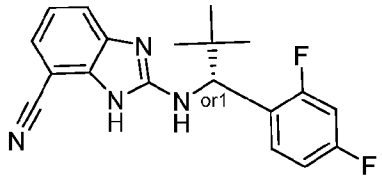
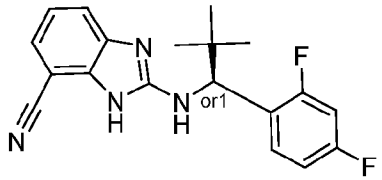
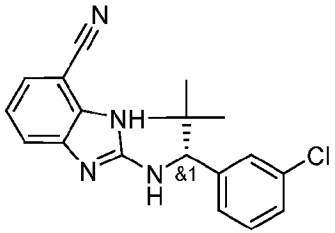
I-649		(400 MHz, dmso) 8.04 (s, 1H), 7.63 (d, J = 1.2 Hz, 1H), 7.49 (d, J = 9.0 Hz, 1H), 7.26 (dd, J = 8.9, 7.0 Hz, 1H), 6.77 (d, J = 6.9 Hz, 1H), 6.46 (d, J = 8.8 Hz, 1H), 6.00 (d, J = 7.8 Hz, 1H), 4.91 (dd, J = 8.1, 6.9 Hz, 1H), 4.17 - 4.04 (m, 1H), 3.73 - 3.61 (m, 1H), 3.61 - 3.50 (m, 1H), 3.15 - 3.01 (m, 1H), 2.79 - 2.67 (m, 1H), 2.27 - 2.16 (m, 1H), 1.97 (app. d, J = 3.5 Hz, 3H), 1.86 - 1.61 (m, 2H), 1.32 - 1.00 (m, 2H), 0.94 (d, J = 6.7 Hz, 3H), 0.88 (d, J = 6.7 Hz, 3H). Partial formate salt	358.2	E	
I-650		(400 MHz, dmso) 11.11 (br. s, 1H), 7.90 (d, J = 7.8 Hz, 1H), 7.59 (td, J = 8.6, 6.8 Hz, 1H), 7.36 (d, J = 7.4 Hz, 1H), 7.24 (d, J = 7.7 Hz, 1H), 7.19 (ddd, J = 10.6, 9.5, 2.6 Hz, 1H), 7.08 (td, J = 8.4, 2.4 Hz, 1H), 6.91 (t, J = 7.7 Hz, 1H), 4.96 (t, J = 9.5 Hz, 1H), 2.40 - 2.30 (m, J = 7.4 Hz, 1H), 1.86 - 1.77 (m, 1H), 1.70 - 1.34 (m, 6H), 1.25 - 1.13 (m, 1H).	353.2	C	D
I-651		(400 MHz, dmso) 11.13 (br (s), 1H), 7.90 (d, J = 9.1 Hz, 1H), 7.59 (td, J = 8.5, 6.8 Hz, 1H), 7.35 (d, J = 7.8 Hz, 1H), 7.24 (d, J = 7.6 Hz, 1H), 7.22 - 7.15 (m, 1H), 7.08 (td, J = 8.4, 2.3 Hz, 1H), 6.91 (t, J = 7.5 Hz, 1H), 4.96 (t, J = 9.4 Hz, 1H), 2.41 - 2.28 (m, 1H), 1.87 - 1.75 (m, 1H), 1.50 (ddd, J = 51.2, 37.0, 22.5 Hz, 6H), 1.25 - 1.13 (m, 1H).	353.2	E	
I-652		(400 MHz, DMSO-d6) 11.36-11.05 (m, 1H), 8.04 (d, J = 8.0 Hz, 1H), 7.55 (s, 1H), 7.47-7.43 (m, 1H), 7.40-7.34 (m, 2H), 7.33-7.28 (m, 1H), 7.24 (d, J = 8.0 Hz, 1H), 6.95-6.87 (m, 1H), 4.38-4.26 (m, 1H), 1.26-1.21 (m, 1H), 0.61-0.43 (m, 4H).	323	E	

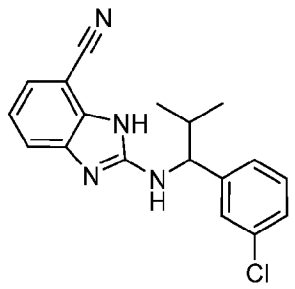
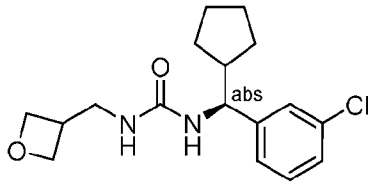
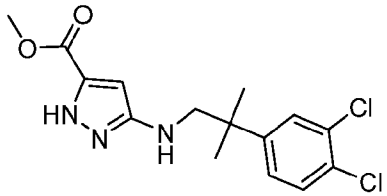
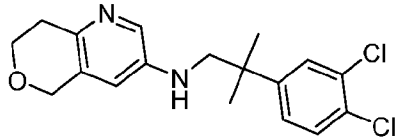
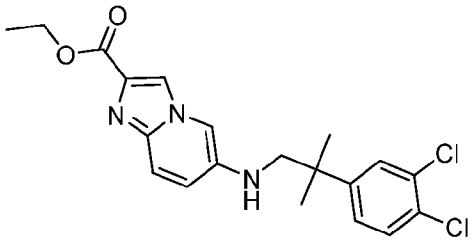
I-653		(DMSO-d6, 400MHz): 8.33 (d, J = 4.8 Hz, 2H), 7.40-7.17 (m, 4H), 6.58 (t, J = 4.8 Hz, 1H), 6.38 (d, J = 8.8 Hz, 1H), 5.83 (d, J = 8.0 Hz, 1H), 4.52-4.32 (m, 3H), 3.71-3.52 (m, 1H), 3.15-2.98 (m, 2H), 2.17-2.06 (m, 1H), 1.87-1.71 (m, 2H), 1.69-1.38 (m, 5H), 1.36-1.05 (m, 5H).	414.1	E	
I-654		(400 MHz, DMSO-d6) ppm 7.35-7.45 (m, 1H), 7.31 (s, 1H), 7.26 (d, J=7.6 Hz, 2H), 6.57 (d, J=7.6 Hz, 1H), 4.48 (s, 1H), 4.04-4.10 (m, 1H), 3.00-3.15 (m, 1H), 2.89 (s, 3H), 2.66-2.81 (m, 1H), 2.04-2.17 (m, 1H), 1.97 (d, J=3.2 Hz, 3H), 0.89-1.85 (m, 13H).	373.2	E	
I-655		(400 MHz, DMSO-d6) ppm 8.45-8.49 (m, 2H), 7.22-7.27 (m, 2H), 6.43 (d, J=8.4 Hz, 1H), 5.87 (d, J=7.6 Hz, 1H), 4.44-4.49 (m, 1H), 4.09-4.14 (m, 1H), 3.65-3.70 (m, 1H), 3.48-3.58 (m, 1H), 3.01-3.13 (m, 1H), 2.67-2.75 (m, 1H), 2.06-2.19 (m, 1H). 1.98 (d, J=2.8 Hz, 3H), 1.53-1.83 (m, 5H). 1.05-1.50 (m, 7H).	345.2	E	
I-656		(400 MHz, DMSO-d6) ppm 8.43 (s, 1H), 8.11 (d, J = 6.4 Hz, 1H), 7.14-7.34 (m, 4H), 6.79 (d, J = 6.4 Hz, 1H), 6.36 (d, J = 8.8 Hz, 1H), 5.81 (d, J = 8.0 Hz, 1H), 4.37-4.42 (m, 1H), 4.15 (s, 2H), 3.56 (d, J = 10.4 Hz, 1H), 2.94-3.09 (m, 2H), 2.00-2.15 (m, 1H), 1.68-1.83 (m, 2H), 1.36-1.66 (m, 5H), 1.03-1.32 (m, 5H).	414.1	D	

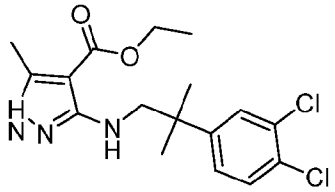
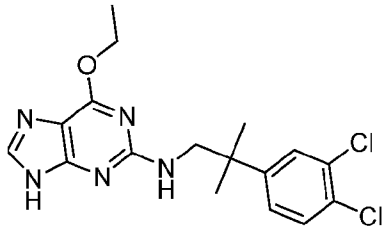
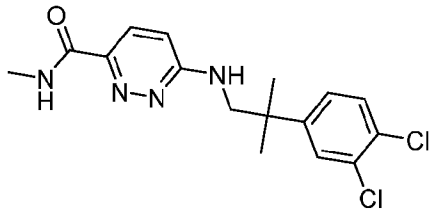
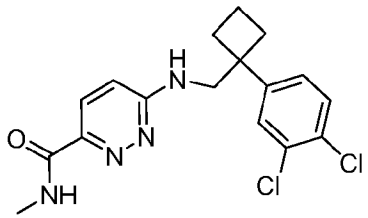
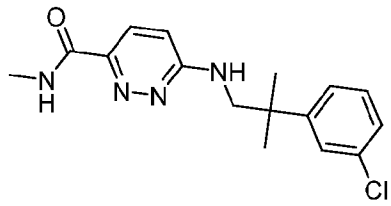
I-657		(400 MHz, DMSO-d6) 11.08 (s, 1H), 7.64 - 7.51 (m, 2H), 7.35 - 7.23 (m, 4H), 6.92 (t, J = 7.7 Hz, 1H), 3.71 (d, J = 6.4 Hz, 2H), 3.13 (q, J = 13.3 Hz, 2H), 2.95 (q, J = 13.5 Hz, 2H).	407.05	D	
I-658		(400 MIIz, DMSO-d6) 10.97 (s, 1II), 7.33 (t, J = 7.8 Hz, 2H), 7.27 - 7.09 (m, 5H), 6.90 (t, J = 7.7 Hz, 1H), 3.69 (d, J = 6.2 Hz, 2H), 2.38 - 2.29 (m, 1H), 2.29 - 2.21 (m, 3H), 2.17 - 2.02 (m, 1H), 1.81 (dq, J = 14.4, 9.2, 7.1 Hz, 1H).	337.1	B	B
I-659				E	
I-660				E	
I-661				E	

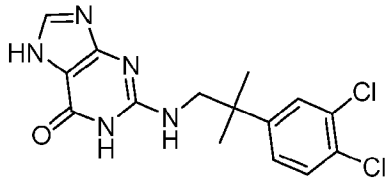
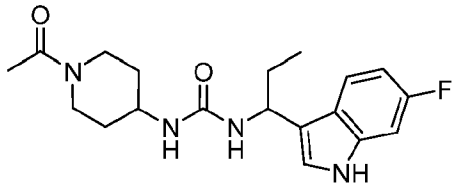
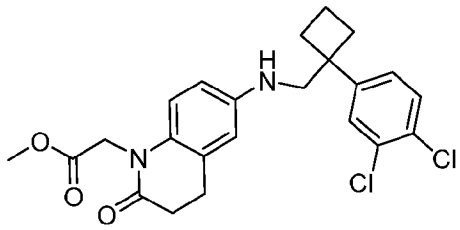
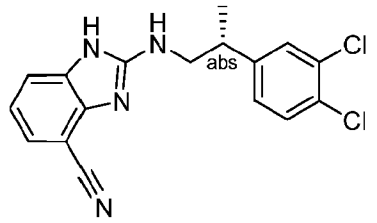
I-662		(400 MHz, DMSO-d6) ppm 11.74 (s, 1H), 7.46 (s, 1H), 7.17-7.38 (m, 4H), 6.35 (d, J=8.8 Hz, 1H), 5.83 (d, J = 7.6 Hz, 1H), 5.70 (s, 1H), 4.42-4.47 (m, 1H), 3.45 (d, J = 3.6 Hz, 3H), 2.70 (d, J = 8.8 Hz, 2 H), 2.06-2.17 (m, 1H), 1.24-1.88 (m, 12H), 1.08-1.19 (m, 1H).	402.1	D	
I-663		(400 MHz, DMSO-d6) ppm 10.32 (s, 2H), 7.28-7.40 (m, 4H), 6.63 (s, 1H), 4.46 (d, J − 8.8 Hz, 1H), 4.01-4.13 (m, 1H), 3.49-3.56 (m, 2H), 3.04-3.13 (m, 1H), 2.68-2.83 (m, 1H), 2.03-2.15 (m, 1H), 1.94-2.00 (m, 3H), 1.39-1.78 (m, 7H), 1.03-1.36 (m, 5H).	717.4	E	
I-664		(400 MHz, DMSO-d6) 9.19 (s, 1H), 7.01 (d, J = 8.8 Hz, 2H), 6.67 (d, J = 8.8 Hz, 2H), 6.16 (d, J = 9.2 Hz, 1H), 5.73 (d, J = 8.0 Hz, 1H), 4.32-4.36 (m, 1H), 4.07-4.12 (m, 1H), 3.64-3.69 (m, 1H), 3.48-3.59 (m, 1H), 3.01-3.15 (m, 1H), 2.66-2.78 (m, 1H), 2.03-2.14 (m, 1H), 1.98 (d, J = 2.8 Hz, 3H), 1.40-1.82 (m, 7H), 1.02-1.35 (m, 5H).	360.1	E	
I-665		(400 MHz, DMSO-d6) 8.66 (d, J = 5.0 Hz, 1H), 7.63 (d, J = 9.2 Hz, 1H), 7.42 -6.97 (m, 5H), 6.79 (d, J = 9.2 Hz, 1H), 4.83 (s, 1H), 3.80 (d, J = 6.0 Hz, 2H), 2.78 (d, J = 4.8 Hz, 3H), 2.56 -2.52 (m, 2H), 2.37- 2.26 (m, 2H), 1.39 (s, 3H).	361.15	E	
I-666		NMR (400 MHz, d6-DMSO) 12.96 (br s, 1H), 8.57 (d, J = 8.7 Hz, 1H), 7.98 (s, 1H), 7.55 (s, 1H), 7.43 (d, J = 8.4 Hz, 1H), 7.37 (dd, J = 1.6, 1.6 Hz, 1H), 7.34 - 7.20 (m, 4H), 4.55 (app t, J = 9.1 Hz, 1H), 3.54 (d, J = 14.0 Hz, 1H), 3.48 (d, J = 13.9 Hz, 1H), 2.25 - 2.12 (m, 1H), 1.75 - 1.66	368.3	E	

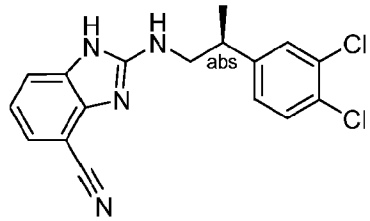
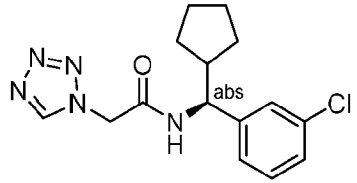
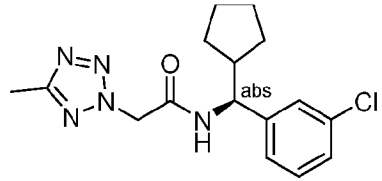
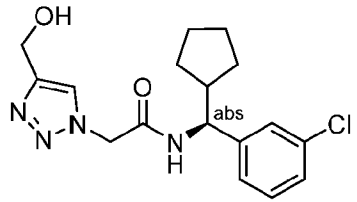
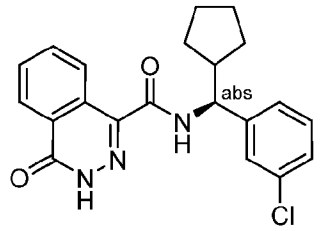
		(m, 1H), 1.58 - 1.37 (m, 4H), 1.30 - 1.21 (m, 2H), 1.13 - 1.02 (m, 1H).			
I-667		(400 MHz, DMSO-d6) 10.91 (s, 1H), 7.69 (d, J = 2.1 Hz, 1H), 7.59 (d, J = 8.4 Hz, 1H), 7.44 (dd, J = 8.4, 2.2 Hz, 1H), 7.36 (dd, J = 7.8, 1.1 Hz, 1H), 7.25 (dd, J = 7.8, 1.1 Hz, 1H), 7.18 (s, 1H), 6.91 (t, J = 7.8 Hz, 1H), 3.96 (dt, J = 8.0, 6.8 Hz, 1H), 3.86 (td, J = 7.7, 5.5 Hz, 1H), 3.67 (d, J = 6.2 Hz, 2H), 2.33 - 2.23 (m, 1H), 2.10 - 1.92 (m, 2H), 1.74 (dt, J = 12.1, 7.3 Hz, 1H).	387.05	D	
I-668		(400 MHz, DMSO-d6) 11.16 (s, 1H), 7.61 - 7.53 (m, 2H), 7.42 - 7.17 (m, 4H), 6.92 (t, J = 7.8 Hz, 1H), 3.64- 3.44 (m, 2H), 3.15 (q, J = 7.1 Hz, 1H), 1.26 (d, J = 6.9 Hz, 3H).	345.05	D	
I-669		(400 MHz, DMSO-d6)11.07 (s, 1H), 7.59-7.51 (m, 2H), 7.33 (dd, J = 8.3, 2.4 Hz, 2H), 7.24 (dd, J = 7.8, 1.1 Hz, 1H), 7.13 (s, 1H), 6.91 (t, J = 7.8 Hz, 1H), 3.72-3.59 (m, 2H), 3.05 (d, J = 9.4 Hz, 1H), 2.86 (td, J − 8.6, 5.3 Hz, 1H), 2.59 (d, J − 9.4 Hz, 1H), 2.44 (dd, J = 9.1, 6.0 Hz, 1H), 2.32 (s, 3H), 2.20 (ddd, J = 13.8, 8.1, 6.0 Hz, 1H), 2.05 (ddd, J = 13.6, 7.4, 3.5 Hz, 1H).	400.1	E	
I-670		(400 MHz, d6-DMSO) 12.96 (br s, 1H), 8.57 (d, J = 8.7 Hz, 1H), 7.98 (s, 1H), 7.55 (s, 1H), 7.43 (d, J = 8.4 Hz, 1H), 7.37 (dd, J = 1.6, 1.6 Hz, 1H), 7.34 - 7.20 (m, 4H), 4.55 (app t, J = 9.1 Hz, 1H), 3.54 (d, J = 14.0 Hz, 1H), 3.48 (d, J = 13.9 Hz, 1H), 2.25 - 2.12 (m, 1H), 1.75 - 1.66 (m, 1H), 1.58 - 1.37 (m, 4H), 1.30 - 1.21 (m, 2H), 1.13 - 1.02 (m, 1H).	368.3	D	

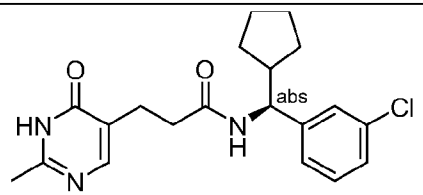
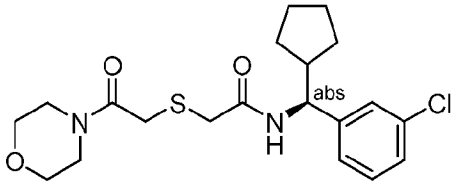
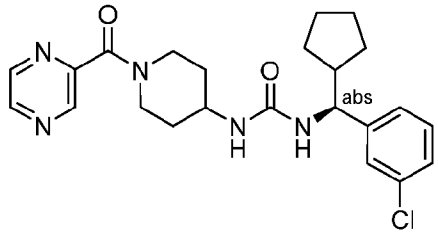
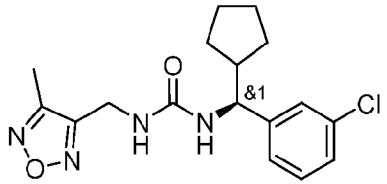
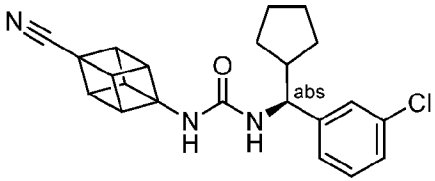
I-671		(400 MHz, DMSO-d6)12.02 (s,1H), 8.28 (s, 1H), 7.63 (d, J = 2.3 Hz, 1H), 7.57 (d, J = 8.4 Hz, 1H), 7.40 (dd, J = 8.5, 2.3 Hz, 1H), 7.24 (s, 1H), 6.36 (s, 1H), 3.34 (d, J = 6.1 Hz, 2H), 2.00 (s, 3H), 1.29 (s, 6H).	297.95	E	
I-672		(400 MHz, dmso) 11.17 (br. s, 1H), 8.01 (br. s, 1H), 7.52 - 7.47 (m, 1H), 7.39 - 7.35 (m, 3H), 7.33 - 7.28 (m, 1H), 7.23 (d, J = 7.6 Hz, 1H), 6.91 (t, J = 7.8 Hz, 1H), 4.73 (d, J = 10.7 Hz, 1H), 0.95 (s, 9H)	339.2	C	
I-673		(400 MIIz, dmso) 7.88 (br. s, 1II), 7.55 (td, J = 8.8, 7.0 Hz, 1H), 7.38 (dd, J = 7.8, 1.0 Hz, 1H), 7.26 - 7.17 (m, 2H), 7.11 (td, J = 8.4, 2.4 Hz, 1H), 6.92 (t, J = 7.8 Hz, 1H), 5.10 (d, J = 10.2 Hz, 1H), 0.96 (s, 9H). One NH proton signal missing; some minor aliphatic impurities	341.2	E	
I-674		(400 MHz, dmso) 7.93 (br. s, 1H), 7.55 (td, J = 8.6, 6.8 Hz, 1H), 7.38 (dd, J − 7.7, 1.0 Hz, 1H), 7.26 - 7.16 (m, 2H), 7.10 (td, J = 8.5, 2.6 Hz, 1H), 6.91 (t, J = 7.8 Hz, 1H), 5.10 (d, J = 10.2 Hz, 1H), 0.96 (s, 9H). One NH proton signal missing; some minor aliphatic impurities	341.2	D	
I-675		(400 MHz, dmso) 11.13 (br. s, 1H), 8.00 (d, J = 8.4 Hz, 1H), 7.52 - 7.47 (m, 1H), 7.40 - 7.34 (m, 3H), 7.33 - 7.27 (m, 1H), 7.24 (dd, J = 7.8, 0.8 Hz, 1H), 6.91 (t, J = 7.8 Hz, 1H), 4.73 (d, J = 10.4 Hz, 1H), 0.95 (s, 9H). Approx. 10.1% w/w of diethylamine.	339.2	E	

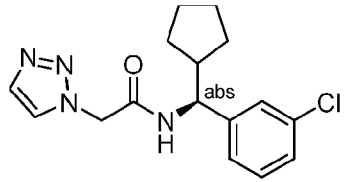
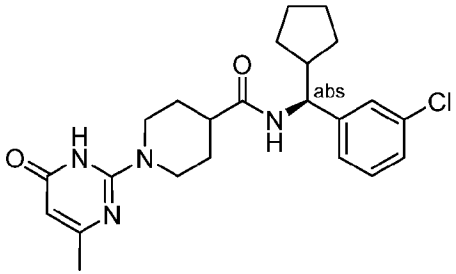
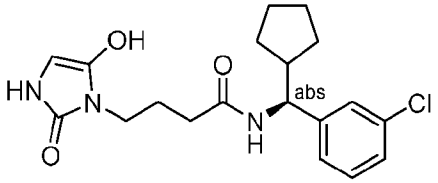
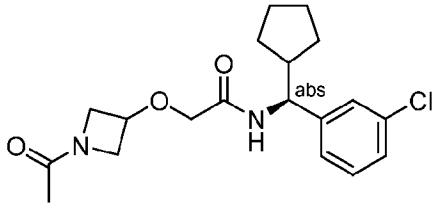
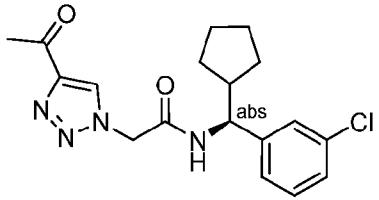
I-676		(400 MHz, DMSO-d6) 11.18 (s, 1H), 7.92 (d, J = 8.0 Hz, 1H), 7.49 (s, 1H), 7.40-7.22 (m, 5H), 6.99-6.85 (m, 1H), 4.67-4.48 (m, 1H), 2.11-2.04 (m, 1H), 0.98 (d, J − 8.0 Hz, 3H), 0.79 (d, J − 8.0 Hz, 3H).	325	D	
I-677				D	
I-678				E	
I-679				D	
I-680				E	

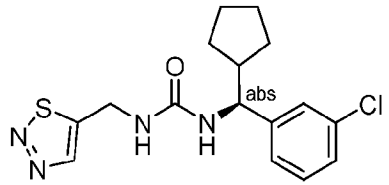
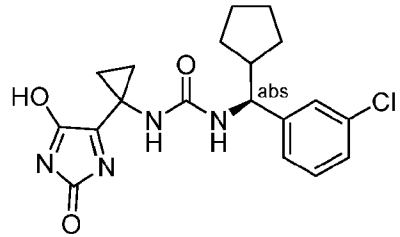
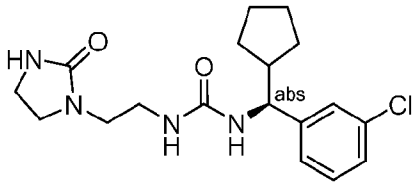
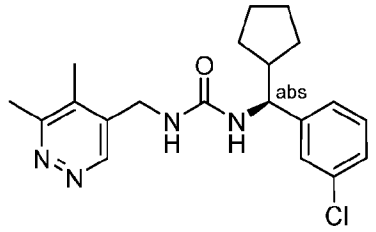
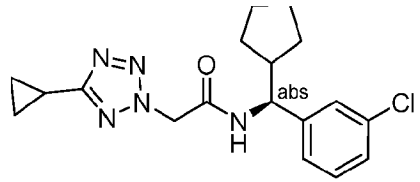
I-681				E	
I-682				E	
I-683				E	
I-684				D	
I-685				E	

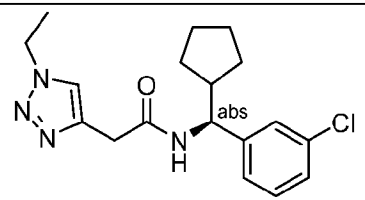
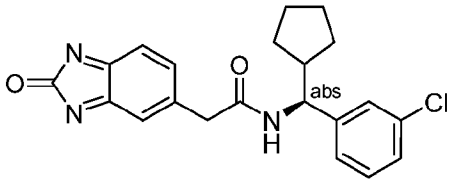
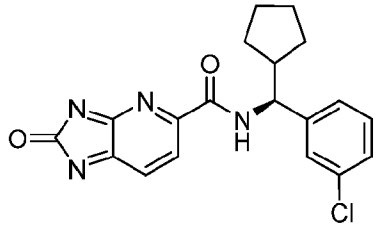
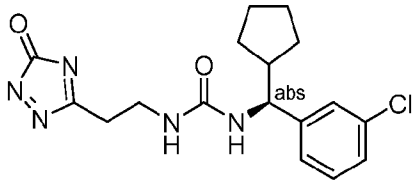
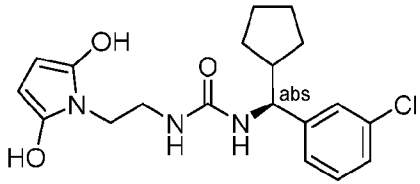
I-686			352.3	E	
I-687		(400 MHz, d6-DMSO) 10.97 (br s, 1H), 7.35 - 7.27 (m, 2H), 7.25 (d, J = 2.4 Hz, 1H), 6.90 (app td, J = 9.2, 2.5 Hz, 1H), 5.97 (d, J = 8.6 Hz, 1H), 5.79 (d, J = 7.8 Hz, 1H), 4.79 (dt, J = 7.8, 7.2 Hz, 1H), 4.08 (dd, J = 15.4, 8.8 Hz, 1H), 3.73 - 3.52 (m, 2H), 3.17 - 3.03 (m, 1H), 2.82 - 2.69 (m, 1H), 1.98 (s, 1.5 H), 1.97 (s, 1.5 H) 1.91 - 1.62 (m, 4H), 1.31 - 1.00 (m, 2H), 0.84 (t, J = 7.3 Hz, 3H). The acetyl moiety appears as two separate singlets.	359.4	E	
I-688		(400 MHz, DMSO-d6) 7.52 (d, J = 8.3 Hz, 1H), 7.42 (d, J = 2.1 Hz, 1H), 7.18 (dd, J = 8.3, 2.2 Hz, 1H), 6.61 (d, J = 8.6 Hz, 1H), 6.41 - 6.31 (m, 2H), 5.27 (t, J = 6.1 Hz, 1H), 4.53 (s, 2H), 3.65 (s, 3H), 2.68 (dd, J = 8.6, 5.8 Hz, 2H), 2.46 (dd, J = 8.6, 5.8 Hz, 4H), 2.26 (q, J = 8.9, 7.4 Hz, 4H), 2.08 (ddd, J = 16.6, 10.1, 5.6 Hz, 1H), 1.80 (s, 1H).	477.1	E	
I-689		(400 MHz, DMSO-d6) 11.17 (s, 1H), 7.61 - 7.53 (m, 2H), 7.42 - 7.16 (m, 4H), 6.92 (t, J = 7.7 Hz, 1H), 3.50 (s, 2H), 3.15 (d, J = 7.4 Hz, 1H), 1.26 (d, J = 6.9 Hz, 3H).	345.05	D	

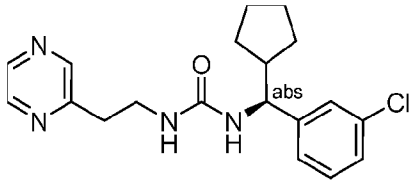
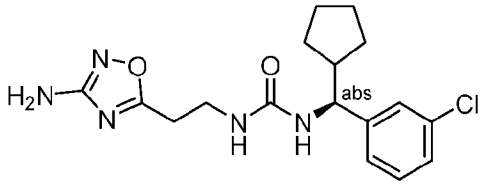
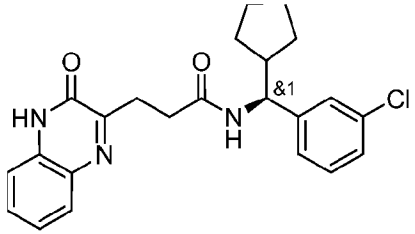
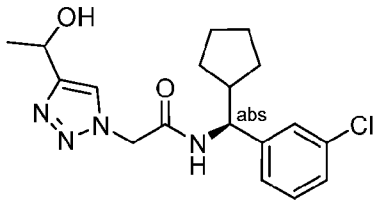
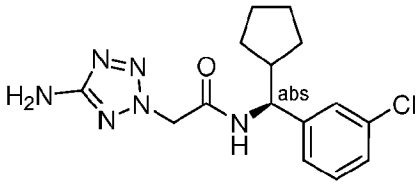
I-690		(400 MHz, DMSO-d6) 11.16 (s, 1H), 7.61 - 7.53 (m, 2H), 7.37- 7.22 (m, 4H), 6.92 (t, J = 7.8 Hz, 1H), 3.50 (t, J = 6.8 Hz, 2H), 3.15 (q, J = 7.0 Hz, 1H), 1.26 (d, J = 6.9 Hz, 3H).	345.05	D	
I-691				E	
I-692				E	
I-693				E	
I-694				E	

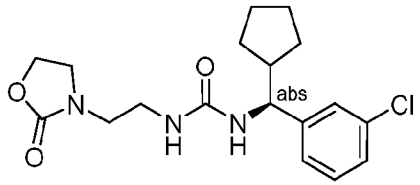
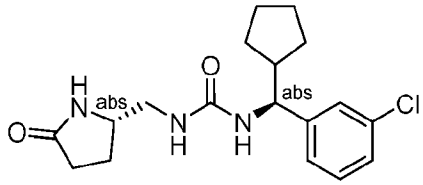
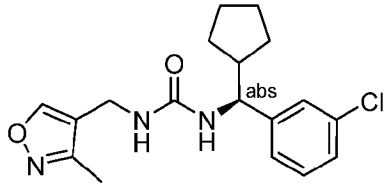
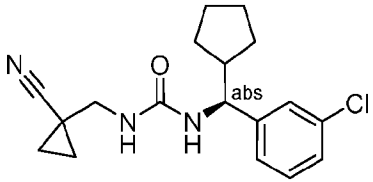
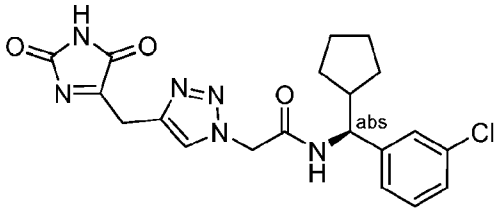
I-695				E	
I-696				E	
I-697				D	
I-698				D	
I-699				E	

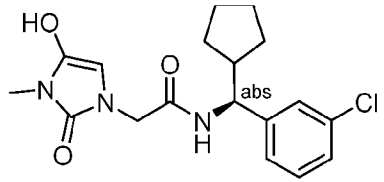
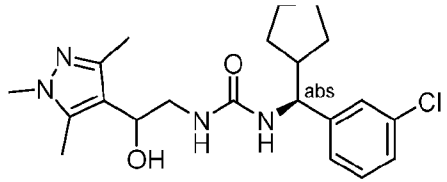
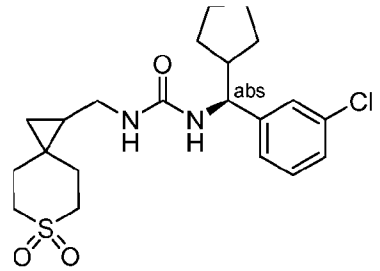
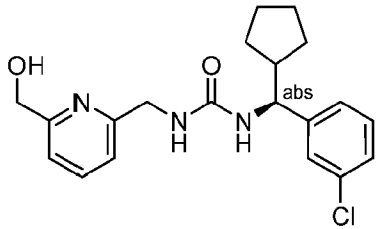
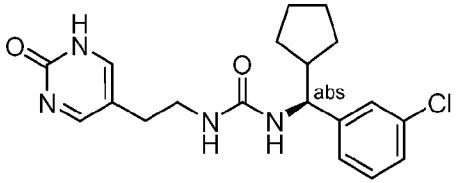
I-700				D	
I-701				E	
I-702				E	
I-703				E	
I-704				E	

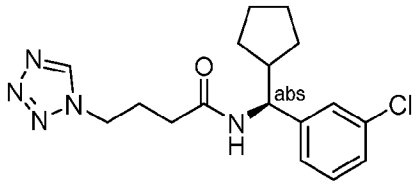
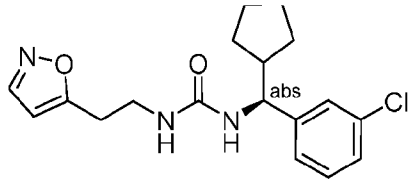
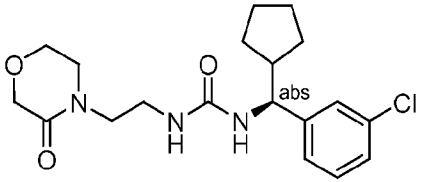
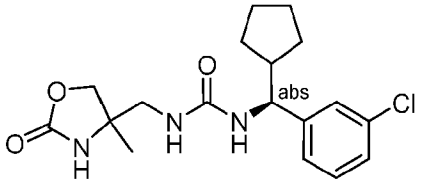
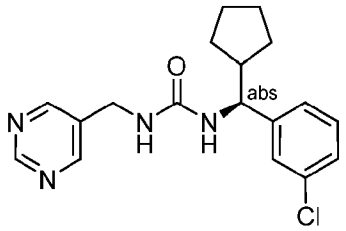
I-705				D	
I-706				E	
I-707				E	
I-708				D	
I-709				E	

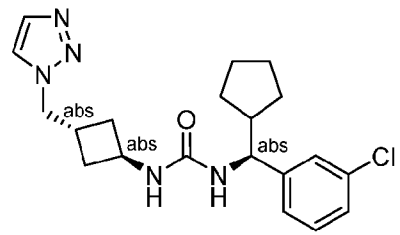
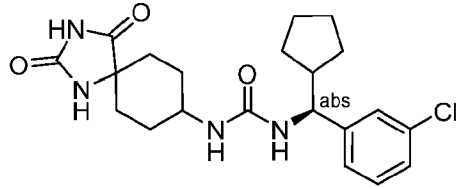
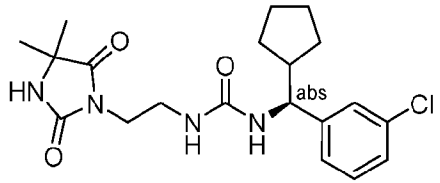
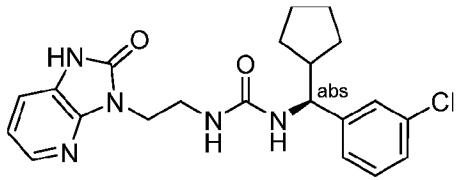
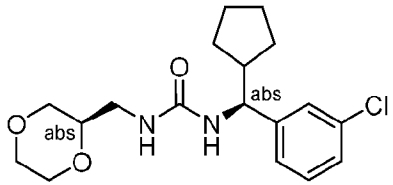
I-710				D	
I-711				E	
I-712				E	
I-713				D	
I-714				E	

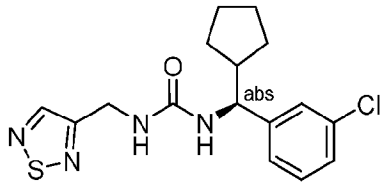
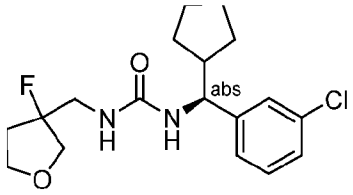
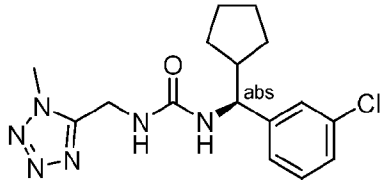
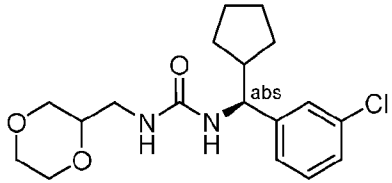
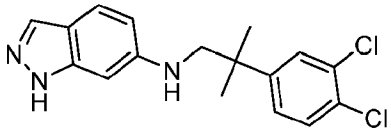
I-715				E	
I-716				E	
I-717				E	
I-718				E	
I-719				E	

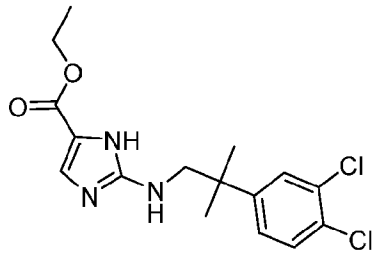
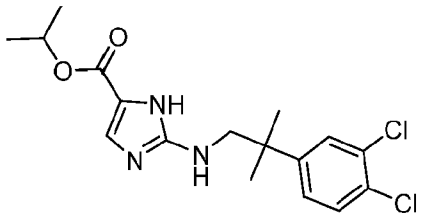
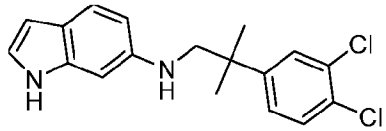
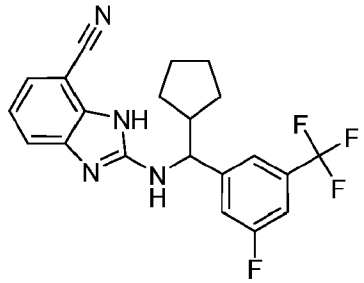
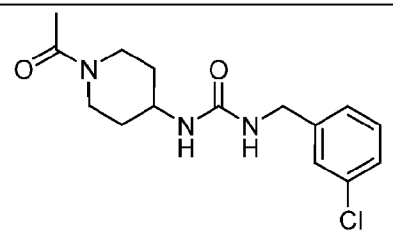
I-720				E	
I-721				E	
I-722				D	
I-723				D	
I-724				E	

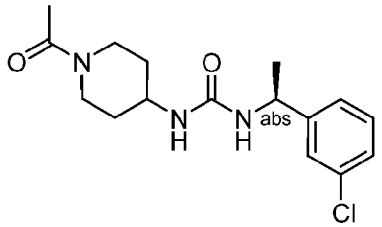
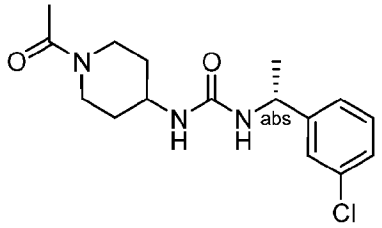
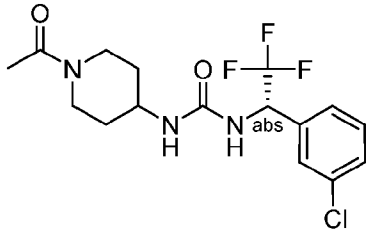
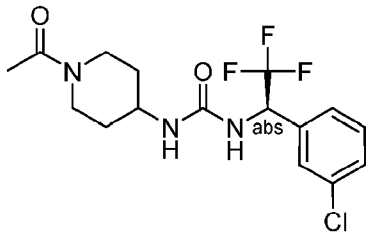
I-725				E	
I-726				E	
I-727				D	
I-728				D	
I-729				D	

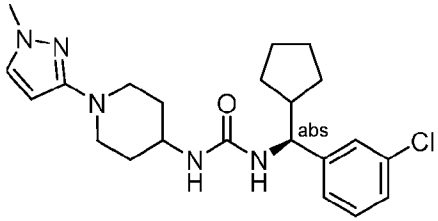
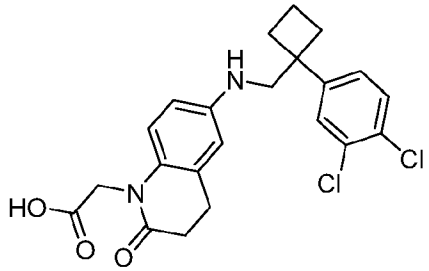
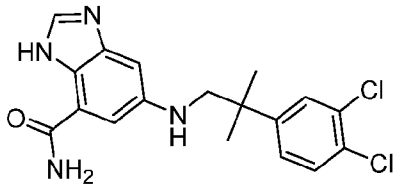
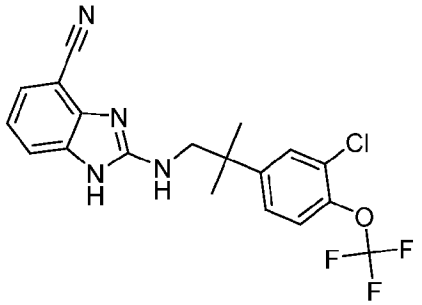
I-730				D	
I-731				E	
I-732				D	
I-733				D	
I-734				E	

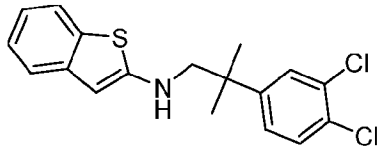
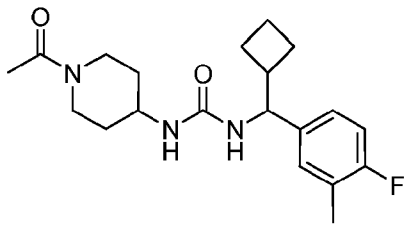
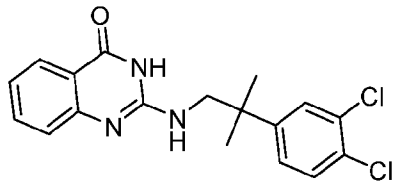
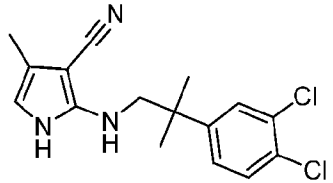
I-735				D	
I-736				C	
I-737				E	
I-738				E	
I-739				E	

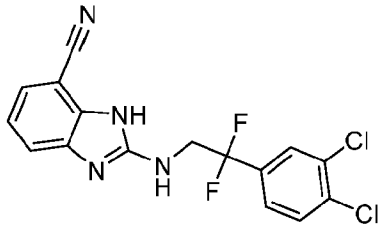
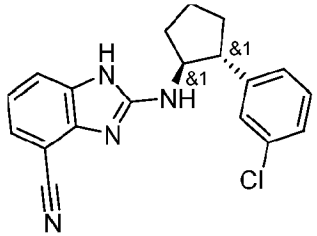
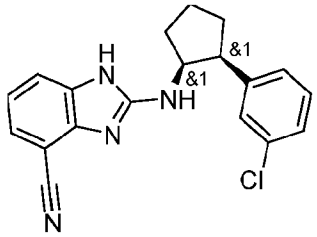
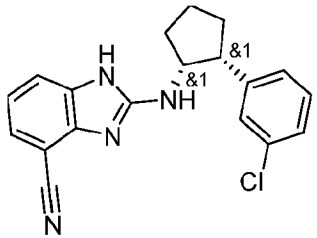
I-740				D	
I-741				D	
I-742				D	
I-743				E	
I-744			334.29	E	

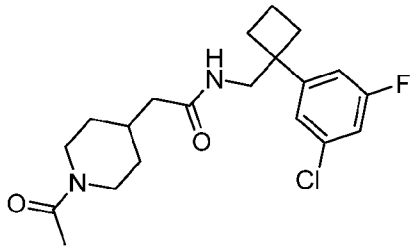
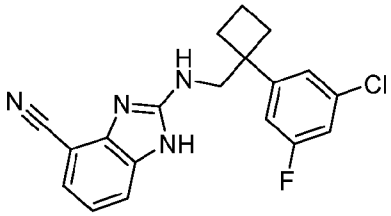
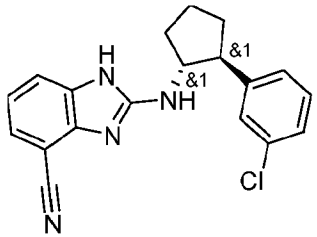
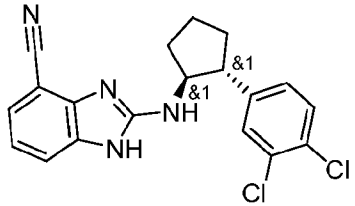
I-745			356.3	E	
I-746			370.35	D	
I-747			333.29	E	
I-748		(400 MIIz, dmso) 11.32 (br. s, 1II), 8.08 (br. d, J = 10.2 Hz, 1H), 7.72 (s, 1H), 7.65 (d, J = 9.9 Hz, 1H), 7.53 (d, J − 8.6 Hz, 1H), 7.36 (dd, J − 7.7, 0.9 Hz, 1H), 7.25 (d, J = 7.2 Hz, 1H), 6.92 (t, J = 7.7 Hz, 1H), 4.74 (t, J = 9.1 Hz, 1H), 2.40 - 2.29 (m, 1H), 1.89 - 1.78 (m, 1H), 1.69 - 1.39 (m, 5H), 1.38 - 1.26 (m, 1H), 1.26 - 1.15 (m, 1H). Partial formate salt	403.2	C	
I-749				E	

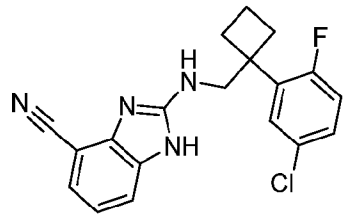
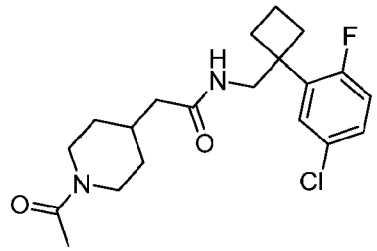
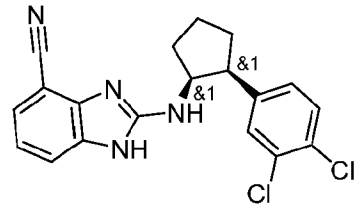
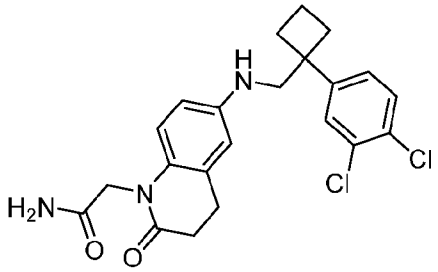
I-750				E	
I-751				E	
I-752				E	
I-753				E	

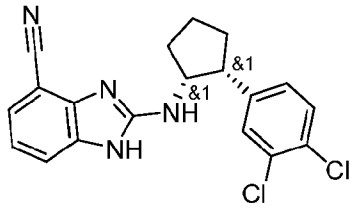
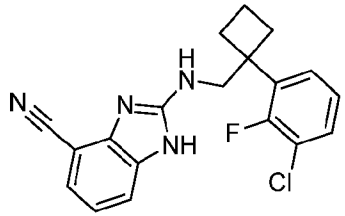
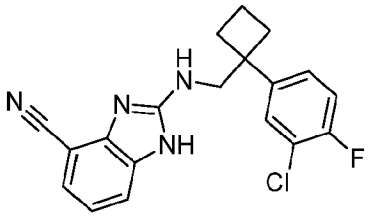
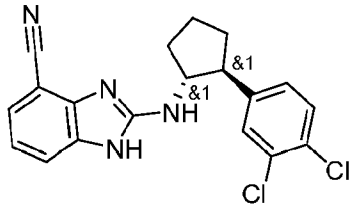
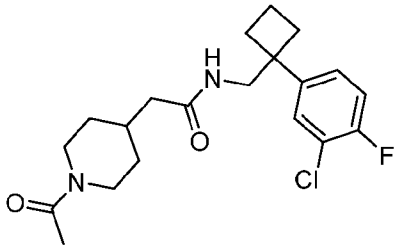
I-754		(DMSO-d6, 400MHz): 7.40 (s, 1H), 7.37-7.18 (m, 4H), 6.35 (d, J = 8.4 Hz, 1H), 5.82 (d, J = 7.6 Hz, 1H), 5.64 (s, 1H), 4.45 (t, J = 8.4 Hz, 1H), 3.64 (s, 3H), 3.46 (d, J = 5.6 Hz, 4H), 2.71-2.71 (m, 1H), 2.73-2.70 (m, 1H), 2.67 (d, J = 8.8 Hz, 2H), 2.21-2.02 (m, 1H), 1.87-1.22 (m, 13H), 1.15 (d, J = 7.2 Hz, 1H), 1.20-1.04 (m, 1H).	416.1	E	
I-755		(400 MHz, DMSO-d6) 7.52 (d, J = 8.3 Hz, 1H), 7.42 (d, J = 2.1 Hz, 1H), 7.18 (dd, J = 8.3, 2.1 Hz, 1H), 6.54 (d, J = 8.7 Hz, 1H), 6.36 (dd, J = 8.7, 2.7 Hz, 1H), 6.30 (d, J = 2.6 Hz, 1H), 5.14 (s, 1H), 4.16 (s, 2H), 3.31 (d, J = 3.7 Hz, 3H), 2.65 (dd, J = 8.7, 6.0 Hz, 2H), 2.40 (dd, J = 8.6, 5.9 Hz, 2H), 2.30 - 2.17 (m, 4H), 2.07 (q, J = 9.1 Hz, 1H), 1.80 (s, 1H).	433.05	E	
I-756		(400 MHz, DMSO-d6) 12.31 (s, 1H), 9.21 (d, J = 3.4 Hz, 1H), 8.08 (s, 1H), 7.64 (d, J = 2.3 Hz, 1H), 7.55 (d, J = 8.4 Hz, 2H), 7.45 - 7.41 (m, 1H), 7.33 (d, J = 2.3 Hz, 1H), 6.77 (d, J = 2.3 Hz, 1H), 5.44 (d, J = 5.6 Hz, 1H), 3.24 (d, J = 5.6 Hz, 2H), 1.38 (s, 6H).	377.05	D	
I-757		(400 MHz, DMSO-d6) 10.98 (s, 1H), 7.72 (d, J = 2.2 Hz, 1H), 7.57 - 7.45 (m, 2H), 7.34 (dd, J = 7.8, 1.1 Hz, 1H), 7.25 (dd, J = 7.7, 1.1 Hz, 1H), 7.16 (s, 1H), 6.91 (t, J = 7.7 Hz, 1H), 3.58 (d, J = 6.2 Hz, 2H), 1.36 (s, 6H).	409.05	E	

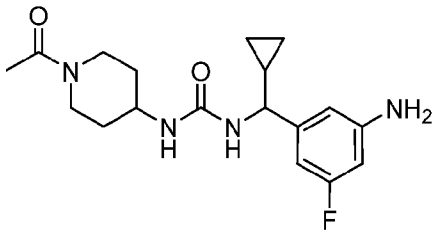
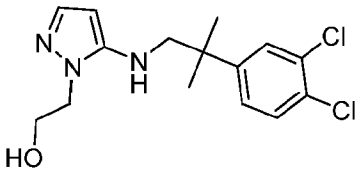
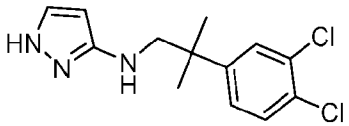
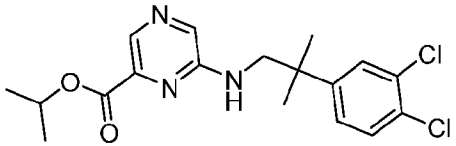
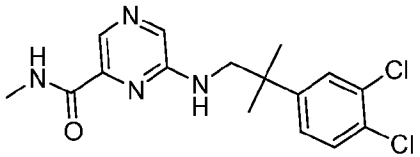
I-758		(400 MHz, DMSO-d6) 7.64 (d, J = 2.3 Hz, 1H), 7.56 (d, J = 8.5 Hz, 1H), 7.51 (dt, J = 7.9, 0.9 Hz, 1H), 7.43 (dd, J = 8.5, 2.3 Hz, 1H), 7.27 (dt, J = 7.9, 1.0 Hz, 1H), 7.11 (ddd, J = 8.0, 7.2, 1.1 Hz, 1H), 6.91 (ddd, J = 8.3, 7.3, 1.2 Hz, 1H), 6.47 (t, J = 5.9 Hz, 1H), 6.00 (s, 1H), 3.31 (d, J = 5.9 Hz, 2H), 1.36 (s, 6H).	350.05	E	
I-759		(400 MHz, dmso) 7.09 (d, J = 7.9 Hz, 1H), 7.04 (d, J = 1.1 Hz, 1H), 7.03 - 7.01 (m, 1H), 6.18 (d, J = 8.7 Hz, 1H), 5.79 (d, J = 7.7 Hz, 1H), 4.50 (t, J = 8.8 Hz, 1H), 4.16 - 4.06 (m, 1H), 3.72 - 3.61 (m, 1H), 3.60 - 3.48 (m, 1H), 3.13 - 3.01 (m, 1H), 2.77 - 2.65 (m, 1H), 2.46 (submerged m, 1H), 2.20 (d, J = 1.7 Hz, 3H), 1.97 (s, 1.5H), 1.97 (s, 1.5H), 1.94 - 1.86 (m, 1H), 1.82 - 1.63 (m, 7H), 1.28 - 1.02 (m, 2H). CH3 (acetyl) shows up as two singlets.	362.2	E	
I-760			362.25	E	
I-761			322.29	D	

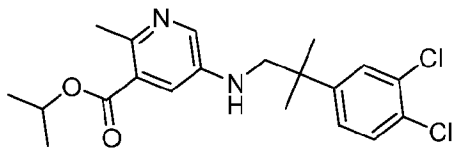
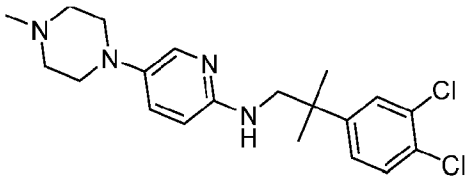
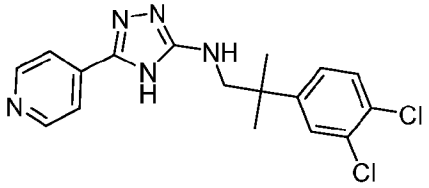
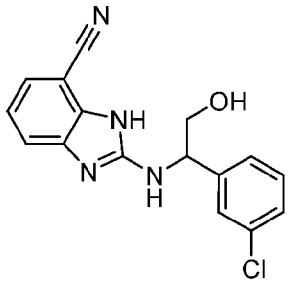
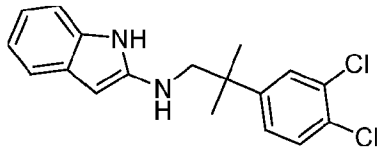
I-762			367.2	E	
I-763		(400 MHz, DMSO-d6) 11.29 (s, 1H), 7.50 (s, 1H), 7.41 (d, J = 2.4 Hz, 1H), 7.30 (dd, J = 8.1, 5.3 Hz, 3H), 7.23 (dd, J = 6.0, 3.2 Hz, 2H), 6.89 (t, J = 7.8 Hz, 1H), 4.14 (q, J = 8.6 Hz, 1H), 3.10 (q, J = 9.3 Hz, 1H), 2.36 - 2.27 (m, 1H), 2.19 - 2.07 (m, 1H), 1.89 - 1.69 (m, 3H), 1.63 - 1.49 (m, 1H).	337.15	E	
I-764		(400 MHz, DMSO-d6) 11.18 (s, 1H), 7.49 (d, J = 8.4 Hz, 1H), 7.41 (d, J = 2.0 Hz, 1H), 7.34 - 7.28 (m, 3H), 7.26 - 7.19 (m, 2H), 6.89 (t, J = 7.7 Hz, 1H), 4.23 - 4.05 (m, 1H), 3.10 (d, J = 9.1 Hz, 1H), 2.35 - 2.31 (m, 1H), 2.14 (dd, J = 12.7, 7.1 Hz, 1H), 1.89 - 1.77 (m, 3H), 1.56 (dd, J = 12.5, 8.4 Hz, 1H).	337.05	E	
I-765		(400 MHz, DMSO-d6) 10.84 (s, 1H), 7.31 - 7.25 (m, 2H), 7.25 - 7.16 (m, 3H), 7.18 - 7.07 (m, 2H), 6.87 (t, J = 7.8 Hz, 1H), 4.53 - 4.44 (m, 1H), 3.39 (td, J = 8.7, 6.4 Hz, 1H), 2.19 - 2.01 (m, 3H), 1.92 (dq, J = 14.0, 7.5, 6.3 Hz, 1H), 1.74 (ddt, J = 13.6, 11.5, 4.5 Hz, 2H).	337.15	E	

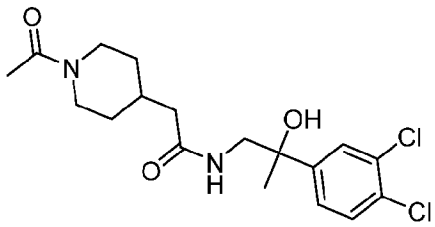
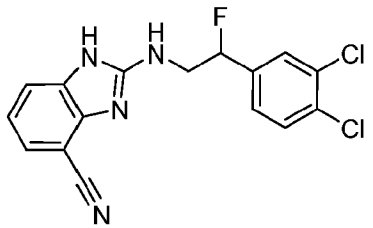
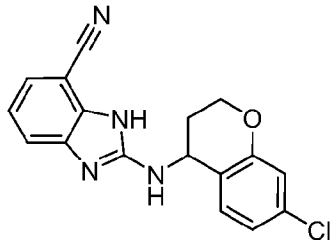
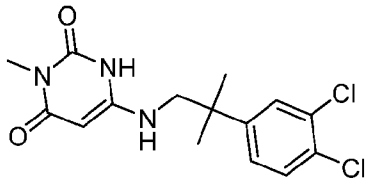
I-766		(400 MHz, DMSO-d6) 7.70 (t, J = 6.1 Hz, 1H), 7.22 (dt, J = 8.8, 2.1 Hz, 1H), 6.97 (t, J = 1.7 Hz, 1H), 6.95 - 6.87 (m, 1H), 4.26 (d, J = 13.1 Hz, 1H), 3.70 (d, J = 13.6 Hz, 1H), 3.45 (d, J = 6.1 Hz, 2H), 2.92 (ddd, J = 14.1, 12.2, 2.7 Hz, 1H), 2.43 (dd, J = 12.7, 2.8 Hz, 1H), 2.24- 2.13 (m, 4H), 2.10 -1.98 (m, 1H), 1.95 (d, J = 11.1 Hz, 5II), 1.75 (dtd, J = 14.6, 7.2, 3.4 IIz, 2II), 1.43 (dd, J = 12.5, 4.3 Hz, 2H), 0.97 (td, J = 12.3, 4.1 Hz, 1H), 0.89 - 0.76 (m, 1H).	381.15	E	
I-767		(400 MHz, DMSO-d6) 10.99 (s, 1H), 7.32 (dd, J = 7.7, 1.1 Hz, 1H), 7.24 (dd, J = 7.9, 1.1 Hz, 1H), 7.18 (dt, J = 8.8, 2.2 Hz, 2H), 7.11 (t, J = 1.7 Hz, 1H), 7.03 (dt, J = 9.7, 2.0 Hz, 1H), 6.90 (t, J = 7.7 Hz, 1H), 3.71 (d, J = 6.1 Hz, 2H), 2.38 - 2.20 (m, 4H), 2.18 - 2.05 (m, 1H), 1.81 (dtd, J = 15.4, 9.1, 4.2 Hz, 1H).	355.05	C	
I-768		(400 MHz, DMSO-d6) 10.85 (s, 1H), 7.28 (t, J = 3.7 Hz, 2H), 7.25 - 7.16 (m, 3H), 7.18 - 7.07 (m, 2H), 6.87 (t, J = 7.8 Hz, 1H), 4.48 (t, J = 7.4 Hz, 1H), 3.39 (td, J = 8.7, 6.5 Hz, 1H), 2.19 - 2.01 (m, 3H), 1.91 (ddd, J = 13.8, 9.6, 6.4 Hz, 1H), 1.74 (tdd, J = 14.7, 8.2, 4.0 Hz, 2H).	337.15	E	
I-769		(400 MHz, DMSO-d6) 11.17 (s, 1H), 7.62 (d, J = 2.1 Hz, 1H), 7.50 (dd, J − 19.4, 8.5 Hz, 2H), 7.39-7.28 (m, 2H), 7.27 - 7.21 (m, 1H), 6.90 (t, J = 7.8 Hz, 1H), 4.18 - 4.10 (m, 1H), 3.10 (q, J = 9.1, 8.7 Hz, 1H), 2.33 - 2.25 (m, 1H), 2.17- 2.06 (m, 1H), 1.90- 1.70 (m, 3H), 1.64 - 1.50 (m, 1H).	371.05	D	

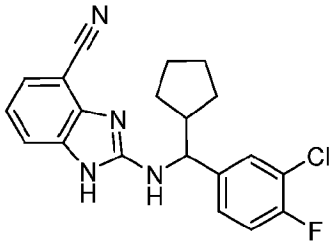
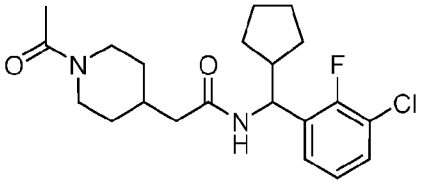
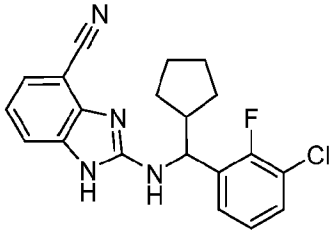
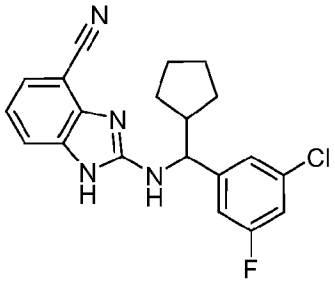
I-770		(400 MHz, DMSO-d6) 11.02 (s, 1H), 7.31 (dd, J = 7.7, 1.1 Hz, 1H), 7.28 - 7.22 (m, 2H), 7.22 - 7.07 (m, 3H), 6.89 (t, J = 7.8 Hz, 1H), 3.79 (d, J = 6.2 Hz, 2H), 2.39 - 2.28 (m, 4H), 2.26 - 2.08 (m, 1H), 1.85 (dt, J = 11.3, 5.6 Hz, 1H).	355.1	E	
I-771		(400 MHz, DMSO-d6) 7.76 (t, J = 6.2 Hz, 1H), 7.28 (ddd, J = 8.7, 4.3, 2.7 Hz, 1H), 7.12 (dd, J = 10.5, 8.7 Hz, 1H), 7.02 (dd, J = 6.7, 2.7 Hz, 1H), 4.26 (d, J = 13.0 Hz, 1H), 3.69 (d, J = 13.4 Hz, 1H), 3.53 (dd, J = 6.3, 2.0 Hz, 2H), 2.91 (td, J = 13.5, 12.9, 2.7 Hz, 1H), 2.48 - 2.38 (m, 1H), 2.33 - 2.21 (m, 4H), 2.14 - 2.01 (m, 1H), 1.96 (s, 3H), 1.91 (dd, J = 7.2, 1.4 Hz, 2H), 1.85 - 1.74 (m, 1H), 1.69 (ddd, J = 11.2, 7.4, 3.8 Hz, 1H), 1.41 - 1.33 (m, 2H), 0.99 - 0.82 (m, 2H),	381.15	E	
I-772		(400 MHz, DMSO-d6) 11.17 (s, 1H), 7.62 (d, J = 2.0 Hz, 1H), 7.50 (dd, J = 19.9, 8.4 Hz, 2H), 7.39-7.28 (m, 2H), 7.24 (d, J = 7.8 Hz, 1H), 6.90 (t, J = 7.8 Hz, 1H), 4.14 (t, J = 8.8 Hz, 1H), 3.10 (d, J = 9.0 Hz, 1H), 2.36 - 2.24 (m, 1H), 2.12 (d, J = 8.1 Hz, 1H), 1.87 - 1.78 (m, 3H), 1.56 (s, 1H).	371.05	D	
I-773		(400 MHz, DMSO-d6) 7.52 (d, J = 8.3 Hz, 1H), 7.42 (d, J = 2.1 Hz, 1H), 7.36 (s, 1H), 7.18 (dd, J = 8.3, 2.1 Hz, 1H), 7.09 (s, 1H), 6.50 (d, J = 8.7 Hz, 1H), 6.38 (dd, J = 8.7, 2.6 Hz, 1H), 6.33 (d, J = 2.6 Hz, 1H), 5.22 (t, J = 6.1 Hz, 1H), 4.28 (s, 2H), 3.31 (s, 2H), 2.72 - 2.61 (m, 2H), 2.50 - 2.43 (m, 1H), 2.24 (t, J = 8.9 Hz, 4H), 2.08 (s, 2H) , 1.81 (d, J = 4.4 Hz, 1H).	432.05	E	

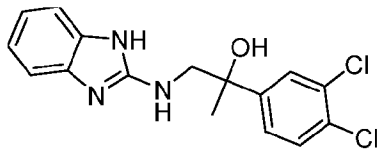
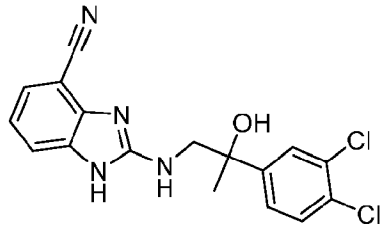
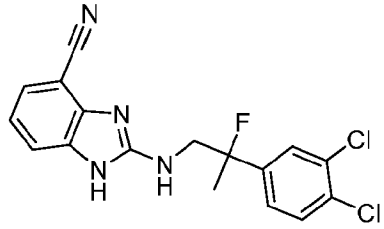
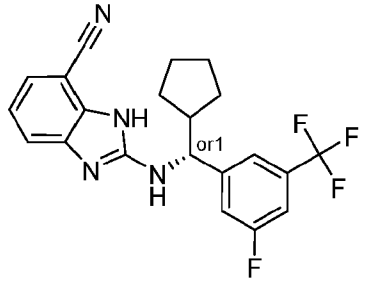
I-774		(400 MHz, DMSO-d6) 10.85 (s, 1H), 7.48 - 7.35 (m, 2H), 7.29 (dd, J = 7.7, 1.1 Hz, 1H), 7.21 (ddd, J = 10.1, 8.1, 1.6 Hz, 2H), 7.12 (d, J = 9.2 Hz, 1H), 6.88 (t, J = 7.8 Hz, 1H), 4.53- 4.42 (m, 1H), 3.46- 3.35 (m, 1H), 2.18 - 2.01 (m, 3H), 1.93 (dtt, J = 12.2, 8.3, 4.8 Hz, 1H), 1.73 (qq, J = 10.5, 7.4, 6.3 Hz, 2H).	371.05	D	
I-775		(400 MHz, DMSO-d6) 11.00 (s, 1H), 7.40 - 7.27 (m, 2H), 7.22 (dd, J = 7.9, 1.1 Hz, 1H), 7.19 - 7.06 (m, 3H), 6.89 (t, J = 7.7 Hz, 1H), 3.81 (d, J = 6.3 Hz, 2H), 2.35 (t, J = 9.9 Hz, 4H), 2.18 (q, J = 9.2 Hz, 1H), 1.85 (ddd, J = 13.9, 8.1, 4.3 Hz, 1H).	355.1	C	B
I-776		(400 MHz, DMSO-d6) 10.96 (s, 1H), 7.37 (dd, J = 7.3, 2.3 Hz, 1H), 7.37 - 7.27 (m, 2H), 7.27 - 7.19 (m, 1H), 7.23 - 7.12 (m, 2H), 6.90 (t, J = 7.8 Hz, 1H), 3.69 (d, J = 6.2 Hz, 2H), 2.54 (s, 4H), 2.18 - 2.04 (m, 1H), 1.87 - 1.74 (m, 1H).	355.05	D	
I-777		(400 MHz, DMSO-d6) 10.85 (s, 1H), 7.48 - 7.39 (m, 2H), 7.29 (dd, J = 7.7, 1.1 Hz, 1H), 7.21 (td, J = 8.4, 1.6 Hz, 2H), 7.12 (d, J = 9.2 Hz, 1H), 6.88 (t, J = 7.8 Hz, 1H), 4.47 (dd, J = 9.3, 5.5 Hz, 1H), 3.46- 3.35 (m, 1H), 2.08 (tt, J = 16.0, 4.7 Hz, 3H), 2.02 - 1.85 (m, 1H), 1.80 - 1.63 (m, 2H).	371.05	D	
I-778		(400 MHz, DMSO-d6) 7.68 (t, J = 6.1 Hz, 1H), 7.33 (t, J = 9.0 Hz, 1H), 7.23 (dd, J = 7.2, 2.3 Hz, 1H), 7.08 (ddd, J = 8.6, 4.7, 2.3 Hz, 1H), 4.31 - 4.22 (m, 1H), 3.70 (d, J = 13.6 Hz, 1H), 3.43 (d, J = 6.1 Hz, 2H), 2.92 (ddd, J = 14.0, 12.1, 2.7 Hz, 1H), 2.44 (td, J = 12.6, 2.8 Hz, 1H), 2.19 (p, J = 5.6, 4.5 Hz, 4H), 2.10 - 1.98 (m, 1H), 1.95 (d, J =	381.15	E	

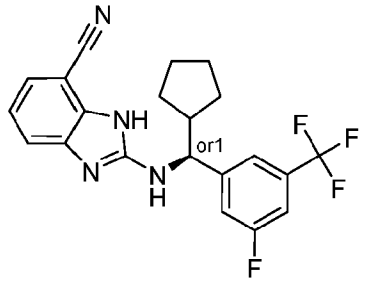
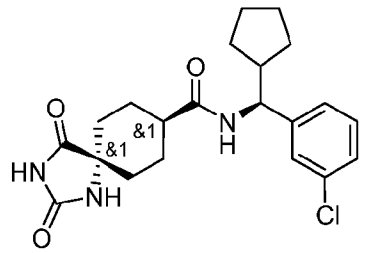
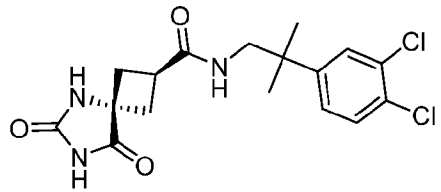
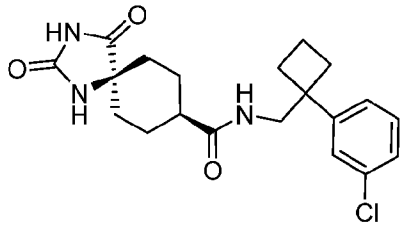
		13.8 Hz, 5H), 1.75 (ddq, J = 14.8, 6.9, 3.8, 3.4 Hz, 2H), 1.46 - 1.37 (m, 2H), 0.89 (dqd, J = 41.4, 12.2, 4.2 Hz, 2H).			
I-779		(400 MHz, dmso) 6.31 (s, 1H), 6.27 - 6.12 (m, 3H), 5.85 (d, J = 7.5 Hz, 1H), 5.34 (br. s, 2H), 4.16 - 4.06 (m, 1H), 3.97 (t, J = 7.8 Hz, 1H), 3.72 - 3.63 (m, 1H), 3.54 (m (submerged), 1H), 3.14 - 3.03 (m, 1H), 2.78 - 2.65 (m, 1H), 1.98 (s, 3H), 1.83 - 1.64 (m, 2H), 1.29 - 1.17 (m, 1H), 1.17 - 1.05 (m, 1H), 1.04 - 0.94 (m, 1H), 0.49 - 0.37 (m, 2H), 0.34 - 0.17 (m, 2H). Partial formate salt	349.3	E	
I-780			328.29	E	
I-781			284.28	E	
I-782			382.31	E	
I-783			353.3	E	

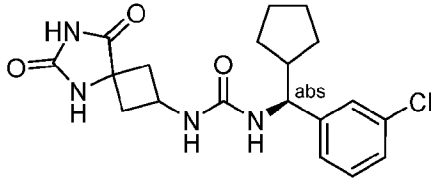
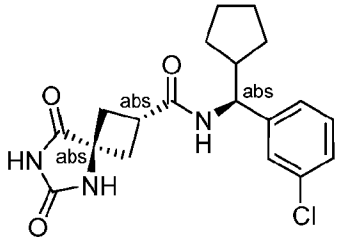
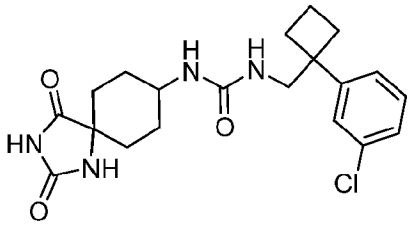
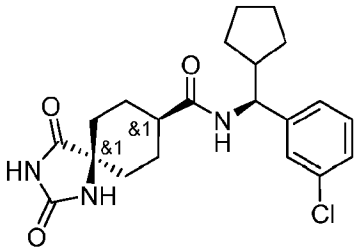
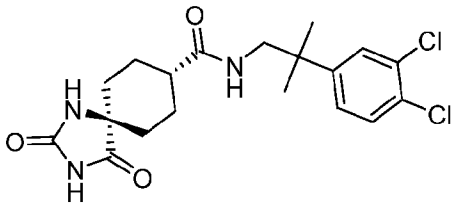
I-784			395.3	E	
I-785			393.36	E	
I-786			362.3	D	
I-787		(400 MHz, DMSO-d6) 11.17 (s, 1H), 7.82 (d, J = 8.0 Hz, 1H), 7.50 (s, 1H), 7.42-7.34 (m, 3H), 7.33-7.28 (m, 1H), 7.25(d, J = 8.0 Hz, 1H), 6.96-6.89 (m, 1H), 5.14-5.05 (m, 1H), 5.03-4.92 (m, 1H), 3.75-3.68 (m, 2H).	313	E	
I-788		(400 MHz, DMSO-d6) 12.29 (s, 1H), 7.86-7.57 (m, 3H), 7.57 - 7.39 (m, 2H), 7.38 - 7.16 (m, 2H), 7.03 (d, J = 51.0 Hz, 1H), 3.67 (d, J = 5.9 Hz, 1H), 3.54 (d, J = 18.2 Hz, 1H), 1.37 (dd, J = 10.6, 7.3 Hz, 6H), 1.24 (s, 1H).	333.05	D	

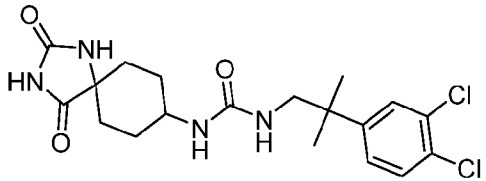
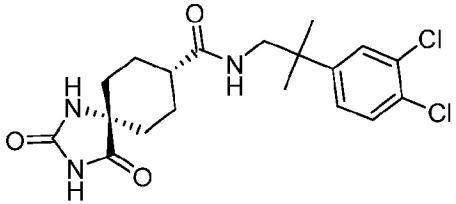
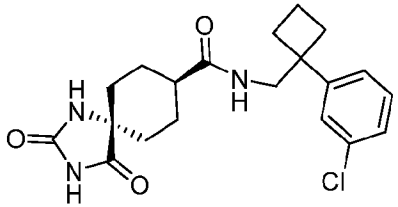
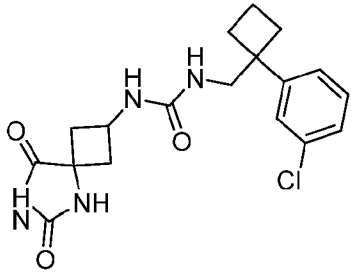
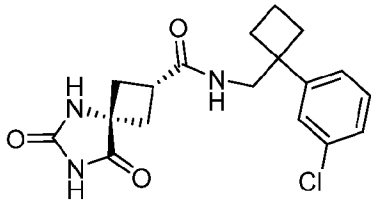
I-789		(400 MHz, DMSO-d6)7.75-7.67 (m, 1H), 7.64 (dd, J = 5.5, 2.1 Hz, 1H), 7.55 (dd, J = 8.4, 1.4 Hz, 1H), 7.39 (dt, J = 8.4, 1.7 Hz, 1H), 5.56 (d, J = 5.6 Hz, 1H), 4.24 (d, J = 13.1 Hz, 1H), 3.66 (t, J = 14.0 Hz, 1H), 3.54 (ddd, J = 13.4, 11.5, 7.1 Hz, 1H), 3.20 (ddd, J = 13.5, 10.7, 4.7 Hz, 1H), 2.94-2.80 (m, 1H), 2.45-2.35 (m, 1H), 2.01-1.86 (m, 5H), 1.65 (s, 1H), 1.41 (d, J = 1.9 Hz, 4H), 1.21 (t, J = 13.7 Hz, 1H), 0.83 (ddtd, J = 47.6, 24.7, 12.4, 4.3 Hz, 2H).	387.2	E	
I-790		(400 MHz, DMSO-d6)11.29 (s, 1H), 7.77 (d, J = 2.0 Hz, 1H), 7.72 (d, J = 8.2 Hz, 1H), 7.62 (t, J = 6.1 Hz, 1H), 7.48 (dd, J = 8.6, 2.1 Hz, 1H), 7.40 (dd, J = 7.7, 1.1 Hz, 1H), 7.29 (dd, J = 7.8, 1.1 Hz, 1H), 6.96 (t, J = 7.8 Hz, 1H), 5.91-5.72 (m, 1H), 3.89-3.72 (m, 2H).	349	E	
I-791				E	
I-792			342.29	E	

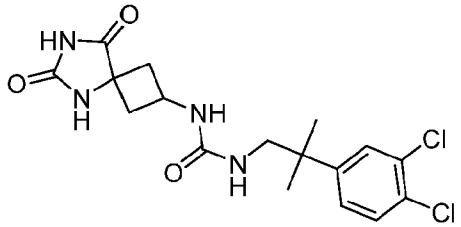
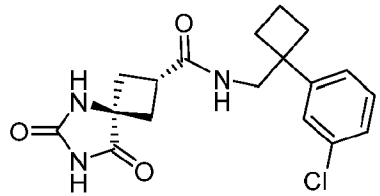
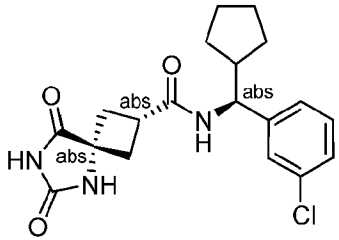
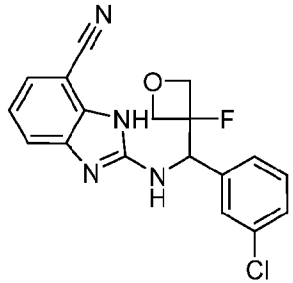
I-793		(400 MHz, DMSO-d6) 10.98 (s, 1H), 8.00 (s, 1H), 7.68 (dd, J = 7.2, 2.1 Hz, 1H), 7.46 (ddd, J = 8.6, 4.8, 2.2 Hz, 1H), 7.42 - 7.32 (m, 2H), 7.25 (dd, J = 7.8, 1.1 Hz, 1H), 6.92 (t, J = 7.8 Hz, 1H), 4.60 (t, J = 9.4 Hz, 1H), 2.36 - 2.24 (m, 1H), 2.08 (s, 1H), 1.91 - 1.78 (m, 0H), 1.70 - 1.25 (m, 3H), 1.16 (dq, J = 16.4, 8.1 Hz, 1H).	369.1	D	
I-794		(400 MHz, DMSO-d6) 8.42 (d, J = 8.3 Hz, 1H), 7.48 - 7.42 (m, 1H), 7.36 (ddd, J = 8.0, 6.5, 1.7 Hz, 1H), 7.21 (t, J = 7.9 Hz, 1H), 4.86 (td, J = 10.2, 9.3, 2.5 Hz, 1H), 4.27 (t, J = 12.9 Hz, 1H), 3.73 (t, J = 12.5 Hz, 1H), 3.00 - 2.88 (m, 1H), 2.46 - 2.32 (m, 1H), 2.20 (h, J = 8.2 Hz, 1H), 2.11 - 1.99 (m, 2H), 1.96 (s, 3H), 1.91 - 1.73 (m, 2H), 1.66 - 1.40 (m, 6H), 1.31 (dt, J = 11.7, 4.5 Hz, 2H), 1.06 (dd, J = 12.5, 7.4 Hz, 2H), 0.97 - 0.85 (m, 1H).	395.1	D	
I-795		(400 MHz, DMSO-d6) 7.97 (s, 1H), 7.53 (t, J = 7.1 Hz, 1H), 7.45 (d, J = 7.1 Hz, 1H), 7.37 (dd, J = 7.7, 1.1 Hz, 1H), 7.29 - 7.18 (m, 2H), 6.93 (t, J = 7.8 Hz, 1H), 5.01 (t, J = 9.4 Hz, 1H), 2.42 - 2.29 (m, 1H), 2.08 (s, 1H), 1.89 - 1.34 (m, 6H), 1.21 (d, J = 9.4 Hz, 1H).	369.05	D	
I-796		(400 MHz, DMSO-d6) 11.27 (s, 1H), 8.01 (d, J = 9.5 Hz, 1H), 7.44-7.35 (m, 2H), 7.34-7.21 (m, 3H), 6.93 (t, J = 7.8 Hz, 1H), 4.63 (t, J = 9.5 Hz, 1H), 2.28 (dd, J = 16.8, 8.3 Hz, 1H), 1.86-1.77 (m, 1H), 1.70-1.28 (m, 6H), 1.26-1.14 (m, 1H).	369.1	C	

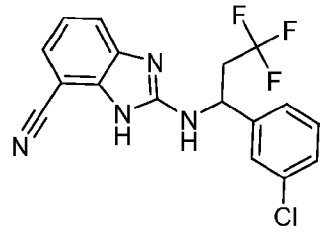
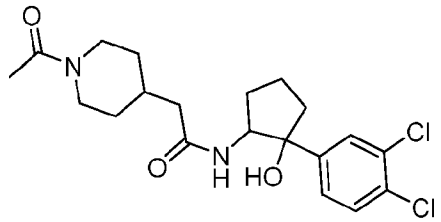
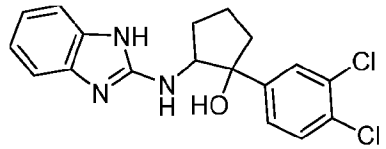
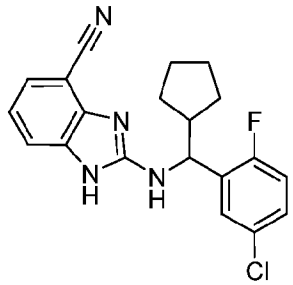
I-797		(400 MHz, DMSO-d6)10.56 (s, 1H), 7.73 (d, J = 2.1 Hz, 1H), 7.56 (d, J = 8.4 Hz, 1H), 7.48 (dd, J = 8.4, 2.1 Hz, 1H), 7.12 (d, J = 7.3 Hz, 2H), 6.87 (s, 2H), 6.52 (s, 2H), 3.66-3.52 (m, 2H), 1.45 (s, 3H).	336.15	E	
I-798		(400 MHz, DMSO-d6)10.93 (s, 1H), 7.76 (d, J = 2.1 Hz, 1H), 7.57 (d, J = 8.4 Hz, 1H), 7.50 (dd, J = 8.4, 2.1 Hz, 1H), 7.37 (dd, J = 7.8, 1.0 Hz, 1H), 7.26 (dd, J = 7.8, 1.1 Hz, 1H), 7.06 (s, 1H), 6.93 (t, J = 7.7 Hz, 1H), 5.92 (s, 1H), 3.62 (dd, J = 13.1, 5.9 Hz, 2H), 1.49 (s, 3H).	361.1	E	
I-799		(400 MHz, DMSO-d6)10.82 (s, 1H), 7.73 (d, J = 2.1 Hz, 1H), 7.66 (d, J = 8.3 Hz, 1H), 7.46 (dd, J = 8.4, 2.2 Hz, 2H), 7.38 (dd, J = 7.7, 1.1 Hz, 1H), 7.27 (dd, J = 7.8, 1.1 Hz, 1H), 6.94 (t, J = 7.8 Hz, 1H), 3.99-3.77 (m, 2H), 1.71 (d, J = 22.8 Hz, 3H).	363.15	D	
I-800		(400 MHz, dmso) 11.28 (br. s, 1H), 8.05 (br. d, J = 9.6 Hz, 1H), 7.72 (s, 1H), 7.65 (d, J = 9.8 Hz, 1H), 7.53 (d, J = 8.7 Hz, 1H), 7.36 (d, J = 7.7 Hz, 1H), 7.25 (d, J = 7.7 Hz, 1H), 6.92 (t, J = 7.8 Hz, 1H), 4.74 (t, J = 9.3 Hz, 1H), 2.40 - 2.29 (m, 1H), 1.90 - 1.76 (m, 1H), 1.70 - 1.40 (m, 5H), 1.38 - 1.27 (m, 1H), 1.26 - 1.16 (m, 1H).	403.1	C	D

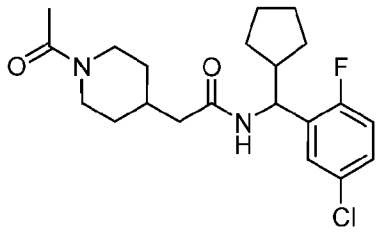
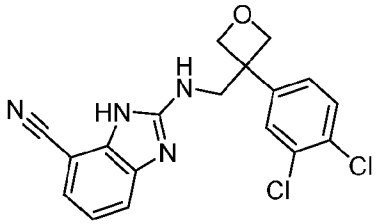
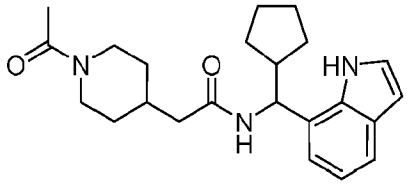
I-801		(400 MHz, dmso) 11.30 (br. s, 1H), 8.06 (br. d, J = 8.4 Hz, 1H), 7.73 (s, 1H), 7.65 (d, J = 9.5 Hz, 1H), 7.53 (d, J = 8.8 Hz, 1H), 7.36 (dd, J = 7.8, 1.0 Hz, 1H), 7.25 (dd, J = 7.8, 0.9 Hz, 1H), 6.92 (t, J = 7.8 Hz, 1H), 4.74 (t, J = 9.4 Hz, 1H), 2.39 - 2.28 (m, 1H), 1.90 - 1.79 (m, 1H), 1.69 - 1.40 (m, 5H), 1.37 - 1.27 (m, 1H), 1.27 - 1.16 (m, 1H).	403.1	D	
I-802				C	
I-803				E	
I-804				D	

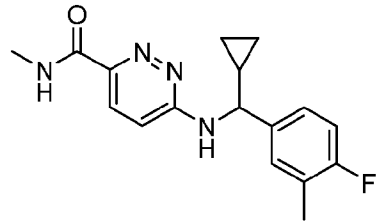
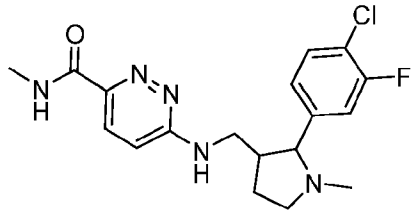
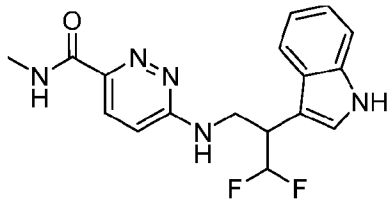
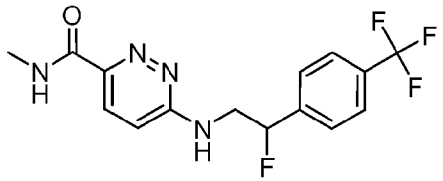
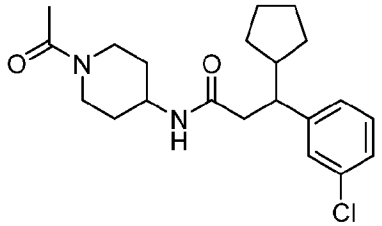
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I-807				E	
I-808				D	
I-809				E	

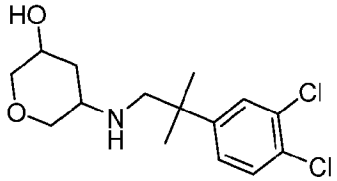
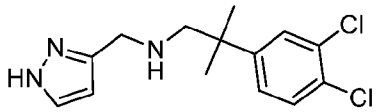
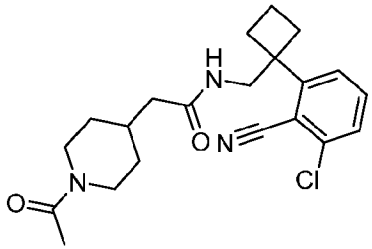
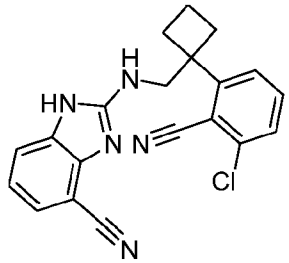
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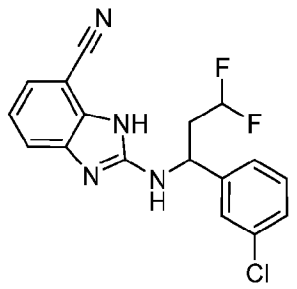
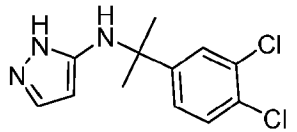
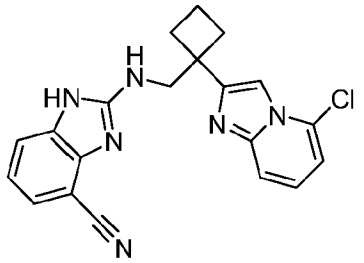
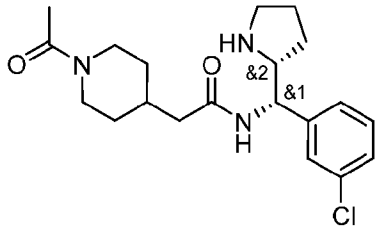
I-815				E	
I-816				E	
I-817				D	
I-818		(400 MHz, DMSO-d6): 7.57-7.59 (m, 1H), 7.53-7.55 (m, 1H), 7.46-7.49 (m, 3H), 7.24-7.25 (m, 1H), 7.20-7.22 (m, 1H), 4.68-4.73 (m, 2H), 4.60-4.64 (m, 2H), 3.56-3.60 (m, 1H).	357	E	

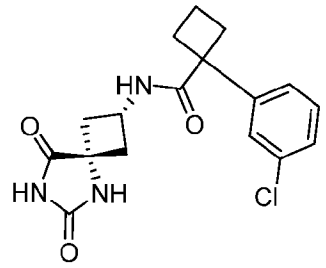
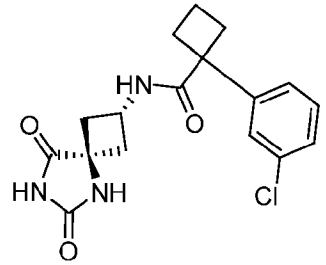
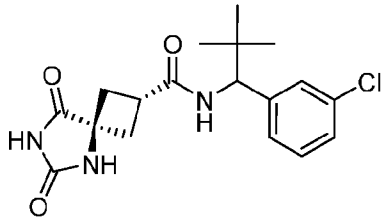
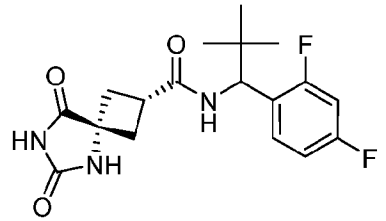
I-819		(400 MHz, DMSO-d6) 8.02 (d, J = 8.0 Hz, 1H), 7.62 (s, 1H), 7.54-7.45 (m, 1H), 7.44-7.32 (m, 3II), 7.28 (d, J = 8.0 IIz, 1II), 7.00-6.92 (m, 1II), 5.40-5.25 (m, 1H), 3.14-2.72 (m, 2H).	365	E	
I-820		(400 MHz, DMSO-d6) 7.61 -7.49 (m, 3H), 7.38 (td, J = 8.3, 2.0 Hz, 1H), 5.30 (s, 1H), 4.22 (d, J = 10.2 Hz, 2H), 3.61 (dd, J = 33.3, 13.7 Hz, 1H), 2.81 (q, J = 13.1, 12.5 Hz, 1H), 2.36 (d, J = 2.8 Hz, 1H), 2.24 (d, J = 11.6 Hz, 2H), 1.94 (d, J = 6.5 Hz, 3H), 1.86 - 1.65 (m, 5H), 1.48 (t, J = 4.6 Hz, 2H), 1.33 (t, J = 12.1 Hz, 1H), 0.96 - 0.68 (m, 2H), 0.59 (dd, J = 14.4, 9.8 Hz, 1H).	413.1	E	
I-821		(400 MHz, DMSO-d6) 10.35 (s, 1H), 7.56 (d, J = 2.1 Hz, 1H), 7.43 (s, 1H), 7.36 (dd, J = 8.5, 2.1 Hz, 1H), 7.13 (d, J = 7.7 Hz, 1H), 7.06 (d, J = 7.5 Hz, 1H), 6.92 - 6.78 (m, 3H), 6.58 (d, J = 7.2 Hz, 1H), 4.22 (q, J = 7.5 Hz, 1H), 2.26 (dt, J = 13.2, 4.7 Hz, 2H), 2.09 - 1.99 (m, 1H), 1.97- 1.81 (m, 2H), 1.75 -1.63 (m, 1H).	362.05	E	
I-822		(400 MHz, DMSO-d6) 11.22 (s, 1H), 7.92 (s, 1H), 7.65 (s, 1H), 7.36 (t, J = 10.5 Hz, 2H), 7.24 (t, J = 9.0 Hz, 2H), 6.93 (s, 1H), 5.00 (t, J = 9.0 Hz, 1H), 2.34 (s, 1H), 1.81 (s, 1H), 1.64 (s, 2H), 1.50 (s, 4H), 1.23 (s, 1H).	369.05	B	

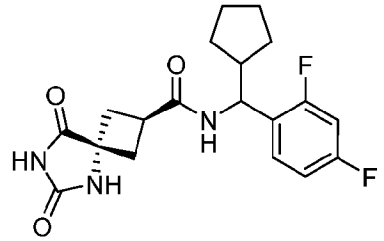
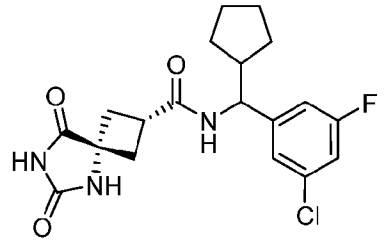
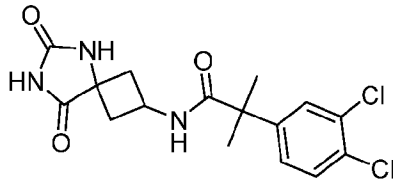
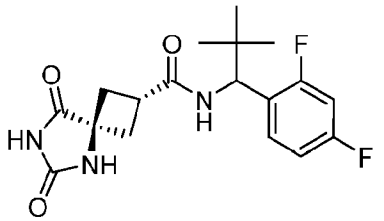
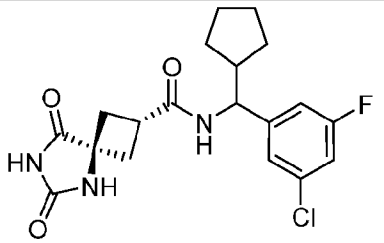
I-823		(400 MHz, DMSO-d6) 8.38 (dd, J = 8.7, 2.8 Hz, 1H), 7.47 (dt, J = 6.0, 2.9 Hz, 1H), 7.33 (ddd, J = 8.8, 4.4, 2.7 Hz, 1H), 7.20 (t, J = 9.2 Hz, 1H), 4.86 (td, J = 9.3, 4.1 Hz, 1H), 4.27 (t, J = 11.4 Hz, 1H), 3.74 (t, J = 12.5 Hz, 1H), 3.01 - 2.90 (m, 1H), 2.48 - 2.42 (m, 1H), 2.16 (dt, J = 15.8, 7.7 Hz, 1H), 2.05 (d, J = 6.8 Hz, 2H), 1.96 (s, 3H), 1.86 (td, J = 7.3, 3.6 Hz, 1H), 1.58 (s, 1H), 1.49 (s, 6H), 1.28 (dd, J = 14.1, 6.3 Hz, 2H), 1.15 - 0.99 (m, 2H), 0.97 - 0.87 (m, 1H).	395.15	D	
I-824		(400 MHz, DMSO-d6) 11.11 (s, 1H), 7.60 (d, J = 8.3 Hz, 1H), 7.52 (d, J = 2.1 Hz, 1H), 7.42 - 7.31 (m, 2H), 7.27 (dd, J = 7.8, 1.1 Hz, 1H), 7.22 (dd, J = 8.3, 2.2 Hz, 1H), 6.93 (t, J = 7.7 Hz, 1H), 4.86 - 4.76 (m, 4H), 3.93 (d, J = 6.2 Hz, 2H).	373	E	
I-825		(400 MHz, d6-DMSO) 10.99 (s, 1H), 8.41 (d, J = 8.7 Hz, 1H), 7.38 (d, J = 7.7 Hz, 1H), 7.31 (app t, J = 2.4 Hz, 1H), 7.04 (d, J = 7.1 Hz, 1H), 6.93 (t, J = 7.5 Hz, 1H), 6.41 (dd, J = 3.0, 1.8 Hz, 1H), 5.14 - 5.04 (m, 1H), 4.32 - 4.18 (m, 1H), 2.99 - 2.86 (m, 1H), 2.55 - 2.30 (m, 2H), 2.13 - 1.99 (m, 2H), 1.95 (s, 1.5 H), 1.94 (s, 1.5 H), 1.92 - 1.81 (m, 1H), 1.80 - 1.69 (m, 1H), 1.68 - 1.22 (m, 8H), 1.20 - 0.82 (m, 3H). Missing 1H was overlapping with the chemical shift (ca. 3.8-3.2) of the residual water from solvent. The acetyl (CH3) appears as two singlets.	380.5	E	

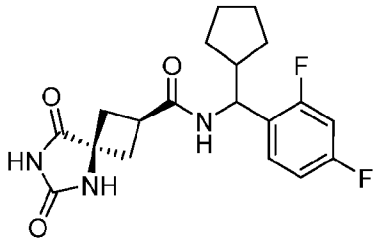
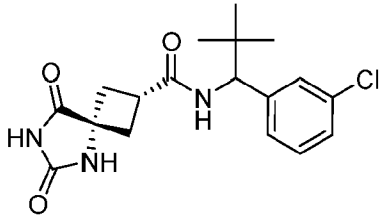
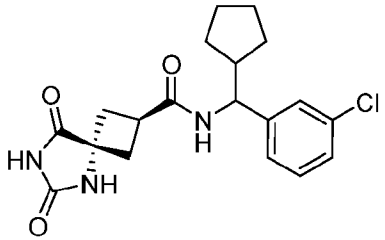
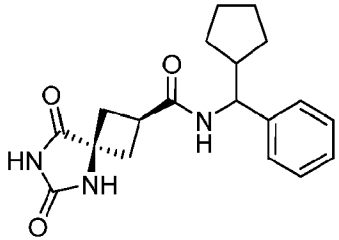
I-826				E	
I-827				E	
I-828				E	
I-829				E	
I-830			377.1	E	

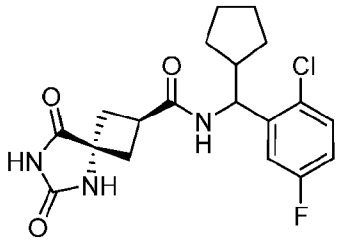
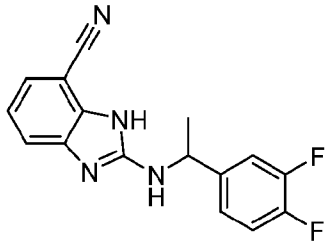
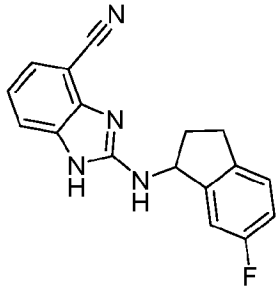
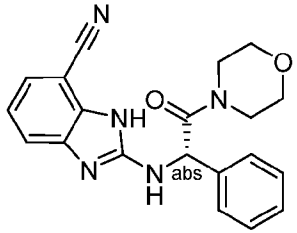
I-831			318.29	E	
I-832			298.89	E	
I-833		(400 MHz, DMSO-d6) 7.87 (t, J = 6.4 Hz, 1H), 7.61 (t, J = 7.9 Hz, 1H), 7.55 (dd, J = 8.1, 1.1 Hz, 1H), 7.13 (dd, J = 7.7, 1.2 Hz, 1H), 4.30- 4.20 (m, 1H), 3.82 - 3.47 (m, 3H), 2.91 (td, J = 13.7, 13.0, 2.7 Hz, 1H), 2.49 -2.29 (m, 5H), 2.10 (dq, J = 11.0, 9.0 Hz, 1H), 1.96 (s, 3H), 1.89 (d, J = 7.1 Hz, 2H), 1.84 - 1.62 (m, 2H), 1.47- 1.35 (m, 2H), 0.94 (qd, J = 12.2, 4.1 Hz, 1H), 0.81 (qd, J = 12.3, 4.3 Hz, 1H).	388.15	E	
I-834		(400 MHz, DMSO-d6) 11.03 (s, 1H), 7.58- 7.44 (m, 2H), 7.29 (dd, J = 7.7, 1.1 Hz, 1H), 7.21 (dq, J = 7.9, 1.7 Hz, 3H), 6.88 (t, J = 7.8 Hz, 1H), 3.93 (d, J = 6.5 Hz, 2H), 2.47 (d, J = 2.5 Hz, 1H), 2.46-2.32 (m, 3H), 2.29 -2.13 (m, 1H), 1.84 (dt, J = 11.6, 9.2 Hz, 1H).	362.1	D	

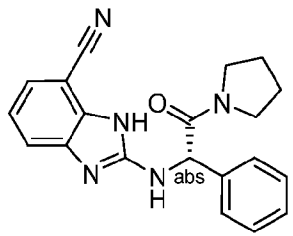
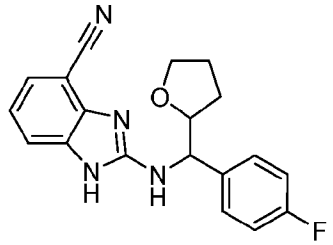
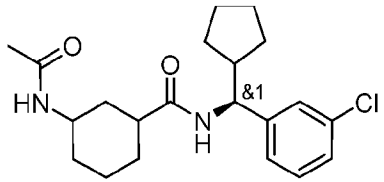
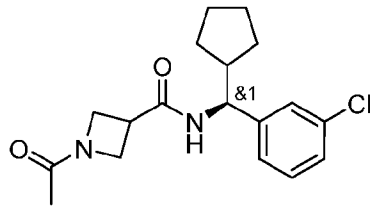
I-835		(400 MHz, DMSO-d6) ppm 11.47 (s, 1H), 8.07 (d, J = 9.2 Hz, 1H), 7.57 (s, 1H), 7.44-7.48 (m, 1H), 7.37-7.42 (m, 2H), 7.31-7.36 (m, 1H), 7.26-7.31 (m, 1H), 6.92-6.98 (m, 1H), 5.99-6.38 (m, 1H), 5.12-5.18 (m, 1H), 2.24-2.49 (m, 2H).	347	E	
I-836		(400 MIIz, CDCN) 7.66 - 7.62 (m, 1II), 7.46 - 7.39 (m, 2H), 7.19 (br s, 1H), 5.16 (s, 1H), 4.80 (br s, 2H), 1.55 (s, 6H).	270.2	E	
I-837		(400 MHz, DMSO-d6)11.02 (s, 1H), 8.00 (s, 1H), 7.61 (d, J = 9.0 Hz, 1H), 7.30 (ddd, J = 19.6, 14.0, 7.7 Hz, 3H), 7.14 (dd, J = 7.3, 1.0 Hz, 1H), 7.07 (s, 1H), 6.91 (t, J − 7.7 Hz, 1H), 3.90 (d, J − 6.0 Hz, 2H), 2.45-2.36 (m, 2H), 2.28 (dd, J = 16.2, 10.1 Hz, 2H), 2.06 (dd, J = 9.9, 7.6 Hz, 1H), 2.02-1.90 (m, 1H).	377.05	E	
I-838		(400 MHz, dmso) 8.30 (d, J = 8.7 Hz, 1H), 7.37 (d, J = 1.6 Hz, 1H), 7.35 - 7.21 (m, 3H), 4.58 (td, J = 8.7, 2.5 Hz, 1H), 4.27 (t, J = 11.4 Hz, 1H), 3.73 (t, J = 11.4 Hz, 1H), 3.21 (submerged dd, J = 15.3, 7.4 Hz, 2H), 3.01 - 2.91 (m, 1H), 2.77 - 2.64 (m, 2H), 2.48 - 2.43 (submerged m, 1H), 2.12 - 2.01 (m, 2H), 1.96 (s, 3H), 1.93 - 1.81 (m, 1H), 1.81 - 1.71 (m, 1H), 1.67 - 1.44 (m, 4H), 1.43 - 1.33 (m, 1H), 1.14 - 1.00 (m, 1H), 0.99 - 0.87 (m, 1H).	378.1	E	

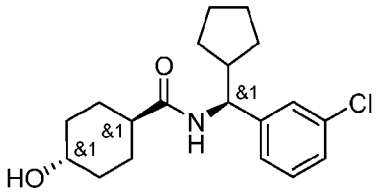
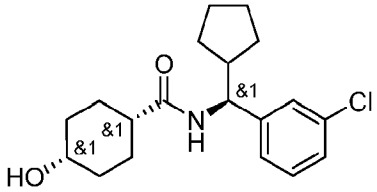
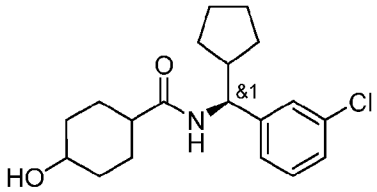
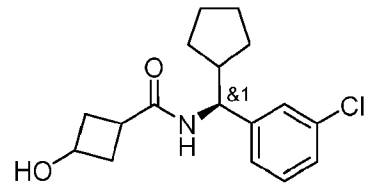
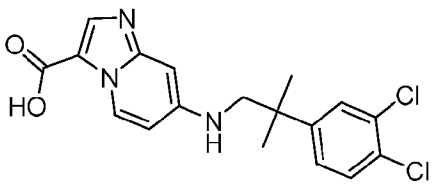
I-839				E	
I-840				E	
I-841				E	
I-842				D	

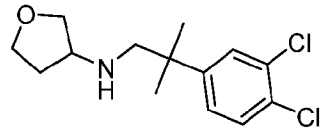
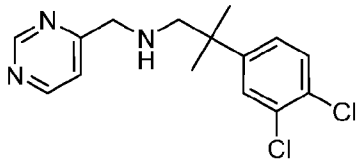
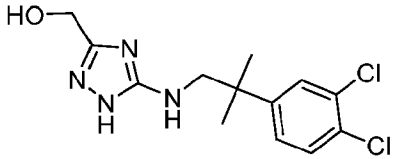
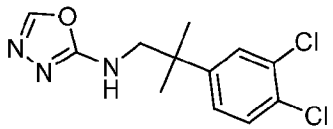
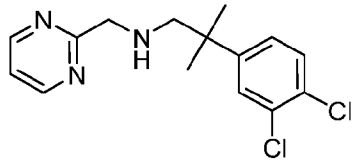
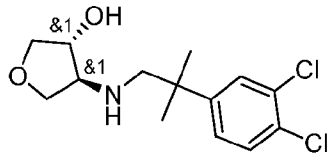
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I-844				E	
I-845				E	
I-846				D	
I-847				C	

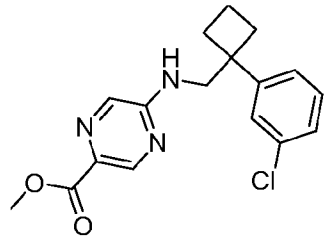
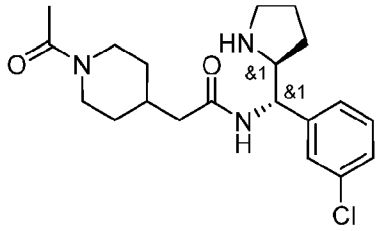
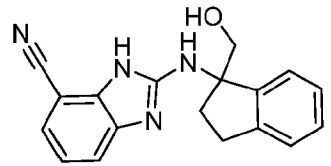
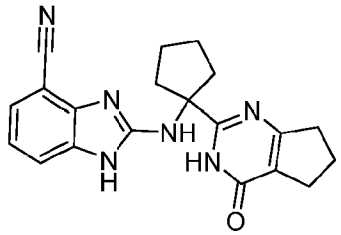
I-848				D	
I-849				E	
I-850				D	
I-851				E	

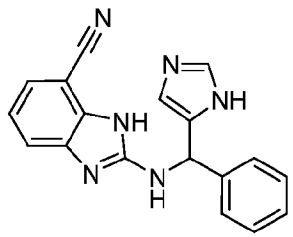
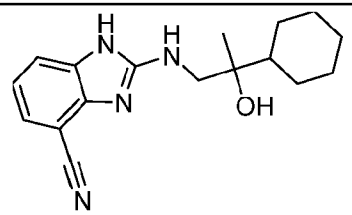
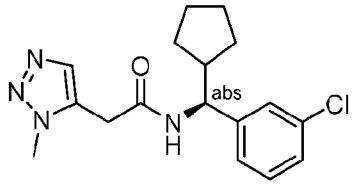
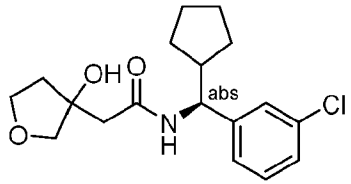
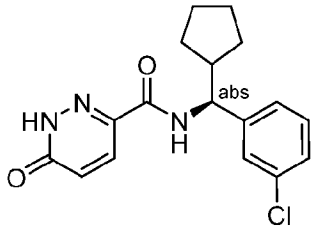
I-852				D	
I-853				E	
I-854				E	
I-855				E	

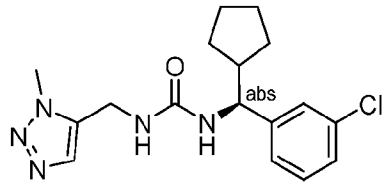
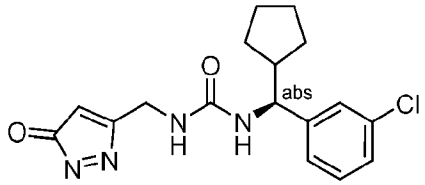
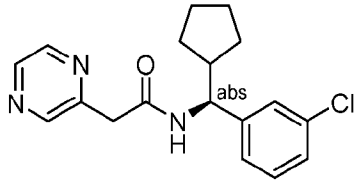
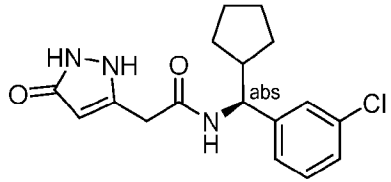
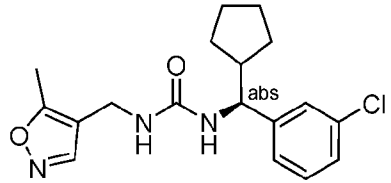
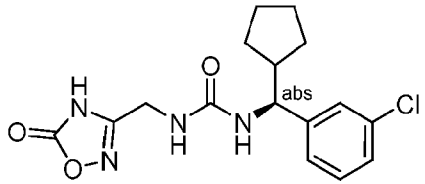
I-856				E	
I-857				D	
I-858		(400 MHz, DMSO-d6) 8.31 - 8.02 (m, 1H), 7.79 - 7.55 (m, 1H), 7.36 (ddt, J = 8.7, 6.8, 1.8 Hz, 1H), 7.32 (dt, J = 6.4, 1.6 Hz, 1H), 7.29 - 7.23 (m, 2II), 4.55 (td, J = 9.0, 4.4 IIz, 1II), 3.97 - 3.44 (m, 1H), 2.45 - 2.41 (m, 1H), 2.30 - 2.08 (m, 2H), 1.82 (d, J − 9.4 Hz, 4H), 1.76 (d, J − 11.8 Hz, 2H), 1.65 - 1.60 (m, 1H), 1.60 - 1.36 (m, 7H), 1.34 - 1.21 (m, 3H), 1.16 - 0.97 (m, 2H).	377.2	E	
I-859		(400 MHz, DMSO-d6) 8.50 (d, J = 8.6 Hz, 1H), 7.39 - 7.31 (m, 2H), 7.31 - 7.23 (m, 2H), 4.60 (td, J = 9.1, 4.9 Hz, 1H), 4.19 (dt, J = 30.5, 8.5 Hz, 1H), 4.10 - 3.84 (m, 2H), 3.74 (ddd, J = 36.1, 9.2, 5.8 Hz, 1H), 3.32 - 3.28 (m, 1H), 2.17 (h, J = 8.5 Hz, 1H), 1.72 (d, J = 6.4 Hz, 4H), 1.64 - 1.37 (m, 4H), 1.27 (d, J = 7.5 Hz, 2H), 1.10 (t, J = 10.3 Hz, 1H).	335.15	E	

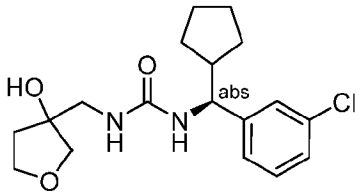
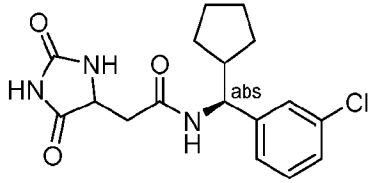
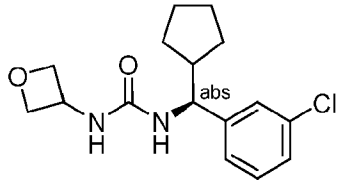
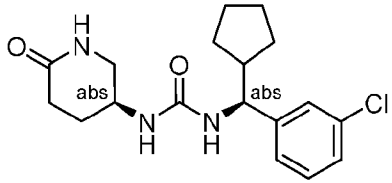
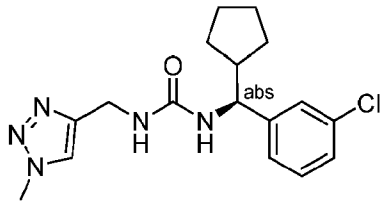
I-860		(400 MHz, DMSO-d6)8.12 (d, J = 8.8 Hz, 1H), 7.38 (t, J = 1.9 Hz, 1H), 7.36-7.29 (m, 1H), 7.26 (dt, J = 7.0, 1.8 Hz, 2H), 4.55 (t, J = 9.3 Hz, 1H), 4.26 (d, J = 3.2 Hz, 1H), 3.74 (s, 1H), 2.16 (tt, J = 9.7, 5.7 Hz, 2H), 1.85-1.67 (m, 3H), 1.66-1.33 (m, 9H), 1.36-1.21 (m, 3H), 1.16-1.02 (m, 1H).	336.05	E	
I-861		(400 MHz, DMSO-d6)8.19 (d, J = 8.8 Hz, 1H), 7.39-7.30 (m, 2H), 7.25 (ddt, J = 7.3, 5.6, 1.5 Hz, 2H), 4.55 (t, J = 9.2 Hz, 2H), 3.31 (ddd, J = 10.7, 6.4, 4.1 Hz, 1H), 2.22-2.01 (m, 2H), 1.90-1.77 (m, 2H), 1.71 (dtd, J = 12.6, 9.2, 7.7, 5.3 Hz, 2H), 1.62-1.51 (m, 3H), 1.51-1.32 (m, 3H), 1.27 (ddd, J = 12.5, 10.1, 4.0 Hz, 3H), 1.19-1.03 (m, 3H).	336.1	E	
I-862		(400 MHz, DMSO-d6)8.16 (dd, J = 28.7, 8.7 Hz, 1H), 7.40-7.29 (m, 2H), 7.26 (dt, J = 7.1, 1.8 Hz, 2H), 4.60-4.49 (m, 1H), 4.26 (d, J = 3.2 Hz, 1H), 3.74 (s, 1H), 2.23-2.02 (m, 2H), 1.91-1.66 (m, 3H), 1.65-1.46 (m, 4H), 1.46-1.34 (m, 4H), 1.34-1.19 (m, 3H), 1.20-1.02 (m, 2H).	336.1	E	
I-863		(400 MHz, DMSO-d6) 8.19 (t, J = 8.3 Hz, 1H), 7.37 - 7.30 (m, 2H), 7.26 (td, J = 8.8, 8.3, 1.7 Hz, 2H), 5.03 (dd, J = 19.1, 6.7 Hz, 1H), 4.55 (d, J = 18.6 Hz, 1H), 4.05 (dq, J = 117.6, 7.1 Hz, 1H), 2.46 - 1.98 (m, 4H), 1.97 - 1.81 (m, 2H), 1.74 - 1.64 (m, 1H), 1.61 - 1.37 (m, 4H), 1.31 - 1.19 (m, 2H), 1.14 - 1.00 (m, 1H) .	308.15	D	
I-864		(400 MHz, DMSO-d6) 12.39 (s, 1H), 8.80 (d, J = 7.5 Hz, 1H), 7.90 (s, 1H), 7.67 (d, J = 2.2 Hz, 1H), 7.56 (d, J = 8.5 Hz, 1H), 7.44 (dd, J = 8.5, 2.3 Hz, 1H), 6.73 (dd, J = 7.6, 2.4 Hz, 1H), 6.55 (d, J = 2.3 Hz, 1H), 6.37 (s, 1H), 3.35 (d, J = 5.8 Hz, 2H), 1.37 (s, 6H).	378.15	D	

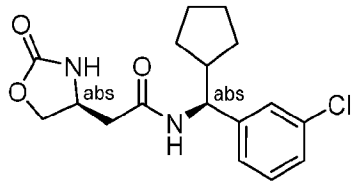
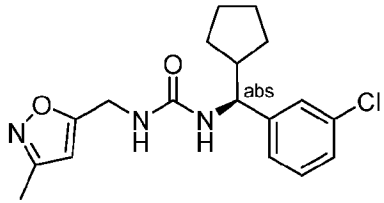
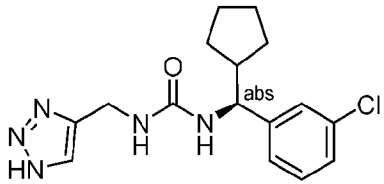
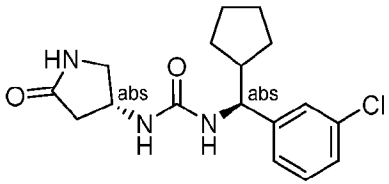
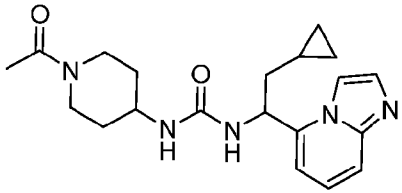
I-865			288.33	E	
I-866			310.29	E	
I-867			315.24	D	
I-868			286.28	E	
I-869			310.29	E	
I-870			304.28	E	

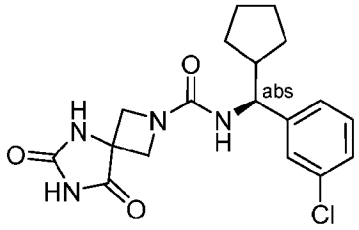
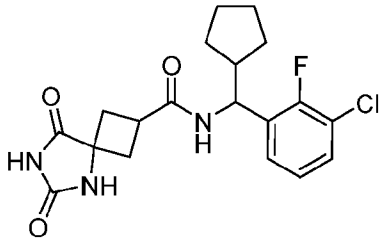
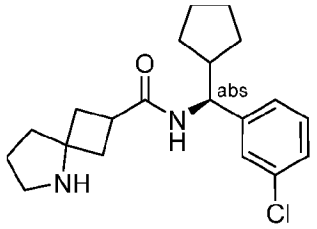
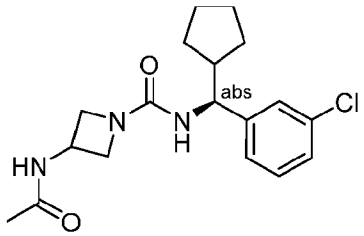
I-871			332.29	E	
I-872		(400 MHz, dmso) 8.17 (dd, J = 8.3, 2.9 Hz, 1H), 7.40 - 7.36 (m, 1H), 7.36 - 7.20 (m, 3H), 4.72 - 4.65 (m, 1H), 4.32 - 4.22 (m, 1H), 3.79 - 3.68 (m, 1H), 3.25 (submerged dd, J = 13.4, 6.9 Hz, 2H), 3.03 - 2.90 (m, 1H), 2.85 - 2.66 (m, 2H), 2.48 - 2.42 (submerged m, 1H), 2.19 - 2.05 (m, 2H), 1.96 (s, 3H), 1.93 - 1.79 (m, 1H), 1.69 - 1.44 (m, 5H), 1.33 - 1.24 (m, 1H), 1.10 - 1.01 (m, 1H), 1.01 - 0.88 (m, 1H).	378.1	E	
I-873				E	
I-874				E	

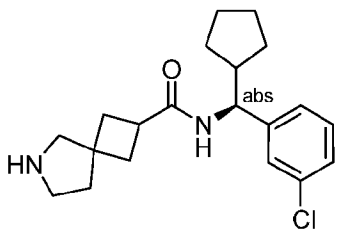
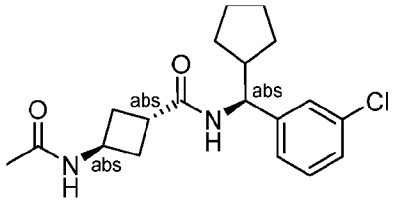
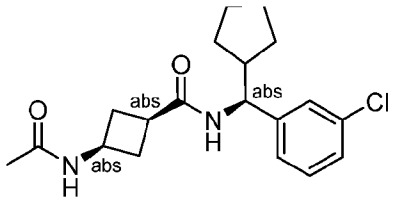
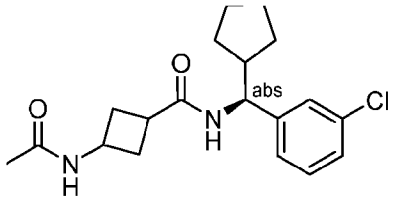
I-875				E	
I-876				E	
I-877				D	
I-878				E	
I-879				E	

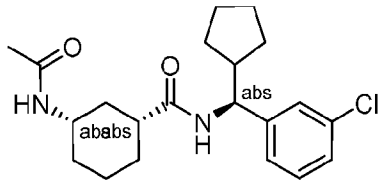
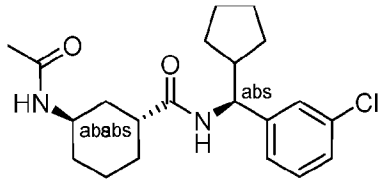
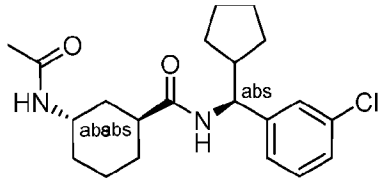
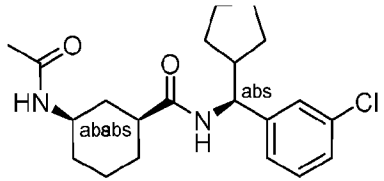
I-880				D	
I-881				D	
I-882				E	
I-883				D	
I-884				E	
I-885				D	

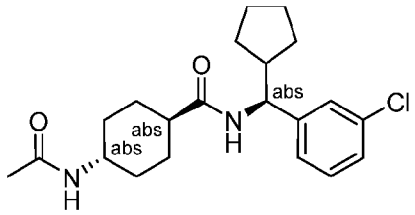
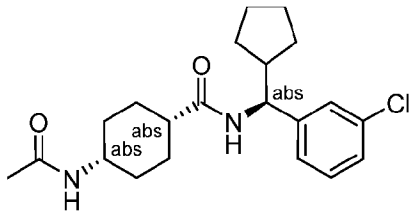
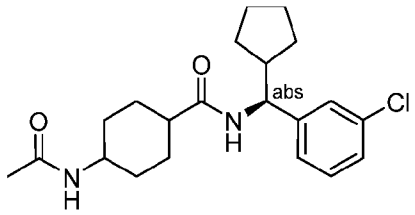
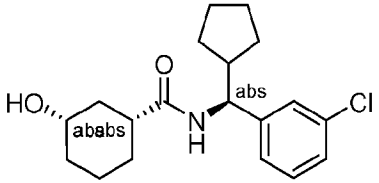
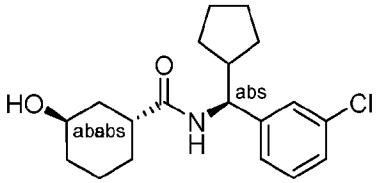
I-886				E	
I-887				E	
I-888				D	
I-889				E	
I-890				D	

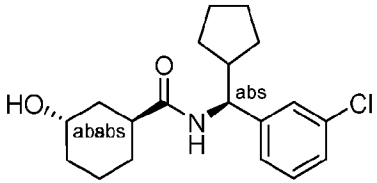
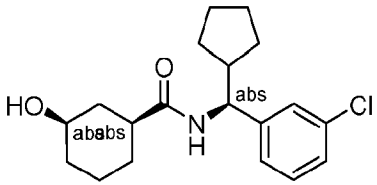
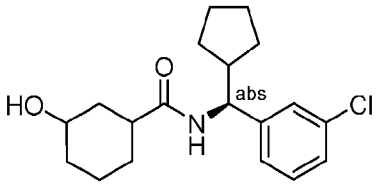
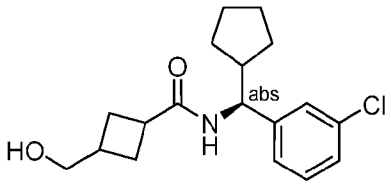
I-891				D	
I-892				E	
I-893				D	
I-894				E	
I-895		(400 MIIz, CD3CN) 7.92 (br s, J = 6.9 IIz, 1II), 7.60 (br s, 1H), 7.46 (d, J = 9.1 Hz, 1H), 7.23 (dd, J − 9.0, 7.0 Hz, 1H), 6.82 (d, J − 7.0 Hz, 1H), 5.37 (d, J = 8.5 Hz, 1H), 5.23 (ddd, J = 8.3, 8.3, 5.5 Hz, 1H), 5.04 (d, J = 7.4 Hz, 1H), 4.30 - 4.20 (m, 1H), 3.78 - 3.61 (m, 2H), 3.17 - 3.05 (m, 1H), 2.78 - 2.67 (m, 1H), 2.00 (s, 1.5 H), 1.98 (s, 1.5 H), 1.86 - 1.73 (m, 3H), 1.36 - 1.17 (m, 3H), 0.83 - 0.71 (m, 1H), 0.50 - 0.36 (m, 2H), 0.17 - 0.05 (m, 2H).	370.4	E	

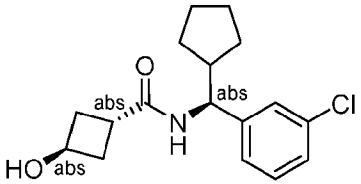
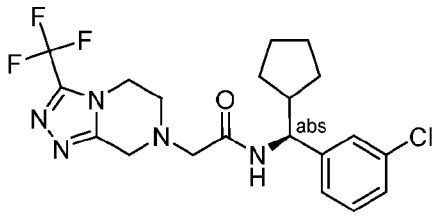
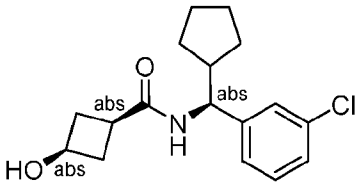
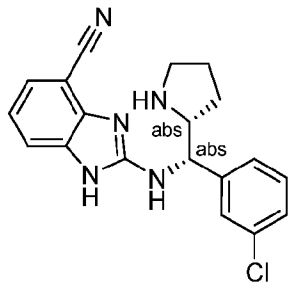
I-896		(400 MHz, DMSO-d6)10.64 (s, 1H), 8.46 (s, 1H), 7.40 (t, J = 1.9 Hz, 1H), 7.35-7.29 (m, 1H), 7.26 (dt, J = 6.9, 1.7 Hz, 2H), 6.98 (d, J = 8.8 Hz, 1H), 4.41-4.25 (m, 1H), 4.06 (d, J = 8.8 Hz, 1H), 4.01 (d, J = 8.8 Hz, 1H), 3.88 (d, J = 8.8 Hz, 1H), 3.82 (d, J = 8.9 Hz, 1H), 2.19 (q, J = 8.5 Hz, 1H), 1.85-1.70 (m, 1H), 1.60-1.52 (m, 2H), 1.5-1.38 (m, 2H), 1.37-1.27 (m, 1H), 1.22 (dt, J = 12.2, 7.3 Hz, 1H), 1.07 (dd, J = 12.4, 8.5 Hz, 1H).	377.1	E	
I-897		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.65 - 8.46 (m, 1H), 8.28 (s, 1H), 7.45 (td, J = 7.6, 7.2, 1.6 Hz, 1H), 7.35 (ddd, J = 8.0, 6.5, 1.7 Hz, 1H), 7.21 (t, J = 7.9 Hz, 1H), 4.88 (td, J = 9.0, 4.8 Hz, 1H), 3.20 - 3.01 (m, 1H), 2.47 - 2.09 (m, 5H), 1.73 (dd, J = 12.3, 7.6 Hz, 1H), 1.64 - 1.40 (m, 4H), 1.35 - 1.22 (m, 2H), 1.07 (q, J = 11.0, 9.5 Hz, 1H).	394.25	D	
I-898		(400 MHz, DMSO-d6) 8.21 (d, J = 8.7 Hz, 1H), 7.48 - 7.07 (m, 4H), 4.56 (t, J = 9.2 Hz, 1H), 3.30-2.86 (m, 1H), 2.79- 2.60 (m, 2H), 2.22 - 2.06 (m, 1H), 2.11- 2.02 (m, 2H), 1.96 (qd, J = 8.9, 3.0 Hz, 2H), 1.67 (dtd, J = 13.1, 7.1, 6.6, 2.4 Hz, 4H), 1.60 - 1.37 (m, 5H), 1.26 (dq, J − 12.7,	347.3	D	
I-899		(400 MHz, DMSO-d6) 8.42 (d, J = 7.1 Hz, 1H), 7.39 (d, J = 1.9 Hz, 1H), 7.35 - 7.28 (m, 1H), 7.25 (dt, J = 8.7, 1.7 Hz, 2H), 6.76 (d, J = 8.8 Hz, 1H), 4.42 - 4.28 (m, 2H), 3.99 (dt, J = 20.4, 8.0 Hz, 2H), 3.58 (ddd, J = 16.5, 8.4, 5.5 Hz, 2H), 2.27 - 2.12 (m, 1H), 1.80 (s, 4H), 1.84 - 1.72 (m, 1H), 1.66 - 1.55 (m, 1H), 1.59 - 1.47 (m, 1H), 1.50 - 1.37 (m, 1H), 1.44 (s, 1H), 1.26 (dtd, J = 40.5, 7.8, 4.2 Hz, 1H), 1.06 (dq, J = 12.6, 8.1 Hz, 1H).	350.1	E	

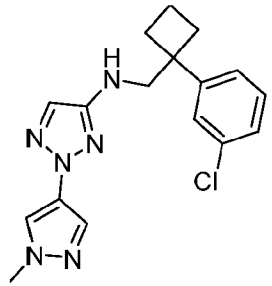
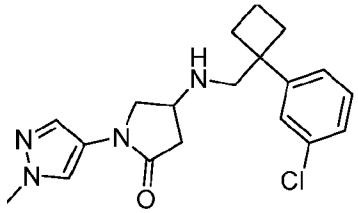
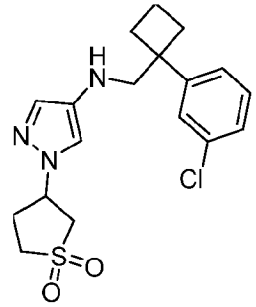
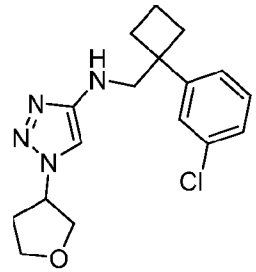
I-900		(400 MHz, DMSO-d6) 8.13 (dd, J = 8.7, 3.9 Hz, 1H), 7.39 - 7.29 (m, 2H), 7.25 (tt, J = 7.3, 1.5 Hz, 2H), 4.56 (t, J = 9.2 Hz, 1H), 3.03 - 2.86 (m, 1H), 2.78 - 2.65 (m, 4H), 2.60 (s, 1H), 2.16 (h, J = 8.4 Hz, 1H), 2.11 - 1.96 (m, 3H), 1.99 - 1.84 (m, 1H), 1.71 (dt, J = 11.2, 5.8 Hz, 2H), 1.61 - 1.50 (m, 3H), 1.28 (dd, J = 9.7, 5.1 Hz, 2H), 1.28 - 1.21 (m, 2H), 1.08 (dd, J = 12.9, 7.8 Hz, 1H).	347.15	D	
I-901		(400 MHz, DMSO-d6) 8.20 (d, J = 8.8 Hz, 1H), 8.07 (d, J = 7.6 Hz, 1H), 7.39-7.30 (m, 2H), 7.26 (ddt, J = 7.1, 5.3, 1.5 Hz, 2H), 4.59 (t, J = 9.3 Hz, 1H), 4.25 (h, J = 7.8 Hz, 1H), 2.89 (ddt, J = 12.2, 8.4, 3.7 Hz, 1H), 2.29 (tt, J = 7.8, 3.9 Hz, 1H), 2.24-2.03 (m, 3H), 2.04-1.95 (m, 1H), 1.76 (s, 3H), 1.74-1.65 (m, 1H), 1.63-1.51 (m, 2H), 1.52-1.37 (m, 2H), 1.27 (tdd, J = 10.8, 7.0, 2.6 Hz, 2H), 1.09 (dq, J = 12.2, 8.1 Hz, 1H).	349.1	D	
I-902		(400 MHz, DMSO-d6) 8.22 (d, J = 8.7 Hz, 1H), 8.10 (d, J = 7.9 Hz, 1H), 7.39-7.29 (m, 2H), 7.26 (ddt, J = 7.5, 6.3, 1.5 Hz, 2H), 4.57 (t, J = 9.3 Hz, 1H), 4.09 (tq, J = 9.3, 7.7 Hz, 1H), 2.74-2.60 (m, 1H), 2.30 (d, J = 7.8 Hz, 1H), 2.18 (dd, J = 17.0, 8.2 Hz, 2H), 1.95 (dq, J = 24.1, 9.9 Hz, 2H), 1.74 (s, 3H), 1.69 (td, J = 7.5, 4.2 Hz, 1H), 1.56 (dddd, J = 19.9, 15.9, 8.2, 3.1 Hz, 2H), 1.50-1.38 (m, 2H), 1.26 (dq, J = 12.7, 8.6, 8.0 Hz, 2H), 1.08 (dq, J = 12.4, 8.1 Hz, 1H).	349.1	D	
I-903		(400 MHz, DMSO-d6) 8.21 (dd, J = 8.8, 5.0 Hz, 1H), 8.09 (dd, J = 10.6, 7.8 Hz, 1H), 7.38-7.30 (m, 2H), 7.26 (ddt, J = 7.3, 5.5, 1.5 Hz, 2H), 4.58 (q, J = 9.4 Hz, 1H), 4.30-4.02 (m, 1H), 2.96-2.61 (m, 1H), 2.30 (qd, J = 7.7, 6.4, 3.8 Hz, 1H), 2.25-2.07 (m, 2H), 1.95 (dq, J = 24.2, 9.9 Hz, 2H), 1.75 (d, J = 8.7 Hz, 4H), 1.55 (dddd, J = 19.6, 13.2,	349.15	D	

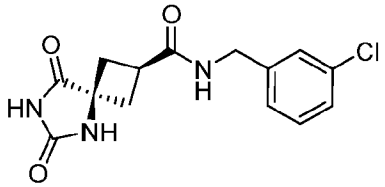
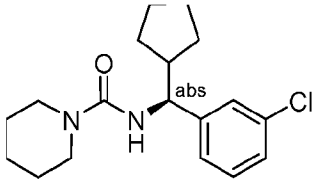
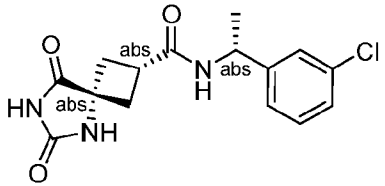
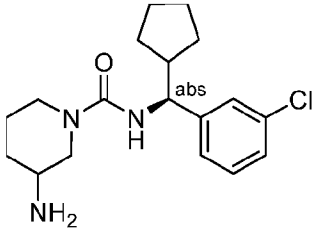
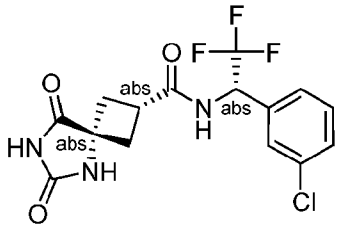
		8.1, 2.6 Hz, 2H), 1.49-1.37 (m, 2H), 1.27 (qd, J = 7.8, 3.9 Hz, 2H), 1.09 (qd, J = 8.3, 4.0 Hz, 1H).			
I-904		(400 MHz, DMSO-d6)8.13 (d, J = 8.7 Hz, 1H), 7.62 (d, J = 6.9 Hz, 1H), 7.39 (t, J = 1.8 Hz, 1H), 7.36 - 7.29 (m, 1H), 7.26 (dd, J = 6.9, 2.1 Hz, 2H), 4.54 (t, J = 9.4 Hz, 1H), 3.92 (s, 1H), 2.44 (p, J = 4.9 Hz, 1H), 2.21 (q, J = 8.4 Hz, 1H), 1.81 (s, 3H), 1.78-1.37 (m, 13H), 1.26 (dd, J = 12.8, 7.5 Hz, 2H), 1.07 (dd, J = 12.7, 8.1 Hz, 1H).	377.4	E	
I-905		(400 MHz, DMSO-d6)8.12 (d, J = 8.7 Hz, 1H), 7.65 (d, J = 7.0 Hz, 1H), 7.39 (t, J = 1.9 Hz, 1H), 7.35-7.29 (m, 1H), 7.26 (dd, J = 6.9, 2.0 Hz, 2H), 4.53 (t, J = 9.4 Hz, 1H), 3.92 (s, 1H), 2.44 (d, J = 6.8 Hz, 1H), 2.17 (dt, J = 16.7, 8.3 Hz, 1H), 1.83 (s, 3H), 1.80-1.68 (m, 1H), 1.67-1.32 (m, 12H), 1.31-1.18 (m, 2H), 1.13-1.00 (m, 1H).	377.3	D	
I-906		(400 MHz, DMSO-d6)8.16 (d, J = 8.7 Hz, 1H), 7.39-7.30 (m, 2H), 7.27-7.24 (m, 2H), 5.04 (d, J = 7.0 Hz, 1H), 4.56 (t, J = 9.3 Hz, 1H), 3.91-3.89 (m, 1H), 2.42-2.39 (m, 1H), 2.36-2.25 (m, 1H), 2.24-2.09 (m, 2H), 1.97-1.80 (m, 2H), 1.76-1.64 (m, 1H), 1.57-1.55 (m, 2H), 1.49-1.35 (m, 2H), 1.33-1.19 (m, 2H), 1.09 (dt, J = 12.7, 8.0 Hz, 1H).	377.15	E	
I-907		(400 MHz, DMSO-d6)8.17 (d, J = 8.7 Hz, 1H), 7.39-7.29 (m, 2H), 7.27-7.24 (m, 2H), 4.98 (d, J = 6.3 Hz, 1H), 4.56 (t, J = 9.3 Hz, 1H), 4.21-4.18 (m, 1H), 2.86-2.83 (m, 1H), 2.28-2.26 (m, 1H), 2.17-2.14 (m, 2H), 2.01 (td, J = 10.5, 6.7 Hz, 1H), 1.92 (td, J = 10.4, 6.7 Hz, 1H), 1.69 (dd, J = 12.2, 7.5 Hz, 1H), 1.55-1.53 (m, 2H), 1.49-1.36 (m, 2H), 1.27 (dt, J = 12.5, 3.9 Hz, 2H), 1.09-1.07 (m, 1H).	377.2	E	

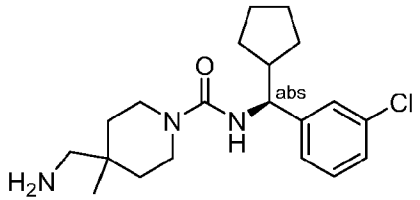
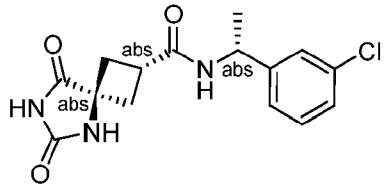
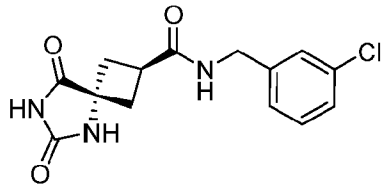
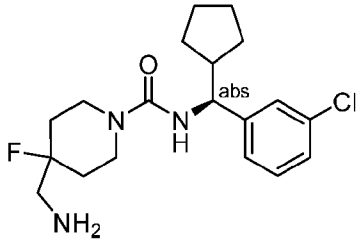
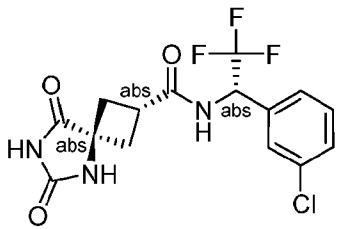
I-908		(400 MHz, DMSO-d6) 8.17 (d, J = 8.7 Hz, 1H), 7.72 (d, J = 7.3 Hz, 1H), 7.38 (t, J = 1.9 Hz, 1H), 7.33 (dd, J = 8.9, 6.4 Hz, 1H), 7.26 (dd, J = 6.8, 1.9 Hz, 2H), 4.57 (t, J = 9.2 Hz, 1H), 3.74 (s, 1H), 2.25-2.10 (m, 2H), 1.79 (s, 5H), 1.61-1.53 (m, 6H), 1.53-1.39 (m, 5H), 1.28 (dd, J = 12.5, 7.5 Hz, 2H), 1.09 (dd, J = 12.9, 8.0 Hz, 1H).	377.3	D	
I-909		(400 MHz, DMSO-d6) 8.18 (d, J = 8.7 Hz, 1H), 7.69 (d, J = 7.7 Hz, 1H), 7.39-7.29 (m, 2H), 7.26 (ddt, J = 7.5, 6.1, 1.5 Hz, 2H), 4.55 (t, J = 9.2 Hz, 1H), 3.49-3.37 (m, 1H), 2.23-2.05 (m, 2H), 1.87-1.67 (m, 7H), 1.58 (d, J = 14.1 Hz, 3H), 1.51-1.37 (m, 3H), 1.28 (d, J = 8.7 Hz, 3H), 1.21-1.04 (m, 3H).	377.3	E	
I-910		(400 MHz, DMSO-d6) 8.17 (dd, J = 8.9, 4.7 Hz, 1H), 7.75-7.66 (m, 1H), 7.41-7.29 (m, 2H), 7.29-7.21 (m, 2H), 4.61-4.51 (m, 1H), 3.44 (s, 1H), 2.25-2.05 (m, 2H), 1.78 (d, J = 10.9 Hz, 6H), 1.57 (s, 4H), 1.44 (s, 4H), 1.36-1.23 (m, 2H), 1.20-1.04 (m, 3H).	377.2	D	
I-911		(400 MHz, DMSO-d6) 8.18 (d, J = 8.6 Hz, 1H), 7.37 (s, 1H), 7.33 (t, J = 7.5 Hz, 1H), 7.27 (d, J = 6.7 Hz, 2H), 4.55 (q, J = 8.3, 7.1 Hz, 2H), 3.32 (s, 1H), 2.16 (dd, J = 16.3, 8.7 Hz, 2H), 1.72 (s, 4H), 1.57 (s, 3H), 1.44 (s, 2H), 1.25 (s, 4H), 1.10 (ddd, J = 41.9, 26.2, 12.1 Hz, 3H).	336.1	D	
I-912		(400 MHz, DMSO-d6) 8.19 (d, J = 8.8 Hz, 1H), 7.39 - 7.29 (m, 2H), 7.26 (t, J = 6.6 Hz, 2H), 4.62 - 4.51 (m, 2H), 3.37 (d, J = 4.5 Hz, 1H), 2.17 (dt, J = 16.9, 9.7 Hz, 2H), 1.93 - 1.85 (m, 1H), 1.79 (d, J = 11.9 Hz, 1H), 1.69 (s, 2H), 1.57 (s, 2H), 1.50 - 1.44 (m, 3H), 1.27 (s, 2H), 1.19 (d, J = 11.4 Hz, 2H), 1.17 - 0.98 (m, 3H).	336.1	E	

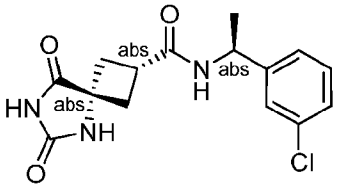
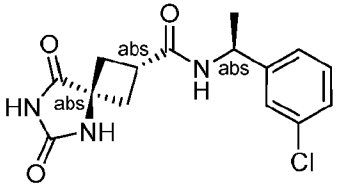
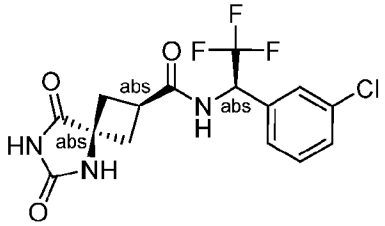
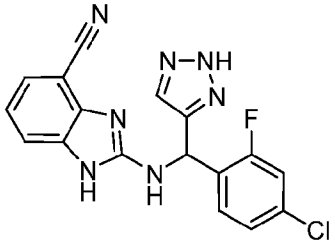
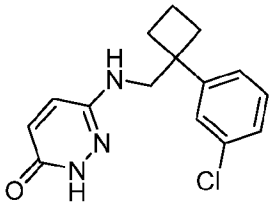
I-913		(400 MHz, DMSO-d6) 8.21 (d, J = 8.8 Hz, 1H), 7.38 (t, J = 1.9 Hz, 1H), 7.36 - 7.29 (m, 1H), 7.26 (ddt, J = 7.6, 4.0, 1.9 Hz, 2H), 4.55 (t, J = 9.3 Hz, 1H), 4.34 (d, J = 2.9 Hz, 1H), 3.90 (s, 1H), 2.58 (s, 1H), 2.16 (q, J = 8.7 Hz, 1H), 1.69 (dd, J = 23.6, 10.2 Hz, 6H), 1.58 - 1.40 (m, 5H), 1.38 - 1.22 (m, 4H), 1.08 (s, 1H).	336.1	D	
I-914		(400 MHz, DMSO-d6) 8.20 (d, J = 8.7 Hz, 1H), 7.38 (t, J = 1.9 Hz, 1H), 7.32 (dd, J = 8.9, 6.5 Hz, 1H), 7.25 (dd, J = 6.9, 1.9 Hz, 2H), 4.54 (t, J = 9.3 Hz, 1H), 4.38 (d, J = 3.0 Hz, 1H), 3.91 (s, 1H), 2.60 (s, 1H), 2.16 (q, J = 8.5 Hz, 1H), 1.62 - 1.44 (m, 1H), 1.43 - 1.31 (m, 9H), 1.25 (t, J = 11.4 Hz, 2H), 1.11 (t, J = 8.0 Hz, 3H), 1.06 (d, J = 7.7 Hz, 1H).	336.1	E	
I-915		(400 MHz, DMSO-d6) 8.20 (t, J = 9.3 Hz, 1H), 7.38 (t, J = 2.4 Hz, 1H), 7.36 - 7.30 (m, 1H), 7.30 - 7.21 (m, 2H), 4.56 (ddd, J = 13.4, 9.5, 4.6 Hz, 1H), 4.37 (dd, J = 19.3, 3.0 Hz, 1H), 3.91 (d, J = 8.4 Hz, 1H), 2.69 - 2.66 (m, 1H), 2.60 (s, 1H), 2.16 (q, J = 8.6, 8.1 Hz, 3H), 1.90 - 1.64 (m, 3H), 1.63 - 1.41 (m, 1H), 1.35 (d, J = 11.8 Hz, 4H), 1.29 - 1.16 (m, 3H), 1.11 (d, J = 13.3 Hz, 2H).	336.1	E	
I-916		(400 MHz, DMSO-d6) 8.09 (t, J = 7.8 Hz, 1H), 7.35 (dd, J = 4.7, 2.9 Hz, 1H), 7.31 (d, J = 7.6 Hz, 1H), 7.25 (ddt, J = 8.7, 7.0, 1.5 Hz, 2H), 4.62-4.46 (m, 1H), 4.39 (t, J = 5.3 Hz, 1H), 3.40 (dd, J = 6.6, 5.2 Hz, 1H), 3.28 (t, J = 5.8 Hz, 1H), 3.04 - 2.80 (m, 1H), 2.34 -1.93 (m, 4H), 1.91- 1.66 (m, 3H), 1.56 (dtd, J = 13.8, 7.2, 6.3, 3.8 Hz, 2H), 1.46 (tdd, J = 14.8, 6.2, 3.0 Hz, 2H), 1.26 (pd, J = 8.4, 7.7, 4.1 Hz, 2H), 1.08 (ddt, J = 12.2, 8.4, 4.4 Hz, 1H).	322.25	D	

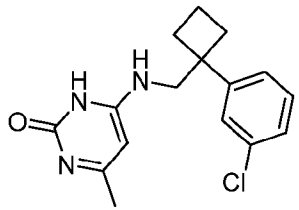
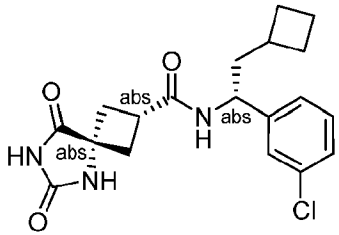
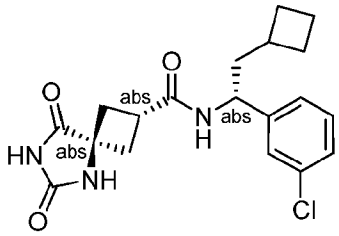
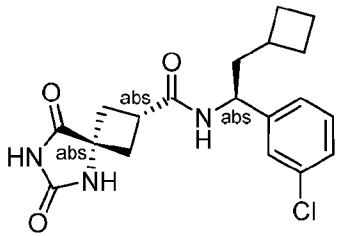
I-917		(400 MHz, DMSO-d6) 8.24 (d, J = 8.7 Hz, 1H), 7.71 (d, J = 7.9 Hz, 1H), 7.38-7.30 (m, 2H), 7.28 - 7.22 (m, 2H), 4.54 (t, J = 9.2 Hz, 1H), 3.57 - 3.45 (m, 1H), 2.29 - 2.21 (m, 1H), 2.15 (m, J = 8.4 Hz, 1H), 1.75 (s, 6H), 1.69 - 1.62 (m, 3H), 1.56 (m, J = 7.4, 3.7 Hz,2H), 1.44 (m, J = 12.0, 7.6 Hz, 2H), 1.33-1.22 (m, 4H), 1.22 - 0.96 (m, 3H).	308.05	D	
I-918		(400 MHz, DMSO-d6) 8.40 (d, J = 8.9 Hz, 1H), 7.44 (t, J = 1.8 Hz, 1H), 7.36 -7.26 (m, 3H), 4.59 (dd, J = 10.3, 8.9 Hz, 1H), 4.19 (hept, J = 6.8, 6.1 Hz, 2H), 3.95 (s, 2H), 3.28 (d, J = 4.3 Hz, 2H), 3.05 -2.88 (m, 2H), 2.36 - 2.23 (m, 1H), 1.76 (dtd, J = 12.2, 7.5, 4.3 Hz, 1H), 1.66 - 1.38 (m, 4H), 1.27 (ddt, J = 15.3, 7.7, 3.9 Hz, 2H), 1.12 - 1.01 (m, 1H).	442.3	E	
I-919		(400 MHz, DMSO-d6) 8.26 (d, J = 8.8 Hz, 1H), 7.75 (d, J = 7.9 Hz, 1H), 7.38 - 7.30 (m, 2H), 7.26 (ddt, J = 7.3, 5.6, 1.5 Hz, 2H), 4.55 (t, J = 9.3 Hz, 1H), 3.55 (dt, J = 7.8, 3.8 Hz, 1H), 2.30 - 2.20 (m, 1H), 2.15 (q, J = 8.3 Hz, 1H), 1.82 (d, J = 12.3 Hz, 1H), 1.78 (s, 3H), 1.75 - 1.66 (m, 3H), 1.62 - 1.50 (m, 3H), 1.45 (dt, J = 12.1, 7.6 Hz, 2H), 1.25 (dt, J = 12.3, 4.8 Hz, 4H), 1.20 - 0.97 (m, 3H).	308.05	D	
I-920		(400 MHz, dmso) δ 7.96 (br. s, 1H), 7.53 (app. t, J = 1.7 Hz, 1H), 7.42 (br. d, J = 7.6 Hz, 1H), 7.36 – 7.31 (m, 2H), 7.27 (ddd, J = 7.9, 1.8, 1.2 Hz, 1H), 7.24 (dd, J = 7.8, 0.9 Hz, 1H), 6.91 (t, J = 7.8 Hz, 1H), 4.65 (t, J = 8.6 Hz, 1H), 3.40 (submerged dd, J = 14.2, 7.5 Hz, 1H), 2.75 (t, J = 6.5 Hz, 2H), 1.88 – 1.78 (m, 1H), 1.68 – 1.48 (m, 4H), 1.31 – 1.26 (submerged m, 1H). Grease peaks present at 1.24 and 0.82-0.88 ppm.	352.1	E	

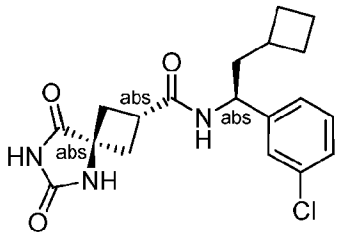
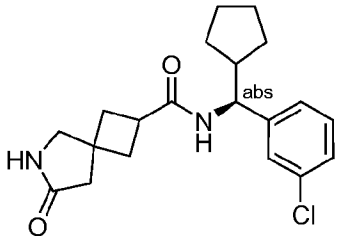
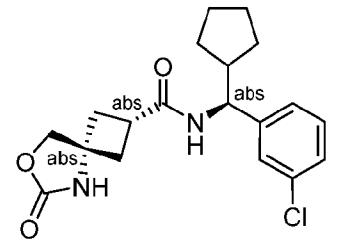
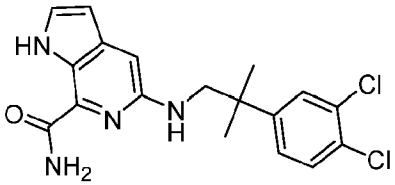
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I-922			359.35	E	
I-923			380.41	E	
I-924			359.35	E	

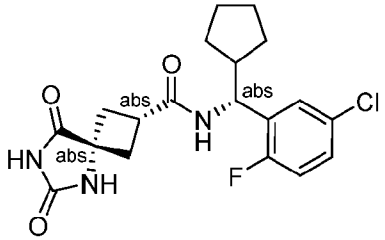
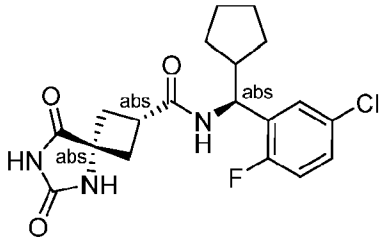
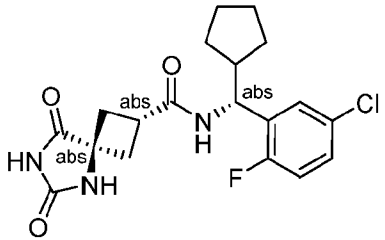
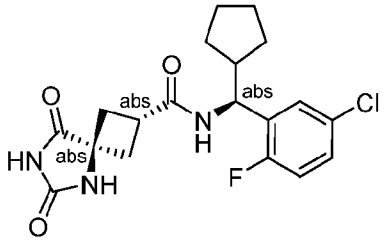
I-925				E	
I-926				E	
I-927				E	
I-928				E	
I-929				E	

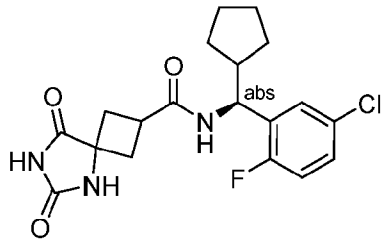
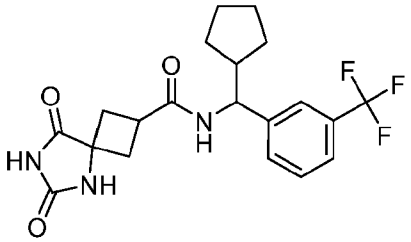
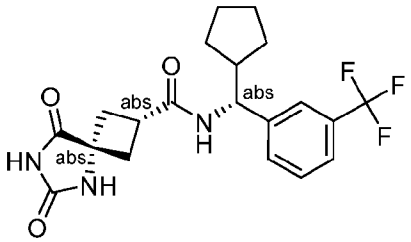
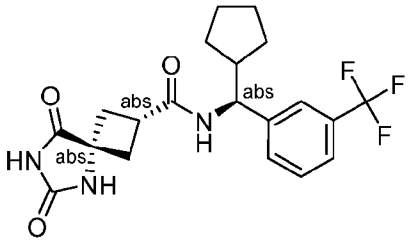
I-930				D	
I-931				E	
I-932				E	
I-933				D	
I-934				E	

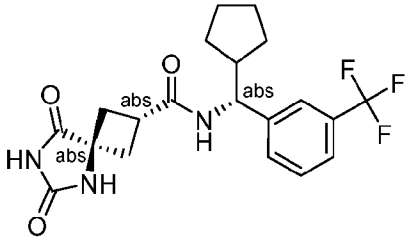
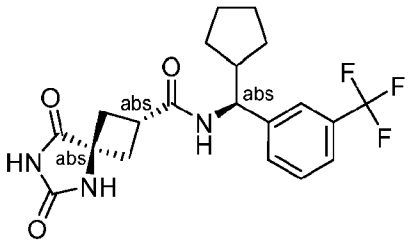
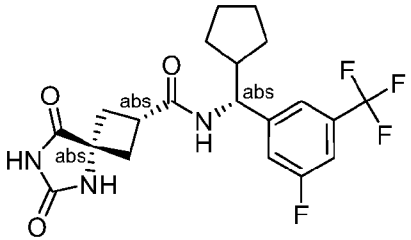
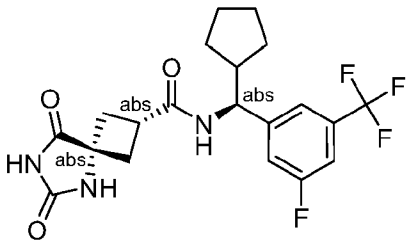
I-935				E	
I-936				E	
I-937				E	
I-938				E	
I-939				D	

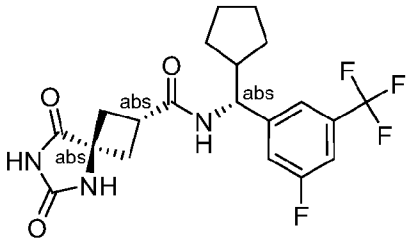
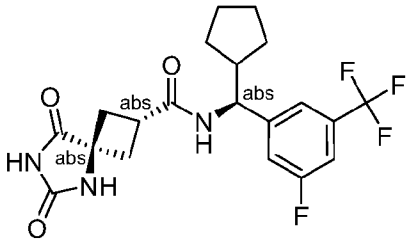
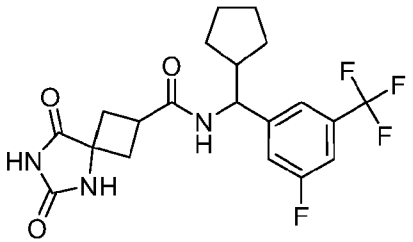
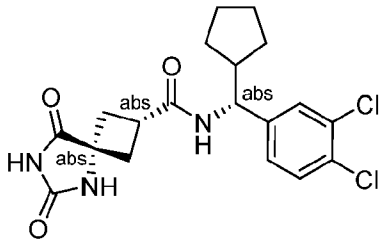
I-940				E	
I-941		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.35 (d, J = 8.4 Hz, 1H), 8.28 (s, 1H), 7.38 - 7.30 (m, 2H), 7.30- 7.25 (m, 1H), 7.22 (dt, J = 7.7, 1.4 Hz, 1H), 4.69 (td, J = 8.6, 6.1 Hz, 1H), 3.14- 3.00 (m, 1H), 2.48 - 2.28 (m, 4H), 2.19 (h, J = 7.7 Hz, 1H), 1.95 (ddp, J = 11.3, 7.7, 3.9 Hz, 1H), 1.86 (ddt, J = 14.4, 7.4, 4.1 Hz, 1H), 1.82 - 1.52 (m, 6H).	376.25	E	
I-942		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.35 (d, J = 8.4 Hz, 1H), 8.28 (s, 1H), 7.38 - 7.30 (m, 2H), 7.30 - 7.25 (m, 1H), 7.25 - 7.18 (m, 1H), 4.69 (td, J = 8.6, 6.1 Hz, 1H), 3.14 - 3.00 (m, 1H), 2.49-2.28 (m, 4H), 2.19 (h, J = 7.7 Hz, 1H), 1.95 (ddq, J = 11.4, 7.7, 4.1 Hz, 1H), 1.86 (ddt, J = 14.7, 7.5, 4.1 Hz, 1H), 1.82 - 1.51 (m, 6H).	376.25	E	
I-943		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.60 (s, 1H), 8.21 (d, J = 8.4 Hz, 1H), 7.38 - 7.30 (m, 2H), 7.27 (dt, J = 8.3, 1.5 Hz, 1H), 7.23 (dd, J = 7.5, 1.6 Hz, 1H), 4.70 (td, J = 8.6, 6.1 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.67 (ddd, J = 20.7, 11.8, 9.1 Hz, 2H), 2.20 (tdd, J = 15.9, 10.3, 4.6 Hz, 3H), 1.96 (dtd, J = 11.7, 7.6, 4.1 Hz, 1H), 1.88 (dq, J = 10.8, 3.5 Hz, 1H), 1.83- 1.52 (m, 6H).	376.25	E	

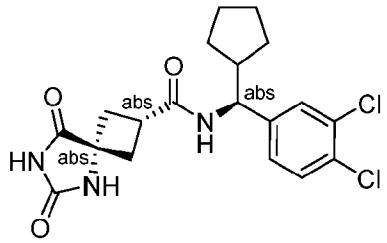
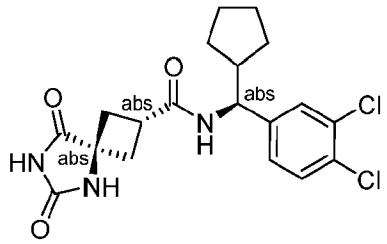
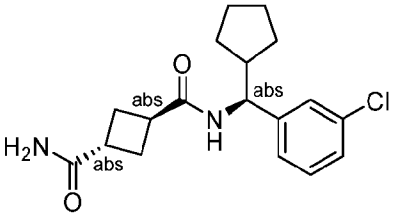
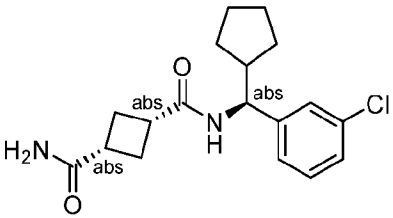
I-944		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.21 (d, J = 8.4 Hz, 1H), 7.38 - 7.30 (m, 2H), 7.27 (dt, J = 8.2, 1.5 Hz, 1H), 7.23 (dt, J = 7.5, 1.5 Hz, 1H), 4.69 (td, J = 8.7, 6.1 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.67 (ddd, J = 20.8, 11.8, 9.0 Hz, 2H), 2.20 (tdd, J = 15.9, 10.4, 4.5 Hz, 3H), 2.01 - 1.83 (m, 2H), 1.83 - 1.52 (m, 6H).	376.3	D	
I-945		(400 MHz, DMSO-d6) 8.18 (t, J = 9.1 Hz, 1H), 7.47 (d, J = 21.8 Hz, 1H), 7.40 -7.19 (m, 4H), 4.56 (t, J = 9.3 Hz, 1H), 3.28 (s, 1H), 2.97 (q, J = 8.3 Hz, 1H), 2.28 (d, J = 1.5 Hz, 1H), 2.21 - 2.08 (m, 4H), 2.04 (t, J = 7.7 Hz, 2H), 1.71 (d, J = 10.8 Hz, 1H), 1.53 (d, J = 25.3 Hz, 2H), 1.49 - 1.37 (m, 2H), 1.25 (s, 3H), 1.09 (d, J = 9.1 Hz, 1H).	361.3	D	
I-946		(400 MHz, DMSO-d6) 8.32 (d, J = 8.7 Hz, 1H), 8.15 (s, 1H), 7.38 -7.20 (m, 4H), 4.57 (t, J = 9.3 Hz, 1H), 4.30 - 4.18 (m, 2H), 2.86 (tt, J = 9.6, 4.9 Hz, 1H), 2.45 (t, J = 10.8 Hz, 1H), 2.39 - 2.26 (m, 2H), 2.26 - 2.10 (m, 2H), 1.70 (t, J = 6.2 Hz, 1H), 1.56 (dq, J = 11.6, 7.0, 4.6 Hz, 2H), 1.51 - 1.38 (m, 2H), 1.32 - 1.20 (m, 2H), 1.13 - 1.01 (m, 1H).	363.25	D	
I-947		(400 MHz, DMSO-d6) 10.78 (s, 1H), 7.90 (s, 1H), 7.67 (d, J = 2.2 Hz, 1H), 7.51 (d, J = 8.5 Hz, 2H), 7.44 (dd, J = 8.5, 2.2 Hz, 1H), 7.35 (t, J = 2.8 Hz, 1H), 6.78 (s, 1H), 6.18 (dd, J = 3.0, 1.9 Hz, 1H), 5.49 (t, J = 6.3 Hz, 1H), 3.61 (d, J = 6.3 Hz, 2H), 1.34 (s, 6H).	377.2	E	

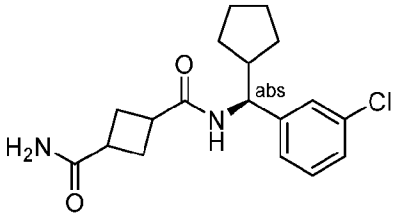
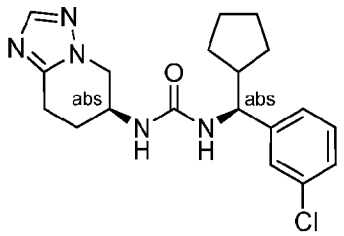
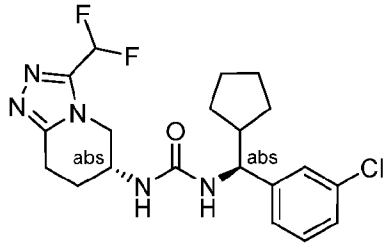
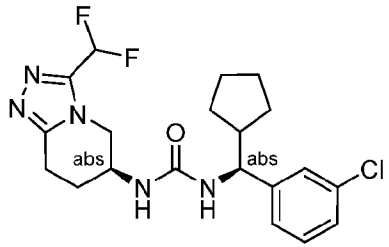
I-948		(400 MHz, DMSO-d6) 10.50 (s, 1H), 8.46 (d, J = 8.7 Hz, 1H), 8.27 (s, 1H), 7.47 (dd, J = 6.2, 2.7 Hz, 1H), 7.33 (ddd, J = 8.7, 4.4, 2.7 Hz, 1H), 7.20 (t, J = 9.2 Hz, 1H), 4.89 (t, J = 9.2 Hz, 1H), 3.16 - 3.02 (m, 1H), 2.49 - 2.26 (m, 4H), 2.16 (h, J = 8.4 Hz, 1H), 1.75 - 1.65 (m, 1H), 1.63 - 1.49 (m, 2H), 1.52 - 1.41 (m, 2H), 1.38 - 1.22 (m, 2H), 1.14 - 1.00 (m, 1H).	394.05	E	
I-949		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.46 (d, J = 8.6 Hz, 1H), 8.27 (s, 1H), 7.47 (dd, J = 6.2, 2.7 Hz, 1H), 7.33 (ddd, J = 8.7, 4.4, 2.7 Hz, 1H), 7.20 (t, J = 9.2 Hz, 1H), 4.89 (t, J = 9.2 Hz, 1H), 3.08 (h, J = 8.5, 7.9 Hz, 1H), 2.37 (dp, J = 31.9, 11.3, 10.6 Hz, 4H), 2.16 (q, J = 8.4 Hz, 1H), 1.70 (s, 1H), 1.61 - 1.41 (m, 4H), 1.38 - 1.22 (m, 2H), 1.07 (s, 1H).	394.05	D	
I-950		(400 MHz, DMSO-d6) 10.50 (s, 1H), 8.60 (s, 1H), 8.33 (d, J = 8.5 Hz, 1H), 7.49 (dd, J = 6.2, 2.8 Hz, 1H), 7.33 (ddd, J = 8.8, 4.4, 2.6 Hz, 1H), 7.20 (t, J = 9.2 Hz, 1H), 4.88 (t, J = 9.3 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.65 (ddd, J = 15.3, 12.0, 9.0 Hz, 2H), 2.30 - 2.10 (m, 3H), 1.77 - 1.69 (m, 1H), 1.64 - 1.56 (m, 2H), 1.46 (s, 2H), 1.29 (td, J = 17.1, 15.4, 7.8 Hz, 2H), 1.08 (s, 1H).	394.05	E	
I-951		(400 MHz, DMSO-d6) 10.45 (s, 1H), 8.60 (d, J = 2.0 Hz, 1H), 8.33 (d, J = 8.6 Hz, 1H), 7.49 (dd, J = 6.2, 2.7 Hz, 1H), 7.33 (ddd, J = 8.5, 4.4, 2.7 Hz, 1H), 7.20 (t, J = 9.2 Hz, 1H), 4.88 (t, J = 9.3 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.65 (ddd, J = 15.3, 12.0, 9.0 Hz, 2H), 2.25 (td, J = 8.8, 4.7 Hz, 1H), 2.17 (dp, J = 13.2, 4.7 Hz, 2H), 1.73 (ddd, J = 12.0, 8.5, 4.6 Hz, 1H), 1.62 - 1.40 (m, 4H), 1.37 - 1.22 (m, 2H), 1.08 (dd, J = 11.7, 7.4 Hz, 1H).	394.05	B	B

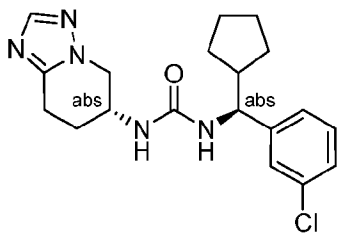
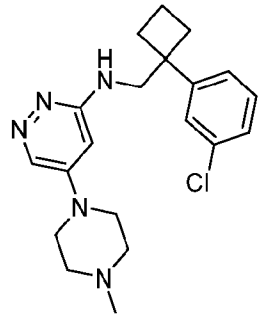
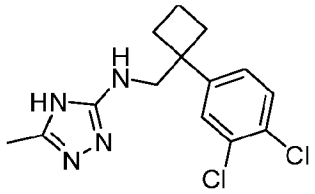
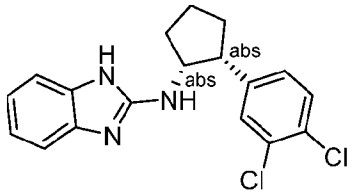
I-952		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.46 (d, J = 8.6 Hz, 1H), 8.27 (s, 1H), 7.47 (dd, J = 6.2, 2.7 Hz, 1H), 7.33 (ddd, J = 8.9, 4.4, 2.8 Hz, 1H), 7.21 (t, J = 9.2 Hz, 1H), 4.89 (t, J = 9.2 Hz, 1H), 3.15 - 3.02 (m, 2H), 2.39 (t, J = 10.2 Hz, 2H), 2.30 (d, J = 10.5 Hz, 1H), 2.16 (q, J = 8.5 Hz, 1H), 1.72 (s, 1H), 1.60 - 1.53 (m, 2H), 1.49 (dd, J = 15.4, 8.0 Hz, 2H), 1.38 - 1.22 (m, 2H), 1.07 (s, 1H).	394.05	D	
I-953		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.51 (d, J = 8.6 Hz, 1H), 8.26 (s, 1H), 7.66 (s, 1H), 7.63 - 7.50 (m, 3H), 4.68 (t, J = 9.1 Hz, 1H), 3.10 (ddd, J = 17.6, 9.2, 7.6 Hz, 1H), 2.48 - 2.41 (m, 1H), 2.39 (d, J = 11.1 Hz, 1H), 2.30 (t, J = 10.5 Hz, 2H), 2.16 (h, J = 8.2 Hz, 1H), 1.72 (ddt, J = 15.7, 12.1, 5.7 Hz, 1H), 1.60 - 1.52 (m, 2H), 1.55 - 1.39 (m, 2H), 1.33 - 1.21 (m, 2H), 1.11 (dt, J = 12.8, 8.2 Hz, 1H).	410.05	E	
I-954		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.51 (d, J = 8.6 Hz, 1H), 8.26 (s, 1H), 7.66 (s, 1H), 7.61 - 7.50 (m, 3H), 4.68 (t, J = 9.1 Hz, 1H), 3.16 - 3.03 (m, 1H), 2.48 - 2.34 (m, 3H), 2.34 - 2.25 (m, 1H), 2.16 (h, J = 8.3 Hz, 1H), 1.70 (td, J = 7.7, 4.3 Hz, 1H), 1.63 - 1.55 (m, 2H), 1.59 - 1.39 (m, 2H), 1.35 - 1.20 (m, 2H), 1.17 - 1.01 (m, 1H).	410.05	E	
I-955		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.51 (d, J = 8.6 Hz, 1H), 8.26 (s, 1H), 7.66 (s, 1H), 7.60 (d, J = 7.2 Hz, 1H), 7.58 - 7.50 (m, 2H), 4.68 (t, J = 9.1 Hz, 1H), 3.10 (p, J = 8.9 Hz, 1H), 2.49 - 2.41 (m, 1H), 2.41 - 2.34 (m, 2H), 2.30 (t, J = 10.5 Hz, 1H), 2.16 (h, J = 8.4 Hz, 1H), 1.70 (dt, J = 12.1, 5.8 Hz, 1H), 1.57 (t, J = 4.0 Hz, 2H), 1.58 - 1.40 (m, 2H), 1.33 - 1.21 (m, 2H), 1.10 (dq, J = 12.6, 8.2 Hz, 1H).	410.05	E	

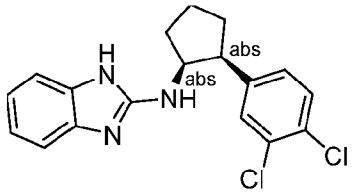
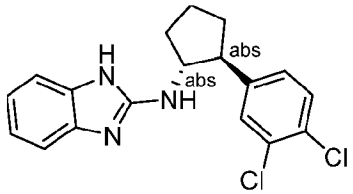
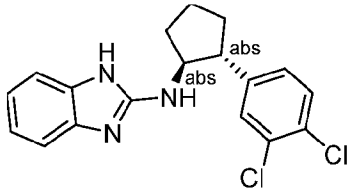
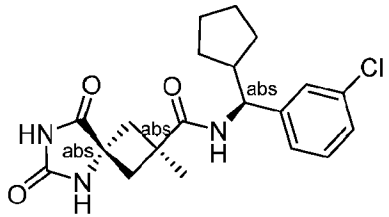
I-956		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.38 (d, J = 8.6 Hz, 1H), 7.66 (s, 1H), 7.64 - 7.55 (m, 2H), 7.58 - 7.50 (m, 1H), 4.67 (t, J = 9.2 Hz, 1H), 3.13 (p, J = 9.2 Hz, 1H), 2.63 (dd, J = 11.8, 8.9 Hz, 2H), 2.29 - 2.15 (m, 2H), 2.19 - 2.09 (m, 1H), 1.73 (dd, J = 11.8, 7.1 Hz, 1H), 1.62 - 1.53 (m, 2H), 1.53 - 1.21 (m, 2H), 1.24 (s, 2H), 1.10 (s, 1H).	410.05	E	
I-957		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.60 (s, 1H), 8.38 (d, J = 8.5 Hz, 1H), 7.66 (s, 1H), 7.64 - 7.50 (m, 3H), 4.67 (t, J = 9.3 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.68 - 2.58 (m, 2H), 2.29 - 2.09 (m, 3H), 1.78 - 1.70 (m, 1H), 1.58 (s, 2H), 1.54 - 1.39 (m, 2H), 1.37 - 1.21 (m, 2H), 1.17 - 1.05 (m, 1H).	410.05	D	
I-958		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.50 (dd, J = 8.6, 2.2 Hz, 1H), 8.26 (s, 1H), 7.52 (dd, J = 16.4, 8.5 Hz, 3H), 4.72 (t, J = 9.2 Hz, 1H), 3.18 - 3.00 (m, 1H), 2.47 - 2.35 (m, 3H), 2.34 - 2.26 (m, 1H), 2.15 (q, J = 8.5 Hz, 1H), 1.70 (s, 1H), 1.58 (s, 2H), 1.46 (dq, J = 14.3, 8.4 Hz, 2H), 1.34 - 1.20 (m, 2H), 1.15 (d, J = 9.6 Hz, 1H).	428.1	E	
I-959		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.50 (d, J = 8.6 Hz, 1H), 8.26 (s, 1H), 7.59 - 7.44 (m, 3H), 4.72 (t, J = 9.0 Hz, 1H), 3.16 - 3.04 (m, 1H), 2.44 (dt, J = 11.9, 3.6 Hz, 2H), 2.41 - 2.35 (m, 1H), 2.30 (t, J = 10.4 Hz, 1H), 2.15 (h, J = 8.4 Hz, 1H), 1.69 (dd, J = 12.1, 7.4 Hz, 1H), 1.63 - 1.52 (m, 2H), 1.46 (td, J = 14.2, 13.1, 7.9 Hz, 2H), 1.27 (dd, J = 12.4, 7.8 Hz, 2H), 1.15 (q, J = 12.1, 10.3 Hz, 1H).	428.1	D	

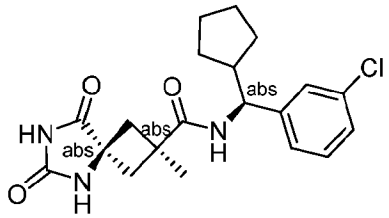
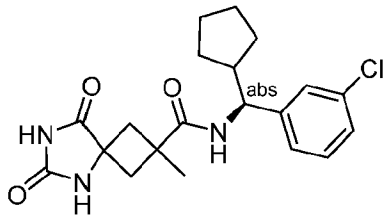
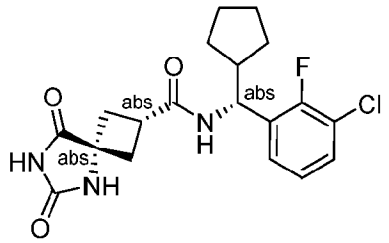
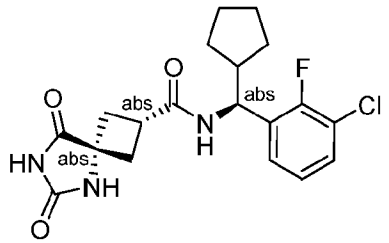
I-960		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.37 (d, J = 8.6 Hz, 1H), 7.61 - 7.41 (m, 3H), 4.70 (t, J = 9.2 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.65 (ddd, J = 17.5, 12.0, 9.0 Hz, 2H), 2.35 - 2.10 (m, 3H), 1.78 - 1.68 (m, 1H), 1.67 - 1.38 (m, 4H), 1.35 - 1.21 (m, 2H), 1.19 - 1.06 (m, 1H).	428.35	E	
I-961		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.59 (s, 1H), 8.37 (d, J = 8.4 Hz, 1H), 7.62 - 7.43 (m, 3H), 4.70 (t, J = 9.3 Hz, 1H), 3.14 (p, J = 9.0 Hz, 1H), 2.65 (ddd, J = 17.2, 11.8, 9.0 Hz, 2H), 2.20 (tt, J = 16.0, 8.8 Hz, 3H), 1.79 - 1.68 (m, 1H), 1.59 (s, 2H), 1.52 - 1.39 (m, 2H), 1.34 - 1.21 (m, 2H), 1.15 (q, J = 11.4, 9.8 Hz, 1H).	428.05	C	C
I-962		(400 MHz, DMSO-d6) 10.59 (d, J = 15.0 Hz, 1H), 8.66 - 8.21 (m, 2H), 7.63 - 7.42 (m, 3H), 4.71 (td, J = 9.2, 6.7 Hz, 1H), 3.19 - 3.03 (m, 1H), 2.68 - 2.59 (m, 1H), 2.46 - 2.35 (m, 2H), 2.34 - 2.08 (m, 2H), 1.96 - 1.65 (m, 1H), 1.64 - 1.51 (m, 2H), 1.52 - 1.38 (m, 2H), 1.27 (dq, J = 11.9, 7.9 Hz, 2H), 1.15 (q, J = 11.6, 10.0 Hz, 1H).	428.1	D	
I-963		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.45 (d, J = 8.6 Hz, 1H), 8.28 (s, 1H), 7.62 - 7.50 (m, 2H), 7.29 (dd, J = 8.3, 2.1 Hz, 1H), 4.57 (t, J = 9.1 Hz, 1H), 3.08 (p, J = 9.0 Hz, 1H), 2.45 - 2.26 (m, 4H), 2.11 (p, J = 8.3 Hz, 1H), 1.74 - 1.34 (m, 5H), 1.32 - 1.19 (m, 2H), 1.15 - 1.02 (m, 1H).	410.25	E	

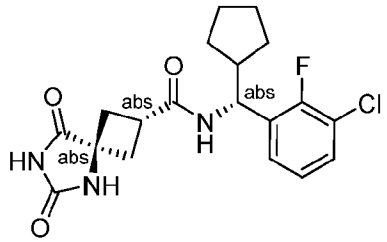
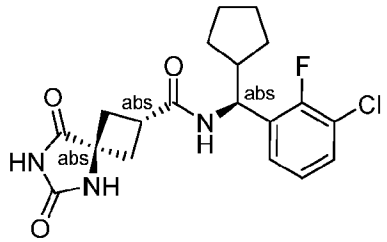
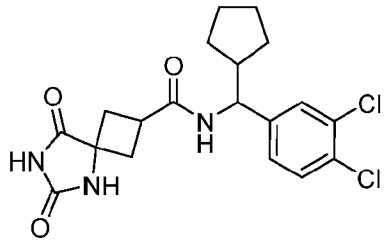
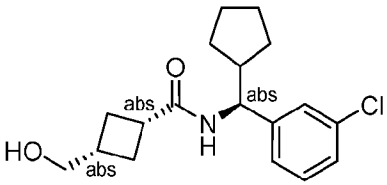
I-964		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.45 (d, J = 8.6 Hz, 1H), 8.28 (s, 1H), 7.63 - 7.50 (m, 2H), 7.29 (dd, J = 8.4, 2.0 Hz, 1H), 4.57 (t, J = 9.1 Hz, 1H), 3.08 (p, J = 8.9 Hz, 1H), 2.46 - 2.35 (m, 3H), 2.33 - 2.27 (m, 1H), 2.12 (h, J = 8.3 Hz, 1H), 1.75 - 1.64 (m, 1H), 1.56 (d, J = 4.3 Hz, 2H), 1.51 - 1.38 (m, 2H), 1.32 - 1.19 (m, 2H), 1.15 - 1.02 (m, 1H).	410.25	E	
I-965		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 8.32 (d, J = 8.5 Hz, 1H), 7.61 - 7.54 (m, 2H), 7.30 (dd, J = 8.3, 2.0 Hz, 1H), 4.56 (t, J = 9.2 Hz, 1H), 3.12 (p, J = 9.1 Hz, 1H), 2.71 - 2.58 (m, 2H), 2.28 - 2.09 (m, 3H), 1.73 (d, J = 6.7 Hz, 1H), 1.63 - 1.36 (m, 4H), 1.33 - 1.21 (m, 2H), 1.10 (dt, J = 12.8, 8.2 Hz, 1H).	410.1	D	
I-966		(400 MHz, DMSO-d6) 8.15 (d, J = 8.7 Hz, 1H), 7.39 - 7.29 (m, 2H), 7.26 (t, J = 7.1 Hz, 2H), 7.13 (s, 1H), 6.70 (s, 1H), 4.55 (t, J = 9.3 Hz, 1H), 2.85 (dp, J = 21.9, 9.0 Hz, 2H), 2.16 (p, J = 10.1 Hz, 4H), 2.07 (d, J = 9.9 Hz, 1H), 1.70 (ddd, J = 12.0, 9.1, 5.3 Hz, 1H), 1.58 (td, J = 7.9, 7.1, 3.8 Hz, 2H), 1.54 - 1.39 (m, 2H), 1.33 - 1.20 (m, 2H), 1.08 (dq, J = 12.3, 8.0 Hz, 1H).	335.15	D	
I-967		(400 MHz, DMSO-d6) 8.20 (d, J = 8.8 Hz, 1H), 7.39 - 7.30 (m, 2H), 7.30 - 7.21 (m, 2H), 7.16 (s, 1H), 6.70 (s, 1H), 4.58 (t, J = 9.3 Hz, 1H), 3.01 (td, J = 8.7, 4.4 Hz, 1H), 2.92 (tt, J = 9.1, 6.3 Hz, 1H), 2.31 - 2.05 (m, 5H), 1.70 (dt, J = 12.1, 5.9 Hz, 1H), 1.57 (qd, J = 9.8, 9.0, 4.5 Hz, 2H), 1.53 - 1.38 (m, 2H), 1.33 - 1.21 (m, 2H), 1.16 - 1.04 (m, 1H).	335.1	D	

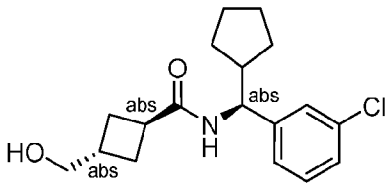
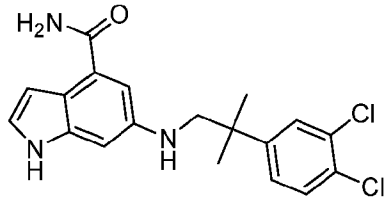
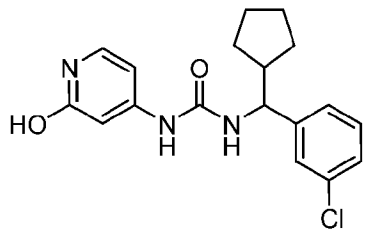
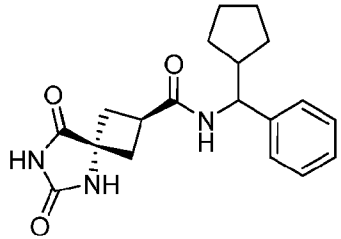
I-968		(400 MHz, DMSO-d6) 8.18 (dd, J = 18.4, 8.8 Hz, 1H), 7.39 - 7.30 (m, 2H), 7.30 - 7.21 (m, 2H), 7.14 (d, J = 15.0 Hz, 1H), 6.70 (s, 1H), 4.57 (q, J = 9.7 Hz, 1H), 3.08 - 2.90 (m, 2H), 2.29 - 2.01 (m, 5H), 1.74 - 1.65 (m, 1H), 1.61 - 1.37 (m, 4H), 1.26 (ddt, J = 11.8, 7.9, 4.6 Hz, 2H), 1.15 - 1.02 (m, 1H).	335.1	D	
I-969		(400 MHz, DMSO-d6) 7.87 (s, 1H), 7.33 (t, J = 7.6 Hz, 1H), 7.31 7.23 (m, 2H), 7.20 (d, J = 7.6 Hz, 1H), 6.45 (d, J = 8.6 Hz, 1H), 6.20 (d, J = 7.2 Hz, 1H), 4.47 (t, J = 8.6 Hz, 1H), 4.21 (dd, J = 12.4, 4.7 Hz, 1H), 4.13 (d, J = 7.0 Hz, 1H), 3.86 (dd, J = 12.5, 5.5 Hz, 1H), 2.96 - 2.77 (m, 2H), 2.12 (p, J = 8.3 Hz, 1H), 1.97 (dp, J = 20.4, 7.3, 6.8 Hz, 2H), 1.68 - 1.51 (m, 3H), 1.47 (hept, J = 8.2 Hz, 2H), 1.31 (ddt, J = 19.3, 13.0, 7.6 Hz, 2H), 1.13 (dt, J = 12.4, 7.5 Hz, 1H).	374.1	E	
I-970		(400 MHz, DMSO-d6) 7.45 - 7.24 (m, 4H), 7.23 - 7.16 (m, 1H), 6.45 (d, J = 8.6 Hz, 1H), 6.23 (d, J = 7.2 Hz, 1H), 4.47 (t, J = 8.6 Hz, 1H), 4.20 (dd, J = 12.2, 4.6 Hz, 1H), 4.17 - 4.03 (m, 1H), 3.86 (dd, J = 12.3, 5.9 Hz, 1H), 3.06 - 2.87 (m, 2H), 2.14 (p, J = 8.2 Hz, 1H), 1.97 (dh, J = 13.7, 6.5 Hz, 2H), 1.71 - 1.60 (m, 1H), 1.60 - 1.52 (m, 2H), 1.52 - 1.39 (m, 2H), 1.31 (ddd, J = 28.6, 12.5, 7.7 Hz, 2H), 1.21 - 1.05 (m, 1H).	424.2	D	
I-971		(400 MHz, DMSO-d6) 7.48 - 7.29 (m, 3H), 7.28 - 7.24 (m, 1H), 7.21 (dt, J = 7.6, 1.5 Hz, 1H), 6.45 (d, J = 8.7 Hz, 1H), 6.22 (d, J = 7.0 Hz, 1H), 4.45 (t, J = 8.7 Hz, 1H), 4.27 - 4.21 (m, 1H), 4.07 (h, J = 7.2 Hz, 1H), 3.94 (dd, J = 12.2, 5.9 Hz, 1H), 3.03 - 2.88 (m, 2H), 2.12 (h, J = 8.2 Hz, 1H), 2.02 - 1.80 (m, 2H), 1.71 - 1.38 (m, 5H), 1.38 - 1.19 (m, 2H), 1.11 (dq, J = 12.2, 7.9 Hz, 1H).	424.2	E	

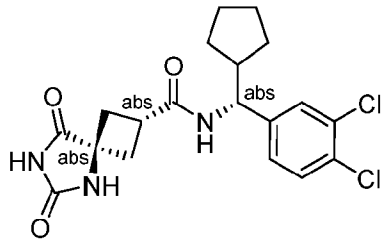
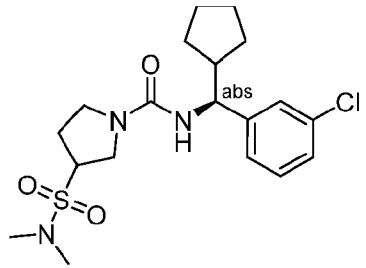
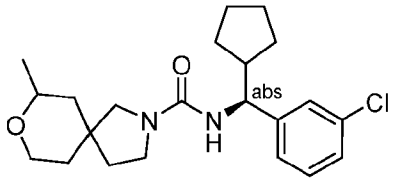
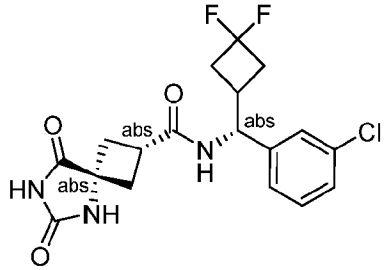
I-972		(400 MHz, DMSO-d6) 7.88 (s, 1H), 7.38 - 7.18 (m, 4H), 6.44 (d, J = 8.6 Hz, 1H), 6.21 (d, J = 7.2 Hz, 1H), 4.46 (t, J = 8.6 Hz, 1H), 4.24 (dd, J = 12.5, 4.6 Hz, 1H), 4.11 (dt, J = 10.2, 3.6 Hz, 1H), 3.92 (dd, J = 12.5, 5.5 Hz, 1H), 2.94 - 2.75 (m, 2H), 2.12 (h, J = 8.3 Hz, 1H), 2.03 - 1.83 (m, 2H), 1.67 - 1.39 (m, 5H), 1.39 - 1.18 (m, 2H), 1.18 - 1.07 (m, 1H).	374.05	E	
I-974		(400 MHz, DMSO-d6) 8.34 (s, 2H), 7.31-7.17 (m, 3H), 7.13 (s, 1H), 6.19 (s, 1H), 3.74 (d, J = 6.2 Hz, 6H), 3.53 (s, 2H), 3.34 (s, 2H), 2.82 (s, 3H), 2.29 (d, J − 9.1 Hz, 4H), 2.12 (dd, J − 19.8, 10.4 Hz, 1H), 1.84 (s, 1H).	372.3	E	
I-975		(400 MHz, DMSO-d6) 11.54 (s, 1H), 7.52 (d, J − 8.3 Hz, 1H), 7.36 (d, J = 2.1 Hz, 1H), 7.13 (dd, J = 8.3, 2.2 Hz, 1H), 6.06 (s, 1H), 3.42 (d, J = 6.5 Hz, 2H), 2.37 - 2.23 (m, 2H), 2.17 (dd, J = 11.3, 8.6 Hz, 2H), 2.10 - 1.96 (m, 4H), 1.83 - 1.73 (m, 1H).	311.2	E	
I-976		(400 MHz, DMSO-d6) 10.59 (s, 1H), 7.60 (d, J = 2.1 Hz, 1H), 7.52 (d, J = 8.3 Hz, 1H), 7.33 (dd, J = 8.4, 2.1 Hz, 1H), 7.09 (d, J = 9.8 Hz, 2H), 6.83 (d, J = 13.3 Hz, 2H), 6.69 (d, J = 8.5 Hz, 1H), 4.13 (p, J = 8.4 Hz, 1H), 3.16 - 3.05 (m, 1H), 2.26 (dq, J = 13.5, 6.9 Hz, 1H), 2.12 (dq, J = 15.6, 7.0, 6.2 Hz, 1H), 1.88- 1.66 (m, 3H), 1.56 (dq, J = 12.6, 8.2 Hz, 1H).	346.05	E	

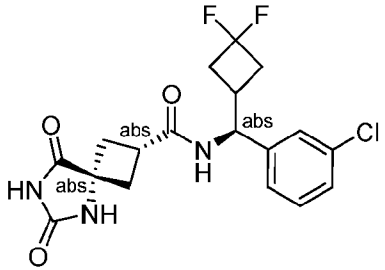
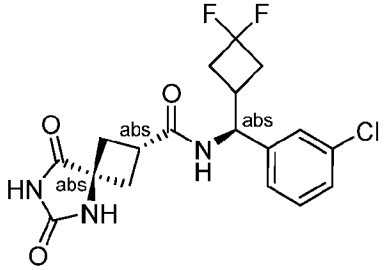
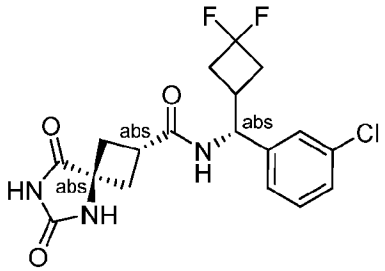
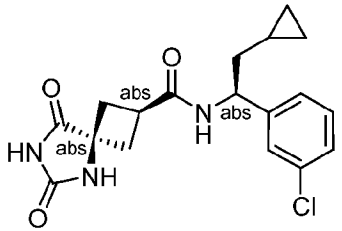
I-977		(400 MHz, DMSO-d6) 10.59 (s, 1H), 7.60 (d, J = 2.0 Hz, 1H), 7.52 (d, J = 8.3 Hz, 1H), 7.33 (dd, J = 8.3, 2.1 Hz, 1H), 7.08 (dd, J = 12.9, 7.7 Hz, 2H), 6.87 (t, J = 7.5 Hz, 1H), 6.81 (d, J = 7.7 Hz, 1H), 6.69 (d, J = 8.5 Hz, 1H), 4.13 (p, J = 8.4 Hz, 1H), 3.11 (q, J = 9.5 Hz, 1H), 2.26 (dq, J = 13.8, 6.9 Hz, 1H), 2.18 - 2.06 (m, 1H), 1.87 - 1.65 (m, 3H), 1.56 (dq, J = 12.6, 8.2 Hz, 1H).	346.1	D	
I-978		(400 MHz, DMSO-d6) 10.25 (s, 1H), 7.47 - 7.39 (m, 2H), 7.18 (dd, J = 8.3, 2.1 Hz, 1H), 7.08 (dd, J = 16.2, 7.7 Hz, 2H), 6.90 -6.72 (m, 2H), 6.24 (d, J = 8.8 Hz, 1H), 4.44 (dq, J = 8.7, 6.2 Hz, 1H), 3.41 (q, J = 7.7 Hz, 1H), 2.16 - 1.84 (m, 4H), 1.79 - 1.63 (m, 2H).	346.05	E	
I-979		(400 MHz, DMSO-d6) 10.25 (s, 1H), 7.47- 7.39 (m, 2H), 7.18 (dd, J = 8.3, 2.1 Hz, 1H), 7.08 (s, 2H), 6.88 - 6.78 (m, 2H), 6.25 (d, J = 8.8 Hz, 1H), 4.44 (dq, J = 8.7, 6.2 Hz, 1H), 3.41 (q, J = 7.8 Hz, 1H), 2.17-1.95 (m, 3H), 1.90 (tt, J = 11.2, 6.0 Hz, 1H), 1.79-1.63 (m, 2H).	346.05	D	
I-980		(400 MHz, DMSO-d6) ¦Ä 10.51 (s, 1H), 8.22 (s, 1H), 8.06 (d, J = 8.7 Hz, 1H), 7.42 (d, J = 1.9 Hz, 1H), 7.37-7.22 (m, 3H), 4.54 (t, J = 9.5 Hz, 1H), 2.70-2.58 (m, 2H), 2.32 (td, J = 8.8, 7.7, 3.5 Hz, 2H), 2.21 (q, J = 8.5 Hz, 1H), 1.78 (d, J = 13.9 Hz, 1H), 1.68-1.55 (m, 3H), 1.50 (s, 3H), 1.48-1.37 (m, 1H), 1.36-1.21 (m, 2H), 1.12 (q, J = 11.0, 9.5 Hz, 1H).	390.25	D	

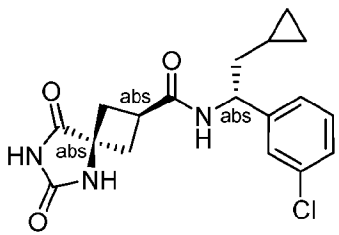
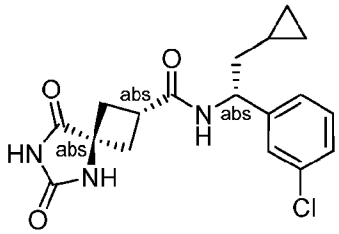
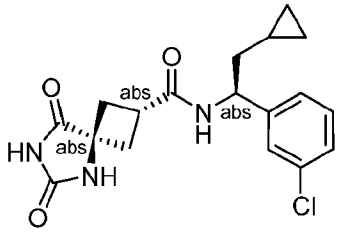
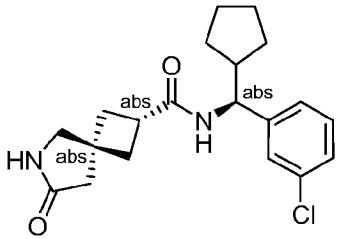
I-981		(400 MHz, DMSO-d6) 10.31 (s, 1H), 8.51 (s, 1H), 8.09 (d, J = 8.6 Hz, 1H), 7.40 (t, J = 1.8 Hz, 1H), 7.36-7.22 (m, 3H), 4.60-4.51 (m, 1H), 2.88 (dd, J = 12.6, 7.4 Hz, 2H), 2.38-2.15 (m, 1H), 2.10-1.96 (m, 2H), 1.76 (t, J = 6.1 Hz, 1H), 1.59 (dd, J = 8.4, 4.6 Hz, 2H), 1.53-1.40 (m, 2H), 1.37 (s, 3H), 1.35-1.21 (m, 2H), 1.13 (dd, J = 12.5, 8.2 Hz, 1H).	390.05	E	
I-982		(400 MHz, DMSO-d6) 10.46 (s, 1H), 8.37 (d, J = 118.8 Hz, 1H), 8.08 (dd, J = 15.8, 8.7 Hz, 1H), 7.41 (q, J = 3.1, 2.5 Hz, 1H), 7.37-7.21 (m, 3H), 4.55 (dt, J = 10.4, 7.1 Hz, 1H), 2.88 (dd, J = 12.5, 7.6 Hz, 1H), 2.69-2.60 (m, 1H), 2.35-2.27 (m, 2H), 2.20 (p, J = 8.4 Hz, 1H), 2.12-1.95 (m, 1H), 1.85-1.71 (m, 1H), 1.68-1.54 (m, 2H), 1.50 (s, 4H), 1.35-1.18 (m, 2H), 1.12 (p, J = 8.0 Hz, 1H).	390.3	D	
I-983		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.54 (d, J = 8.4 Hz, 1H), 8.28 (s, 1H), 7.45 (td, J = 7.6, 1.7 Hz, 1H), 7.40 - 7.31 (m, 1H), 7.21 (t, J = 7.9 Hz, 1H), 4.88 (t, J = 9.1 Hz, 1H), 3.09 (p, J = 8.9 Hz, 1H), 2.46 - 2.13 (m, 5H), 1.73 (dd, J = 12.2, 7.1 Hz, 1H), 1.66 - 1.39 (m, 4H), 1.29 (dq, J = 18.2, 10.2, 8.7 Hz, 2H), 1.06 (t, J = 10.4 Hz, 1H).	394.15	E	
I-984		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.54 (d, J = 8.4 Hz, 1H), 8.29 (s, 1H), 7.49 - 7.42 (m, 1H), 7.36 (ddd, J = 8.0, 6.4, 1.7 Hz, 1H), 7.21 (t, J = 7.9 Hz, 1H), 4.88 (dd, J = 9.9, 8.4 Hz, 1H), 3.09 (p, J = 8.9 Hz, 1H), 2.46 - 2.41 (m, 1H), 2.41 - 2.34 (m, 2H), 2.28 (t, J = 10.5 Hz, 1H), 2.18 (q, J = 8.4 Hz, 1H), 1.79 - 1.69 (m, 1H), 1.52 (ddd, J = 30.2, 14.8, 7.2 Hz, 4H), 1.29 (td, J = 18.7, 17.1, 9.0 Hz, 2H), 1.06 (t, J = 10.4 Hz, 1H).	394.1	D	

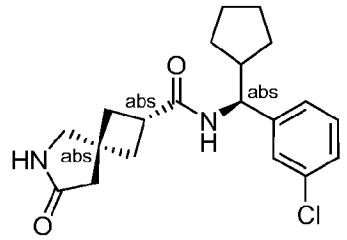
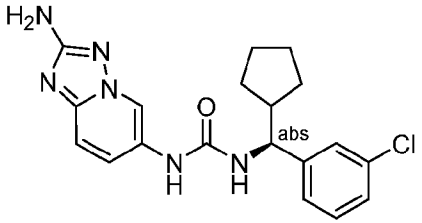
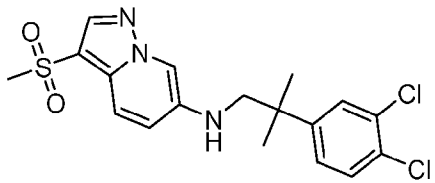
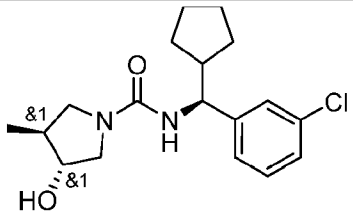
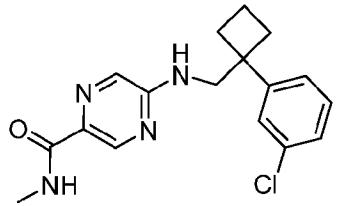
I-985		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.60 (s, 1H), 8.39 (d, J = 8.3 Hz, 1H), 7.50 - 7.33 (m, 2H), 7.21 (t, J = 7.9 Hz, 1H), 4.93 - 4.80 (m, 1H), 3.12 (p, J = 9.0 Hz, 1H), 2.68 - 2.58 (m, 2H), 2.27 - 2.10 (m, 3H), 1.78 (s, 1H), 1.65 - 1.40 (m, 4H), 1.32 (dt, J = 12.6, 7.3 Hz, 2H), 1.08 (d, J = 9.7 Hz, 1H).	394.05	E	
I-986		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.60 (s, 1H), 8.39 (d, J = 8.3 Hz, 1H), 7.44 (t, J = 6.8 Hz, 1H), 7.37 (t, J = 7.1 Hz, 1H), 7.21 (t, J = 7.9 Hz, 1H), 4.95 - 4.78 (m, 1H), 3.11 (q, J = 9.1 Hz, 1H), 2.69 - 2.60 (m, 2H), 2.28 - 2.09 (m, 3H), 1.77 (d, J = 7.6 Hz, 1H), 1.59 (s, 2H), 1.50 (d, J = 7.3 Hz, 2H), 1.37 - 1.26 (m, 2H), 1.07 (d, J = 10.2 Hz, 1H).	394.05	B	B
I-987		(400 MHz, DMSO-d6) 10.57 (d, J = 13.1 Hz, 1H), 8.63 - 8.39 (m, 1H), 8.35 - 8.22 (m, 1H), 7.61 - 7.52 (m, 2H), 7.35 - 7.21 (m, 1H), 4.57 (td, J = 9.1, 3.2 Hz, 1H), 3.17 - 2.99 (m, 1H), 2.71 - 2.59 (m, 1H), 2.45 (q, J = 3.4 Hz, 1H), 2.43 - 2.35 (m, 1H), 2.35 - 2.27 (m, 1H), 2.14 (dt, J = 16.9, 8.6 Hz, 1H), 1.71 (ddt, J = 15.1, 12.0, 5.3 Hz, 1H), 1.56 (tq, J = 6.7, 3.4 Hz, 2H), 1.50 - 1.38 (m, 2H), 1.26 (qt, J = 13.1, 6.4 Hz, 2H), 1.09 (dq, J = 12.3, 8.1 Hz, 1H).	410	D	
I-988		(400 MHz, DMSO-d6) 8.09 (d, J = 8.7 Hz, 1H), 7.39- 7.29 (m, 2H), 7.25 (tt, J = 7.3, 1.5 Hz, 2H), 4.55 (t, J = 9.3 Hz, 1H), 4.40 (t, J = 5.3 Hz, 1H), 3.36- 3.24 (m, 2H), 2.87 (p, J = 8.8 Hz, 1H), 2.33 - 2.21 (m, 1H), 2.16 (q, J = 8.3 Hz, 1H), 2.08 (ddt, J = 12.3, 7.9, 4.0 Hz, 1H), 1.98 (dtd, J = 11.8, 8.0, 3.8 Hz, 1H), 1.86 - 1.65 (m, 3H), 1.55 (dtd, J = 15.7, 9.7, 9.0, 3.2 Hz, 2H), 1.50 - 1.38 (m, 2H), 1.32 - 1.19 (m, 2H), 1.14- 1.01 (m, 1H).	322.2	E	

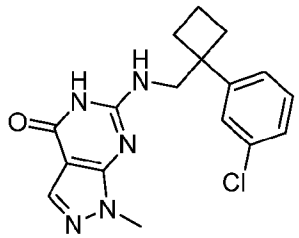
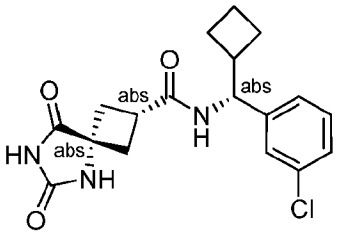
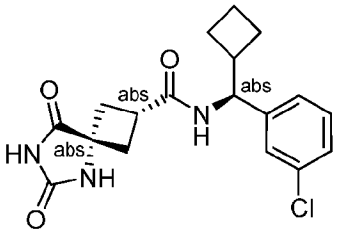
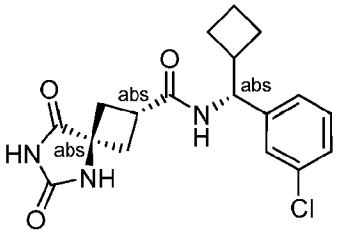
I-989		(400 MHz, DMSO-d6) 8.10 (d, J = 8.7 Hz, 1H), 7.38- 7.29 (m, 2H), 7.25 (ddd, J = 7.3, 3.7, 1.8 Hz, 2H), 4.57 (t, J = 9.3 Hz, 1H), 4.49 (t, J = 5.3 Hz, 1H), 3.40 (dd, J = 6.6, 5.3 Hz, 2H), 2.98 (tt, J = 9.2, 6.6 Hz, 1H), 2.26 (dd, J = 9.8, 4.2 Hz, 1H), 2.26- 1.99 (m, 3H), 1.88 (ddq, J = 8.7, 6.2, 3.4, 2.9 Hz, 1H), 1.78 (ddq, J = 8.6, 6.1, 2.5 Hz, 1H), 1.74 - 1.65 (m, 1H), 1.56 (dtd, J = 13.7, 7.2, 6.3, 3.8 Hz, 2H), 1.46 (dddt, J = 15.7, 12.3, 8.0, 4.4 Hz, 2H), 1.34 - 1.20 (m, 2H), 1.08 (dt, J = 19.9, 7.2 Hz, 1H).	322.2	E	
I-990		(400 MHz, DMSO-d6) 10.63 (s, 1H), 7.65 (d, J = 2.2 Hz, 1H), 7.57 (d, J = 8.5 Hz, 1H), 7.48-7.39 (m, 2H), 7.12 - 7.04 (m, 2H), 6.90 (d, J = 2.0 Hz, 1H), 6.69 (d, J = 2.2 Hz, 1H), 6.59 (t, J = 2.5 Hz, 1H), 4.92 (t, J = 6.0 Hz, 1H), 3.26 (d, J = 6.0 Hz, 2H), 1.38 (s, 6H).	376.05	E	
I-991		(400 MHz, d6-DMSO) 11.65 (d, J = 7.6 Hz, 1H), 7.99 (d, J = 8.0 Hz, 1H), 7.39 - 7.33 (m, 2H), 7.32 - 7.25 (m, 2H), 6.84 (br s, 2H), 5.96 (dd, J = 8.1, 2.4 Hz, 1H), 5.34 (d, J = 2.4 Hz, 1H), 4.69 (app t, J = 8.0 Hz, 1H), 2.38 - 2.18 (m, 1H), 1.74 - 1.13 (m, 8H). This batch is >10:1 mixture of hydroxypyridine: 2-pyridone tautomers. Only the major tautomer was characterized.	346.2	E	
I-992				E	

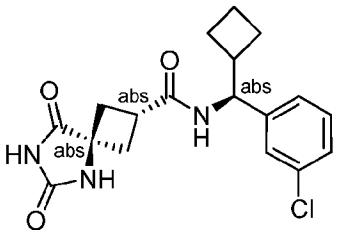
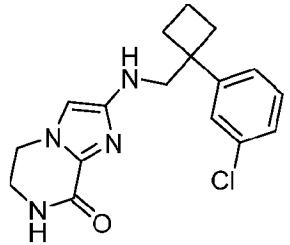
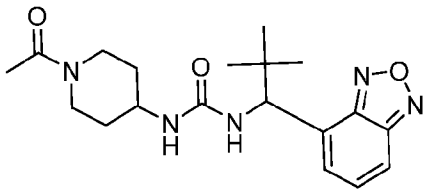
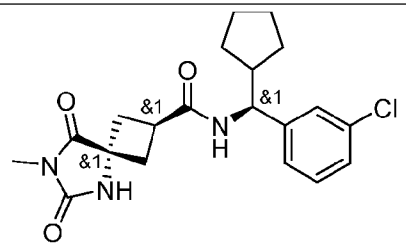
I-993		(400 MHz, Methanol-d4) 7.55 - 7.42 (m, 2H), 7.27 (dd, J = 8.3, 2.1 Hz, 1H), 4.60 (d, J = 10.4 Hz, 1H), 3.26 - 3.13 (m, 1H), 2.93 - 2.83 (m, 2H), 2.44 (dddd, J = 28.1, 12.7, 9.8, 3.5 Hz, 2H), 2.30 (dt, J = 17.1, 8.6 Hz, 1H), 1.95 - 1.84 (m, 1H), 1.75 - 1.60 (m, 2H), 1.59 - 1.51 (m, 2H), 1.47 - 1.36 (m, 2H), 1.31 (s, 1H), 1.22 - 1.10 (m, 1H), 0.91 (d, J = 7.2 Hz, 1H).	410	D	
I-994			414.42	E	
I-995			391.46	E	
I-996		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.49 (d, J = 8.7 Hz, 1H), 8.27 (s, 1H), 7.41 (t, J = 1.8 Hz, 1H), 7.39 - 7.27 (m, 3H), 4.88 (t, J = 8.4 Hz, 1H), 3.16 - 3.05 (m, 1H), 2.69 - 2.55 (m, 1H), 2.49 - 2.28 (m, 8H).	398.1	E	

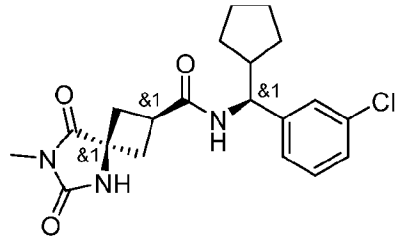
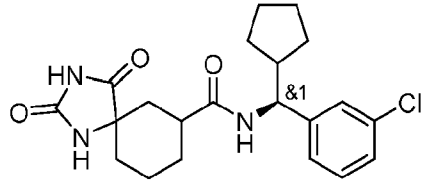
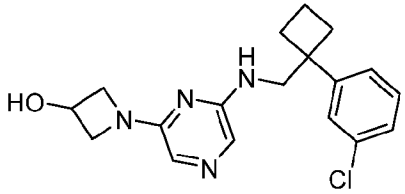
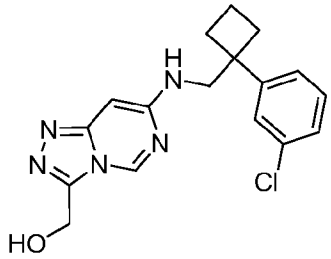
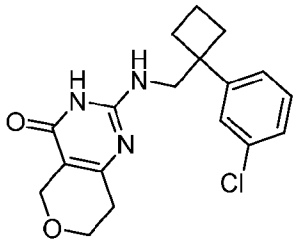
I-997		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.49 (d, J = 8.7 Hz, 1H), 8.27 (s, 1H), 7.41 (t, J = 1.8 Hz, 1H), 7.39 - 7.33 (m, 1H), 7.30 (ddt, J = 7.1, 5.3, 1.6 Hz, 2H), 4.88 (t, J = 8.4 Hz, 1H), 3.09 (dt, J = 9.6, 8.4 Hz, 1H), 2.68 - 2.54 (m, 1H), 2.48 - 2.37 (m, 6H), 2.33 (t, J = 6.8 Hz, 2H).	398.05	E	
I-998		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.57 (d, J = 1.5 Hz, 1H), 8.33 (d, J = 8.7 Hz, 1H), 7.42 (t, J = 1.9 Hz, 1H), 7.39 - 7.28 (m, 3H), 4.90 (t, J = 8.7 Hz, 1H), 3.14 (p, J = 9.0 Hz, 1H), 2.75 - 2.69 (m, 1H), 2.69 - 2.57 (m, 2H), 2.48 - 2.31 (m, 3H), 2.23 (dddd, J = 25.3, 12.6, 9.2, 4.0 Hz, 2H).	398.05	D	
I-999		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.57 (s, 1H), 8.33 (d, J = 8.7 Hz, 1H), 7.42 (t, J = 1.8 Hz, 1H), 7.39 - 7.29 (m, 3H), 4.90 (t, J = 8.7 Hz, 1H), 3.14 (p, J = 9.0 Hz, 1H), 2.76 - 2.69 (m, 1H), 2.69 - 2.56 (m, 2H), 2.46 - 2.31 (m, 3H), 2.23 (dddd, J = 21.8, 12.8, 9.2, 4.2 Hz, 2H).	398.05	E	
I-1000		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.41 (d, J = 8.3 Hz, 1H), 8.28 (s, 1H), 7.38 - 7.32 (m, 2H), 7.31 - 7.26 (m, 1H), 7.24 (d, J = 7.8 Hz, 1H), 5.80 (ddt, J = 16.9, 10.3, 6.5 Hz, 1H), 5.03 - 4.91 (m, 2H), 4.77 (q, J = 7.8 Hz, 1H), 3.11 (p, J = 8.9 Hz, 1H), 2.48 - 2.26 (m, 4H), 1.98 (dp, J = 21.9, 7.2 Hz, 2H), 1.77 - 1.63 (m, 2H).	362.1	E	

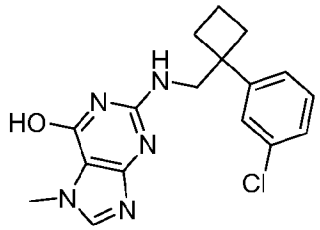
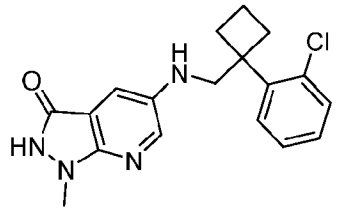
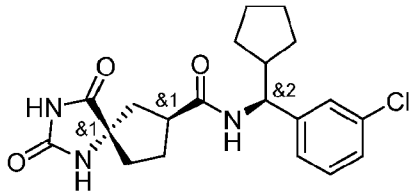
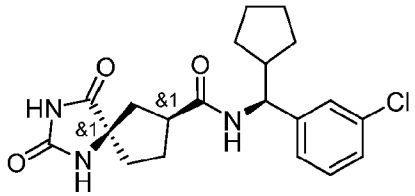
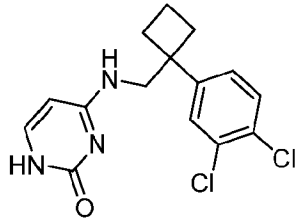
I-1001		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.42 (d, J = 8.4 Hz, 1H), 8.28 (s, 1H), 7.37 - 7.32 (m, 2H), 7.28 (dt, J = 8.4, 1.5 Hz, 1H), 7.24 (dd, J = 7.6, 1.7 Hz, 1H), 5.80 (ddt, J = 16.8, 10.2, 6.5 Hz, 1H), 5.03 - 4.92 (m, 2H), 4.83 - 4.71 (m, 1H), 3.10 (p, J = 8.9 Hz, 1H), 2.47 - 2.28 (m, 4H), 1.99 (ddt, J = 21.6, 14.6, 7.3 Hz, 2H), 1.71 (ddt, J = 10.8, 8.4, 6.0 Hz, 2H).	362.1	E	
I-1002		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (d, J = 2.3 Hz, 1H), 8.27 (d, J = 8.4 Hz, 1H), 7.38 - 7.32 (m, 2H), 7.31 - 7.22 (m, 2H), 5.81 (ddt, J = 16.8, 10.2, 6.5 Hz, 1H), 5.05 - 4.92 (m, 2H), 4.79 (td, J = 8.5, 6.0 Hz, 1H), 3.16 (p, J = 9.1 Hz, 1H), 2.69 (ddd, J = 18.1, 11.8, 8.9 Hz, 2H), 2.21 (dddd, J = 21.2, 13.0, 9.1, 4.2 Hz, 2H), 2.00 (tp, J = 14.5, 7.4 Hz, 2H), 1.74 (tp, J = 14.7, 7.6, 6.9 Hz, 2H).	362.05	E	
I-1003		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.27 (d, J = 8.3 Hz, 1H), 7.38 - 7.32 (m, 2H), 7.26 (ddt, J = 13.7, 7.5, 1.6 Hz, 2H), 5.81 (ddt, J = 16.8, 10.2, 6.5 Hz, 1H), 5.05 - 4.93 (m, 2H), 4.79 (td, J = 8.6, 6.0 Hz, 1H), 3.16 (p, J = 9.1 Hz, 1H), 2.68 (ddd, J = 18.2, 11.9, 9.0 Hz, 2H), 2.21 (dddd, J = 21.0, 12.9, 9.0, 4.3 Hz, 2H), 2.09 - 1.92 (m, 2H), 1.73 (tdd, J = 15.6, 8.4, 4.7 Hz, 2H).	362.25	E	
I-1004		(400 MHz, DMSO-d6) 8.17 (d, J = 8.7 Hz, 1H), 7.50 (s, 1H), 7.40 - 7.29 (m, 2H), 7.25 (tt, J = 7.3, 1.5 Hz, 2H), 4.56 (t, J = 9.2 Hz, 1H), 3.28 (s, 2H), 2.98 (p, J = 8.5 Hz, 1H), 2.24 - 1.98 (m, 7H), 1.70 (p, J = 7.3, 6.5 Hz, 1H), 1.61 - 1.49 (m, 2H), 1.48-1.33 (m, 2H), 1.26 (ddd, J = 19.8, 13.8, 9.6 Hz, 2H), 1.08 (dq, J = 12.3, 8.1 Hz, 1H).	361.3	D	

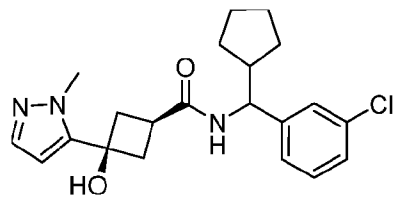
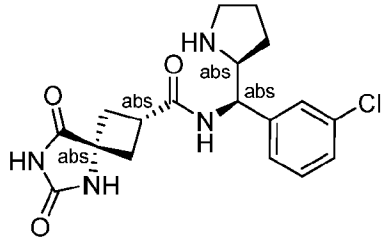
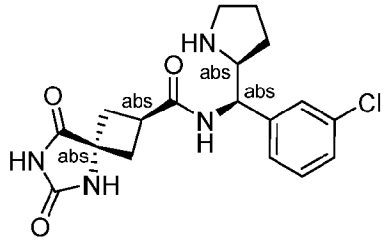
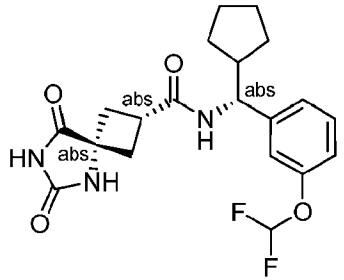
I-1005		(400 MHz, DMSO-d6) 8.19 (d, J = 8.7 Hz, 1H), 7.44 (s, 1H), 7.40 - 7.19 (m, 4H), 4.56 (t, J = 9.3 Hz, 1H), 3.13 (s, 2H), 2.96 (p, J = 8.5 Hz, 1H), 2.28 (s, 2H), 2.21 - 2.08 (m, 3H), 2.03 (dd, J = 8.4, 2.1 Hz, 2H), 1.75 - 1.65 (m, 1H), 1.53 (d, J = 24.2 Hz, 2H), 1.49 - 1.38 (m, 2H), 1.34- 1.20 (m, 2H), 1.13 -1.03 (m, 1H).	361.3	D	
I-1006		(400 MHz, DMSO-d6) 8.78 (dd, J = 2.1, 0.9 Hz, 1H), 8.40 (s, 1H), 7.41- 7.32 (m, 2H), 7.31-7.21 (m, 3H), 7.18 (dd, J = 9.4, 2.1 Hz, 1H), 6.91 (d, J = 8.4 Hz, 1H), 5.80 (s, 2H), 4.51 (t, J = 8.7 Hz, 1H), 2.22 (h, J = 8.1 Hz, 1H), 1.73 (dd, J = 12.2, 7.5 Hz, 1H), 1.67 - 1.41 (m, 4H), 1.36 (p, J = 7.7 Hz, 2H), 1.22 - 1.08 (m, 1H).	385.3	D	
I-1007		(400 MHz, DMSO-d6) 8.12 (s, 1H), 8.02 (d, J = 1.9 Hz, 1H), 7.69-7.60 (m, 2H), 7.55 (d, J = 8.5 Hz, 1H), 7.45 (dd, J = 8.5, 2.3 Hz, 1H), 7.29 (dd, J = 9.6, 2.0 Hz, 1H), 5.65 (t, J = 5.9 Hz, 1H), 3.27 (d, J = 5.9 Hz, 2H), 3.19 (s, 3H), 1.37 (s, 6H).	412.2	E	
I-1008				E	
I-1009			331.34	E	

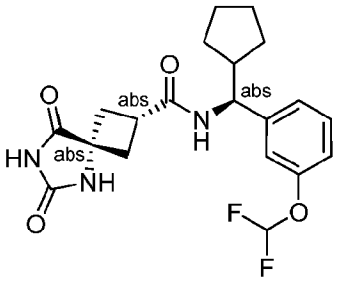
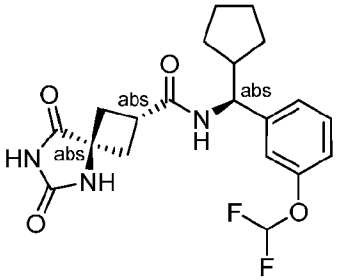
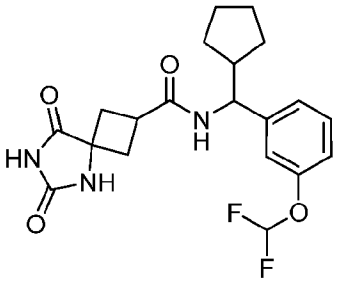
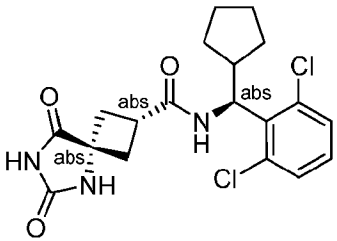
I-1010			344.24	E	
I-1011		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.38 - 8.23 (m, 2H), 7.35 - 7.30 (m, 2H), 7.29 - 7.20 (m, 2H), 4.75 (t, J = 9.0 Hz, 1H), 3.17 - 3.05 (m, 1H), 2.45 (m, 1H), 2.44 - 2.29 (m, 4H), 1.94 (q, J = 7.0, 5.9 Hz, 1H), 1.72 (dt, J = 19.4, 6.6 Hz, 5H).	362.1	E	
I-1012		(400 MHz, Methanol-d4) 7.34 - 7.26 (m, 2H), 7.22 (ddt, J = 11.9, 7.5, 1.4 Hz, 2H), 4.78 (d, J = 10.2 Hz, 1H), 3.26 - 3.15 (m, 1H), 2.72 - 2.53 (m, 4H), 2.51 - 2.43 (m, 1H), 2.17 - 2.07 (m, 1H), 1.94 - 1.72 (m, 5H).	362.1	E	
I-1013		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.18 (d, J = 8.5 Hz, 1H), 7.35 - 7.30 (m, 2H), 7.25 (ddt, J = 13.2, 7.6, 1.5 Hz, 2H), 4.76 (t, J = 9.2 Hz, 1H), 3.15 (p, J = 9.3 Hz, 1H), 2.67 (ddd, J = 16.1, 11.9, 9.1 Hz, 2H), 2.60 - 2.54 (m, 1H), 2.27 - 2.13 (m, 2H), 1.96 (s, 1H), 1.81 - 1.66 (m, 4H).	362.1	E	

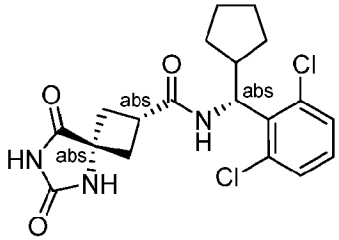
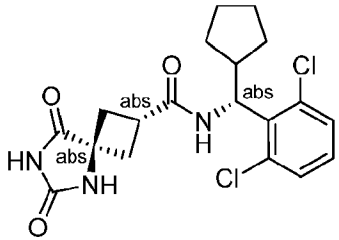
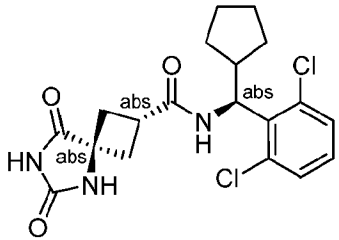
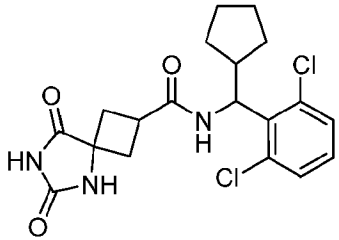
I-1014		(400 MHz, Methanol-d4) 7.34 - 7.21 (m, 4H), 3.37 (s, 3H), 3.28 - 3.14 (m, 1H), 2.90 (ddt, J = 11.9, 8.4, 1.5 Hz, 2H), 2.77 - 2.65 (m, 1H), 2.52 - 2.38 (m, 2H), 2.20 - 2.05 (m, 1H), 1.96 - 1.75 (m, 5H).	362.1	D	
I-1015		(400 MHz, DMSO-d6) 7.76 (s, 1H), 7.33 (t, J = 7.7 Hz, 1H), 7.26 - 7.18 (m, 2H), 7.15 (dt, J = 7.7, 1.4 Hz, 1H), 6.27 (s, 1H), 4.80 (t, J = 6.6 Hz, 1H), 4.02 - 3.95 (m, 2H), 3.55 - 3.45 (m, 1H), 3.49 - 3.43 (m, 1H), 3.27 (d, J = 6.6 Hz, 2H), 2.24 (ddd, J = 19.5, 11.9, 8.5 Hz, 4H), 2.13 - 1.98 (m, 1H), 1.79 (s, 1H).	331.05	E	
I-1016		(400 MHz, CDCN) 7.92 (br s, J = 6.9 Hz, 1H), 7.60 (br s, 1H), 7.46 (d, J = 9.1 Hz, 1H), 7.23 (dd, J = 9.0, 7.0 Hz, 1H), 6.82 (d, J = 7.0 Hz, 1H), 5.37 (d, J = 8.5 Hz, 1H), 5.23 (ddd, J = 8.3, 8.3, 5.5 Hz, 1H), 5.04 (d, J = 7.4 Hz, 1H), 4.30 - 4.20 (m, 1H), 3.78 - 3.61 (m, 2H), 3.17 - 3.05 (m, 1H), 2.78 - 2.67 (m, 1H), 2.00 (s, 1.5 H), 1.98 (s, 1.5 H), 1.86 - 1.73 (m, 3H), 1.36 - 1.17 (m, 3H), 0.83 - 0.71 (m, 1H), 0.50 - 0.36 (m, 2H), 0.17 - 0.05 (m, 2H). This batch contains ca. 9% unknown impurity by LC; the CH3 (acetyl) appears as two singlets.	374.4	E	
I-1017				D	D

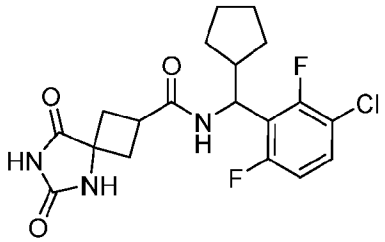
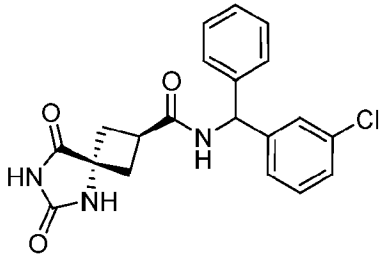
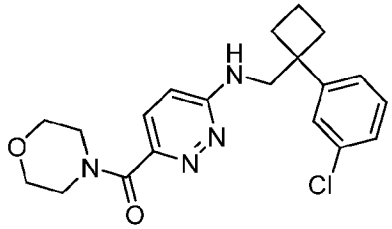
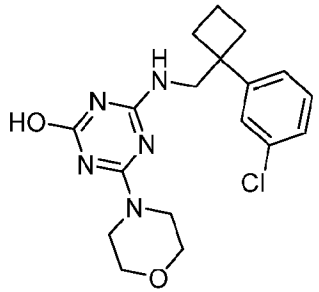
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I-1019				D	
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I-1021			344.34	E	
I-1022			346.34	E	

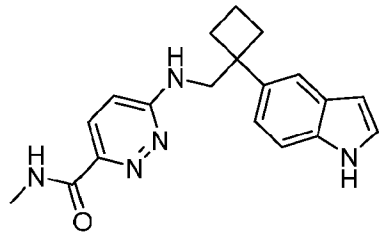
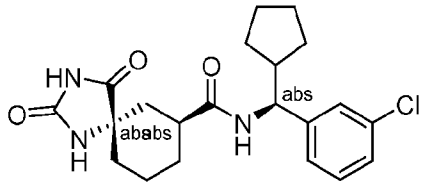
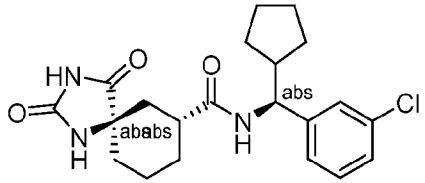
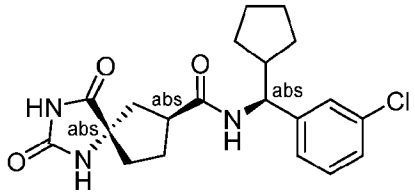
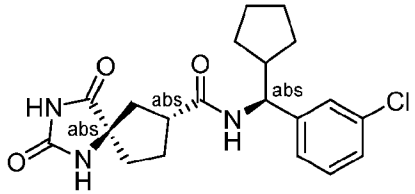
I-1023			344.34	E	
I-1024			343.34	E	
I-1025				B	C
I-1026				E	
I-1027		(400 MHz, DMSO-d6) δ10.19 (br. d, J = 4.9 Hz, 1H), 7.54 (d, J = 8.3 Hz, 1H), 7.36 (d, J = 2.0 Hz, 1H), 7.28 (t, J = 5.8 Hz, 1H), 7.22 – 7.18 (m, 1H), 7.14 (dd, J = 8.3, 2.1 Hz, 1H), 5.61 (d, J = 7.0 Hz, 1H), 3.66 (d, J = 5.9 Hz, 2H), 2.30 – 2.16 (m, 4H), 2.11 – 2.00 (m, 1H), 1.83 – 1.72 (m, 1H) ppm. Peak at 3.31 ppm is an unidentified impurity.	324.2	D	

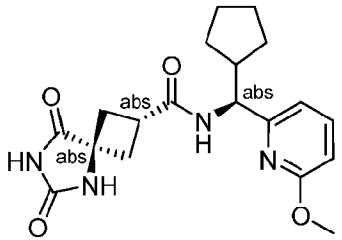
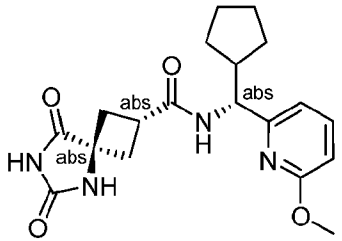
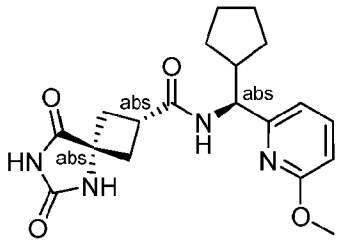
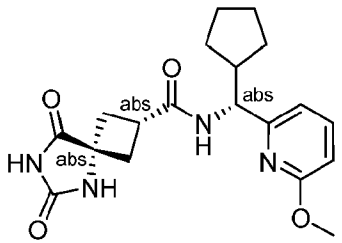
I-1028		(400 MHz, dmso) δ 8.22 (d, J = 8.8 Hz, 1H), 7.72 – 7.63 (m, 1H), 7.35 – 7.18 (m, 5H), 6.26 (d, J = 1.8 Hz, 1H), 4.55 (t, J = 9.2 Hz, 1H), 4.16 – 4.07 (m, 1H), 3.76 (s, 3H), 2.59 – 2.51 (submerged m, 2H), 2.45 – 2.27 (submerged m, 3H), 2.14 – 2.03 (m, 1H), 1.71 – 1.30 (m, 5H), 1.13 – 1.01 (m, 2H). Presence of grease; Formate salt signal at ~ 8.2.	388.1	E	
I-1029		(400 MHz, dmso) δ 8.44 (d, J = 8.8 Hz, 1H), 8.32 – 8.22 (m, 3H), 7.38 (s, 1H), 7.35 – 7.23 (m, 3H), 4.66 (t, J = 8.5 Hz, 1H), 3.27 (dd, J = 15.1, 7.4 Hz, 1H), 3.14 – 3.04 (m, 1H), 2.84 – 2.69 (m, 2H), 2.46 – 2.27 (m, 4H), 1.82 – 1.71 (m, 1H), 1.68 – 1.53 (m, 2H), 1.48 – 1.36 (m, 1H).	377	E	
I-1030		(400 MHz, dmso) δ 8.60 (s, 1H), 8.35 – 8.24 (m, 3H), 7.39 (s, 1H), 7.35 – 7.24 (m, 3H), 4.65 (t, J = 8.6 Hz, 1H), 3.33 – 3.25 (m, 1H), 3.18 – 3.07 (m, 1H), 2.84 – 2.59 (m, 4H), 2.27 – 2.11 (m, 2H), 1.84 – 1.72 (m, 1H), 1.69 – 1.53 (m, 2H), 1.49 – 1.36 (m, 1H).	377	E	
I-1031		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.42 (d, J = 8.8 Hz, 1H), 8.28 (s, 1H), 7.36 (dd, J = 16.5, 8.6 Hz, 1H), 7.23 - 6.97 (m, 4H), 4.60 (t, J = 9.2 Hz, 1H), 3.09 (p, J = 9.0 Hz, 1H), 2.49 - 2.41 (m, 2H), 2.41 - 2.30 (m, 2H), 2.14 (q, J = 8.3 Hz, 1H), 1.74 - 1.64 (m, 1H), 1.56 (d, J = 4.7 Hz, 2H), 1.50 - 1.38 (m, 2H), 1.27 (dd, J = 12.3, 7.6 Hz, 2H), 1.11 (q, J = 10.7, 9.4 Hz, 1H).	408.05	E	

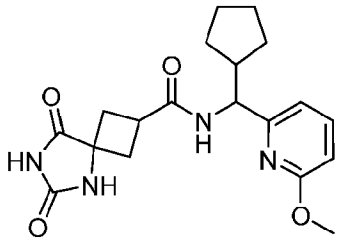
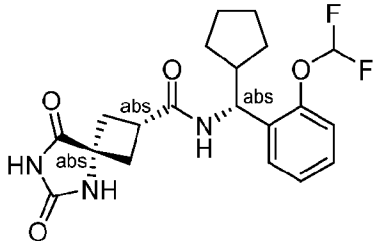
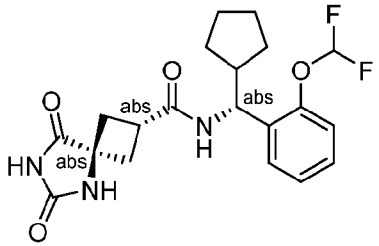
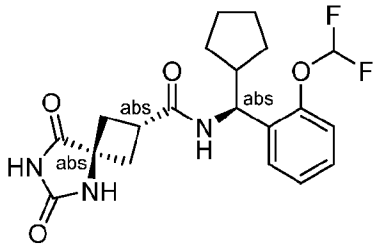
I-1032		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.42 (d, J = 8.8 Hz, 1H), 8.28 (s, 1H), 7.53 - 7.24 (m, 1H), 7.24 - 6.91 (m, 4H), 4.60 (t, J = 9.1 Hz, 1H), 3.16 - 2.92 (m, 1H), 2.49 - 2.33 (m, 2H), 2.32 - 2.23 (m, 2H),2.14 (d, J = 8.3 Hz, 1H), 1.68 (s, 1H), 1.51 (d, J = 39.9 Hz, 4H), 1.27 (s, 2H), 1.10 (s, 1H).	408.15	E	
I-1033		(400 MIIz, DMSO-d6) 10.56 (s, 1II), 8.61 (s, 1II), 8.29 (d, J = 8.6 Hz, 1H), 7.42 - 7.15 (m, 3H), 7.11 (s, 1H), 7.02 (t, J = 4.4 Hz, 1H), 4.59 (t, J = 9.3 Hz, 1H), 3.13 (p, J = 8.7 Hz, 1H), 2.66 (q, J = 11.6, 10.7 Hz, 2H), 2.20 (dt, J = 25.2, 9.8 Hz, 3H), 1.72 (s, 1H), 1.57 (s, 2H), 1.48 (d, J = 7.5 Hz, 2H), 1.27 (d, J = 10.1 Hz, 2H), 1.12 (d, J = 8.9 Hz, 1H).	408.15	E	
I-1034		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.67 - 8.36 (m, 1H), 8.28 (s, 1H), 7.36 (ddd, J = 15.8, 8.6, 1.6 Hz, 1H), 7.23 - 6.95 (m, 4H), 4.60 (t, J = 9.1 Hz, 1H), 3.11 (dt, J = 17.5, 8.6 Hz, 1H), 2.39 (dt, J = 30.4, 10.5 Hz, 4H), 2.15 (p, J = 8.3 Hz, 1H), 1.77 - 1.37 (m, 5H), 1.28 (d, J = 10.2 Hz, 2H), 1.11 (d, J = 10.0 Hz, 1H).	408.2	E	
I-1035		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.41 (d, J = 6.7 Hz, 1H), 8.23 (s, 1H), 7.38 (s, 2H), 7.24 (t, J = 8.0 Hz, 1H), 5.19 (dd, J = 11.3, 6.6 Hz, 1H), 3.15 (p, J = 8.9 Hz, 1H), 2.77 - 2.65 (m, 2H), 2.43 - 2.31 (m, 3H), 2.21 (t, J = 10.2 Hz, 1H), 2.03 - 1.92 (m, 1H), 1.67 - 1.50 (m, 3H), 1.45 (td, J = 8.4, 7.2, 4.5 Hz, 1H), 1.32 - 1.16 (m, 2H), 1.10 (dq, J = 12.5, 8.0 Hz, 1H).	410	E	

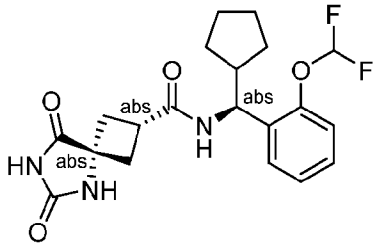
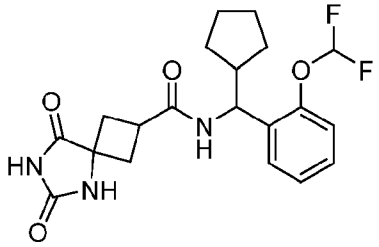
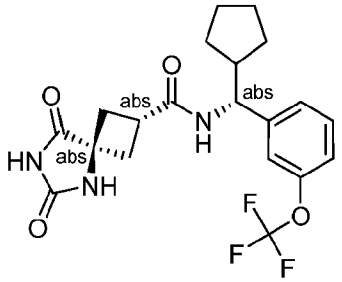
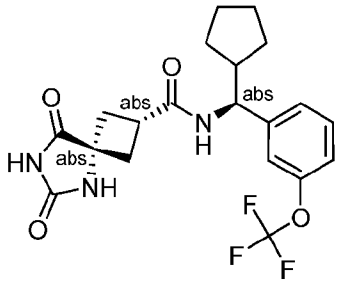
I-1036		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.42 (d, J = 6.7 Hz, 1H), 8.23 (s, 1H), 7.38 (s, 2H), 7.24 (t, J = 8.0 Hz, 1H), 5.19 (dd, J = 11.2, 6.7 Hz, 1H), 3.15 (p, J = 8.9 Hz, 1H), 2.71 (dp, J = 10.0, 7.8 Hz, 1H), 2.39 (dd, J = 11.2, 8.6 Hz, 3H), 2.21 (td, J = 9.5, 2.4 Hz, 1H), 2.04 - 1.93 (m, 1H), 1.69 - 1.50 (m, 3H), 1.45 (ddt, J = 12.4, 7.8, 4.1 Hz, 1H), 1.33 - 1.16 (m, 2H), 1.10 (dq, J = 12.6, 8.1 Hz, 1H).	410.1	E	
I-1037		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.58 (s, 1H), 8.31 (d, J = 6.8 Hz, 1H), 7.39 (d, J = 19.0 Hz, 2H), 7.25 (t, J = 8.0 Hz, 1H), 5.21 (dd, J = 11.3, 6.8 Hz, 1H), 3.18 (p, J = 9.1 Hz, 1H), 2.79 - 2.64 (m, 1H), 2.58 (dd, J = 11.8, 9.3 Hz, 2H), 2.18 (tdd, J = 15.0, 9.2, 4.1 Hz, 2H), 1.98 (dt, J = 12.3, 6.0 Hz, 1H), 1.69 - 1.38 (m, 4H), 1.35 - 1.16 (m, 2H), 1.16 - 1.07 (m, 1H).	410.25	E	
I-1038		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.31 (d, J = 6.8 Hz, 1H), 7.39 (d, J = 20.1 Hz, 2H), 7.25 (t, J = 7.9 Hz, 1H), 5.21 (dd, J = 11.3, 6.7 Hz, 1H), 3.17 (q, J = 9.1 Hz, 1H), 3.08 (s, 1H), 2.79 - 2.63 (m, 2H), 2.63 - 2.54 (m, 2H), 2.25 - 2.11 (m, 2H), 1.99 (q, J = 5.8 Hz, 1H), 1.58 (dt, J = 26.6, 7.8 Hz, 2H), 1.49 - 1.38 (m, 1H), 1.36 - 1.21 (m, 1H), 1.21 - 1.05 (m, 3H).	410.25	D	
I-1039		(400 MHz, DMSO-d6)10.56 (d, J = 7.0 Hz, 1H), 8.61 - 8.19 (m, 2H), 7.38 (s, 2H), 7.24 (td, J = 8.0, 3.4 Hz, 1H), 5.20 (dt, J = 11.2, 7.4 Hz, 1H), 3.23 - 3.09 (m, 1H), 2.78 - 2.64 (m, 1H), 2.59 (d, J = 11.9 Hz, 1H), 2.39 (dd, J = 11.2, 8.6 Hz, 2H), 2.26 - 2.12 (m, 1H), 1.97 (dd, J = 7.6, 4.7 Hz, 1H), 1.68 - 1.49 (m, 3H), 1.44 (d, J = 11.3 Hz, 1H), 1.25 (td, J = 16.8, 14.8, 7.3 Hz, 2H), 1.10 (ddd, J = 12.8, 8.5, 4.9 Hz, 1H).	410.25	E	

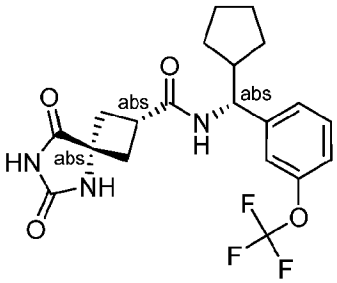
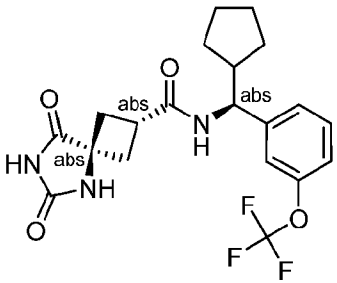
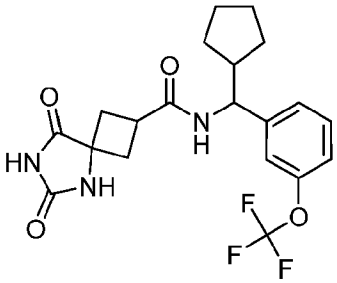
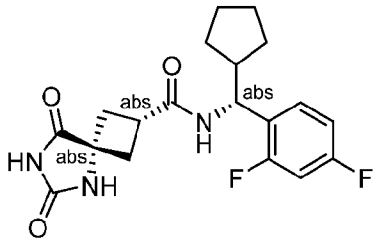
I-1040		(400 MHz, DMSO-d6) 9.31 - 8.65 (S, 1H),8.61 - 8.53 (m, 1H), 8.25 (s, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 4.83 (dd, J = 11.0, 7.4 Hz, 1H), 3.18 - 3.05 (m, 1H), 2.45 - 2.33 (m, 4H), 2.29 - 2.12 (m, 1H), 1.88 (dt, J = 12.3, 6.2 Hz, 1H), 1.59 (s, 4H), 1.40 - 1.18 (m, 2H), 1.06 - 0.93 (m, 1H).	412.05	C	
I-1041				E	
I-1042			387.41	E	
I-1043			376.35	E	

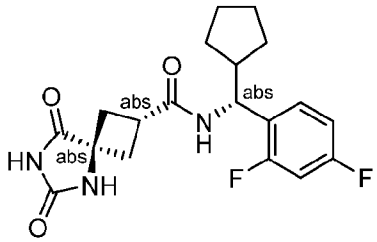
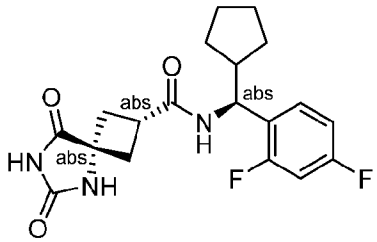
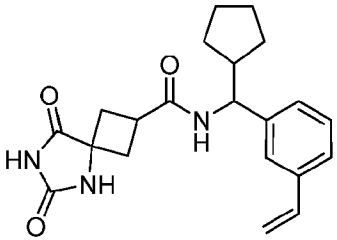
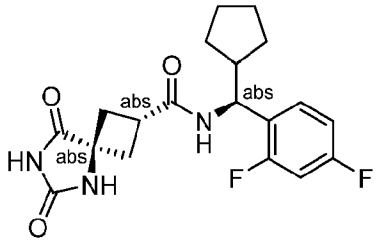
I-1044			336.34	D	
I-1045				D	
I-1046				D	
I-1047				B	C
I-1048				B	C

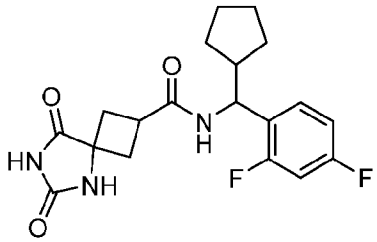
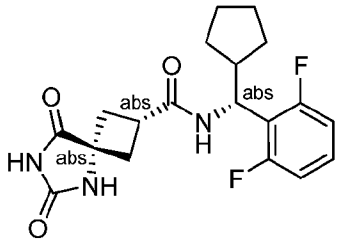
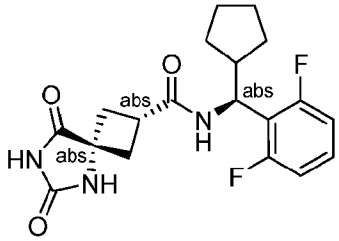
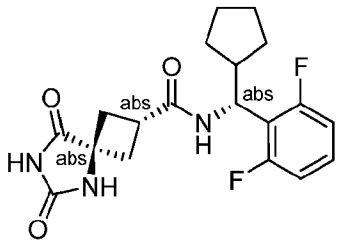
I-1049		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.31 - 8.23 (m, 2H), 7.62 (dd, J = 8.2, 7.3 Hz, 1H), 6.88 (d, J = 7.2 Hz, 1H), 6.64 (d, J = 8.2 Hz, 1H), 4.68 (t, J = 8.8 Hz, 1H), 3.85 (s, 3H), 3.24 - 3.11 (m, 1H), 2.49 - 2.25 (m, 5H), 1.68 - 1.50 (m, 3H), 1.45 (qd, J = 7.4, 6.1, 2.2 Hz, 2H), 1.39 - 1.26 (m, 2H), 1.21 (dq, J = 12.5, 7.5 Hz, 1H).	373.1	E	
I-1050		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.31 - 8.23 (m, 2H), 7.62 (dd, J = 8.2, 7.3 Hz, 1H), 6.88 (d, J = 7.3 Hz, 1H), 6.67 -6.61 (m, 1H), 4.68 (t, J = 8.8 Hz, 1H), 3.85 (s, 3H), 3.24 -3.11 (m, 1H), 2.49 - 2.25 (m, 5H), 1.69 - 1.50 (m, 3H), 1.45 (qd, J = 7.3, 6.2, 2.3 Hz, 2H), 1.41 - 1.29 (m, 2H), 1.21 (dd, J = 12.5, 7.5 Hz, 1H).	373.1	E	
I-1051		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.15 (d, J = 8.9 Hz, 1H), 7.63 (dd, J = 8.2, 7.3 Hz, 1H), 6.90 (d, J = 7.2 Hz, 1H), 6.68 - 6.61 (m, 1H), 4.68 (t, J = 8.8 Hz, 1H), 3.85 (s, 3H), 3.19 (p, J = 9.2 Hz, 1H), 2.76 - 2.61 (m, 2H), 2.39 - 2.24 (m, 1H), 2.27 -2.13 (m, 2H), 1.66 (t, J = 6.0 Hz, 1H), 1.56 (d, J = 4.2 Hz, 2H), 1.50- 1.40 (m, 2H), 1.39 - 1.29 (m, 2H), 1.26 - 1.17 (m, 1H).	373.35	E	
I-1052		(400 MHz, DMSO-d6) 8.60 (s, 1H), 8.16 (d, J = 8.8 Hz, 1H), 7.63 (dd, J = 8.3, 7.3 Hz, 1H), 6.90 (d, J = 7.2 Hz, 1H), 6.64 (d, J = 8.1 Hz, 1H), 4.68 (t, J = 8.9 Hz, 1H), 3.85 (s, 3H), 3.19 (p, J = 9.1 Hz, 1H), 2.68 (td, J = 11.9, 9.1 Hz, 2H), 2.34 (h, J = 8.3 Hz, 1H), 2.21 (dddd, J = 22.2, 12.9, 9.1, 4.2 Hz, 2H), 1.71 - 1.64 (m, 1H), 1.56 (td, J = 7.6, 3.8 Hz, 2H), 1.46 (td, J = 7.4, 4.0 Hz, 2H), 1.34 (dt, J = 11.9, 7.6 Hz, 2H), 1.31 - 1.15 (m, 1H).	373.1	E	

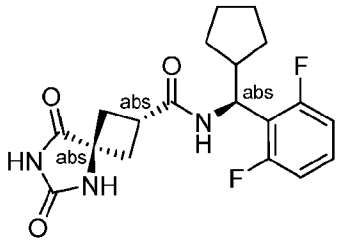
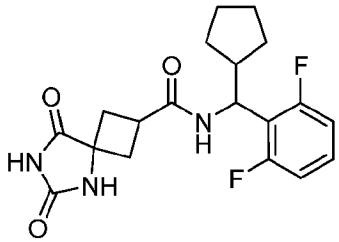
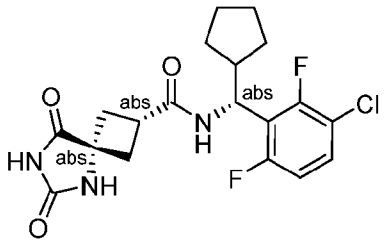
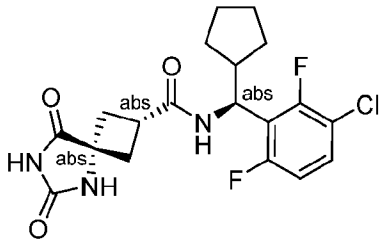
I-1053		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.78- 8.03 (m, 2H), 7.62 (ddd, J = 8.6, 7.2, 1.6 Hz, 1H), 6.89 (t, J = 6.9 Hz, 1H), 6.64 (ddd, J = 8.2, 2.1, 0.7 Hz, 1H), 4.68 (td, J = 8.8, 1.6 Hz, 1H), 3.85 (s, 3H), 3.19 (h, J = 8.8 Hz, 1H), 2.75 - 2.62 (m, 1H), 2.49- 2.13 (m, 4H), 1.73 - 1.51 (m, 3H), 1.45 (dd, J = 7.3, 3.3 Hz, 2H), 1.39 -1.28 (m, 2H), 1.27- 1.14 (m, 1H).	373.35	E	
I-1054		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.46 (d, J = 8.5 Hz, 1H), 8.26 (s, 1H), 7.46 - 7.39 (m, 1H), 7.33 - 7.19 (m, 2H), 7.14 - 7.07 (m, 2H), 4.95 (dd, J = 9.6, 8.4 Hz, 1H), 3.09 (tt, J = 9.6, 8.2 Hz, 1H), 2.50 - 2.23 (m, 4H), 2.16 (h, J = 8.1 Hz, 1H), 1.72 (tt, J = 12.2, 6.1 Hz, 1H), 1.63 - 1.38 (m, 4H), 1.38 - 1.22 (m, 2H), 1.14 (s, 1H),	408.05	E	
I-1055		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.46 (d, J = 8.5 Hz, 1H), 8.26 (s, 1H), 7.46 - 7.39 (m, 1H), 7.33 - 7.19 (m, 3H), 7.10 (d, J = 7.8 Hz, 1H), 4.95 (t, J = 9.0 Hz, 1H), 3.09 (p, J = 8.9 Hz, 1H), 2.49 - 2.23 (m, 4H), 2.16 (h, J = 8.1 Hz, 1H), 1.80 - 1.65 (m, 1H), 1.62 - 1.40 (m, 4H), 1.38 - 1.22 (m, 2H), 1.14 - 1.05 (m, 1H).	408.05	E	
I-1056		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 8.32 (d, J = 8.4 Hz, 1H), 7.48 - 7.38 (m, 1H), 7.38 - 7.19 (m, 3H), 7.11 (d, J = 7.9 Hz, 1H), 4.99 - 4.90 (m, 1H), 3.12 (p, J = 9.1 Hz, 1H), 2.64 (ddd, J = 27.5, 12.0, 9.1 Hz, 2H), 2.27 - 2.06 (m, 3H), 1.82 - 1.69 (m, 1H), 1.62 - 1.39 (m, 4H), 1.38 - 1.21 (m, 2H), 1.08 (dq, J = 15.7, 8.0 Hz, 1H).	408.05	D	

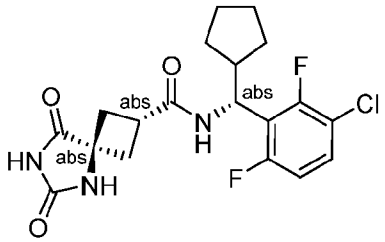
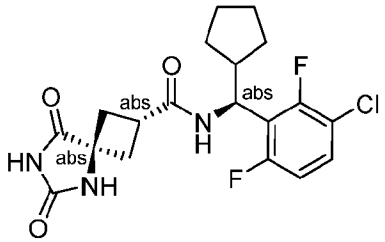
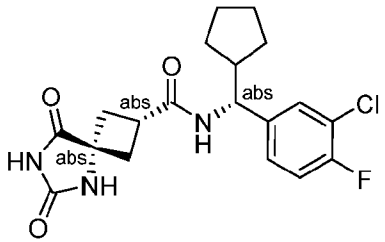
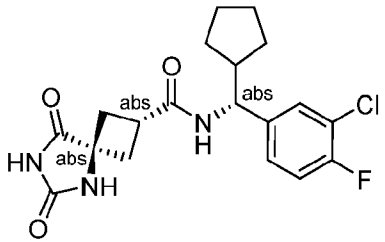
I-1057		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 8.32 (d, J = 8.4 Hz, 1H), 7.48 - 7.38 (m, 1H), 7.33 - 7.19 (m, 3H), 7.11 (d, J = 7.9 Hz, 1H), 4.94 (t, J = 9.2 Hz, 1H), 3.12 (p, J = 9.0 Hz, 1H), 2.64 (ddd, J = 27.5, 12.0, 9.0 Hz, 2H), 2.18 (ddt, J = 27.2, 11.9, 6.6 Hz, 3H), 1.73 (s, 1H), 1.59 (s, 4H), 1.52 - 1.39 (m, 1H), 1.38 - 1.21 (m, 1H), 1.15 - 1.03 (m, 1H).	408.05	E	
I-1058		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.46 (d, J = 8.5 Hz, 1H), 8.26 (s, 1H), 7.48 - 7.38 (m, 1H), 7.33 - 7.19 (m, 3H), 7.11 (d, J = 7.8 Hz, 1H), 4.95 (t, J = 9.0 Hz, 1H), 3.17 - 3.02 (m, 1H), 2.47 - 2.19 (m, 3H), 2.17 - 2.06 (m, 1H), 1.82 - 1.22 (m, 8H), 1.07 (dd, J = 12.7, 7.7 Hz, 1H).	408.15	E	
I-1059		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.47 (d, J = 8.7 Hz, 1H), 8.30-8.25 (m, 1H), 7.43 (t, J = 7.9 Hz, 1H), 7.35-7.27 (m, 2H), 7.20 (ddt, J = 8.1, 2.4, 1.1 Hz, 1H), 4.64 (t, J = 9.1 Hz, 1H), 3.16-3.03 (m, 1H), 2.48-2.26 (m, 4H), 2.12 (p, J = 8.4 Hz, 1H), 1.68 (dd, J = 12.0, 7.3 Hz, 1H), 1.62-1.50 (m, 2H), 1.49-1.36 (m, 2H), 1.28 (d, J = 14.2 Hz, 2H), 1.17-1.06 (m, 1H).	426.1	E	
I-1060		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.47 (d, J = 8.7 Hz, 1H), 8.27 (d, J = 1.7 Hz, 1H), 7.43 (t, J = 7.9 Hz, 1H), 7.35-7.31 (m, 1H), 7.28 (s, 1H), 7.24-7.17 (m, 1H), 4.64 (t, J = 9.1 Hz, 1H), 3.10 (p, J = 8.9 Hz, 1H), 2.48-2.26 (m, 4H), 2.13 (h, J = 8.3 Hz, 1H), 1.68 (dd, J = 12.1, 7.3 Hz, 1H), 1.56 (s, 2H), 1.46 (dt, J = 12.7, 6.7 Hz, 2H), 1.28 (d, J = 14.1 Hz, 2H), 1.18-1.02 (m, 1H).	426.05	E	

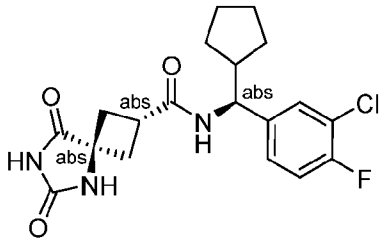
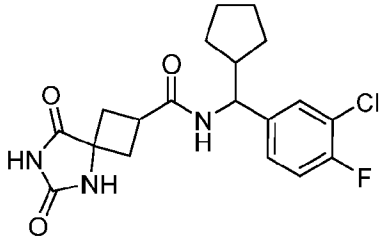
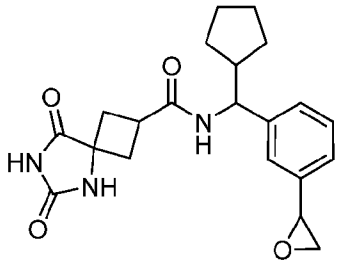
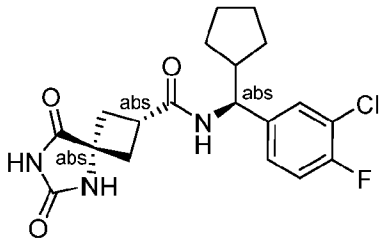
I-1061		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 8.34 (d, J = 8.7 Hz, 1H), 7.44 (t, J = 7.9 Hz, 1H), 7.37-7.27 (m, 2H), 7.24 - 7.17 (m, 1H), 4.63 (t, J = 9.2 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.65 (ddd, J = 21.9, 12.1, 9.2 Hz, 2H), 2.28-2.09 (m, 3H), 1.72 (dt, J = 12.3, 5.8 Hz, 1H), 1.63-1.39 (m, 4H), 1.30 (dd, J = 17.4, 10.0 Hz, 2H), 1.18-1.04 (m, 1H).	426.1	E	
I-1062		(400 MHz, DMSO-d6)10.56 (s, 1H), 8.60 (s, 1H), 8.34 (d, J = 8.6 Hz, 1H), 7.44 (t, J = 7.9 Hz, 1H), 7.36-7.27 (m, 2H), 7.24-7.17 (m, 1H), 4.63 (t, J = 9.2 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.65 (ddd, J = 21.9, 12.1, 9.2 Hz, 2H), 2.28-2.09 (m, 3H), 1.72 (s, 1H), 1.64-1.52 (m, 2H), 1.54-1.39 (m, 2H), 1.29 (dt, J = 18.7, 7.1 Hz, 2H), 1.18-1.06 (m, 1H)	426.05	D	
I-1063		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62-8.23 (m, 2H), 7.44 (t, J = 7.9 Hz, 1H), 7.37-7.26 (m, 2H), 7.24-7.17 (m, 1H), 4.63 (td, J = 9.2, 4.1 Hz, 1H), 3.10 (dq, J = 17.6, 9.0 Hz, 1H), 2.78-2.58 (m, 1H), 2.48-2.33 (m, 2H), 2.32-2.06 (m, 2H), 1.76-1.65 (m, 1H), 1.64-1.50 (m, 2H), 1.49-1.37 (m, 2H), 1.36-1.22 (m, 2H), 1.12 (dd, J = 18.6, 9.4 Hz, 1H).	426.1	E	
I-1064		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.46 (d, J = 8.1 Hz, 1H), 8.30 - 8.25 (m, 1H), 7.55 - 7.29 (m, 1H), 7.20 - 6.81 (m, 2H), 4.87 (t, J = 8.7 Hz, 1H), 3.09 (q, J = 9.1 Hz, 1H), 2.47-2.24 (m, 4H), 2.17 (q, J = 8.3 Hz, 1H), 1.72 (d, J = 9.3 Hz, 1H), 1.64 - 1.42 (m, 4H), 1.33 - 1.26 (m, 2H), 1.07 (d, J = 11.0 Hz, 1H).	378.05	E	

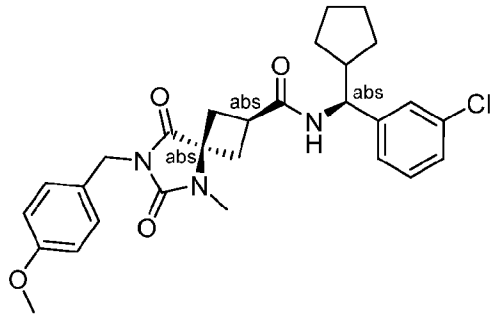
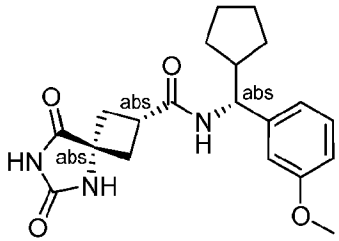
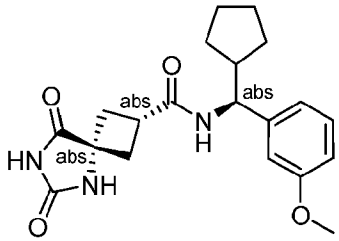
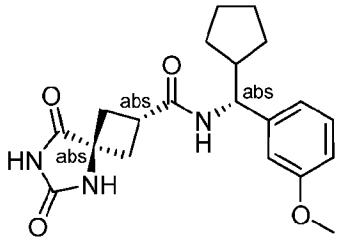
I-1065		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.46 (d, J = 8.6 Hz, 1H), 8.27 (s, 1H), 7.43 (q, J = 8.2 Hz, 1H), 7.20 - 7.10 (m, 1H), 7.12- 7.03 (m, 1H), 4.86 (t, J = 9.2 Hz, 1H), 3.08 (p, J = 8.9 Hz, 1H), 2.47 - 2.24 (m, 4H), 2.18 (dt, J = 16.8, 8.2 Hz, 1H), 1.75 - 1.68 (m, 1H), 1.65 -1.37 (m, 4H), 1.37 -1.21 (m, 2H), 1.05 (p, J = 7.8 Hz, 1H).	378.05	E	
I-1066		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.32 (d, J = 8.5 Hz, 1H), 7.45 (td, J = 8.6, 6.6 Hz, 1H), 7.15 (ddd, J = 10.5, 9.4, 2.6 Hz, 1H), 7.07 (td, J = 8.6, 2.7 Hz, 1H), 4.85 (dd, J = 10.2, 8.4 Hz, 1H), 3.12 (p, J = 9.1 Hz, 1H), 2.65 (ddd, J = 23.8, 12.1, 9.1 Hz, 2H), 2.28 - 2.09 (m, 3H), 1.80 -1.69 (m, 1H), 1.64 - 1.38 (m, 4H), 1.38 - 1.23 (m, 2H), 1.05 (dq, J = 22.2, 7.4, 6.7 Hz, 1H).	378.05	E	
I-1067			368	E	
I-1068		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.32 (d, J = 8.5 Hz, 1H), 7.44 (td, J = 8.5, 6.6 Hz, 1H), 7.15 (ddd, J = 10.5, 9.4, 2.6 Hz, 1H), 7.11 - 7.02 (m, 1H), 4.85 (dd, J = 10.2, 8.5 Hz, 1H), 3.12 (p, J = 9.1 Hz, 1H), 2.64 (ddd, J = 23.8, 12.1, 9.2 Hz, 2H), 2.28- 2.09 (m, 3H), 1.80 - 1.68 (m, 1H), 1.66 - 1.38 (m, 4H), 1.38- 1.24 (m, 2H), 1.06 (dd, J = 12.7, 7.9 Hz, 1H).	378.05	C	

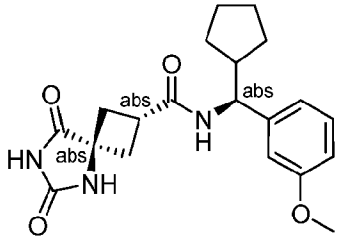
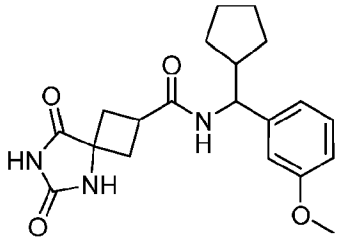
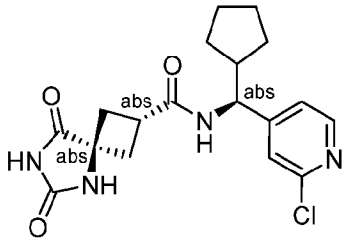
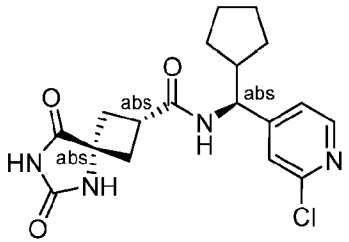
I-1069		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.63 - 8.04 (m, 2H), 7.50 - 7.37 (m, 1H), 7.18 - 7.11 (m, 1H), 7.08 (td, J = 8.6, 2.6 IIz, 1II), 4.86 (td, J = 9.7, 4.9 Hz, 1H), 3.16 - 3.01 (m, 1H), 2.74- 2.59 (m, 1H), 2.46 - 2.33 (m, 2H), 2.30 - 2.06 (m, 2H), 1.72 (td, J = 11.7, 7.2 Hz, 1H), 1.65 -1.38 (m, 4H), 1.29 (p, J = 7.7, 7.1 Hz, 2H), 1.05 (dd, J = 12.7, 7.6 Hz, 1H).	378.05	D	
I-1070		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.44 (d, J = 7.8 Hz, 1H), 8.25 (s, 1H), 7.35 - 7.25 (m, 1H), 7.07-6.97 (m, 2H), 4.87 (t, J = 9.5 Hz, 1H), 3.11 (q, J = 8.8 Hz, 1H), 2.46 - 2.30 (m, 4H), 2.25 (t, J = 10.3 Hz, 1H), 1.86 (s, 1H), 1.65 - 1.40 (m, 4H), 1.27 (d, J = 22.8 Hz, 2H), 1.03 (d, J = 9.0 Hz, 1H).	378.25	E	
I-1071		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.44 (d, J = 7.8 Hz, 1H), 8.25 (s, 1H), 7.36 -7.24 (m, 1H), 7.02 (t, J = 8.5 Hz, 2H), 4.87 (dd, J = 10.9, 7.8 Hz, 1H), 3.12 (p, J = 9.4 Hz, 1H), 2.40 (dd, J = 11.0, 6.1 Hz, 3H), 2.35 (s, 1H), 2.25 (t, J = 10.3 Hz, 1H), 1.92 - 1.80 (m, 1H), 1.52 (ddt, J = 31.7, 16.2, 6.8 Hz, 4H), 1.37 - 1.26 (m, 2H), 1.01 (t, J = 10.0 Hz, 1H).	378.25	E	
I-1072		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.34 (d, J = 7.9 Hz, 1H), 7.32 (ddd, J = 14.8, 8.4, 6.4 Hz, 1H), 7.03 (t, J = 8.5 Hz, 2H), 4.87 (dd, J = 11.1, 7.7 Hz, 1H), 3.15 (p, J = 9.1 Hz, 1H), 2.70 - 2.58 (m, 2H), 2.25- 2.16 (m, 1H), 2.17 -2.08 (m, 1H), 1.87 (dt, J = 12.7, 6.1 Hz, 1H), 1.54 (ddd, J = 32.5, 17.5, 8.4 Hz, 4H), 1.30 (dq, J = 18.5, 6.3, 5.7 Hz, 2H), 1.02 (dd, J = 12.7, 7.6 Hz, 1H).	378.3	E	

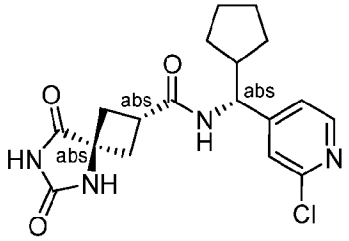
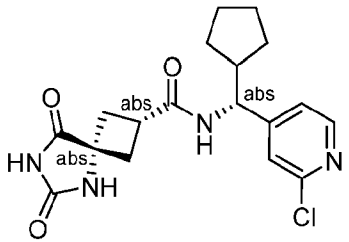
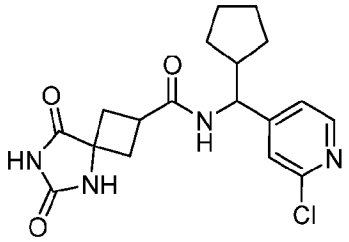
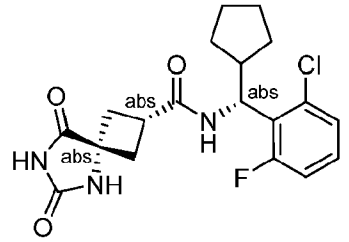
I-1073		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.34 (d, J = 7.8 Hz, 1H), 7.36 - 7.27 (m, 1H), 7.03 (t, J = 8.5 Hz, 2H), 4.89 - 4.83 (m, 1H), 3.15 (p, J = 9.0 Hz, 1H), 2.70 - 2.61 (m, 2H), 2.22 (d, J = 9.6 Hz, 1H), 2.17 - 2.09 (m, 1H), 1.93 - 1.82 (m, 1H), 1.66 - 1.41 (m, 4H), 1.31 (ddd, J = 18.1, 12.3, 6.2 Hz, 2H), 1.03 (s, 1H).	378.15	D	
I-1074		(400 MHz, DMSO-d6) 10.50 (s, 1H), 8.61 - 8.23 (m, 2H), 7.31 (p, J = 7.5 Hz, 1H), 7.03 (t, J = 8.4 Hz, 2H), 4.87 (dd, J = 11.0, 7.7 Hz, 1H), 3.15 (p, J = 10.5, 9.9 Hz, 1H), 2.69 - 2.63 (m, 1H), 2.40 (d, J = 9.6 Hz, 2H), 2.29 - 2.03 (m, 2H), 1.88 (d, J = 7.3 Hz, 1H), 1.66 - 1.41 (m, 4H), 1.36 - 1.18 (m, 2H), 1.02 (s, 1H).	378.3	D	
I-1075		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.56 (d, J = 7.5 Hz, 1H), 8.25 (s, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.3, 1.6 Hz, 1H), 4.83 (dd, J = 11.0, 7.5 Hz, 1H), 3.12 (p, J = 8.9 Hz, 1H), 2.48 - 2.36 (m, 4H), 2.24 (t, J = 10.4 Hz, 1H), 1.88 (s, 1H), 1.63 - 1.45 (m, 4H), 1.40 - 1.28 (m, 1H), 1.25 (q, J = 6.9 Hz, 1H), 1.04 - 0.95 (m, 1H).	412	E	
I-1076		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.56 (d, J = 7.4 Hz, 1H), 8.25 (s, 1H), 7.53 (td, J = 8.7, 5.4 Hz, 1H), 7.13 (t, J = 9.4 Hz, 1H), 4.83 (dd, J = 11.0, 7.5 Hz, 1H), 3.12 (p, J = 8.9 Hz, 1H), 2.45 - 2.31 (m, 4H), 2.24 (t, J = 10.4 Hz, 1H), 1.94 - 1.85 (m, 1H), 1.59 (s, 4H), 1.38 - 1.28 (m, 1H), 1.25 (q, J = 7.0, 6.4 Hz, 1H), 1.00 (s, 1H).	412	D	

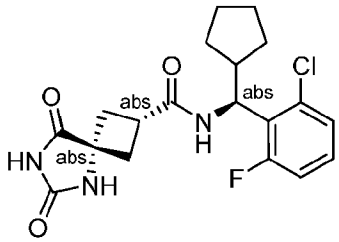
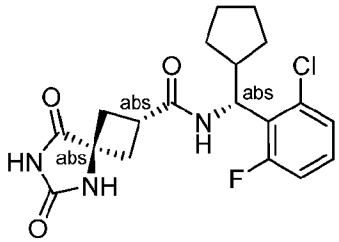
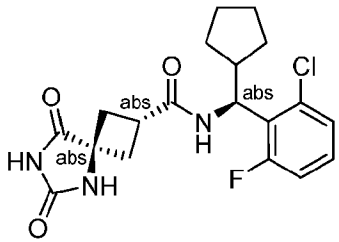
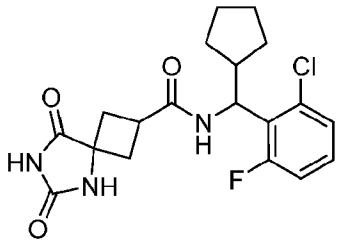
I-1077		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.46 (d, J = 7.4 Hz, 1H), 7.58 - 7.48 (m, 1H), 7.13 (t, J = 9.3 Hz, 1H), 4.83 (dd, J = 11.1, 7.4 Hz, 1H), 3.15 (p, J = 9.2 Hz, 1H), 2.70 - 2.54 (m, 2H), 2.43 (d, J = 9.1 Hz, 1H), 2.21 (s, 1H), 2.14 (s, 1H), 1.90 (d, J = 7.8 Hz, 1H), 1.63 - 1.45 (m, 4H), 1.37 - 1.22 (m, 2H), 1.01 (s, 1H).	412	D	
I-1078		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.46 (d, J = 7.4 Hz, 1H), 7.53 (q, J = 8.3 Hz, 1H), 7.13 (t, J = 9.3 Hz, 1H), 4.83 (dd, J = 11.2, 7.5 Hz, 1H), 3.14 (p, J = 9.0 Hz, 1H), 2.70 - 2.54 (m, 2H), 2.43 (d, J = 9.7 Hz, 1H), 2.20 (dd, J = 19.2, 7.1 Hz, 1H), 2.14 (s, 1H), 1.90 (s, 1H), 1.60 (s, 3H), 1.58 - 1.49 (m, 1H), 1.37 - 1.22 (m, 2H), 1.01 (s, 1H).	412	A	B
I-1079		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.42 (d, J = 8.7 Hz, 1H), 8.27 (s, 1H), 7.51 (dd, J = 7.2, 1.9 Hz, 1H), 7.40 - 7.24 (m, 2H), 4.58 (t, J = 9.2 Hz, 1H), 2.47 - 2.27 (m, 3H), 2.12 (h, J = 8.3 Hz, 1H), 1.68 (dd, J = 12.0, 6.8 Hz, 1H), 1.56 (s, 2H), 1.45 (dq, J = 14.4, 8.4, 8.0 Hz, 1H), 1.25 (s, 2H), 1.08 (dd, J = 13.0, 7.9 Hz, 1H).	394	E	
I-1080		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.60 (s, 1H), 8.28 (d, J = 8.6 Hz, 1H), 7.52 (dd, J = 7.3, 2.0 Hz, 1H), 7.38 - 7.27 (m, 2H), 4.61 - 4.51 (m, 1H), 3.11 (p, J = 9.1 Hz, 1H), 2.65 (ddd, J = 15.9, 12.0, 9.0 Hz, 2H), 2.28 - 2.09 (m, 3H), 1.77 - 1.67 (m, 1H), 1.64 - 1.37 (m, 4H), 1.27 (dd, J = 12.5, 7.6 Hz, 2H), 1.15 - 1.01 (m, 1H).	394	E	

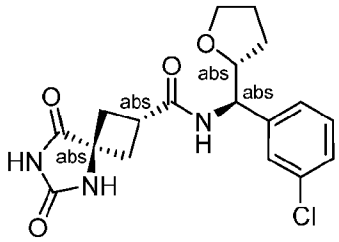
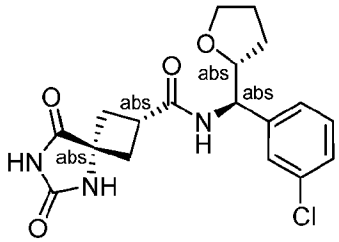
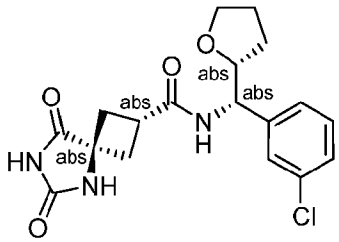
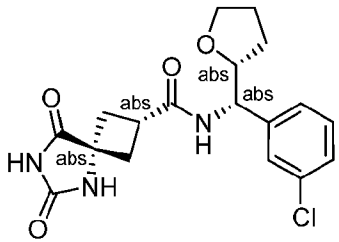
I-1081		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.28 (d, J = 8.6 Hz, 1H), 7.52 (dd, J = 7.2, 2.1 Hz, 1H), 7.40 - 7.26 (m, 2H), 4.57 (t, J = 9.3 Hz, 1H), 3.12 (p, J = 9.0 Hz, 1H), 2.65 (dt, J = 15.7, 10.8 Hz, 2H), 2.29 - 2.08 (m, 3H), 1.77 - 1.67 (m, 1H), 1.58 (s, 2H), 1.51 - 1.37 (m, 2H), 1.33 - 1.20 (m, 2H), 1.14 - 1.00 (m, 1H).	394	C	C
I-1082		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.64 - 8.22 (m, 2H), 7.51 (ddd, J = 7.3, 3.3, 2.0 Hz, 1H), 7.40 - 7.25 (m, 2H), 4.57 (td, J = 9.2, 3.9 Hz, 1H), 3.09 (dp, J = 17.5, 9.1 Hz, 1H), 2.65 (ddd, J = 15.9, 12.1, 9.1 Hz, 1H), 2.48 - 2.27 (m, 2H), 2.26 - 2.06 (m, 2H), 1.71 (dd, J = 10.4, 6.1 Hz, 1H), 1.62 - 1.52 (m, 2H), 1.47 (dd, J = 16.2, 8.8 Hz, 2H), 1.26 (t, J = 11.6 Hz, 2H), 1.08 (dq, J = 16.5, 8.0 Hz, 1H).	394.1	D	
I-1083		δ 10.41 (br s, 1H), 8.62 (s, 0.4H), 8.42 (br d, J = 8.3 Hz, 0.6H), 8.33 – 8.25 (m, 1H), 7.32 – 7.18 (m, 3H), 7.16 – 7.10 (m, 1H), 4.56 (dd, J = 16.5, 8.3 Hz, 1H), 3.89 (d, J = 2.7 Hz, 1H), 3.13 – 3.08 (m, 1H), 3.17 – 3.01 (submerged m, 1H), 2.82 (dd, J = 5.4, 2.5 Hz, 1H), 2.71 – 2.58 (m, 0.6H), 2.47 – 2.26 (m, 3.4H), 2.25 – 2.06 (m, 1H), 1.77 – 1.61 (m, 1H), 1.61 – 1.35 (m, 4H), 1.34 – 1.19 (m, 2H), 1.14 – 0.96 (m, 1H). ~ 3:2 mix of diastereomers. Minor aliphatic impurities	384	E	
I-1084		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.42 (d, J = 8.7 Hz, 1H), 8.27 (s, 1H), 7.51 (dd, J = 7.3, 2.0 Hz, 1H), 7.40 - 7.25 (m, 2H), 4.58 (t, J = 9.2 Hz, 1H), 3.07 (p, J = 9.0 Hz, 1H), 2.48 - 2.27 (m, 4H), 2.11 (p, J = 8.4 Hz, 1H), 1.68 (dd, J = 12.1, 7.3 Hz, 1H), 1.63 - 1.37 (m, 4H), 1.25 (s, 2H), 1.15 - 1.02 (m, 1H).	394.05	E	

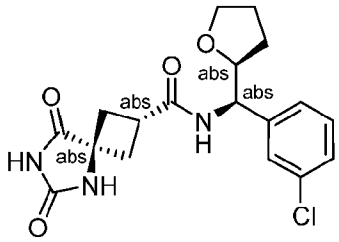
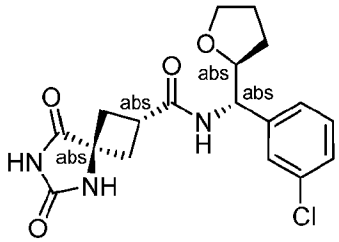
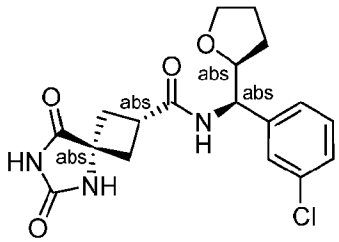
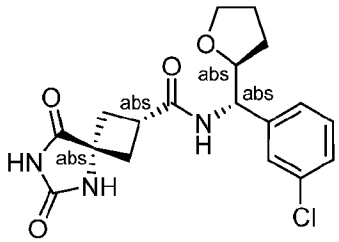
I-1085				E	
I-1086		(400 MHz, DMSO-d6)10.59 (s, 1H), 8.36 (d, J = 9.0 Hz, 1H), 8.28 (s, 1H), 7.20 (t, J = 7.8 Hz, 1H), 6.95-6.82 (m, 2H), 6.77 (ddd, J = 8.2, 2.6, 1.0 Hz, 1H), 4.56 (t, J = 9.3 Hz, 1H), 3.74 (s, 3H), 3.16-2.99 (m, 1H), 2.47-2.26 (m, 4H), 2.14 (h, J = 8.3 Hz, 1H), 1.75-1.60 (m, 2H), 1.53 (d, J = 25.1 Hz, 2H), 1.47 (s, 2H), 1.28 (dt, J = 11.9, 7.5 Hz, 2H), 1.09 (dq, J = 15.7, 7.8 Hz, 1H).	372.1	E	
I-1087		(400 MHz, DMSO-d6)10.59 (s, 1H), 8.36 (d, J = 8.8 Hz, 1H), 8.28 (s, 1H), 7.20 (t, J = 7.5 Hz, 1H), 6.93-6.82 (m, 2H), 6.77 (d, J = 8.0 Hz, 1H), 4.56 (t, J = 9.4 Hz, 1H), 3.74 (d, J = 2.2 Hz, 3H), 3.09 (p, J = 8.9 Hz, 1H), 2.39 (dt, J = 29.4, 10.1 Hz, 4H), 2.14 (q, J = 8.4 Hz, 1H), 1.67 (s, 1H), 1.56 (s, 2H), 1.46 (dd, J = 15.2, 8.3 Hz, 2H), 1.28 (d, J = 12.8 Hz, 2H), 1.11 (d, J = 10.0 Hz, 1H).	372.1	E	
I-1088		(400 MHz, DMSO-d6)10.56 (s, 1H), 8.61 (s, 1H), 8.23 (d, J = 8.9 Hz, 1H), 7.20 (t, J = 7.8 Hz, 1H), 6.92-6.83 (m, 2H), 6.83-6.69 (m, 1H), 4.55 (t, J = 9.3 Hz, 1H), 3.73 (s, 3H), 3.12 (p, J = 9.1 Hz, 1H), 2.66 (ddd, J = 16.8, 12.1, 9.2 Hz, 2H), 2.31-2.06 (m, 3H), 1.70 (t, J = 6.1 Hz, 1H), 1.64-1.35 (m,4H), 1.36-1.20 (m, 2H), 1.10 (dq, J = 16.1, 7.9 Hz, 1H).	372.1	E	

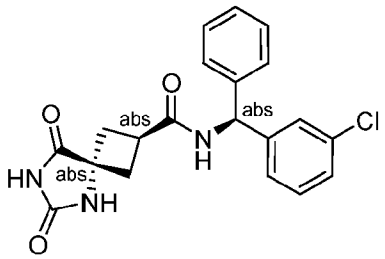
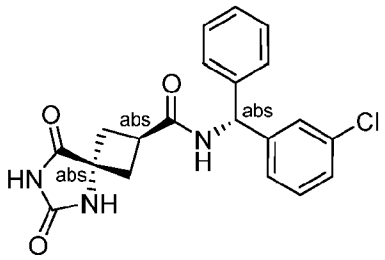
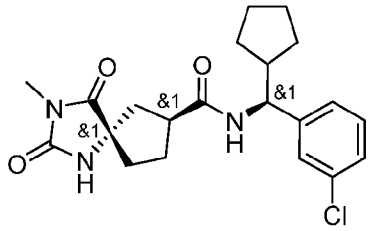
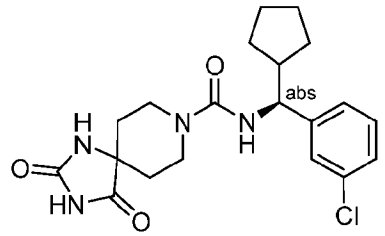
I-1089		(400 MHz, DMSO-d6)10.56 (s, 1H), 8.61 (s, 1H), 8.23 (d, J = 8.9 Hz, 1H), 7.20 (t, J = 7.8 Hz, 1H), 6.91-6.83 (m, 2H), 6.77 (dd, J = 8.7, 2.5 Hz, 1H), 4.55 (t, J = 9.4 Hz, 1H), 3.73 (s, 3H), 3.12 (p, J = 9.3 Hz, 1H), 2.66 (dt, J = 16.6, 10.3 Hz, 2H), 2.29-2.05 (m, 3H), 1.78-1.64 (m, 1H), 1.65-1.35 (m, 4H), 1.27 (dd, J = 18.0, 9.1 Hz, 2H), 1.11 (q, J = 10.8, 9.7 Hz, 1H).	372.1	E	
I-1090		(400 MHz, DMSO-d6)10.57 (s, 1H), 8.77-8.07 (m, 2H), 7.20 (t, J = 7.8 Hz, 1H), 6.86 (d, J = 8.8 Hz, 2H), 6.77 (d, J = 8.3 Hz, 1H), 4.55 (q, J = 5.3 Hz, 1H), 3.74 (s, 3H), 3.10 (dt, J = 15.9, 8.8 Hz, 1H), 2.80-2.58 (m, 1H), 2.42 (t, J = 10.5 Hz, 1H), 2.35 (t, J = 8.9 Hz, 1H), 2.27-2.06 (m, 2H), 1.68 (s, 1H), 1.56 (s,2H), 1.46 (s, 2H), 1.33-1.21 (m, 2H), 1.10 (s, 1H).	372.1	E	
I-1091		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.51 (d, J = 8.5 Hz, 1H), 8.34 (d, J = 5.1 Hz, 1H), 8.27 (s, 1H), 7.45 (s, 1H), 7.34 (dd, J = 5.2, 1.4 Hz, 1H), 4.63 (t, J = 8.8 Hz, 1H), 3.10 (q, J = 8.7 Hz, 1H), 2.46 - 2.26 (m, 3H), 2.13 (d, J = 8.1 Hz, 2H), 1.69 (s, 1H), 1.57 (s, 2H), 1.47 (d, J = 8.6 Hz, 2H), 1.26 (d, J = 16.4 Hz, 2H), 1.15 (d, J = 9.4 Hz, 1H).	377.1	E	
I-1092		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.52 (d, J = 8.5 Hz, 1H), 8.34 (d, J = 5.1 Hz, 1H), 8.27 (s, 1H), 7.45 (s, 1H), 7.36 - 7.32 (m, 1H), 4.63 (t, J = 8.9 Hz, 1H), 3.12 (q, J = 8.6 Hz, 1H), 2.44 - 2.26 (m, 3H), 2.13 (q, J = 8.5 Hz, 2H), 1.69 (s, 1H), 1.58 (s, 2H), 1.47 (d, J = 10.3 Hz, 2H), 1.26 (d, J = 16.2 Hz, 2H), 1.15 (d, J = 8.0 Hz, 1H).	377.15	E	

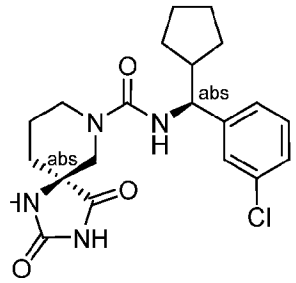
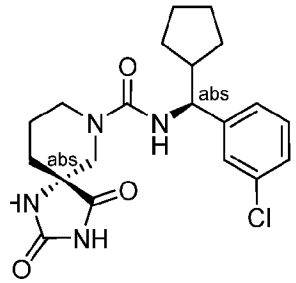
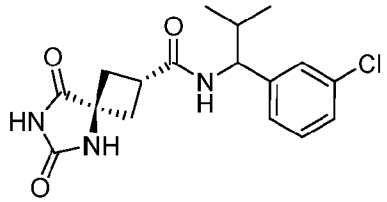
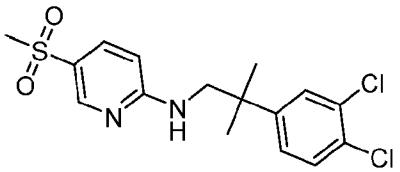
I-1093		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.38 (d, J = 8.5 Hz, 1H), 8.34 (d, J = 5.1 Hz, 1H), 7.46 (s, 1H), 7.35 (dd, J = 5.2, 1.5 Hz, 1H), 4.61 (t, J = 9.0 Hz, 1H), 3.14 (p, J = 9.0 Hz, 1H), 2.66 (dt, J = 13.5, 10.1 Hz, 2H), 2.20 (dq, J = 26.3, 8.7, 8.2 Hz, 3H), 1.84 - 1.64 (m, 1H), 1.56 (d, J = 20.0 Hz, 2H), 1.48 (dd, J = 14.8, 8.0 Hz, 2H), 1.27 (d, J = 11.4 Hz, 2H), 1.15 (q, J = 11.4, 9.9 Hz, 1H).	377.1	E	
I-1094		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.38 (d, J = 8.4 Hz, 1H), 8.34 (d, J = 5.1 Hz, 1H), 7.46 (s, 1H), 7.35 (dd, J = 5.2, 1.5 Hz, 1H), 4.61 (t, J = 9.0 Hz, 1H), 3.14 (p, J = 9.0 Hz, 1H), 2.66 (dd, J = 23.5, 12.2 Hz, 2H), 2.36 - 2.05 (m, 3H), 1.73 (s, 1H), 1.56 (d, J = 19.6 Hz, 2H), 1.52 - 1.39 (m, 2H), 1.28 (s, 2H), 1.15 (d, J = 10.2 Hz, 1H).	377.25	E	
I-1095		(400 MHz, DMSO-d6) 10.30 (s, 1H), 8.76 - 8.16 (m, 3H), 7.45 (d, J = 3.4 Hz, 1H), 7.34 (td, J = 4.5, 3.9, 1.4 Hz, 1H), 4.62 (td, J = 9.0, 4.6 Hz, 1H), 3.23 - 3.05 (m, 1H), 2.75 - 2.59 (m, 1H), 2.47 - 2.31 (m, 1H), 2.28 - 2.09 (m, 3H), 1.84 - 1.64 (m, 1H), 1.64 - 1.53 (m, 2H), 1.48 (q, J = 7.1, 6.5 Hz, 2H), 1.27 (q, J = 7.1, 5.4 Hz, 2H), 1.14 (t, J = 10.5 Hz, 1H).	377.25	E	
I-1096		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.42 (d, J = 7.5 Hz, 1H), 8.25 (s, 1H), 7.34 - 7.22 (m, 2H), 7.21 - 7.12 (m, 1H), 5.21 - 4.91 (m, 1H), 3.13 (p, J = 9.0 Hz, 1H), 2.37 (dd, J = 21.4, 8.8 Hz, 4H), 2.23 (t, J = 10.3 Hz, 1H), 1.89 (d, J = 6.6 Hz, 1H), 1.70 - 1.37 (m, 4H), 1.27 (dd, J = 12.8, 6.3 Hz, 2H), 1.08 (dd, J = 12.6, 7.9 Hz, 1H).	394.15	E	

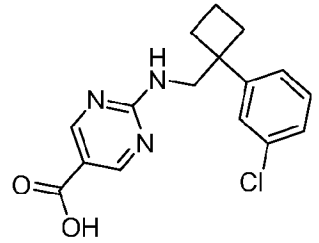
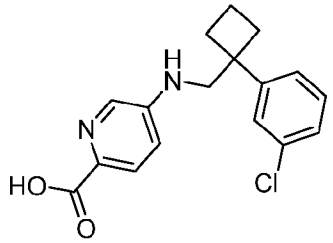
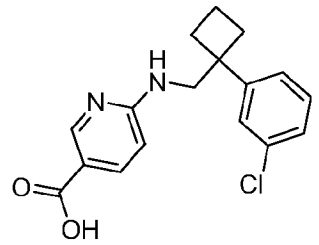
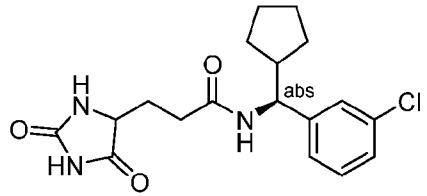
I-1097		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.42 (d, J = 7.5 Hz, 1H), 8.25 (s, 1H), 7.34 - 7.23 (m, 2H), 7.16 (ddd, J = 9.7, 8.0, 1.6 Hz, 1H), 5.10 - 5.00 (m, 1H), 3.13 (t, J = 8.8 Hz, 1H), 2.48 - 2.31 (m, 3H), 2.23 (t, J = 10.4 Hz, 1H), 2.00 - 1.81 (m, 1H), 1.68 - 1.40 (m, 4H), 1.34 - 1.20 (m, 3H), 1.08 (t, J = 10.2 Hz, 1H).	394.25	E	
I-1098		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.60 (s, 1H), 8.31 (d, J = 7.5 Hz, 1H), 7.33 - 7.23 (m, 2H), 7.20 - 7.13 (m, 1H), 5.18 - 4.94 (m, 1H), 3.17 (q, J = 9.2 Hz, 1H), 2.76 - 2.55 (m, 2H), 2.39 - 2.08 (m, 2H), 1.99 - 1.81 (m, 1H), 1.72 - 1.40 (m, 5H), 1.28 (dt, J = 14.7, 7.6 Hz, 2H), 1.11 (d, J = 9.3 Hz, 1H).	394.2	E	
I-1099		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.60 (s, 1H), 8.31 (d, J = 7.6 Hz, 1H), 7.27 (dt, J = 10.4, 6.5 Hz, 2H), 7.21 - 7.11 (m, 1H), 5.12 - 4.98 (m, 1H), 3.23 - 3.07 (m, 1H), 2.74 - 2.58 (m, 2H), 2.30 - 2.05 (m, 2H), 1.93 (d, J = 25.3 Hz, 1H), 1.71 - 1.43 (m, 5H), 1.35 - 1.23 (m, 2H), 1.09 (s, 1H).	394.15	D	
I-1100		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.65 - 8.20 (m, 2H), 7.34 - 7.22 (m, 2H), 7.20 - 7.06 (m, 1H), 5.16 - 4.94 (m, 1H), 3.15 (dt, J = 11.4, 8.8 Hz, 1H), 2.72 - 2.55 (m, 1H), 2.45 - 2.31 (m, 2H), 2.28 - 2.08 (m, 2H), 1.99 - 1.82 (m, 1H), 1.70 - 1.40 (m, 4H), 1.27 (dd, J = 13.6, 6.5 Hz, 2H), 1.13 - 0.98 (m, 1H).	394.25	E	

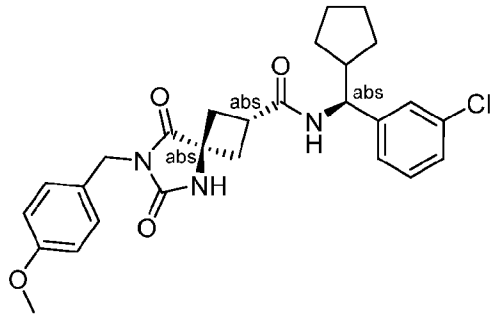
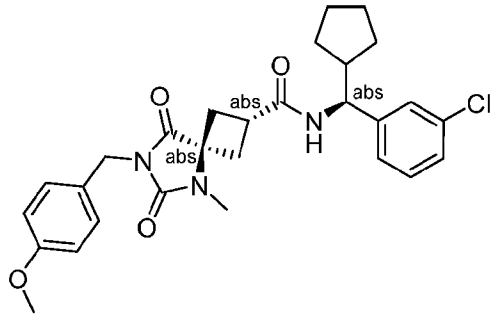
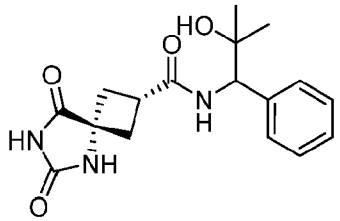
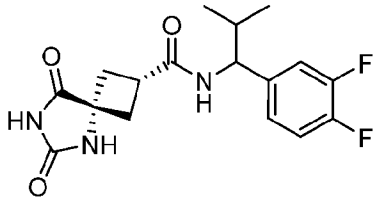
I-1101		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.45 (d, J = 8.8 Hz, 1H), 8.29 (s, 1H), 7.45 -7.26 (m, 4H), 4.89 (dd, J = 9.1, 5.3 Hz, 1H), 4.02 - 3.95 (m, 1H), 3.75 (t, J = 6.8 Hz, 1H), 3.61 (q, J = 7.0 Hz, 1H), 3.25-3.15 (m, 1H), 2.38 (dt, J = 27.8, 10.4 Hz, 4H), 1.73 (dq, J = 12.7, 6.8 Hz, 3H), 1.49 (s, 1H).	378.2	E	
I-1102		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.61 (s, 1H), 8.33 (d, J = 8.9 Hz, 1H), 7.44 (t, J = 1.8 Hz, 1H), 7.40 - 7.20 (m, 3H), 4.90 (dd, J = 8.8, 5.4 Hz, 1H), 4.06 - 3.98 (m, 1H), 3.80 - 3.72 (m, 1H), 3.62 (q, J = 6.9 Hz, 1H), 3.22 (q, J = 9.2 Hz, 1H), 2.73 -2.61 (m, 2H), 2.29 -2.15 (m, 2H), 1.75 (tq, J = 13.0, 6.4, 5.8 Hz, 3H), 1.55 -1.44 (m, 1H).	378.2	E	
I-1103		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.50 (d, J = 9.0 Hz, 1H), 8.29 (s, 1H), 7.39 (t, J = 1.9 Hz, 1H), 7.36 - 7.23 (m, 3H), 4.80 -4.72 (m, 1H), 3.96 (q, J = 7.0 Hz, 1H), 3.70 (dt, J = 8.2, 6.7 Hz, 1H), 3.60 (dt, J = 8.2, 6.7 Hz, 1H), 3.17 -3.07 (m, 1H), 2.47- 2.30 (m, 4H), 1.88 (dq, J = 13.4, 6.8 Hz, 1H), 1.75 (p, J = 6.8 Hz, 2H), 1.59 (dq, J = 14.4, 7.2 Hz, 1H).	378.2	E	
I-1104		(400 MHz, DMSO-d6) 10.53 (s, 1H), 8.61 (s, 1H), 8.37 (d, J = 9.0 Hz, 1H), 7.40 (t, J = 1.8 Hz, 1H), 7.36 -7.25 (m, 3H), 4.76 (t, J = 8.4 Hz, 1H), 4.00 (dt, J = 8.0, 6.7 Hz, 1H), 3.71 (dt, J = 8.1, 6.7 Hz, 1H), 3.61 (dt, J = 8.1, 6.7 Hz, 1H), 3.16 (p, J = 9.1 Hz, 1H), 2.73- 2.62 (m, 2H), 2.28 - 2.12 (m, 2H), 1.91 (dq, J = 11.9, 6.8 Hz, 1H), 1.80- 1.71 (m, 2H), 1.66-1.56 (m, 1H).	378.2	E	

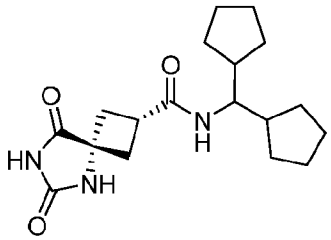
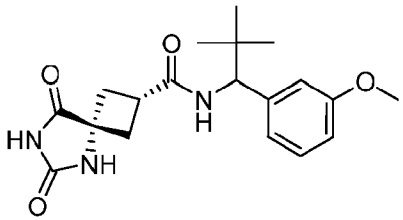
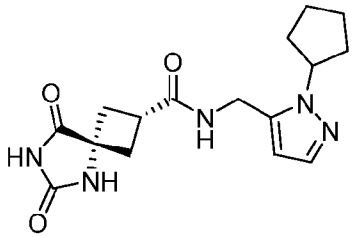
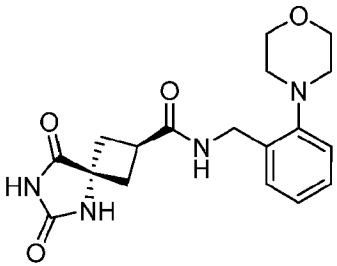
I-1105		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.45 (d, J = 8.9 Hz, 1H), 8.29 (s, 1H), 7.43 (t, J = 1.8 Hz, 1H), 7.38- 7.25 (m, 3H), 4.89 (dd, J = 8.9, 5.3 Hz, 1H), 3.99 (q, J = 6.6 Hz, 1H), 3.76 (dt, J = 8.2, 6.4 Hz, 1H), 3.64- 3.56 (m, 1H), 3.25- 3.14 (m, 1H), 2.48 - 2.30 (m, 4H), 1.79 - 1.67 (m, 3H), 1.54 - 1.42 (m, 1H).	378.2	E	
I-1106		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.50 (d, J = 9.0 Hz, 1H), 8.29 (s, 1H), 7.39 (d, J = 2.0 Hz, 1H), 7.36- 7.25 (m, 3H), 4.77 (t, J = 8.3 Hz, 1H), 3.96 (q, J = 7.0 Hz, 1H), 3.75- 3.66 (m, 1H), 3.60 (q, J = 7.1 Hz, 1H), 3.12 (p, J = 8.9 Hz, 1H), 2.48 - 2.30 (m, 4H), 1.88 (dq, J = 13.4, 6.7 Hz, 1H), 1.75 (p, J = 6.8 Hz, 2H), 1.59 (dq, J = 14.3, 7.2 Hz, 1H).	378.2	E	
I-1107		(400 MHz, DMSO-d6) 10.51 (s, 1H), 8.61 (s, 1H), 8.33 (d, J = 8.8 Hz, 1H), 7.44 (s, 1H), 7.39 - 7.23 (m, 3H), 4.90 (dd, J = 8.9, 5.4 Hz, 1H), 4.06-3.98 (m, 1H), 3.77 (q, J = 6.9 Hz, 1H), 3.62 (q, J = 7.0 Hz, 1H), 3.23 (p, J = 9.1 Hz, 1H), 2.75 -2.61 (m, 2H), 2.29 - 2.13 (m, 2H), 1.75 (q, J = 9.3, 6.7 Hz, 3H), 1.51 (d, J = 10.2 Hz, 1H).	378.2	E	
I-1108		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 8.37 (d, J = 8.9 Hz, 1H), 7.44-7.20 (m, 4H), 4.76 (t, J = 8.4 Hz, 1H), 4.00 (q, J = 7.0 Hz, 1H), 3.76 - 3.66 (m, 1H), 3.61 (q, J = 7.2 Hz, 1H), 3.16 (p, J = 9.0 Hz, 1H), 2.67 (td, J = 12.5, 8.8 Hz, 2H), 2.29 - 2.11 (m, 2H), 1.91 (dq, J = 13.3, 6.6 Hz, 1H), 1.75 (p, J = 6.9 Hz, 2H), 1.61 (dq, J = 14.4, 7.3 Hz, 1H).	378.2	E	

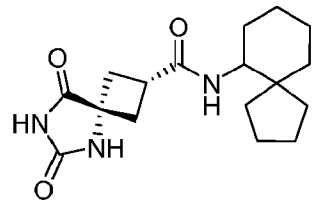
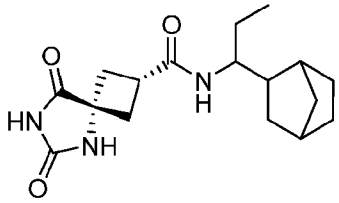
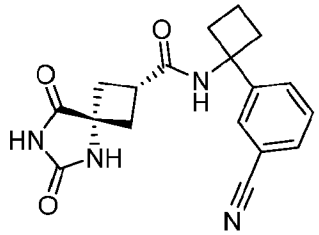
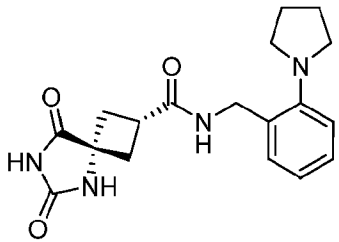
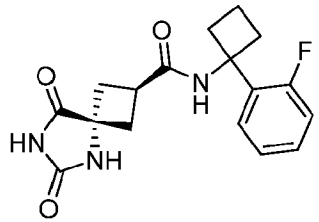
I-1109				E	
I-1110				E	
I-1111				C	D
I-1112				D	

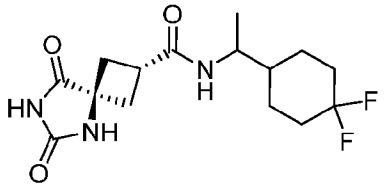
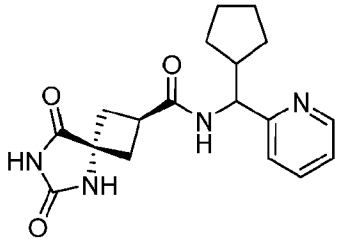
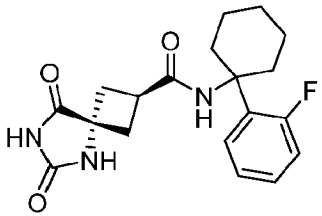
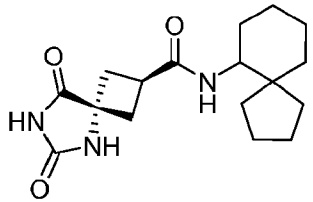
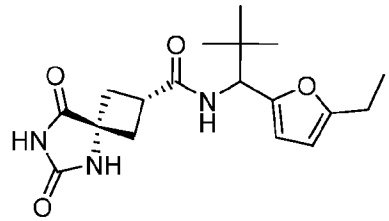
I-1113				E	
I-1114				E	
I-1115			350.35	D	
I-1116		(400 MHz, DMSO-d6) δ 8.33 (d, J = 2.5 Hz, 1H), 7.68 (dd, J = 9.0, 2.5 Hz, 1H), 7.61 (d, J = 2.2 Hz, 1H), 7.54 (d, J = 8.5 Hz, 1H), 7.39 (dd, J = 8.5, 2.3 Hz, 1H), 7.33 (br. t, J = 6.1 Hz, 1H), 6.61 (d, J = 9.0 Hz, 1H), 3.62 (br. d, J = 3.8 Hz, 2H), 3.10 (s, 3H), 1.31 (s, 6H).	373.2	E	

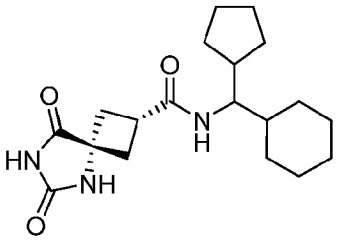
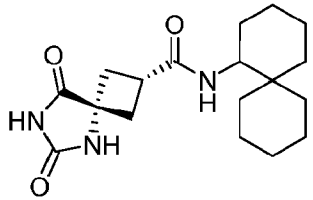
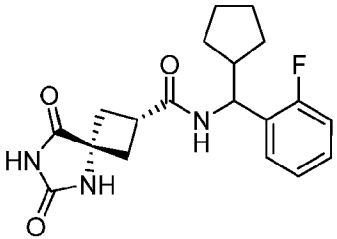
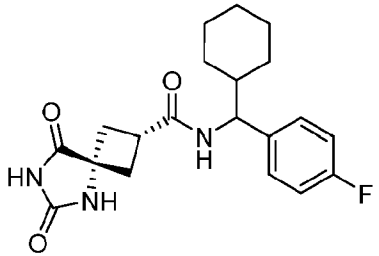
I-1117		NMR (400 MHz, DMSO-d6) δ 8.56 (overlapping br s, 1H), 8.48 (overlapping br s, 1H), 7.80 (br. t, J = 5.9 Hz, 1H), 7.24 (t, J = 7.7 Hz, 1H), 7.15 (submerged d, J = 7.4 Hz, 1H), 7.14 (overlapping s, 1H), 7.08 (d, J = 7.7 Hz, 1H), 3.72 (d, J = 6.2 Hz, 2H), 2.40 – 2.28 (m, 2H), 2.21 (dd, J = 19.9, 9.4 Hz, 2H), 2.13 – 1.95 (m, 1H), 1.87 – 1.70 (m, 1H). Minor aliphatic impurities.	318	E	
I-1118		NMR (400 MHz, DMSO-d6) δ 7.91 (d, J = 1.8 Hz, 1H), 7.62 (d, J = 8.6 Hz, H), 7.28 (dt, J = 8.1, 1.0 Hz, 1H), 7.25 – 7.22 (m, 1H), 7.19 (dd, J = 8.0, 0.9 Hz, 1H), 7.16 (dd, J = 7.8, 0.9 Hz, 1H), 6.75 (dd, J = 8.9, 2.1 Hz, 1H), 6.58 (br t, J = 5.4 Hz, 1H), 3.48 (submerged d, J = 5.6 Hz, 2H), 2.34 – 2.21 (m), 4H, 2.11 (dt, J = 18.2, 9.1 Hz, 1H), 1.88 – 1.74 (m, 1H). Partial formate salt at 8.41 ppm. COOH proton not observed.	317	D	
I-1119		NMR (400 MHz, DMSO-d6) δ 8.40 (d, J = 1.9 Hz, 1H), 7.68 (dd, J = 8.8, 2.2 Hz, 1H), 7.29 (td, J = 8.4, 2.0 Hz, 1H), 7.19 (overlapping s, 1H), 7.18 (submerged d, J = 2.6 Hz, 1H), 7.12 (d, J = 7.6 Hz, 2H), 6.43 (d, J = 8.4 Hz, 1H), 3.72 (d, J = 4.9 Hz, 2H), 2.37 – 2.14 (m, J = 19.0, 9.8 Hz, 4H), 2.14 – 2.00 (m, 1H), 1.85 – 1.71 (m, 1H). COOH proton not observed.	317	E	
I-1120				E	

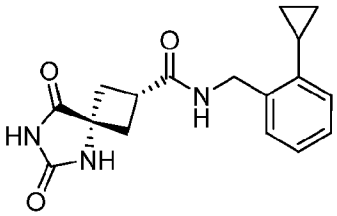
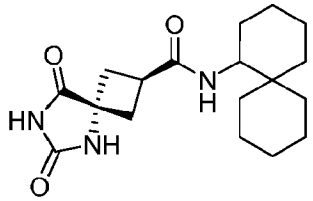
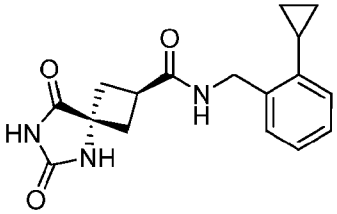
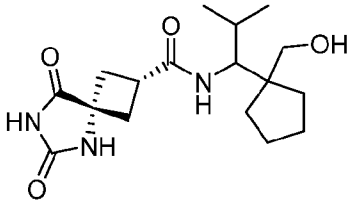
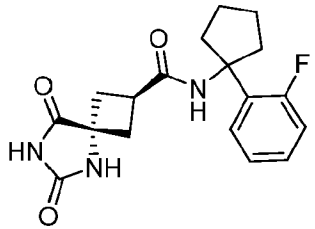
I-1121				B	D
I-1122				D	
I-1123		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.29 (s, 1H), 8.24 (s, 1H), 7.33 (d, J = 7.9 Hz, 2H), 7.26 (t, J = 7.4 Hz, 2H), 7.20 (d, J = 7.6 Hz, 1H), 4.75 (d, J = 9.4 Hz, 1H), 2.58 (s, 2H), 2.39 (d, J = 10.8 Hz, 2H), 1.15 (s, 1H), 1.07 (d, J = 14.5 Hz, 3H), 0.98 (s, 3H).	332.2	E	
I-1124			352	E	

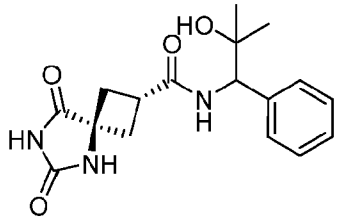
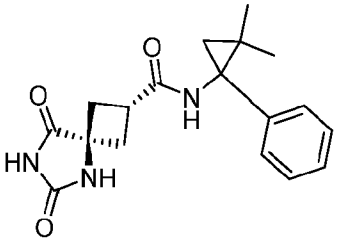
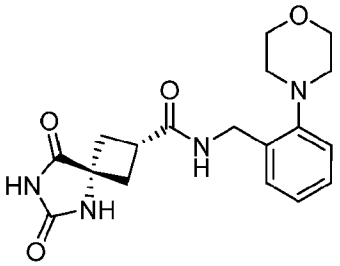
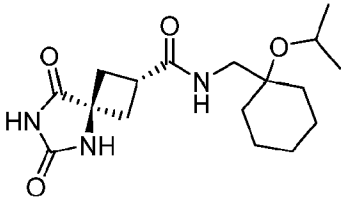
I-1125		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.30 (s, 1H), 7.59 (d, J = 9.8 Hz, 1H), 3.67 (q, J = 7.8 Hz, 1H), 3.08 (p, J = 9.0 Hz, 1H), 2.40 (d, J = 8.9 Hz, 4H), 1.90 (h, J = 8.1 Hz, 2H), 1.66 – 1.25 (m, 12H), 1.25 – 1.00 (m, 4H).	334.4	E	
I-1126		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.28 (d, J = 12.3 Hz, 2H), 7.19 (t, J = 7.9 Hz, 1H), 6.88 (s, 1H), 6.84 (d, J = 7.5 Hz, 1H), 6.79 (dd, J = 8.2, 2.4 Hz, 1H), 4.70 (d, J = 9.9 Hz, 1H), 3.73 (s, 3H), 3.25 (t, J = 8.7 Hz, 1H), 2.41 (d, J = 10.1 Hz, 1H), 2.35 (d, J = 9.6 Hz, 2H), 0.83 (s, 9H).	360.2	E	
I-1127			332.2	E	
I-1128			359.2	E	

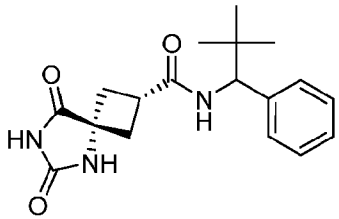
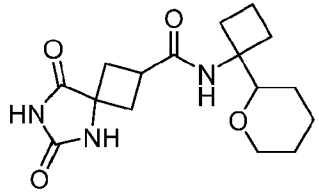
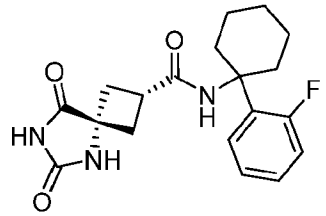
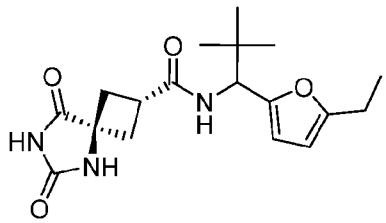
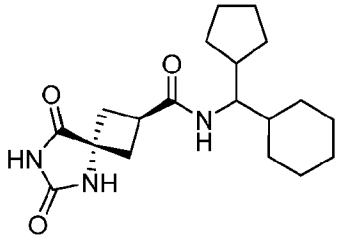
I-1129			320.2	E	
I-1130		(400 MHz, Deuterium Oxide) 3.18 (s, 2H), 2.86 – 2.67 (m, 2H), 2.43 (s, 2H), 2.03 (d, J = 24.7 Hz, 2H), 1.61 (s, 1H), 1.34 (s, 4H), 1.27 – 1.07 (m, 4H), 0.97 (s, 4H), 0.69 (t, J = 7.1 Hz, 3H).	320.2	E	
I-1131		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.58 (d, J = 14.4 Hz, 1H), 7.77 (s, 1H), 7.69 (dd, J = 12.8, 8.0 Hz, 2H), 7.53 (t, J = 7.9 Hz, 1H), 3.12 (s, 1H), 2.62 (d, J = 11.2 Hz, 2H), 2.43 (d, J = 8.3 Hz, 4H), 2.19 (t, J = 11.0 Hz, 2H).	339.2	E	
I-1132			343.2	E	
I-1133			332.2	E	

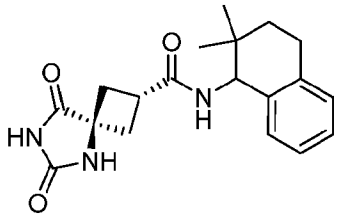
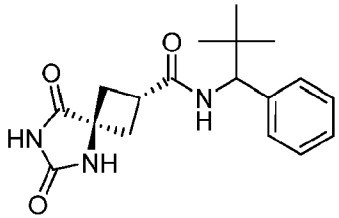
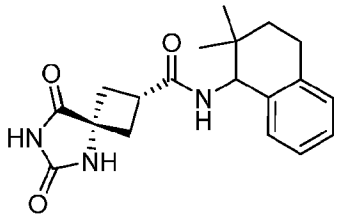
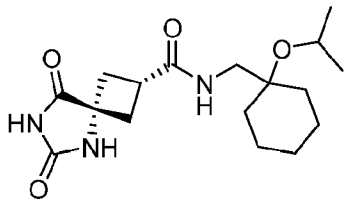
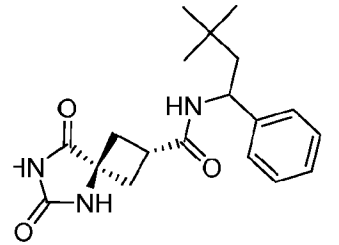
I-1134		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.31 (s, 1H), 7.80 (d, J = 8.7 Hz, 1H), 3.69 (d, J = 7.3 Hz, 1H), 3.10 – 2.99 (m, 1H), 2.39 (d, J = 8.7 Hz, 4H), 1.99 (s, 2H), 1.70 (s, 4H), 1.38 (s, 1H), 1.16 (d, J = 12.5 Hz, 2H), 0.98 (d, J = 6.8 Hz, 3H).	330.2	E	
I-1135			343.2	E	
I-1136		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.62 (s, 1H), 7.83 (s, 1H), 7.31 (t, J = 8.2 Hz, 1H), 7.22 (t, J = 6.5 Hz, 1H), 7.16 – 7.00 (m, 2H), 3.23 (q, J = 9.2 Hz, 1H), 2.70 – 2.61 (m, 2H), 2.42 (s, 2H), 2.19 (dd, J = 12.6, 9.5 Hz, 2H), 1.70 (d, J = 13.0 Hz, 2H), 1.58 (dd, J = 27.6, 14.6 Hz, 5H), 1.22 (d, J = 12.9 Hz, 1H).	360.4	D	
I-1137		(400 MHz, Deuterium Oxide) 3.55 (s, 1H), 3.17 – 3.03 (m, 1H), 2.58 (s, 2H), 2.52 – 2.39 (m, 2H), 1.44 (s, 6H), 1.33 (s, 6H), 1.21 (s, 6H).	320.2	E	
I-1138		(400 MHz, Acetonitrile-d3) 8.45 (s, 1H), 6.83 (d, J = 9.9 Hz, 1H), 6.78 (s, 1H), 6.08 (d, J = 3.1 Hz, 1H), 5.97 (dt, J = 3.2, 1.0 Hz, 1H), 4.84 (d, J = 9.8 Hz, 1H), 3.20 (p, J = 8.7 Hz, 1H), 2.74 – 2.43 (m, 6H), 1.22 (td, J = 7.5, 0.9 Hz, 3H), 0.93 (s, 9H).	346.2	E	

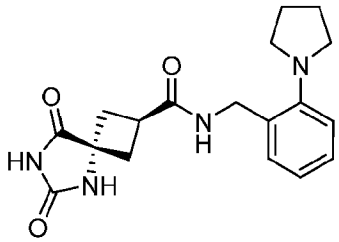
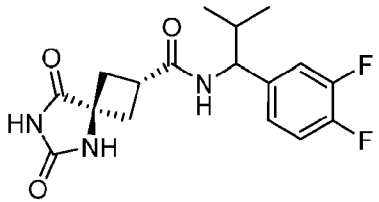
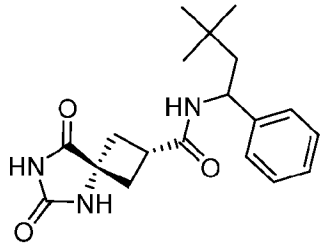
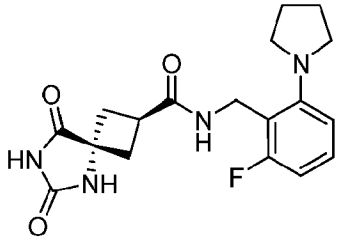
I-1139			348.2	E	
I-1140			334.2	E	
I-1141		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.45 (d, J = 8.7 Hz, 1H), 8.28 (s, 1H), 7.40 (t, J = 7.2 Hz, 1H), 7.26 (q, J = 7.2, 6.7 Hz, 1H), 7.21 – 7.05 (m, 2H), 4.92 (t, J = 9.2 Hz, 1H), 3.09 (t, J = 8.9 Hz, 1H), 2.34 (dt, J = 38.8, 10.6 Hz, 4H), 2.17 (q, J = 8.2 Hz, 1H), 1.71 (s, 1H), 1.64 – 1.39 (m, 4H), 1.29 (s, 2H), 1.06 (q, J = 8.1, 7.0 Hz, 1H).	360	E	
I-1142		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.33 (d, J = 8.7 Hz, 1H), 8.28 (s, 1H), 7.26 (dd, J = 8.4, 5.5 Hz, 2H), 7.12 (t, J = 8.7 Hz, 2H), 4.54 (t, J = 9.1 Hz, 1H), 3.44 (d, J = 6.9 Hz, 1H), 3.10 (t, J = 8.8 Hz, 1H), 2.43 – 2.22 (m, 3H), 1.69 (d, J = 17.2 Hz, 2H), 1.57 (s, 3H), 1.23 (d, J = 11.5 Hz, 2H), 1.06 (q, J = 6.9, 6.2 Hz, 2H), 1.00 – 0.74 (m, 2H).	374.2	E	

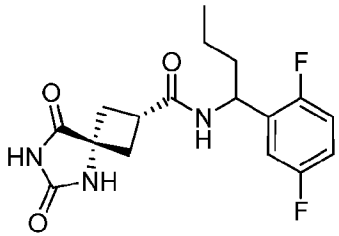
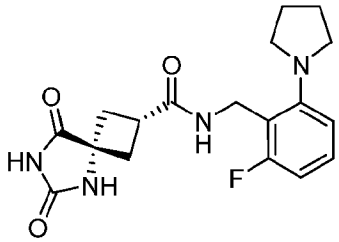
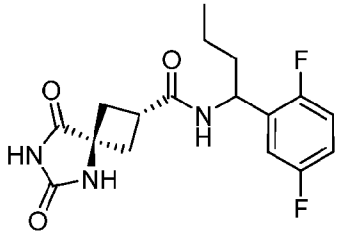
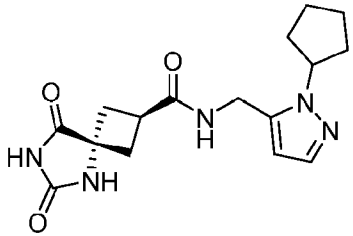
I-1143			314.2	E	
I-1144			334.2	E	
I-1145			314.2	E	
I-1146		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.58 (s, 1H), 7.18 (d, J = 10.2 Hz, 1H), 3.83 (dd, J = 10.2, 3.3 Hz, 1H), 3.31 – 3.14 (m, 4H), 2.68 (q, J = 9.9 Hz, 2H), 2.21 (td, J = 9.5, 2.9 Hz, 2H), 1.97 (td, J = 6.8, 3.2 Hz, 1H), 1.56 – 1.37 (m, 5H), 1.35 – 1.22 (m, 2H), 0.80 (dd, J = 6.8, 3.4 Hz, 6H).	338.4	E	
I-1147		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.60 (s, 1H), 8.03 (s, 1H), 7.36 (td, J = 8.2, 1.9 Hz, 1H), 7.22 (tt, J = 7.1, 3.5 Hz, 1H), 7.15 – 7.01 (m, 2H), 3.11 (p, J = 9.2 Hz, 1H), 2.59 (td, J = 9.5, 2.8 Hz, 2H), 2.42 (d, J = 13.0 Hz, 2H), 2.14 (td, J = 9.5, 2.8 Hz, 2H), 1.91 (q, J = 10.8, 9.4 Hz, 2H), 1.79 – 1.60 (m, 4H).	346.4	E	

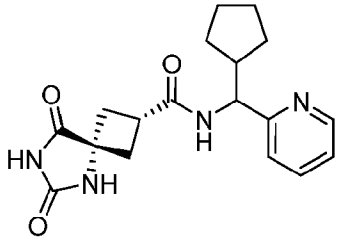
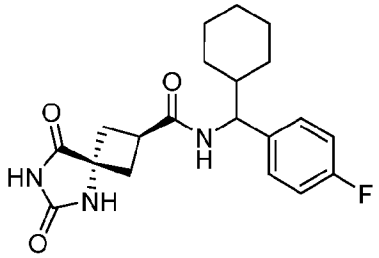
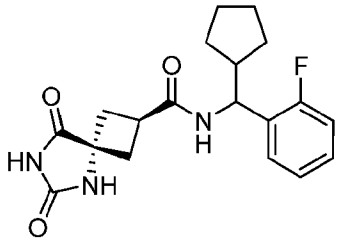
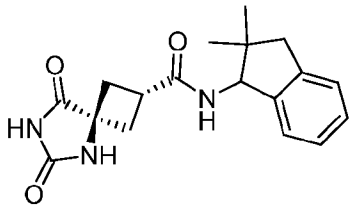
I-1148		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.63 (s, 1H), 8.08 (d, J = 9.1 Hz, 1H), 7.33 (d, J = 7.6 Hz, 2H), 7.25 (d, J = 7.5 Hz, 2H), 7.20 (s, 1H), 4.74 (d, J = 9.2 Hz, 1H), 3.42 – 3.34 (m, 2H), 3.23 (d, J = 7.6 Hz, 1H), 2.40 (s, 2H), 1.08 (s, 3H), 0.98 (s, 3H).	332.2	E	
I-1149		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.57 (s, 1H), 8.41 (s, 1H), 7.40 (d, J = 7.6 Hz, 2H), 7.26 (t, J = 7.5 Hz, 2H), 7.18 (d, J = 7.4 Hz, 1H), 3.11 – 2.94 (m, 1H), 2.59 (d, J = 14.9 Hz, 2H), 2.12 (t, J = 11.1 Hz, 2H), 1.26 (d, J = 5.3 Hz, 1H), 1.23 (s, 3H), 0.75 (s, 1H), 0.73 (s, 3H).	328.2	E	
I-1150			359.2	E	
I-1151		(400 MHz, DMSO-d6) 10.27 (s, 1H), 8.32 (s, 1H), 7.59 (t, J = 5.7 Hz, 1H), 3.79 (h, J = 6.1 Hz, 1H), 3.24 – 3.06 (m, 3H), 2.40 (d, J = 8.9 Hz, 4H), 1.68 – 1.43 (m, 4H), 1.44 – 1.15 (m, 6H), 1.04 (d, J = 6.1 Hz, 6H).	336.2	E	

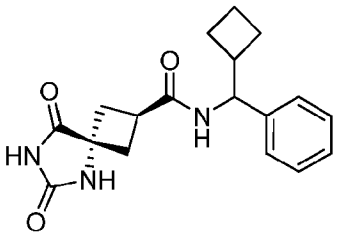
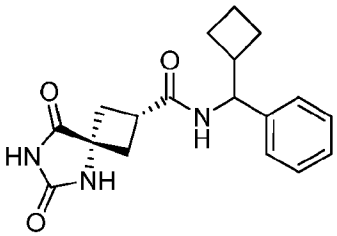
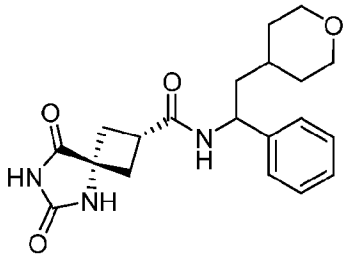
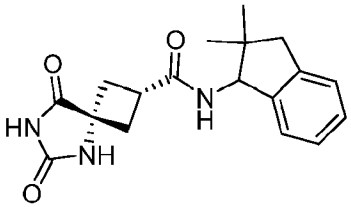
I-1152		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.31 (d, J = 10.4 Hz, 2H), 7.28 (d, J = 5.1 Hz, 4H), 7.22 (q, J = 5.3, 4.5 Hz, 1H), 4.72 (d, J = 9.7 Hz, 1H), 3.25 (q, J = 8.8 Hz, 1H), 2.46 – 2.38 (m, 1H), 2.38 – 2.28 (m, 2H), 2.07 (s, 1H), 0.82 (s, 9H).	330.2	E	
I-1153		(400 MHz, Acetonitrile-d3) 3.98 (d, J = 11.4 Hz, 1H), 3.66 – 3.52 (m, 1H), 3.41 (s, 1H), 3.03 (t, J = 8.7 Hz, 1H), 2.66 – 2.54 (m, 1H), 2.54 – 2.44 (m, 1H), 2.32 (s, 4H), 2.06 (d, J = 6.6 Hz, 2H), 1.90 – 1.79 (m, 1H), 1.72 (d, J = 10.1 Hz, 1H), 1.60 (d, J = 12.2 Hz, 1H), 1.51 (s, 2H), 1.41 – 1.06 (m, 2H), 1.01 (s, 1H).	322.2	E	
I-1154		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.24 (s, 1H), 7.94 (s, 1H), 7.38 – 7.25 (m, 1H), 7.25 – 7.19 (m, 1H), 7.13 – 6.97 (m, 2H), 3.24 (t, J = 8.8 Hz, 1H), 2.41 (t, J = 10.2 Hz, 4H), 2.32 (dd, J = 11.7, 9.3 Hz, 2H), 1.71 (t, J = 11.8 Hz, 2H), 1.55 (d, J = 31.3 Hz, 5H), 1.23 (s, 1H).	360.2	E	
I-1155		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.63 (s, 1H), 8.10 (d, J = 9.8 Hz, 1H), 6.09 (d, J = 3.1 Hz, 1H), 5.96 (d, J = 3.0 Hz, 1H), 4.76 (d, J = 9.7 Hz, 1H), 3.22 (q, J = 9.1 Hz, 1H), 2.69 (q, J = 9.8 Hz, 2H), 2.57 (t, J = 7.5 Hz, 2H), 2.31 – 2.21 (m, 1H), 2.20 – 2.11 (m, 1H), 1.14 (t, J = 7.5 Hz, 3H), 0.86 (s, 9H).	348.4	E	
I-1156		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 7.39 (d, J = 9.7 Hz, 1H), 3.56 (q, J = 7.8 Hz, 1H), 3.13 (q, J = 9.3 Hz, 1H), 2.68 (q, J = 12.7 Hz, 2H), 2.18 (dd, J = 12.6, 8.9 Hz, 2H), 1.99 (q, J = 8.2 Hz, 1H), 1.72 – 1.38 (m, 11H), 1.35 – 1.22 (m, 2H), 1.20 – 1.04 (m, 4H), 0.92 (d, J = 11.7 Hz, 2H).	348.2	D	

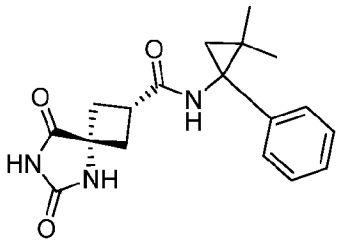
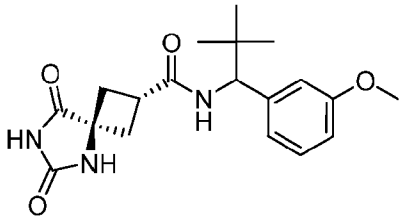
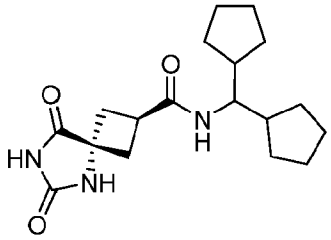
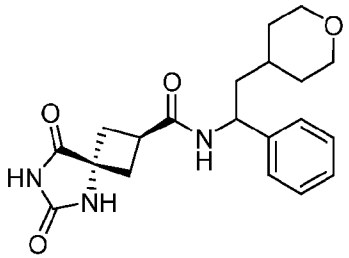
I-1157		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.34 (s, 1H), 8.01 (d, J = 9.7 Hz, 1H), 7.12 (qd, J = 8.7, 7.2, 3.5 Hz, 3H), 7.06 – 6.96 (m, 1H), 4.76 (d, J = 9.6 Hz, 1H), 3.19 (p, J = 8.7 Hz, 1H), 2.74 (q, J = 7.4 Hz, 2H), 2.49 – 2.40 (m, 4H), 1.72 (dt, J = 13.0, 6.3 Hz, 1H), 1.54 (dt, J = 13.9, 7.1 Hz, 1H), 0.88 (s, 3H), 0.82 (s, 3H).	342.2	E	
I-1158		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.65 (s, 1H), 8.18 (d, J = 9.7 Hz, 1H), 7.28 (d, J = 4.4 Hz, 4H), 7.22 (h, J = 4.1 Hz, 1H), 4.73 (d, J = 9.8 Hz, 1H), 3.24 (p, J = 9.1 Hz, 1H), 2.67 (ddd, J = 16.0, 12.0, 9.0 Hz, 2H), 2.25 (ddd, J = 12.3, 8.9, 4.2 Hz, 1H), 2.20 – 2.04 (m, 1H), 0.84 (s, 9H).	330.2	E	
I-1159		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 7.92 (d, J = 9.6 Hz, 1H), 7.24 – 6.98 (m, 4H), 4.78 (d, J = 9.5 Hz, 1H), 3.28 – 3.19 (m, 1H), 2.86 – 2.69 (m, 4H), 2.30 – 2.17 (m, 2H), 1.80 – 1.66 (m, 1H), 1.61 – 1.46 (m, 1H), 0.89 (s, 3H), 0.82 (s, 3H).	342.2	E	
I-1160		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.59 (s, 1H), 7.44 (s, 1H), 3.81 (p, J = 6.1 Hz, 1H), 3.25 – 3.09 (m, 3H), 2.68 (dd, J = 12.4, 9.2 Hz, 2H), 2.19 (t, J = 10.8 Hz, 2H), 1.53 (t, J = 16.3 Hz, 4H), 1.43 – 1.15 (m, 6H), 1.05 (d, J = 6.0 Hz, 6H).	338.2	E	
I-1161		(400 MHz, Deuterium Oxide) 7.22 (ddt, J = 21.0, 14.4, 7.5 Hz, 5H), 4.86 (d, J = 9.9 Hz, 1H), 3.28 – 3.13 (m, 1H), 2.82 – 2.65 (m, 2H), 2.50 – 2.31 (m, 2H), 1.69 (dd, J = 14.7, 9.8 Hz, 1H), 1.60 – 1.43 (m, 1H), 1.21 (d, J = 6.5 Hz, 1H), 0.83 (d, J = 1.7 Hz, 9H).	344.2	E	

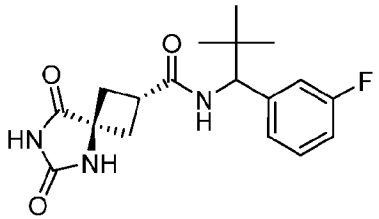
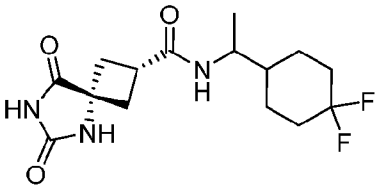
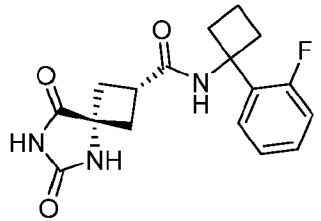
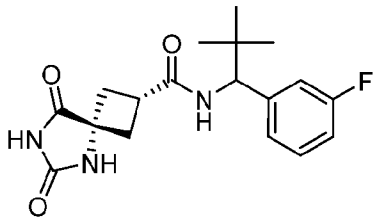
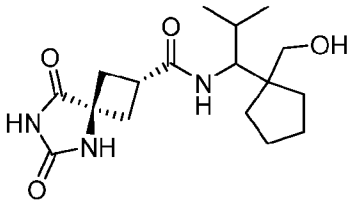
I-1162			343.2	E	
I-1163		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.62 (s, 1H), 8.19 (d, J = 9.0 Hz, 1H), 7.34 (ddd, J = 11.4, 8.1, 2.5 Hz, 2H), 7.10 (d, J = 8.2 Hz, 1H), 4.54 (t, J = 8.7 Hz, 1H), 3.16 (p, J = 9.1 Hz, 1H), 2.66 (ddd, J = 20.5, 12.1, 9.1 Hz, 2H), 2.31 – 2.12 (m, 2H), 1.97 – 1.83 (m, 1H), 0.87 (d, J = 6.6 Hz, 3H), 0.70 (d, J = 6.6 Hz, 3H).	352.2	E	
I-1164		(400 MHz, Deuterium Oxide) 7.27 (t, J = 7.6 Hz, 2H), 7.23 – 7.10 (m, 3H), 4.83 (d, J = 9.9 Hz, 1H), 3.07 (t, J = 9.1 Hz, 1H), 2.66 – 2.50 (m, 2H), 2.42 (dd, J = 29.4, 10.0 Hz, 2H), 1.66 (d, J = 9.8 Hz, 1H), 1.59 – 1.41 (m, 1H), 0.81 (s, 9H).	344.2	E	
I-1165		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.32 (s, 1H), 8.10 (d, J = 4.7 Hz, 1H), 7.16 (q, J = 7.8 Hz, 1H), 6.81 – 6.57 (m, 2H), 4.28 (d, J = 4.2 Hz, 2H), 3.25 – 3.14 (m, 4H), 3.07 (p, J = 8.9 Hz, 1H), 2.40 (d, J = 8.8 Hz, 4H), 1.92 – 1.77 (m, 4H).	361.2	E	

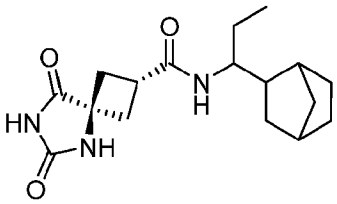
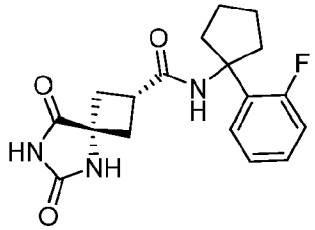
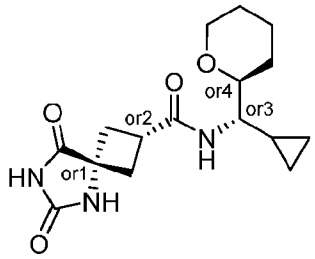
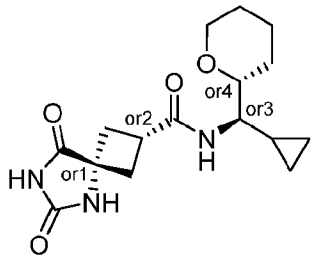
I-1166		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.43 (d, J = 8.3 Hz, 1H), 8.29 (s, 1H), 7.16 (dddd, J = 24.0, 14.7, 10.9, 6.6 Hz, 3H), 5.04 (q, J = 7.9 Hz, 1H), 3.10 (p, J = 9.1 Hz, 1H), 2.42 (dd, J = 10.7, 8.1 Hz, 3H), 2.33 (q, J = 10.5 Hz, 1H), 1.75 – 1.46 (m, 2H), 1.25 (ddt, J = 30.1, 15.2, 7.1 Hz, 2H), 0.86 (t, J = 7.3 Hz, 3H).	352.2	E	
I-1167		(400 MHz, DMSO-d6) 10.69 – 10.48 (m, 1H), 8.57 (s, 1H), 8.01 (d, J = 4.5 Hz, 1H), 7.16 (q, J = 7.9 Hz, 1H), 6.76 – 6.58 (m, 2H), 4.27 (q, J = 2.1 Hz, 2H), 3.26 – 3.16 (m, 4H), 3.12 (q, J = 9.1 Hz, 1H), 2.76 – 2.64 (m, 2H), 2.25 – 2.09 (m, 2H), 1.99 – 1.69 (m, 4H).	361.2	E	
I-1168		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.28 (d, J = 8.2 Hz, 1H), 7.34 – 6.91 (m, 3H), 5.05 (q, J = 7.9 Hz, 1H), 3.14 (q, J = 9.1 Hz, 1H), 2.80 – 2.59 (m, 2H), 2.21 (q, J = 10.6 Hz, 2H), 1.80 – 1.61 (m, 1H), 1.60 – 1.47 (m, 1H), 1.41 – 1.29 (m, 1H), 1.29 – 1.12 (m, 1H), 0.87 (t, J = 7.3 Hz, 3H).	352.2	E	
I-1169		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.44 (s, 1H), 8.33 (s, 1H), 7.33 (d, J = 1.8 Hz, 1H), 6.07 (d, J = 1.8 Hz, 1H), 4.75 – 4.61 (m, 1H), 4.34 (d, J = 5.4 Hz, 2H), 3.05 (t, J = 8.7 Hz, 1H), 2.42 (d, J = 8.6 Hz, 4H), 2.03 – 1.74 (m, 6H), 1.59 (s, 2H).	332.2	E	

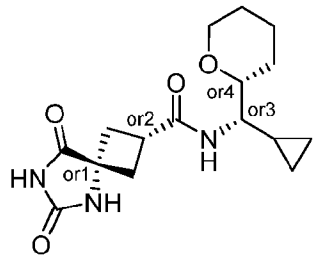
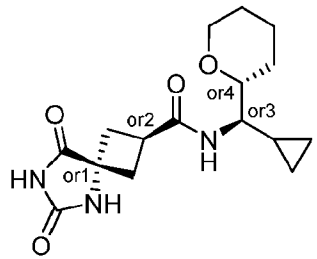
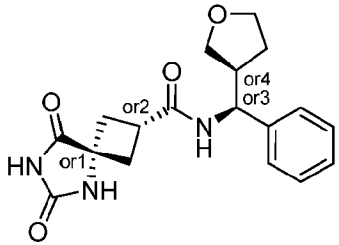
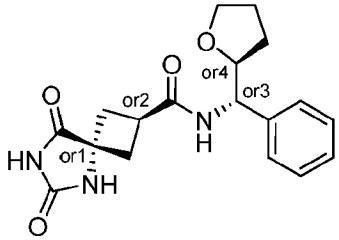
I-1170		(400 MHz, Deuterium Oxide) 8.31 (d, J = 5.0 Hz, 1H), 7.71 (td, J = 7.8, 1.8 Hz, 1H), 7.29 (d, J = 7.9 Hz, 1H), 7.25 – 7.18 (m, 1H), 4.51 (d, J = 10.0 Hz, 1H), 3.20 (p, J = 9.1 Hz, 1H), 2.81 – 2.61 (m, 2H), 2.51 – 2.33 (m, 2H), 2.21 (q, J = 8.7 Hz, 1H), 1.72 (dd, J = 11.5, 4.4 Hz, 1H), 1.59 – 1.40 (m, 3H), 1.35 (d, J = 8.2 Hz, 1H), 1.28 – 1.17 (m, 2H), 1.04 (dd, J = 12.8, 7.9 Hz, 1H).	343.2	E	
I-1171		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.20 (d, J = 8.8 Hz, 1H), 7.39 – 7.22 (m, 2H), 7.11 (t, J = 8.6 Hz, 2H), 4.53 (t, J = 8.9 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.72 – 2.59 (m, 2H), 2.30 – 2.08 (m, 2H), 1.78 (d, J = 12.9 Hz, 1H), 1.69 (d, J = 11.0 Hz, 1H), 1.55 (d, J = 16.0 Hz, 3H), 1.20 (d, J = 13.6 Hz, 1H), 1.16 – 1.01 (m, 3H), 0.94 (t, J = 11.7 Hz, 1H), 0.81 (d, J = 11.4 Hz, 1H).	374.4	E	
I-1172		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 8.32 (d, J = 8.6 Hz, 1H), 7.41 (td, J = 7.5, 1.7 Hz, 1H), 7.26 (q, J = 6.8, 6.3 Hz, 1H), 7.21 – 7.03 (m, 2H), 4.90 (t, J = 9.3 Hz, 1H), 3.13 (p, J = 9.2 Hz, 1H), 2.64 (ddd, J = 24.0, 11.9, 9.1 Hz, 2H), 2.29 – 2.04 (m, 3H), 1.81 – 1.68 (m, 1H), 1.67 – 1.38 (m, 4H), 1.31 (dt, J = 18.6, 6.9 Hz, 2H), 1.08 (dd, J = 12.2, 7.4 Hz, 1H).	360.4	D	
I-1173		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.34 (s, 1H), 8.06 (d, J = 9.4 Hz, 1H), 7.17 (d, J = 6.6 Hz, 3H), 7.11 – 7.02 (m, 1H), 5.04 (d, J = 9.4 Hz, 1H), 3.19 (p, J = 8.8 Hz, 1H), 2.69 (s, 2H), 2.49 – 2.44 (m, 4H), 1.12 (s, 3H), 0.83 (s, 3H).	328.2	E	

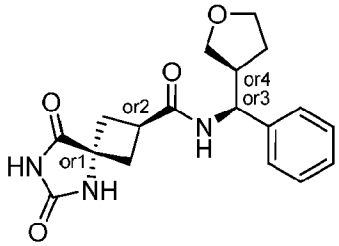
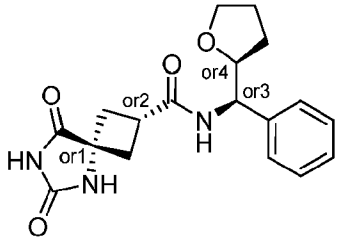
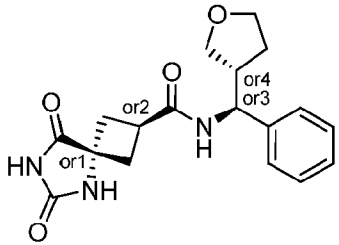
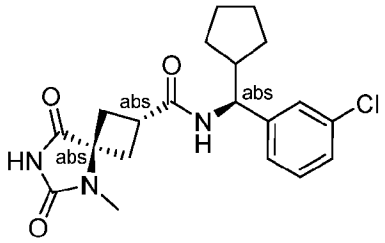
I-1174		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.30 (d, J = 7.6 Hz, 2H), 7.39 – 7.10 (m, 5H), 4.74 (t, J = 9.1 Hz, 1H), 3.09 (q, J = 8.8 Hz, 1H), 2.56 (s, 1H), 2.45 – 2.28 (m, 4H), 1.93 (d, J = 7.8 Hz, 1H), 1.81 – 1.56 (m, 5H).	329.4	E	
I-1175		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.62 (s, 1H), 8.16 (d, J = 8.7 Hz, 1H), 7.41 – 7.09 (m, 5H), 4.76 (t, J = 9.2 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.76 – 2.53 (m, 3H), 2.18 (dddd, J = 22.0, 13.0, 9.1, 4.5 Hz, 2H), 1.95 (dd, J = 8.3, 4.6 Hz, 1H), 1.73 (dddd, J = 15.7, 12.2, 8.2, 4.6 Hz, 5H).	328.2	E	
I-1176		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.24 (d, J = 8.5 Hz, 1H), 7.38 – 7.25 (m, 4H), 7.25 – 7.16 (m, 1H), 4.90 (dt, J = 9.4, 5.0 Hz, 1H), 3.81 (dd, J = 11.7, 3.9 Hz, 2H), 3.28 – 3.08 (m, 3H), 2.79 – 2.61 (m, 2H), 2.20 (ddd, J = 20.8, 13.2, 6.9 Hz, 2H), 1.75 – 1.40 (m, 5H), 1.18 (t, J = 12.5 Hz, 2H).	372.2	E	
I-1177		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 7.96 (d, J = 9.3 Hz, 1H), 7.18 (q, J = 5.2, 4.4 Hz, 3H), 7.11 (d, J = 5.5 Hz, 1H), 5.06 (d, J = 9.3 Hz, 1H), 3.23 (t, J = 9.0 Hz, 1H), 2.89 – 2.63 (m, 4H), 2.25 (dd, J = 12.7, 9.2 Hz, 2H), 1.13 (s, 3H), 0.85 (s, 3H).	328.2	E	

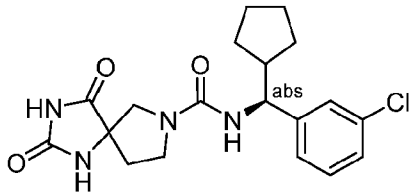
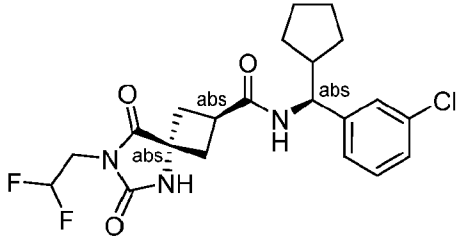
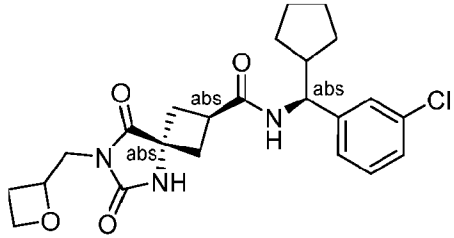
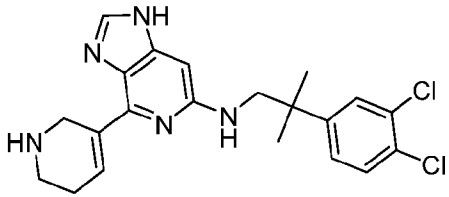
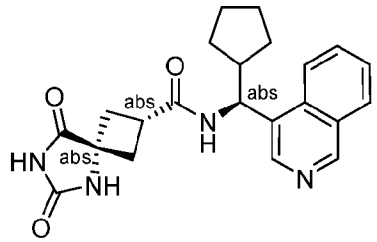
I-1178		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.53 (s, 1H), 8.26 (s, 1H), 7.46 – 7.33 (m, 2H), 7.26 (t, J = 7.5 Hz, 2H), 7.16 (t, J = 7.2 Hz, 1H), 2.96 (q, J = 8.9 Hz, 1H), 2.31 (tt, J = 20.3, 11.4 Hz, 4H), 1.27 (d, J = 5.2 Hz, 1H), 1.22 (s, 3H), 0.72 (d, J = 5.7 Hz, 4H).	328.2	E	
I-1179		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.64 (s, 1H), 8.15 (d, J = 9.8 Hz, 1H), 7.19 (t, J = 7.9 Hz, 1H), 6.88 (d, J = 2.6 Hz, 1H), 6.85 (d, J = 7.7 Hz, 1H), 6.79 (dd, J = 8.0, 2.5 Hz, 1H), 4.71 (d, J = 9.8 Hz, 1H), 3.73 (d, J = 1.5 Hz, 3H), 3.22 (q, J = 9.2 Hz, 1H), 2.76 – 2.59 (m, 2H), 2.25 (t, J = 10.7 Hz, 1H), 2.20 – 2.05 (m, 1H), 0.84 (s, 9H).	360.2	E	
I-1180			334.2	E	
I-1181		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.38 (d, J = 8.6 Hz, 1H), 8.29 (s, 1H), 7.38 – 7.24 (m, 4H), 7.21 (td, J = 6.7, 2.5 Hz, 1H), 4.89 (s, 1H), 3.80 (d, J = 10.8 Hz, 2H), 3.19 (td, J = 13.1, 10.5 Hz, 2H), 3.07 (q, J = 8.9 Hz, 1H), 2.45 – 2.26 (m, 4H), 1.70 – 1.37 (m, 5H), 1.27 – 1.08 (m, 2H).	372.2	E	

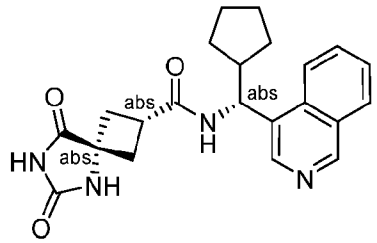
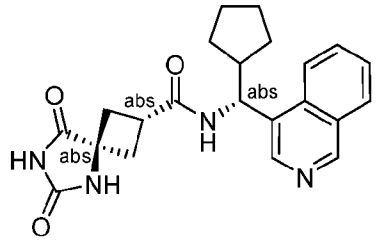
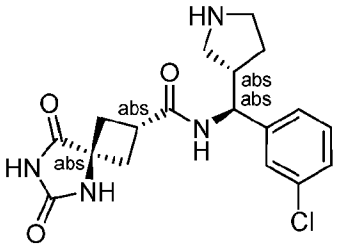
I-1182		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.65 (s, 1H), 8.18 (d, J = 9.7 Hz, 1H), 7.40 – 7.28 (m, 1H), 7.15 (dd, J = 19.1, 9.1 Hz, 2H), 7.10 – 6.99 (m, 1H), 4.77 (d, J = 9.7 Hz, 1H), 3.24 (t, J = 9.1 Hz, 1H), 2.65 (dd, J = 13.2, 8.5 Hz, 2H), 2.26 (t, J = 11.3 Hz, 1H), 2.23 – 2.11 (m, 1H), 0.84 (s, 9H).	348.2	E	
I-1183		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.59 (s, 1H), 7.65 (d, J = 8.7 Hz, 1H), 3.71 (q, J = 7.3 Hz, 1H), 3.07 (q, J = 9.1 Hz, 1H), 2.79 – 2.53 (m, 3H), 2.18 (dd, J = 10.1, 5.6 Hz, 2H), 1.99 (s, 2H), 1.74 (d, J = 31.5 Hz, 3H), 1.41 (s, 1H), 1.28 – 1.10 (m, 2H), 1.00 (d, J = 6.8 Hz, 3H).	330.4	E	
I-1184			332.2	E	
I-1185			348.2	E	
I-1186			338.2	E	

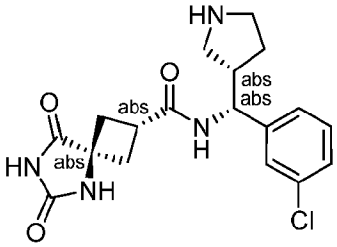
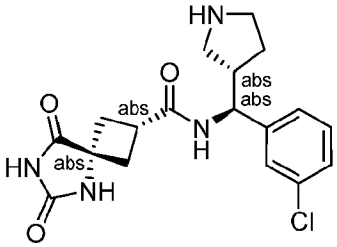
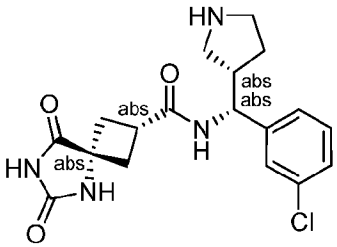
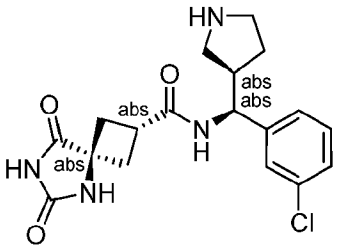
I-1187			320.2	E	
I-1188		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.24 (s, 1H), 8.14 (s, 1H), 7.34 (t, J = 8.1 Hz, 1H), 7.21 (d, J = 6.6 Hz, 1H), 7.13 – 6.99 (m, 2H), 3.13 – 3.03 (m, 1H), 2.38 (t, J = 11.0 Hz, 4H), 2.27 (t, J = 10.4 Hz, 2H), 1.90 (d, J = 10.1 Hz, 2H), 1.69 (s, 4H).	346.2	E	
I-1189			322.2	E	
I-1190			322.2	E	

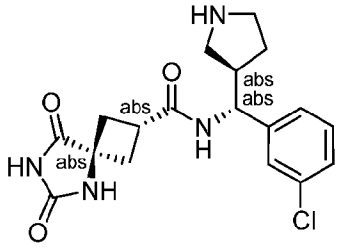
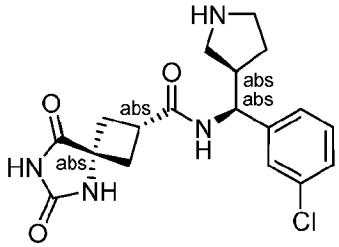
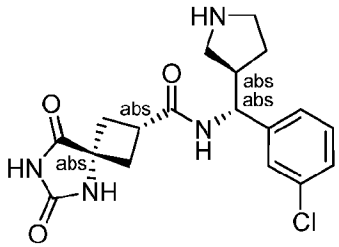
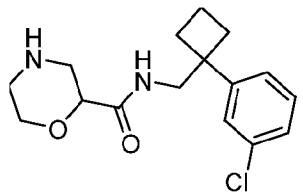
I-1191			322.2	E	
I-1192			322.2	E	
I-1193		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.49 (d, J = 8.7 Hz, 1H), 8.27 (s, 1H), 7.40 – 7.28 (m, 4H), 7.23 (q, J = 4.2 Hz, 1H), 4.67 (t, J = 9.3 Hz, 1H), 3.73 (dd, J = 9.5, 6.2 Hz, 2H), 3.57 (q, J = 7.6 Hz, 1H), 3.44 (dd, J = 8.6, 6.6 Hz, 1H), 3.04 (q, J = 8.9 Hz, 1H), 2.44 – 2.27 (m, 5H), 1.65 – 1.51 (m, 1H), 1.41 (dd, J = 12.5, 7.3 Hz, 2H).	344.2	E	
I-1194			344.2	E	

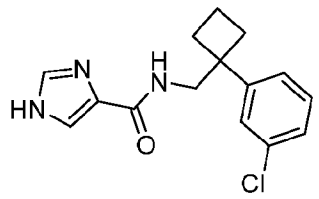
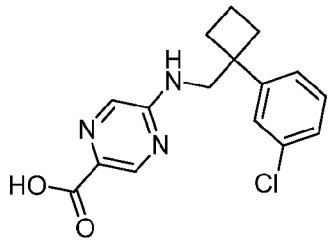
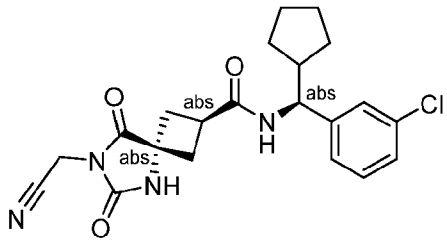
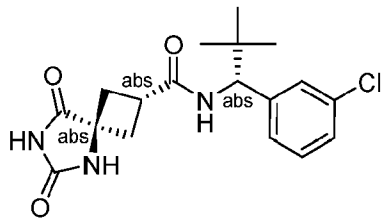
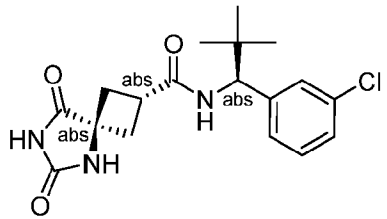
I-1195			344.2	E	
I-1196			344.2	E	
I-1197			344.2	E	
I-1198			390.36	D	

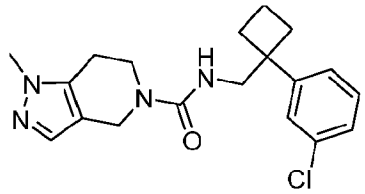
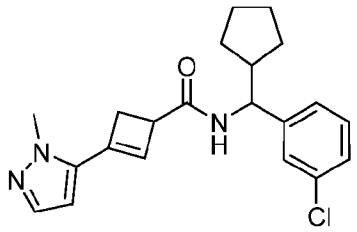
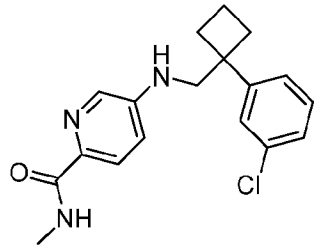
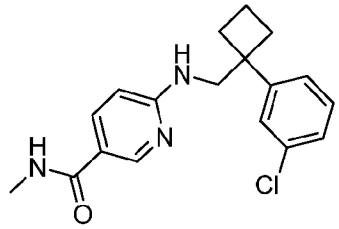
I-1199			391.26	E	
I-1200				C	D
I-1201				D	
I-1202		(400 MHz, DMSO-d6) 12.04 (s, 1H), 7.94 (d, J = 4.9 Hz, 1H), 7.68 (s, 1H), 7.63 (d, J = 2.2 Hz, 1H), 7.54 (d, J = 8.5 Hz, 1H), 7.42 (dd, J = 8.5, 2.3 Hz, 1H), 6.37 (d, J = 5.1 Hz, 1H), 5.75 (s, 1H), 3.91 (s, 2H), 3.57 (d, J = 6.2 Hz, 2H), 2.96 (s, 2H), 2.33 (p, J = 1.9 Hz, 2H), 1.31 (s, 6H).	416.1	D	
I-1203		(400 MHz, DMSO-d6) 10.58 (s, 1H), 9.20 (s, 1H), 8.59 (d, J = 8.5 Hz, 1H), 8.53 (s, 1H), 8.31 - 8.23 (m, 2H), 8.13 (d, J = 8.1 Hz, 1H), 7.82 (ddd, J = 8.4, 6.8, 1.4 Hz, 1H), 7.69 (t, J = 7.5 Hz, 1H), 5.37 (t, J = 9.1 Hz, 1H), 3.08 (p, J = 8.9 Hz, 1H), 2.57 (d, J = 8.8 Hz, 1H), 2.47 - 2.38 (m, 2H), 2.36 - 2.20 (m, 2H), 1.83 - 1.73 (m, 1H), 1.69 - 1.60 (m, 1H), 1.59 - 1.52	393.2	E	

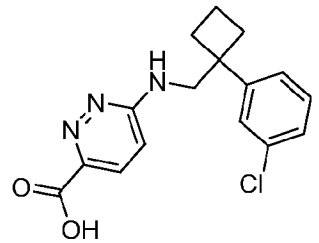
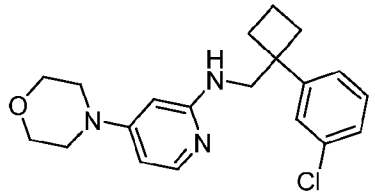
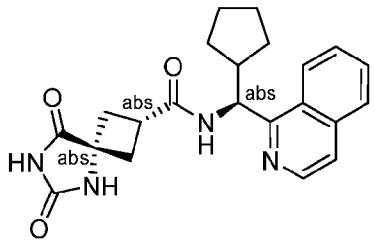
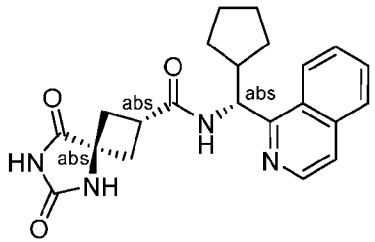
		(m, 2H), 1.50 - 1.40 (m, 2H), 1.36 (dd, J = 12.2, 7.4 IIz, 1II), 1.05 (dq, J = 12.2, 7.9 IIz, 1II).			
I-1204		(400 MHz, DMSO-d6) 10.58 (s, 1H), 9.21 (s, 1H), 8.60 (d, J = 8.6 Hz, 1H), 8.53 (s, 1H), 8.36 - 8.19 (m, 2H), 8.14 (d, J = 8.1 Hz, 1H), 7.82 (ddd, J = 8.5, 6.8, 1.4 Hz, 1H), 7.69 (t, J = 7.5 Hz, 1H), 5.38 (t, J = 9.1 Hz, 1H), 3.08 (p, J = 8.9 Hz, 1H), 2.59 (d, J = 8.4 Hz, 1H), 2.48 - 2.38 (m, 2H), 2.35 - 2.21 (m, 2H), 1.77 (dt, J = 14.4, 5.9 Hz, 1H), 1.66 (d, J = 14.4 Hz, 1H), 1.58 - 1.50 (m, 2H), 1.49 - 1.40 (m, 2H), 1.41 - 1.30 (m, 1H), 1.10 - 0.99 (m, 1H).	393.1	E	
I-1205		(400 MHz, DMSO-d6) 10.55 (s, 1H), 9.21 (s, 1H), 8.57 (d, J = 13.0 Hz, 2H), 8.46 (d, J = 8.5 Hz, 1H), 8.30 (d, J = 8.6 Hz, 1H), 8.13 (d, J = 8.1 Hz, 1H), 7.82 (t, J = 7.7 Hz, 1H), 7.69 (t, J = 7.5 Hz, 1H), 5.39 (t, J = 9.2 Hz, 1H), 3.11 (p, J = 9.2 Hz, 1H), 2.70 (dd, J = 11.8, 9.0 Hz, 1H), 2.60 (dd, J = 12.3, 9.1 Hz, 2H), 2.23 (ddd, J = 12.4, 8.9, 4.3 Hz, 1H), 2.09 (ddd, J = 12.9, 9.1, 4.4 Hz, 1H), 1.86 - 1.74 (m, 1H), 1.65 (s, 1H), 1.51 (td, J = 16.2, 6.7 Hz, 4H), 1.36 (d, J = 7.8 Hz, 1H), 1.06 (dt, J = 12.9, 7.6 Hz, 1H).	393.2	E	
I-1206		(400 MIIz, DMSO-d6) 8.48 (dd, J = 9.1, 3.0 IIz, 1H), 8.29 (s, 1H), 7.50 - 7.20 (m, 4H), 4.63 (t, J = 8.6 Hz, 1H), 3.08 (p, J − 8.8 Hz, 1H), 2.87 (d, J − 53.9 Hz, 1H), 2.75 - 2.67 (m, 1H), 2.46 (m, 1H), 2.43 (d, J = 8.8 Hz, 2H), 2.41 - 2.32 (m, 2H), 2.29 (d, J = 9.5 Hz, 2H), 1.76 (q, J = 6.6, 6.0 Hz, 1H), 1.41 (s, 1H).	377.15	E	

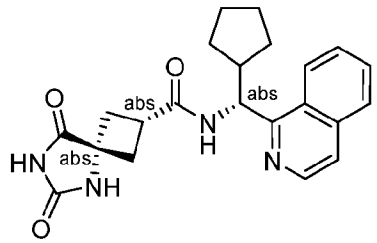
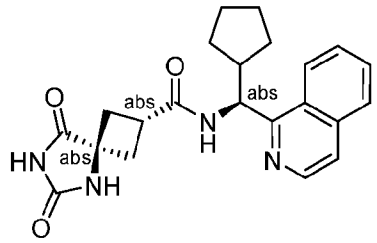
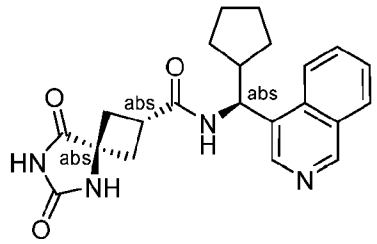
I-1207		(400 MHz, DMSO-d6) 8.68 - 8.39 (m, 1H), 8.29 (d, J = 4.4 Hz, 1H), 7.50 - 7.13 (m, 4H), 4.81 - 4.42 (m, 1H), 3.40 (d, J = 9.5 Hz, 1H), 3.07 (q, J = 8.9 Hz, 1H), 2.90 (d, J = 45.6 Hz, 1H), 2.77 (s, 1H), 2.72 - 2.59 (m, 2H), 2.48 - 2.26 (m, 4H), 1.41 (t, J = 18.6 Hz, 1H), 1.27 - 1.10 (m, 1H).	377.15	E	
I-1208		(400 MHz, DMSO-d6) 8.61 (s, 1H), 8.45 - 8.24 (m, 1H), 7.46 - 7.10 (m, 4H), 4.67 (d, J = 34.8 Hz, 1H), 3.21 - 3.03 (m, 1H), 2.87 (d, J = 43.8 Hz, 1H), 2.76-2.55 (m, 3H), 2.46 - 2.40 (m, 1H), 2.39 - 2.08 (m, 4H), 1.87 (d, J = 74.2 Hz, 1H), 1.43 (s, 1H).	377.15	E	
I-1209		(400 MHz, DMSO-d6) 8.60 (s, 1H), 8.41 (dd, J = 34.0, 8.2 Hz, 1H), 7.34 (dt, J = 30.3, 9.2 Hz, 4H), 4.90 - 4.42 (m, 1H), 3.43 (s, 1H), 3.26- 3.05 (m, 1H), 2.87 (t, J = 32.5 Hz, 2H), 2.70 (s, 1H), 2.68 - 2.57 (m, 2H), 2.41 - 2.31 (m, 1H), 2.19 (d, J = 31.5 Hz, 2H), 1.42 (s, 1H), 1.31 -1.07 (m, 1H).	377.05	E	
I-1210		(400 MHz, DMSO-d6) 8.48 (d, J = 8.7 Hz, 1H), 8.28 (s, 1H), 7.42 - 7.24 (m, 4H), 4.75 - 4.59 (m, 1H), 3.08 (p, J = 8.8 Hz, 1H), 2.88 - 2.76 (m, 1H), 2.75 - 2.64 (m, 1H), 2.47 (m, 1H), 2.44 (d, J = 9.9 Hz, 2H), 2.34 (dd, J = 36.2, 10.3 Hz, 4H), 1.76 (s, 1H), 1.39 (t, J = 13.9 Hz, 1H).	377.1	E	

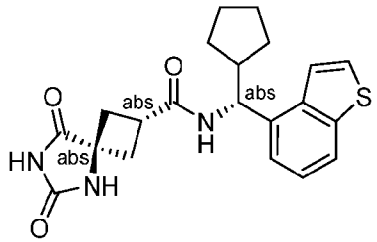
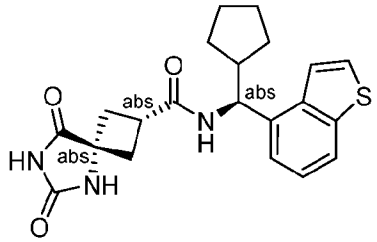
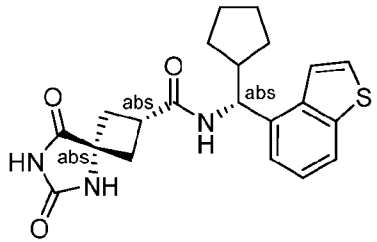
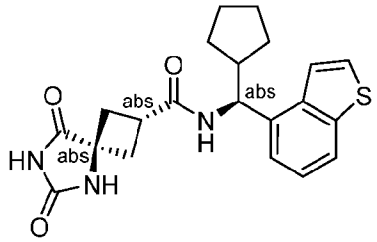
I-1211		(400 MHz, DMSO-d6) 8.68- 8.39 (m, 1H), 8.29 (d, J = 2.9 Hz, 1H), 7.43 -7.24 (m, 4H), 4.66 (dt, J = 38.1, 9.3 Hz, 1H), 3.40 (s, 1H), 3.07 (q, J = 9.0 Hz, 1H), 2.98 - 2.74 (m, 2H), 2.66 (d, J = 9.4 Hz, 2H), 2.46 - 2.21 (m, 4H), 1.39 (s, 1H), 1.22 (d, J = 16.4 Hz, 1H).	377.15	E	
I-1212		(400 MHz, DMSO-d6) 8.61 (s, 1H), 8.44 - 8.31 (m, 1H), 7.48-7.13 (m, 4H), 4.62 (t, J = 9.1 Hz, 1H), 3.13 (q, J = 8.7 Hz, 1H), 2.81 (s, 1H), 2.67 (dq, J = 19.3, 10.1, 8.7 Hz, 3H), 2.48 -2.42 (m, 1H), 2.39 - 2.07 (m, 4H), 1.78 (s, 1H), 1.43 (s, 1H).	377.15	E	
I-1213		(400 MHz, DMSO-d6) 8.61 (d, J = 9.5 Hz, 1H), 8.36 (d, J = 8.4 Hz, 1H), 7.46 - 7.13 (m, 4H), 4.62 (t, J = 9.2 Hz, 1H), 3.42 (d, J = 8.2 Hz, 1H), 3.10 (q, J = 9.1 Hz, 1H), 2.84 (dd, J = 22.7, 13.9 Hz, 2H), 2.69 (d, J = 3.5 Hz, 1H), 2.68- 2.59 (m, 2H), 2.37 (s, 1H), 2.23 (t, J = 10.8 Hz, 1H), 2.15 (s, 1H), 1.42 (t, J = 11.0 Hz, 1H), 1.26 - 1.18 (m, 1H).	377.1	E	
I-1214		NMR (400 MHz, DMSO-d6) δ 8.35 (s, 2H), 7.36 – 7.29 (m, 2H), 7.23 (ddd, J = 8.0, 1.8, 0.8 Hz, 1H), 7.08 (t, J = 1.7 Hz, 1H), 7.04 (d, J = 7.7 Hz, 1H), 3.80 – 3.72 (m, 2H), 3.50 – 3.42 (m, 2H), 3.35 (dd, J = 13.2, 6.1 Hz, 1H), 2.89 (dd, J = 12.4, 2.1 Hz, 1H), 2.69 (br. d, J = 12.4 Hz, 1H), 2.65 – 2.57 (m, 1H), 2.37 (dd, J = 12.2, 10.4 Hz, 1H), 2.28 – 2.13 (m, 4H), 2.05 – 1.93 (m, 1H), 1.79 – 1.69 (m, 1H). Compound is a formate salt. Racemic mixture of enantiomers.	309.2	E	

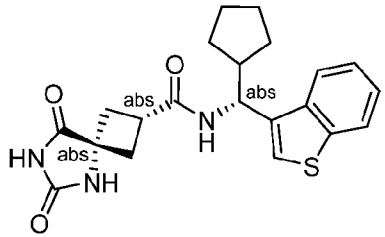
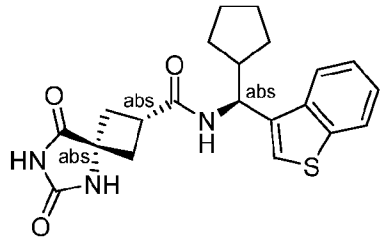
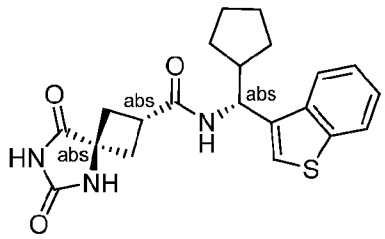
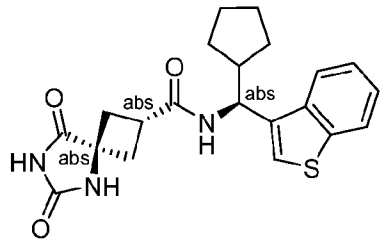
I-1215		(400 MHz, DMSO-d6) δ 12.47 (br. s, 1H), 7.68 (d, J = 1.0 Hz, 1H), 7.57 (d, J = 0.9 Hz, 1H), 7.44 – 7.37 (m, 1H), 7.34 (t, J = 7.8 Hz, 1H), 7.24 (br. d, J = 8.6 Hz, 1H), 7.15 (t, J = 1.8 Hz, 1H), 7.09 (br. d, J = 7.7 Hz, 1H), 3.57 (d, J = 6.4 Hz, 2H), 2.33 – 2.16 (m, 4H), 2.09 – 1.97 (m, 1H), 1.82 – 1.72 (m, 1H).	290.2	E	
I-1216		NMR (400 MHz, DMSO-d6) δ 8.39 (d, J = 1.2 Hz, 1H), 7.89 (br s, 1H), 7.72 (t, J = 6.0 Hz, 1H), 7.32 – 7.23 (m, 1H), 7.20 – 7.16 (m, 2H), 7.13 – 7.10 (m, 1H), 3.75 (d, J = 6.1 Hz, 2H), 2.35 – 2.18 (m, 4H), 2.16 – 2.01 (m, 1H), 1.87 – 1.71 (m, 1H). COOH proton not observed.	317	D	
I-1217				C	D
I-1218				E	
I-1219				B	C

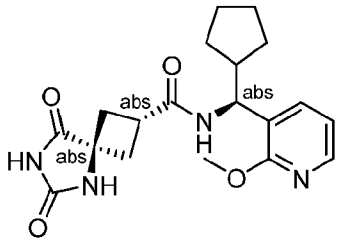
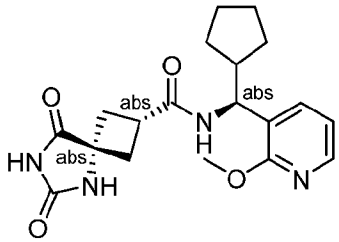
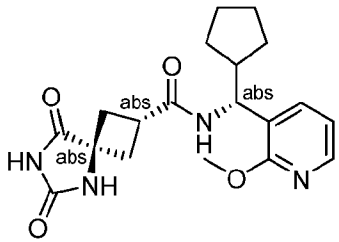
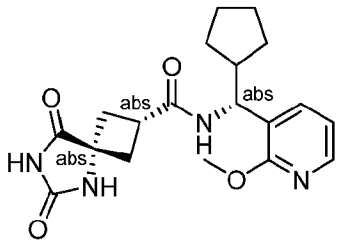
I-1220		(400 MHz, DMSO-d6) δ 7.27 – 7.18 (m, 3H), 7.06 (t, J = 1.7 Hz, 1H), 6.99 (dt, J = 7.5, 1.4 Hz, 1H), 6.50 (t, J = 6.0 Hz, 1H), 4.24 (s, 2H), 3.65 (s, 3H), 3.52 (t, J = 5.7 Hz, 2H), 3.36 (s, 2H), 2.55 (t, J = 5.6 Hz, 2H), 2.30 – 2.23 (m, 2H), 2.17 – 2.08 (m, 2H), 2.01 – 1.89 (m, 1H), 1.76 – 1.66 (m, 1H). 2H singlet at 3.36 ppm partially overlaps with peak for residual H2O.	359.3	E	
I-1221		(400 MHz, dmso) δ 8.39 (dd, J = 8.6, 5.5 Hz, 1H), 7.40 (t, J = 1.7 Hz, 1H), 7.37 – 7.31 (m, 2H), 7.31 – 7.24 (m, 2H), 6.29 (d, J = 1.9 Hz, 1H), 6.28 (d, J = 1.1 Hz, 1H), 6.21 (d, J = 1.1 Hz, 1H), 4.59 (td, J = 9.4, 3.7 Hz, 1H), 3.85 (s, 1.64H), 3.83 (s, 1.36H), 3.62 (t, J = 4.8 Hz, 1H), 2.98 – 2.86 (m, 1H), 2.84 – 2.72 (m, 1H), 2.27 – 2.14 (m, 1H), 1.82 – 1.71 (m, 1H), 1.63 – 1.41 (m, 4H), 1.35 – 1.22 (m, 2H), 1.16 – 1.03 (m, 1H). Mix of diastereomers (~1.2:1.0)	370.1	D	
I-1222		NMR (400 MHz, DMSO-d6) δ 8.22 (q, J = 4.7 Hz, 1H), 7.83 (d, J = 2.7 Hz, 1H), 7.57 (d, J = 8.6 Hz, 1H), 7.28 (t, J = 7.8 Hz, 1H), 7.23 (t, J = 1.8 Hz, 1H), 7.21 – 7.12 (m, 2H), 6.79 (dd, J = 8.7, 2.8 Hz, 1H), 6.37 (t, J = 6.0 Hz, 1H), 3.46 (d, J = 6.1 Hz, 2H), 2.72 (d, J = 4.8 Hz, 3H), 2.35 – 2.19 (m, 4H), 2.17 – 1.98 (m, 1H), 1.90 – 1.72 (m, 1H).	330	E	
I-1223		NMR (400 MHz, DMSO-d6) δ 8.37 (d, J = 2.3 Hz, 1H), 8.05 (q, J = 4.0 Hz, 1H), 7.68 (dd, J = 8.8, 2.4 Hz, 1H), 7.33 – 7.25 (m, 1H), 7.22-7.16 (m, 2H), 7.16 – 7.10 (m, 1H), 6.89 (t, J = 6.3 Hz, 1H), 6.41 (d, J = 8.7 Hz, 1H), 3.69 (d, J = 6.0 Hz, 2H), 2.71 (d, J = 4.5 Hz, 3H), 2.36 – 2.15 (m, 4H), 2.15 – 1.98 (m, 1H), 1.85 – 1.71 (m, 1H). Minor impurities.	330	E	

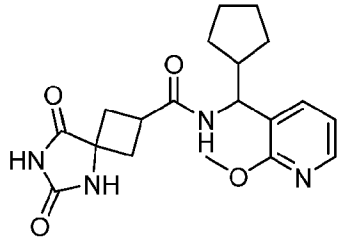
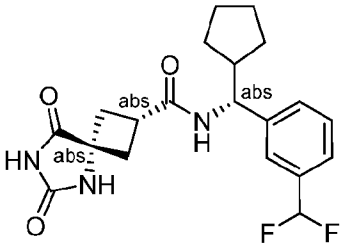
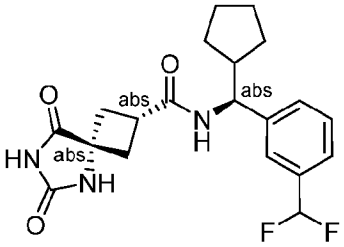
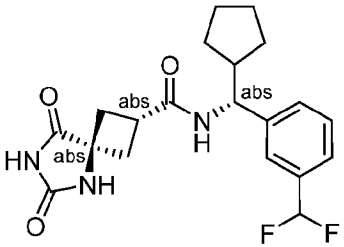
I-1224		NMR (400 MHz, DMSO-d6) δ 7.87 (br s, 1H), 7.63 (d, J = 9.3 Hz, 1H), 7.44 (br s, 1H), 7.33 – 7.26 (m, 1H), 7.23 – 7.17 (m, 2H), 7.16 – 7.10 (m, 1H), 6.79 (br s, 1H), 3.86 (br s, 2H), 2.39 – 2.19 (m, 4H), 2.16 – 2.01 (m, 1H), 1.88 – 1.73 (m, 1H). Minor impurities. Formate salts present.	318	D	
I-1225		NMR (400 MHz, DMSOd6) δ 8.25 (s, 1H, formate), 7.56 (d, J = 6.3 Hz, 1H), 7.28 (t, J = 7.7 Hz, 1H), 7.20 (submerged s, 1H), 7.19 (submerged d, J = 9.3 Hz, 1H), 7.11 (d, J = 7.6 Hz, 1H), 6.71 (br s, 1H), 6.15 (dd, J = 6.3, 1.7 Hz, 1H), 5.67 (s, 1H), 3.69 – 3.61 (dd, J = 4.5, 4.5 Hz, 4H), 3.58 (d, J = 5.9 Hz, 2H), 3.17 – 3.06 (dd, J = 4.2, 4.9 Hz, 4H), 2.33 – 2.14 (m, 4H), 2.14 – 1.99 (m, 1H), 1.79 (m, 1H).	358.3	E	
I-1226		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.53 - 8.46 (m, 2H), 8.43 (d, J = 8.5 Hz, 1H), 8.26 (d, J = 1.7 Hz, 1H), 7.97 (dd, J = 8.3, 1.3 Hz, 1H), 7.81 - 7.72 (m, 2H), 7.68 (ddd, J = 8.3, 6.8, 1.4 Hz, 1H), 5.68 (t, J = 9.1 Hz, 1H), 3.09 (p, J = 8.9 Hz, 1H), 2.78 - 2.64 (m, 1H), 2.50- 2.37 (m, 2H), 2.28 (dd, J = 8.7, 3.0 Hz, 2H), 1.80 - 1.69 (m, 1H), 1.63 (dd, J = 12.6, 5.9 Hz, 1H), 1.48 (tdt, J = 13.5, 8.8, 6.4 Hz, 4H), 1.34 (dt, J = 12.2, 7.6 Hz, 1H), 0.99 (dq, J = 12.4, 8.0 Hz, 1H).	393.2	E	
I-1227		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.53 - 8.46 (m, 2H), 8.43 (d, J = 8.5 Hz, 1H), 8.26 (s, 1H), 8.01 - 7.94 (m, 1H), 7.81- 7.72 (m, 2H), 7.68 (ddd, J = 8.3, 6.8, 1.4 Hz, 1H), 5.68 (t, J = 9.1 Hz, 1H), 3.09 (p, J = 8.9 Hz, 1H), 2.73 (dd, J = 16.3, 8.2 Hz, 1H), 2.49 - 2.37 (m, 2H), 2.28 (dd, J = 8.7, 2.9 Hz, 2H), 1.73 (dt, J = 11.3, 6.3 Hz, 1H), 1.62 (s, 1H), 1.58 - 1.39 (m, 4H), 1.35 (dd, J = 12.3, 7.6 Hz, 1H), 1.06 - 0.92 (m, 1H).	393.15	E	

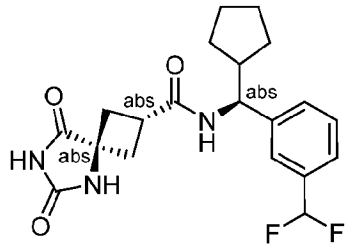
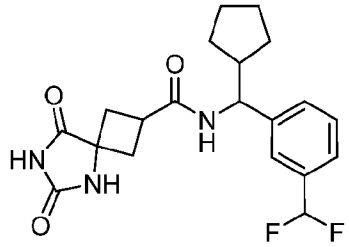
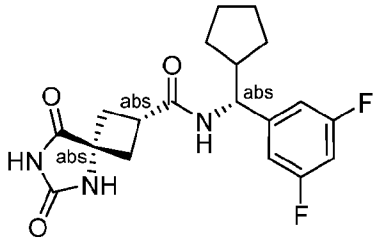
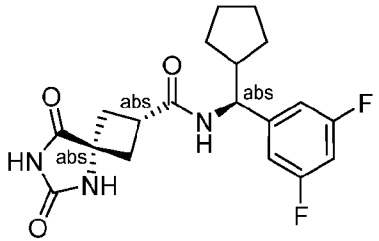
I-1228		(400 MHz, DMSO-d6) 10.53 (s, 1H), 8.57 (s, 1H), 8.52 - 8.36 (m, 3H), 7.97 (dd, J = 8.2, 1.3 Hz, 1H), 7.82 - 7.73 (m, 2H), 7.69 (ddd, J = 8.2, 6.8, 1.4 Hz, 1H), 5.70 (t, J = 9.2 Hz, 1H), 3.15 (p, J = 9.1 Hz, 1H), 2.80 - 2.65 (m, 2H), 2.61 (dd, J = 12.0, 9.2 Hz, 1H), 2.23 (ddd, J = 12.5, 8.9, 4.4 Hz, 1H), 2.07 (ddt, J = 12.7, 8.8, 4.2 Hz, 1H), 1.73 (td, J = 9.6, 5.3 Hz, 1H), 1.64 (ddd, J = 7.7, 5.7, 2.9 Hz, 1H), 1.58 -1.40 (m, 4H), 1.35 (qd, J = 7.3, 3.1 Hz, 1H), 1.10 - 0.93 (m, 1H).	393.2	E	
I-1229		(400 MHz, DMSO-d6) 10.53 (s, 1H), 8.57 (d, J = 1.6 Hz, 1H), 8.52 - 8.37 (m, 3H), 7.98 (dd, J = 8.2, 1.3 Hz, 1H), 7.82 - 7.73 (m, 2H), 7.69 (ddd, J = 8.3, 6.8, 1.4 Hz, 1H), 5.70 (t, J = 9.2 Hz, 1H), 3.15 (p, J = 9.1 Hz, 1H), 2.80- 2.65 (m, 2H), 2.61 (dd, J = 12.0, 9.2 Hz, 1H), 2.23 (ddd, J = 12.5, 9.0, 4.5 Hz, 1H), 2.12- 2.01 (m, 1H), 1.73 (td, J = 9.3, 4.8 Hz, 1H), 1.68 - 1.56 (m, 1H), 1.49 (tt, J = 17.1, 6.6 Hz, 4H), 1.39 - 1.28 (m, 1H), 1.10 - 0.93 (m, 1H).	393.2	D	
I-1230		(400 MHz, Methanol-d4) 9.17 (s, 1H), 8.53 (s, 1H), 8.39 (d, J = 8.6 Hz, 1H), 8.14 (d, J = 8.2 Hz, 1H), 7.93 - 7.83 (m, 1H), 7.73 (t, J = 7.5 Hz, 1H), 5.54 (d, J = 10.3 Hz, 1H), 3.20 (p, J = 9.0 Hz, 1H), 2.88 (ddd, J = 28.3, 12.6, 8.4 Hz, 2H), 2.71 (h, J = 7.8, 7.2 Hz, 1H), 2.47 (ddd, J = 12.8, 9.5, 3.7 Hz, 1H), 2.35 (ddd, J = 12.9, 9.5, 3.8 Hz, 1H), 1.98 (q, J = 9.7, 7.9 Hz, 1H), 1.80 (d, J = 14.3 Hz, 1H), 1.71 - 1.55 (m, 4H), 1.54 - 1.42 (m, 1H), 1.16 (dq, J = 14.6, 7.7 Hz, 1H).	393.15	E	

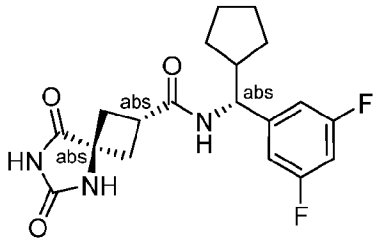
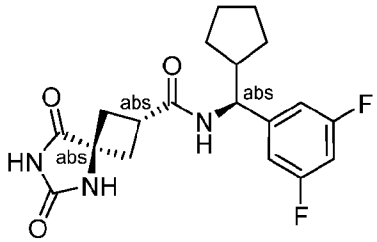
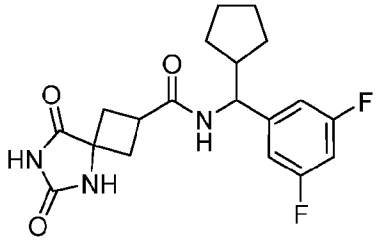
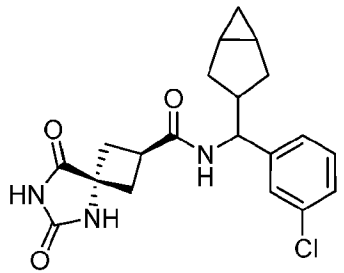
I-1231		(400 MHz, DMSO-d6) 10.35 (s, 1H), 8.50 (d, J = 8.6 Hz, 1H), 8.27 (s, 1H), 7.87 (dd, J = 6.5, 2.5 Hz, 1H), 7.75 (d, J = 5.6 Hz, 1H), 7.70 (dd, J = 5.7, 0.8 Hz, 1H), 7.38-7.29 (m, 2H), 5.12 (t, J = 9.2 Hz, 1H), 3.15-3.01 (m, 1H), 2.43 (qd, J = 10.8, 8.0 Hz, 3H), 2.36-2.22 (m, 2H), 1.80-1.71 (m, 1H), 1.68-1.34 (m, 5H), 1.27 (ddd, J = 12.4, 7.8, 4.7 Hz, 1H), 1.04 (dq, J = 12.6, 8.0 Hz, 1H).	398.15	E	
I-1232		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.50 (d, J = 8.6 Hz, 1H), 8.27 (s, 1H), 7.86 (dt, J = 7.4, 3.7 Hz, 1H), 7.76 (d, J = 5.5 Hz, 1H), 7.70 (d, J = 5.6 Hz, 1H), 7.34 (q, J = 4.2, 3.7 Hz, 2H), 5.12 (t, J = 9.2 Hz, 1H), 3.08 (p, J = 8.9 Hz, 1H), 2.42 (qd, J = 10.5, 7.9 Hz, 3H), 2.35-2.22 (m, 2H), 1.80-1.70 (m, 1H), 1.60 (d, J = 5.0 Hz, 1H), 1.52 (tt, J = 12.3, 5.7 Hz, 2H), 1.41 (ddd, J = 19.2, 11.1, 7.7 Hz, 2H), 1.32-1.22 (m, 1H), 1.11-0.97 (m, 1H).	398.15	E	
I-1233		(400 MHz, DMSO-d6) 10.53 (s, 1H), 8.59 (s, 1H), 8.36 (d, J = 8.6 Hz, 1H), 7.87 (dt, J = 7.5, 1.2 Hz, 1H), 7.75 (d, J = 5.6 Hz, 1H), 7.70 (dd, J = 5.6, 0.8 Hz, 1H), 7.37 (dd, J = 7.4, 1.6 Hz, 1H), 7.34 (t, J = 7.4 Hz, 1H), 5.13 (dd, J = 10.0, 8.6 Hz, 1H), 3.11 (p, J = 9.2 Hz, 1H), 2.74-2.57 (m, 2H), 2.44 (p, J = 8.1 Hz, 1H), 2.22 (ddd, J = 12.5, 9.0, 4.5 Hz, 1H), 2.09 (ddd, J = 12.6, 8.9, 4.4 Hz, 1H), 1.78 (s, 1H), 1.69-1.58 (m, 1H), 1.55-1.34 (m, 4H), 1.35-1.22 (m, 1H), 1.11-0.97 (m, 1H).	398.15	E	
I-1234		(400 MHz, DMSO-d6) 10.48 (s, 1H), 8.60 (s, 1H), 8.37 (d, J = 8.5 Hz, 1H), 7.91-7.84 (m, 1H), 7.76 (d, J = 5.6 Hz, 1H), 7.73-7.67 (m, 1H), 7.41-7.29 (m, 2H), 5.18-5.09 (m, 1H), 3.11 (p, J = 9.1 Hz, 1H), 2.65 (ddd, J = 29.7, 12.1, 9.2 Hz, 2H), 2.44 (dt, J = 17.0, 8.2 Hz, 1H), 2.22 (ddd, J = 12.4, 9.0, 4.4 Hz, 1H), 2.09 (ddd, J = 12.7, 9.1, 4.4 Hz, 1H), 1.83-1.74 (m, 1H), 1.65 (d, J = 14.7 Hz, 1H), 1.59-1.48 (m,	398.15	B	

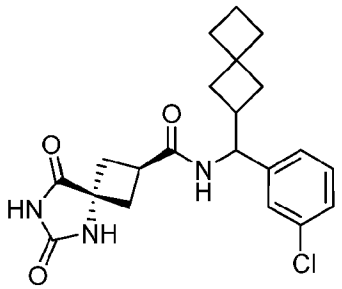
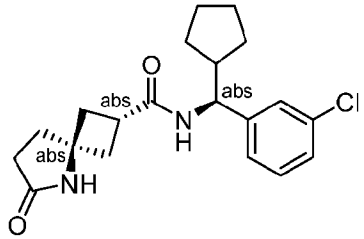
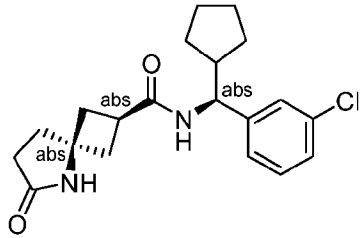
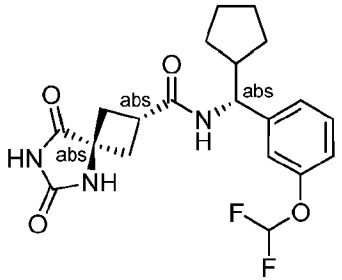
		2H), 1.49-1.36 (m, 2H), 1.35-1.22 (m, 1H), 1.04 (dq, J = 15.8, 7.9 Hz, 1H).			
I-1235		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.37 (d, J = 9.1 Hz, 1H), 8.30 (s, 1H), 8.00- 7.83 (m, 2H), 7.60 (s, 1H), 7.42 - 7.30 (m, 2H), 5.12 (t, J = 9.2 Hz, 1H), 3.06 (p, J = 8.9 Hz, 1H), 2.55 (d, J = 7.7 Hz, 1H), 2.45 (dd, J = 8.8, 2.4 Hz, 2H), 2.39-2.27 (m, 2H), 1.72 (ddd, J = 12.5, 8.0, 5.0 Hz, 1H), 1.66 - 1.45 (m, 5H), 1.39 (dt, J = 15.2, 7.4 Hz, 1H), 1.21 - 1.06 (m, 1H).	398.15	E	
I-1236		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.37 (d, J = 9.1 Hz, 1H), 8.30 (s, 1H), 8.00 -7.84 (m, 2H), 7.60 (s, 1H), 7.46 -7.27 (m, 2H), 5.12 (t, J = 9.2 Hz, 1H), 3.06 (p, J = 8.9 Hz, 1H), 2.54 (s, 1H), 2.45 (dd, J = 8.7, 2.4 Hz, 2H), 2.38- 2.26 (m, 2H), 1.72 (dq, J = 12.5, 6.5, 5.9 Hz, 1H), 1.65 - 1.44 (m, 5H), 1.40 (dq, J = 15.6, 7.6 Hz, 1H), 1.19-1.05 (m, 1H).	398.15	D	
I-1237		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.58 (s, 1H), 8.24 (d, J = 9.1 Hz, 1H), 8.00 - 7.85 (m, 2H), 7.61 (s, 1H), 7.37 (tt, J = 7.2, 5.5 Hz, 2H), 5.12 (t, J = 9.3 Hz, 1H), 3.10 (p, J = 9.1 Hz, 1H), 2.76- 2.71 (m, 1H), 2.70 - 2.61 (m, 2H), 2.22 (ddd, J = 12.6, 9.0, 4.4 Hz, 1H), 2.09 (ddd, J = 12.8, 9.0, 4.4 Hz, 1H), 1.81 - 1.69 (m, 1H), 1.68 -1.32 (m, 6H), 1.19-1.06 (m, 1H).	398.15	E	
I-1238		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.58 (s, 1H), 8.24 (d, J = 9.1 Hz, 1H), 7.99- 7.83 (m, 2H), 7.61 (s, 1H), 7.37 (tt, J = 7.2, 5.4 Hz, 2H), 5.12 (t, J = 9.3 Hz, 1H), 3.10 (p, J = 9.2 Hz, 1H), 2.78 - 2.70 (m, 1H), 2.70- 2.60 (m, 2H), 2.22 (ddd, J = 12.5, 8.9, 4.5 Hz, 1H), 2.09 (ddd, J = 12.8, 8.9, 4.4 Hz, 1H), 1.80 - 1.69 (m, 1H), 1.68- 1.31 (m, 6H), 1.15 (dd, J = 12.9, 7.4 Hz, 1H).	398.15	B	C

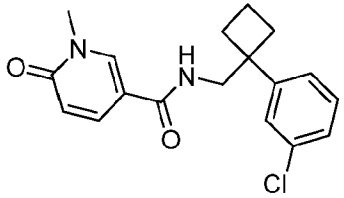
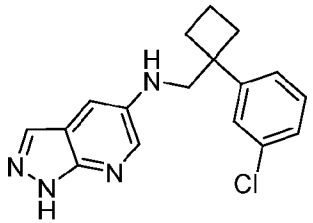
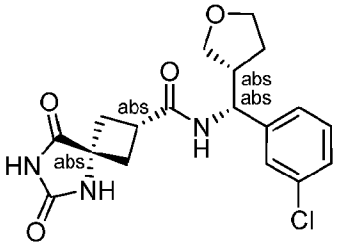
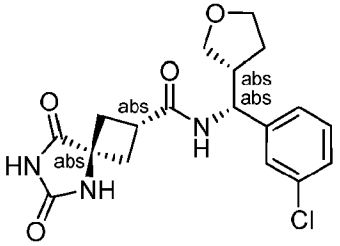
I-1239		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.28 (t, J = 4.5 Hz, 2H), 8.03 (dd, J = 4.9, 1.8 Hz, 1H), 7.65 (dd, J = 7.3, 1.9 Hz, 1H), 6.96 (dd, J = 7.3, 4.9 Hz, 1H), 5.00 (t, J = 8.8 Hz, 1H), 3.87 (s, 3H), 3.12 (p, J = 9.0 Hz, 1H), 2.47 - 2.25 (m, 4H), 2.20 (q, J = 8.0 Hz, 1H), 1.56 (s, 3H), 1.45 (d, J = 6.0 Hz, 2H), 1.30 (s, 2H), 1.19 - 1.08 (m, 1H).	373.15	E	
I-1240		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.27 (d, J = 6.1 Hz, 2H), 8.11 - 7.91 (m, 1H), 7.75 - 7.57 (m, 1H), 6.96 (dd, J = 7.3, 4.9 Hz, 1H), 5.00 (t, J = 8.8 Hz, 1H), 3.87 (s, 3H), 3.12 (p, J = 8.9 Hz, 1H), 2.48 - 2.37 (m, 2H), 2.30 (t, J = 10.5 Hz, 2H), 2.20 (q, J = 8.2 Hz, 1H), 1.56 (s, 3H), 1.45 (s, 2H), 1.30 (s, 2H), 1.15 (d, J = 9.3 Hz, 1H).	373.15	E	
I-1241		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.70 - 8.55 (m, 1H), 8.14 (d, J = 8.4 Hz, 1H), 8.04 (dd, J = 4.9, 2.5 Hz, 1H), 7.66 (dd, J = 5.6, 3.6 Hz, 1H), 6.96 (ddd, J = 7.1, 4.9, 2.0 Hz, 1H), 4.98 (t, J = 8.6 Hz, 1H), 3.87 (d, J = 1.9 Hz, 3H), 3.19 - 3.07 (m, 1H), 2.65 (dt, J = 23.1, 11.2 Hz, 2H), 2.37 - 2.11 (m, 3H), 1.57 (s, 3H), 1.45 (s, 2H), 1.30 (s, 2H), 1.15 (s, 1H).	373.15	E	
I-1242		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.14 (d, J = 8.8 Hz, 1H), 8.03 (dd, J = 5.0, 1.9 Hz, 1H), 7.66 (dd, J = 7.4, 1.9 Hz, 1H), 6.96 (dd, J = 7.3, 4.9 Hz, 1H), 4.98 (t, J = 9.0 Hz, 1H), 3.87 (s, 3H), 3.14 (p, J = 9.0 Hz, 1H), 2.62 (dd, J = 12.6, 9.6 Hz, 1H), 2.33 (p, J = 1.8 Hz, 1H), 2.27 - 2.11 (m, 3H), 1.70 - 1.53 (m, 3H), 1.45 (d, J = 6.7 Hz, 2H), 1.31 (dd, J = 12.1, 6.9 Hz, 2H), 1.21 - 1.08 (m, 1H).	373.15	E	

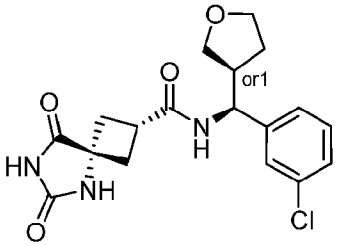
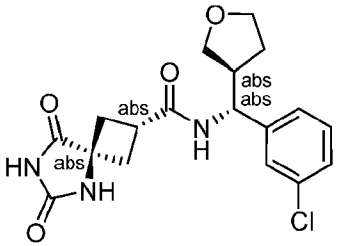
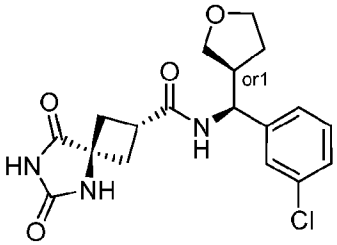
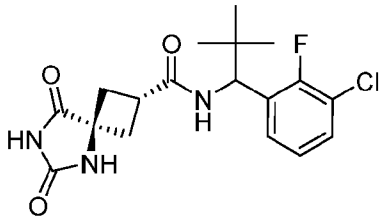
I-1243		(400 MHz, DMSO-d6) 10.57 (d, J = 9.8 Hz, 1H), 8.28 (t, J = 4.5 Hz, 1H), 8.14 (d, J = 8.9 Hz, 1H), 8.03 (ddd, J = 5.0, 1.9, 0.8 Hz, 1H), 7.65 (ddd, J = 7.2, 5.1, 1.9 Hz, 1H), 6.96 (ddd, J = 7.2, 4.9, 1.1 Hz, 1H), 4.99 (q, J = 9.0 Hz, 1H), 3.87 (s, 3H), 3.13 (h, J = 8.9 Hz, 1H), 2.73 - 2.58 (m, 1H), 2.47 - 2.28 (m, 2H), 2.19 (ddd, J = 26.0, 16.7, 10.6 Hz, 2H), 1.67 - 1.51 (m, 3H), 1.45 (s, 2H), 1.37 - 1.26 (m, 2H), 1.16 (d, J = 6.1 Hz, 1H).	373.2	E	
I-1244		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.49 (d, J = 8.6 Hz, 1H), 8.27 (s, 1H), 7.53- 7.35 (m, 4H), 7.01 (t, J = 56.0 Hz, 1H), 4.63 (t, J = 9.2 Hz, 1H), 3.09 (p, J = 8.9 Hz, 1H), 2.48 -2.27 (m, 4H), 2.16 (p, J = 8.4 Hz, 1H), 1.76 - 1.65 (m, 1H), 1.63 - 1.36 (m, 4H), 1.34 - 1.19 (m, 2H), 1.08 (dq, J = 16.4, 8.2 Hz, 1H).	390.2	E	
I-1245		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.48 (d, J = 8.7 Hz, 1H), 8.27 (s, 1H), 7.53 - 7.36 (m, 3H), 7.01 (t, J = 56.0 Hz, 1H), 4.63 (t, J = 9.1 Hz, 1H), 3.09 (p, J = 9.1 Hz, 1H), 2.47 - 2.27 (m, 4H), 2.17 (h, J = 8.5 Hz, 1H), 1.78 - 1.66 (m, 1H), 1.63 - 1.37 (m, 4H), 1.28 (dd, J = 14.2, 9.1 Hz, 2H), 1.16 - 1.02 (m, 1H).	390.2	E	
I-1246		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 8.36 (d, J = 8.7 Hz, 1H), 7.53-7.35 (m, 4H), 7.01 (t, J = 56.0 Hz, 1H), 4.62 (t, J = 9.3 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.66 (ddd, J = 16.2, 12.0, 9.1 Hz, 2H), 2.28 -2.19 (m, 2H), 2.14 (ddt, J = 12.9, 8.9, 4.8 Hz, 1H), 1.74 (tt, J = 12.1, 5.7 Hz, 1H), 1.65 - 1.37 (m, 4H), 1.36 - 1.19 (m, 2H), 1.08 (dq, J = 12.4, 8.2 Hz, 1H).	393.2	E	

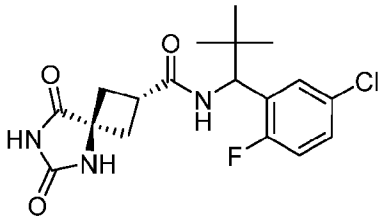
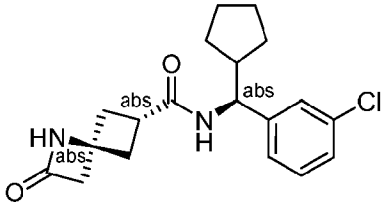
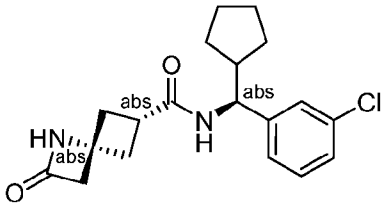
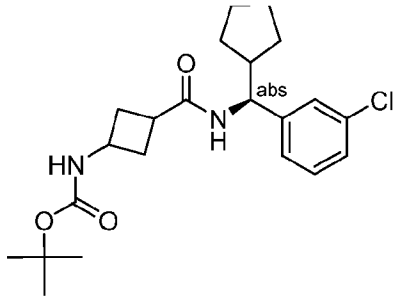
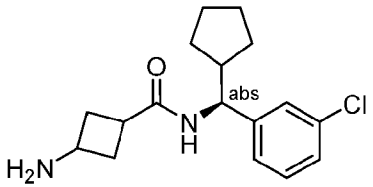
I-1247		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 8.36 (d, J = 8.6 Hz, 1H), 7.54 - 7.35 (m, 4H), 7.01 (t, J = 56.0 Hz, 1H), 4.62 (dd, J = 9.9, 8.6 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.75 - 2.60 (m, 2H), 2.27- 2.19 (m, 2H), 2.14 (ddt, J = 13.0, 8.9, 4.9 Hz, 1H), 1.79 - 1.69 (m, 1H), 1.65- 1.37 (m, 4H), 1.35 -1.19 (m, 2H), 1.08 (dq, J = 12.5, 8.2 Hz, 1H).	392.3	D	
I-1248		(400 MHz, Methanol-d4) 7.65-7.23 (m, 4H), 6.76 (t, J = 56.3 Hz, 1H), 4.67 (dd, J = 15.9, 10.4 Hz, 1H), 3.25-3.14 (m, 1H), 2.94-2.84 (m, 1H), 2.67- 2.52 (m, 1H), 2.51- 2.23 (m, 3H), 1.92 (dt, J = 8.8, 4.7 Hz, 1H), 1.77- 1.49 (m, 4H), 1.47-1.30 (m, 2H), 1.15 (dt, J = 12.8, 8.0 Hz, 1H).	392.15	D	
I-1249		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.42 (d, J = 8.7 Hz, 1H), 8.28 (s, 1H), 7.11 - 7.01 (m, 3H), 4.63 (t, J = 9.1 Hz, 1H), 3.09 (p, J = 9.0 Hz, 1H), 2.48 - 2.36 (m, 4H), 2.12 (q, J = 8.4 Hz, 1H), 1.67 (dd, J = 12.1, 7.3 Hz, 1H), 1.59 - 1.54 (m, 2H), 1.49 (dd, J = 16.0, 7.8 Hz, 1H), 1.44 (s, 1H), 1.30 - 1.18 (m, 2H), 1.12 (s, 1H).	378.2	E	
I-1250		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.42 (d, J = 8.7 Hz, 1H), 8.28 (s, 1H), 7.11 - 7.01 (m, 3H), 4.63 (t, J = 9.1 Hz, 1H), 3.16 - 3.02 (m, 1H), 2.48 - 2.27 (m, 4H), 2.11 (p, J = 8.4 Hz, 1H), 1.67 (s, 1H), 1.56 (dd, J = 7.2, 3.8 Hz, 2H), 1.52 - 1.37 (m, 2H), 1.34 - 1.19 (m, 2H), 1.19 - 1.07 (m, 1H).	378.15	E	

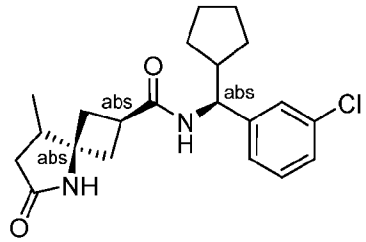
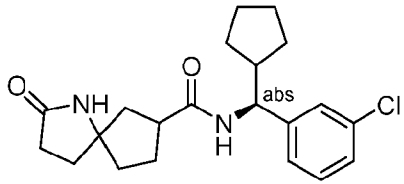
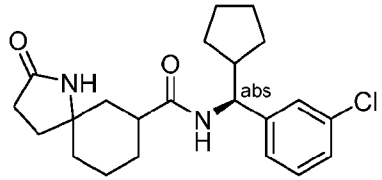
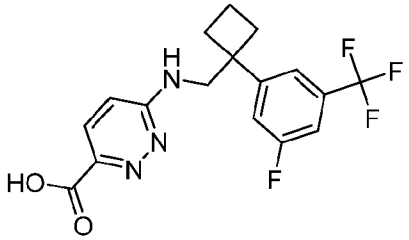
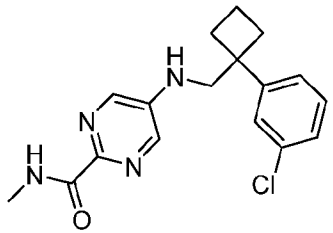
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I-1252		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 8.28 (d, J = 8.7 Hz, 1H), 7.11 - 7.00 (m, 3H), 4.61 (t, J = 9.2 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.73 - 2.59 (m, 2H), 2.29 - 2.08 (m, 3H), 1.74 - 1.67 (m, 1H), 1.58 (s, 2H), 1.55 - 1.36 (m, 1H), 1.27 (t, J = 10.3 Hz, 3H), 1.14 (dt, J = 12.5, 8.2 Hz, 1H).	378.15	D	
I-1253		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.42 (d, J = 8.8 Hz, 1H), 8.28 (d, J = 7.8 Hz, 1H), 7.12 - 7.01 (m, 3H), 4.62 (td, J = 9.2, 5.4 Hz, 1H), 3.20 - 3.02 (m, 1H), 2.67 - 2.59 (m, 1H), 2.44 - 2.35 (m, 2H), 2.25 - 2.04 (m, 2H), 1.74 - 1.64 (m, 1H), 1.57 (s, 2H), 1.46 (s, 2H), 1.24 (s, 2H), 1.14 (q, J = 11.7, 9.8 Hz, 1H).	378.15	D	
I-1254			388.2	B	D

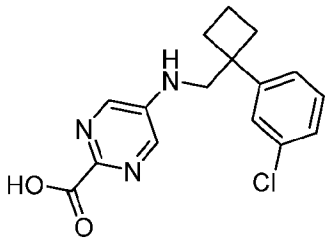
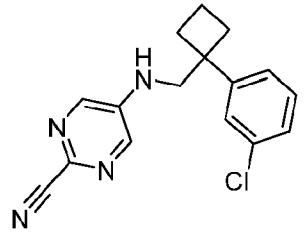
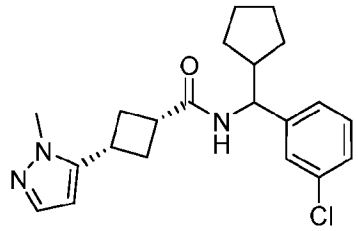
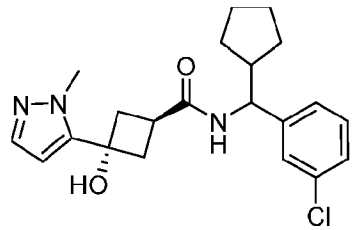
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I-1256			361.33	C	C
I-1257			361.23	D	
I-1258		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 8.29 (d, J = 8.7 Hz, 1H), 7.41 - 7.15 (m, 3H), 7.11 (s, 1H), 7.02 (dd, J = 7.2, 3.0 Hz, 1H), 4.59 (t, J = 9.3 Hz, 1H), 3.13 (t, J = 9.0 Hz, 1H), 2.81 - 2.61 (m, 2H), 2.27 - 2.09 (m, 3H), 1.72 (d, J = 7.6 Hz, 1H), 1.58 (s, 2H), 1.52 - 1.37 (m, 2H), 1.37 - 1.21 (m, 2H), 1.15 - 1.02 (m, 1H).	408.05	E	

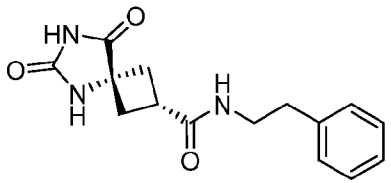
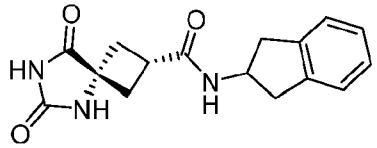
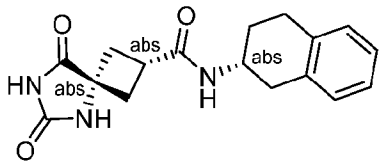
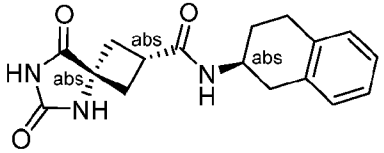
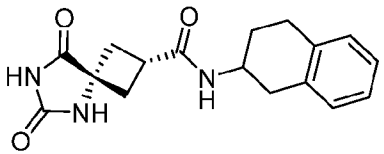
I-1259		(400 MHz, DMSO-d6) δ 8.24 (d, J = 2.6 Hz, 1H), 8.07 (t, J = 6.2 Hz, 1H), 7.77 (dd, J = 9.5, 2.6 Hz, 1H), 7.31 (t, J = 7.8 Hz, 1H), 7.21 (ddd, J = 7.9, 1.9, 0.8 Hz, 1H), 7.14 (t, J = 1.8 Hz, 1H), 7.09 – 7.06 (m, 1H), 6.38 (d, J = 9.5 Hz, 1H), 3.55 (d, J = 6.2 Hz, 2H), 3.45 (s, 3H), 2.37 – 2.30 (m, 2H), 2.25 – 2.16 (m, 2H), 2.08 – 1.96 (m, 1H), 1.81 – 1.71 (m, 1H) ppm.	331.2	E	
I-1260		NMR (400 MHz, DMSOd6) δ 13.09 (s, 1H), 8.06 (d, J = 1.7 Hz, 1H), 7.75 (s, 1H), 7.3 (submerged t, J = 7.8 Hz, 1H), 7.28 (submerged s, 1H), 7.21 (submerged d, J = 6.9 Hz, 1H), 7.19 (submerged dd, J = 7.3, 1.0 Hz, 1H), 6.97 (br s, 1H), 5.45 (t, J = 5.9 Hz, 1H), 3.37 (d, J = 6.0 Hz, 2H), 2.37-2.23 (m, 4H), 2.17 – 2.05 (m, 1H), 1.88 – 1.76 (m, 1H).	313.2	E	
I-1261		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.59 (s, 1H), 8.37 (d, J = 8.6 Hz, 1H), 7.43 (t, J = 1.8 Hz, 1H), 7.40 - 7.26 (m, 3H), 4.68 (t, J = 9.5 Hz, 1H), 3.79 - 3.70 (m, 2H), 3.58 (q, J = 7.7 Hz, 1H), 3.46 (dd, J = 8.7, 6.4 Hz, 1H), 3.10 (p, J = 9.0 Hz, 1H), 2.72 - 2.54 (m, 3H), 2.30 - 2.09 (m, 2H), 1.65 - 1.52 (m, 1H), 1.43 (dq, J = 14.8, 7.5 Hz, 1H).	378.1	E	
I-1262		(400 MHz, DMSO-d6) 10.53 (s, 1H), 8.53 (d, J = 8.7 Hz, 1H), 8.27 (s, 1H), 7.42 (t, J = 1.9 Hz, 1H), 7.39 - 7.27 (m, 4H), 4.71 - 4.62 (m, 1H), 3.73 (td, J = 8.2, 5.0 Hz, 2H), 3.57 (q, J = 7.6 Hz, 1H), 3.43 (dd, J = 8.6, 6.5 Hz, 1H), 3.05 (p, J = 8.9 Hz, 1H), 2.56 (t, J = 8.8 Hz, 1H), 2.46 - 2.33 (m, 2H), 2.29 (t, J = 10.4 Hz, 1H), 1.57 (dt, J = 12.8, 6.2 Hz, 1H), 1.42 (dq, J = 14.9, 7.7 Hz, 1H).	378.1	E	

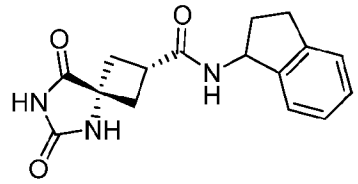
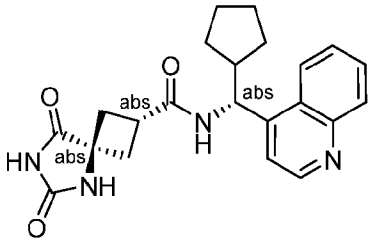
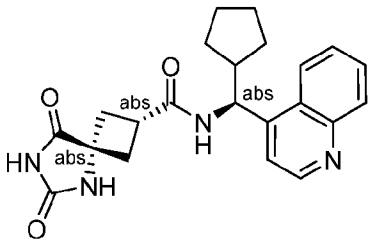
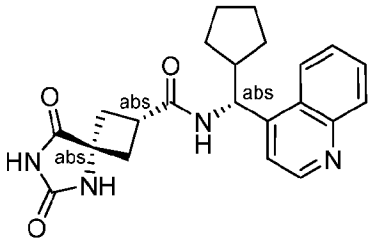
I-1263		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.62 - 8.36 (m, 1H), 8.29 (s, 1H), 7.44 - 7.22 (m, 4H), 4.72 (t, J = 9.2 Hz, 1H), 3.74 (td, J = 8.2, 4.7 Hz, 1H), 3.62 (q, J = 7.7 Hz, 1H), 3.41 (s, 1H), 3.22 (dd, J = 8.6, 7.0 Hz, 1H), 3.09 (h, J = 8.5 Hz, 1H), 2.69 - 2.53 (m, 1H), 2.48 - 2.28 (m, 4H), 1.93 (dtd, J = 12.6, 7.7, 4.8 Hz, 1H), 1.64 (dq, J = 12.4, 7.5 Hz, 1H).	378.1	E	
I-1264		(400 MIIz, DMSO-d6) 10.41 (s, 1II), 8.55 (d, J = 8.8 Hz, 1H), 8.28 (s, 1H), 7.44 - 7.21 (m, 4H), 4.72 (t, J = 9.2 Hz, 1H), 3.74 (td, J = 8.2, 4.8 Hz, 1H), 3.62 (q, J = 7.7 Hz, 1H), 3.39 (t, J = 8.0 Hz, 1H), 3.22 (dd, J = 8.6, 7.0 Hz, 1H), 3.09 (p, J = 9.1 Hz, 1H), 2.69 - 2.54 (m, 1H), 2.48 - 2.27 (m, 4H), 1.98 - 1.85 (m, 1H), 1.64 (dq, J = 12.2, 7.5 Hz, 1H).	378.1	E	
I-1265		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.40 (d, J = 8.7 Hz, 1H), 7.44 - 7.24 (m, 4H), 4.72 (t, J = 9.3 Hz, 1H), 3.75 (td, J = 8.2, 5.0 Hz, 1H), 3.63 (q, J = 7.6 Hz, 1H), 3.39 (dd, J = 8.6, 7.4 Hz, 1H), 3.23 (dd, J = 8.6, 6.9 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.65 (tdd, J = 15.1, 10.9, 8.1 Hz, 3H), 2.24 (ddd, J = 12.4, 9.0, 4.2 Hz, 1H), 2.16 (ddd, J = 12.9, 9.0, 4.2 Hz, 1H), 1.95 (dtd, J = 12.6, 7.7, 5.0 Hz, 1H), 1.67 (dq, J = 12.3, 7.5 Hz, 1H).	378.05	E	
I-1266				B	

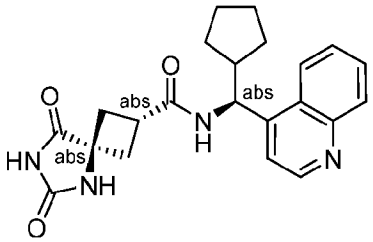
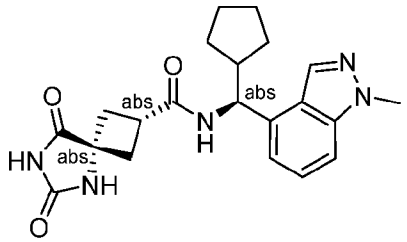
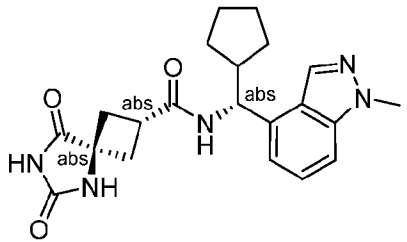
I-1267				B	
I-1268				C	
I-1269				C	
I-1270			307.17	E	
I-1271			307.22	D	

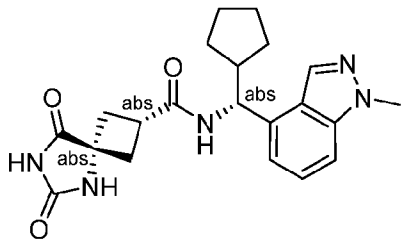
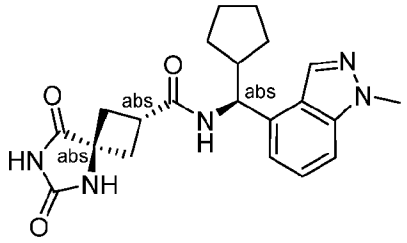
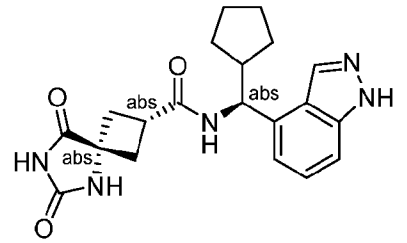
I-1272			375.28	C	
I-1273			375.28	C	
I-1274			389.28	D	
I-1275		NMR (400 MHz, DMSO-d6) δ 8.36 (d, J = 5.3 Hz, 0.5H), 7.60 (dd, J = 9.0, 5.5 Hz, 1H), 7.42 (d, J = 6.4 Hz, 1H), 7.39 – 7.27 (m, 2H), 7.09 (d, J = 5.0 Hz, 1H), 6.73 (dd, J = 8.8, 5.4 Hz, 1H), 3.86 (overlapping s, 2H), 2.41 – 2.20 (m, 4H), 2.19 – 2.03 (m, 1H), 1.92 – 1.66 (m, 1H). Minor impurities. COOH peak not fully observed.	370.3	D	
I-1276		NMR (400 MHz, DMSO-d6) δ 8.36 (q, J = 4.6 Hz, 1H), 7.96 (s, 2H), 7.27 (t, J = 7.8 Hz, 1H), 7.23 (t, J = 1.8 Hz, 1H), 7.20 – 7.13 (m, 2H), 6.57 (t, J = 6.2 Hz, 1H), 3.54 (d, J = 6.2 Hz, 2H), 2.72 (d, J = 4.8 Hz, 3H), 2.34 – 2.21 (m, 4H), 2.20 – 2.04 (m, 1H), 1.91 – 1.72 (m, 1H).	331.2	D	

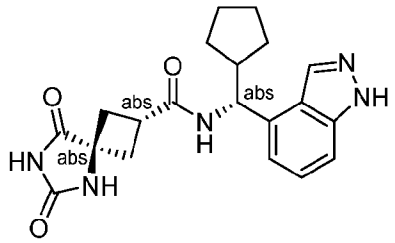
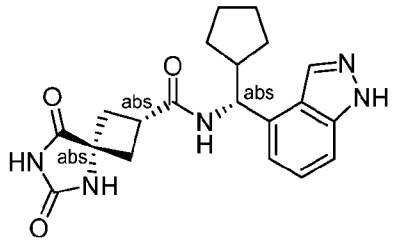
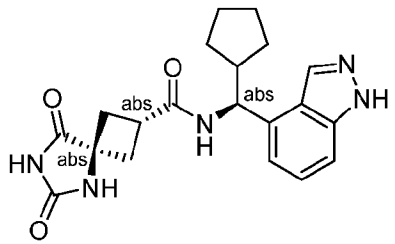
I-1277		NMR (400 MHz, DMSO-d6) δ 8.52 (s, 5H, formate salts), 7.92 (s, 2H), 7.30 (t, J = 7.8 Hz, 1H), 7.26 – 7.23 (m, 1H), 7.22 – 7.14 (m, 2H), 6.22 (br s, 1H), 3.45 (d, J = 6.3 Hz, 2H), 2.38 – 2.20 (m, 4H), 2.17 – 1.99 (m, 1H), 1.94 – 1.73 (m, 1H). Minor aliphatic impurities. 20% w/w of formate salts.	318.2	E	
I-1278		NMR (400 MHz, DMSO-d6) δ 7.97 (s, 2H), 7.25 (t, J = 7.7 Hz,1H), 7.20 (s, 1H), 7.17 (d, J = 7.7 Hz, 2H), 7.11 (d, J = 7.6 Hz, 1H), 3.58 (s, 2H), 2.26 (t, J = 7.5 Hz, 4H), 2.20 – 2.01 (m, 1H), 1.89 – 1.73 (m, 1H). Concentrated sample	299.2	E	
I-1279		(400 MHz, dmso) δ 8.25 (d, J = 8.7 Hz, 1H), 7.38 – 7.29 (m, 2H), 7.29 – 7.21 (m, 3H), 6.02 (d, J = 1.8 Hz, 1H), 4.55 (t, J = 9.3 Hz, 1H), 3.65 (s, 3H), 3.50 – 3.39 (m, 1H), 3.09 – 2.99 (submerged m, 1H), 2.55 – 2.46 (m, 1H), 2.46 – 2.36 (submerged m, 1H), 2.22 – 2.04 (m, 3H), 1.78 – 1.66 (m, 1H), 1.63 – 1.37 (m, 4H), 1.34 – 1.19 (m, 2H), 1.14 – 1.00 (m, 1H).	372.1	D	
I-1280		(400 MHz, dmso) δ 8.26 (d, J = 8.7 Hz, 1H), 7.36 – 7.29 (m, 2H), 7.28 – 7.21 (m, 2H), 7.21 – 7.18 (m, 1H), 6.02 (d, J = 1.8 Hz, 1H), 5.73 (br. s, 1H), 4.53 (t, J = 9.3 Hz, 1H), 3.74 (s, 3H), 3.26 (submerged. m, 1H), 2.53 (submerged. m, 2H), 2.47 – 2.38 (m, 1H), 2.37 – 2.27 (m, 1H), 2.21 – 2.10 (m, 1H), 1.75 – 1.64 (m, 1H), 1.64 – 1.37 (m, 4H), 1.32 – 1.18 (m, 2H), 1.13 – 1.00 (m, 1H). Partial formate salt	388.1	D	

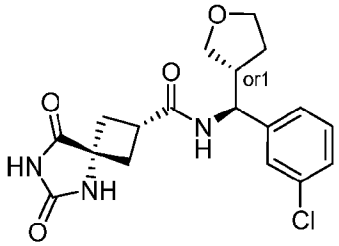
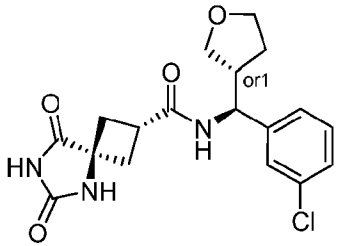
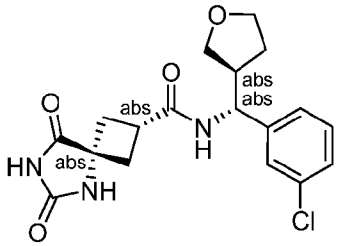
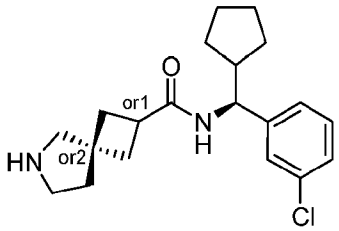
I-1281		(400 MHz, DMSO-d6) 10.54 - 10.49 (m, 1H), 8.58 (s, 1H), 7.91 (t, J = 5.6 Hz, 1H), 7.29 (t, J = 7.4 Hz, 2H), 7.23 - 7.15 (m, 3H), 3.31 - 3.22 (m, 2H), 3.07 (p, J = 9.1 Hz, 1H), 2.72 (d, J = 7.4 Hz, 2H), 2.72 - 2.63 (m, 2H), 2.15 (td, J = 9.5, 2.8 Hz, 2H).	288.1	E	
I-1282		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 8.13 (d, J = 6.9 Hz, 1H), 7.21 (dd, J = 5.4, 3.3 Hz, 2H), 7.17 - 7.09 (m, 2H), 4.53 - 4.37 (m, 1H), 3.21 - 2.99 (m, 3H), 2.73 (ddd, J = 19.7, 14.4, 7.7 Hz, 4H), 2.16 (ddd, J = 13.0, 8.3, 2.8 Hz, 2H).	300.1	E	
I-1283		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.62 (d, J = 1.7 Hz, 1H), 7.90 (d, J = 7.5 Hz, 1H), 7.13 - 7.02 (m, 4H), 3.94 (s, 1H), 3.12 (p, J = 9.1 Hz, 1H), 2.94 (dd, J = 16.2, 5.2 Hz, 1H), 2.81 (q, J = 6.1 Hz, 2H), 2.73 (ddd, J = 13.6, 9.0, 3.0 Hz, 2H), 2.60 (dd, J = 16.3, 9.7 Hz, 1H), 2.23 - 2.13 (m, 2H), 1.98 - 1.88 (m, 1H), 1.70 - 1.55 (m, 1H).	314.1	E	
I-1284		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.62 (s, 1H), 7.90 (d, J = 7.5 Hz, 1H), 7.15 - 6.99 (m, 4H), 3.99 - 3.90 (m, 1H), 3.12 (p, J = 9.1 Hz, 1H), 2.94 (dd, J = 16.4, 5.3 Hz, 1H), 2.81 (dt, J = 10.6, 5.0 Hz, 2H), 2.73 (ddd, J = 13.8, 9.2, 3.0 Hz, 2H), 2.60 (dd, J = 16.4, 9.7 Hz, 1H), 2.23 - 2.13 (m, 2H), 1.92 (dd, J = 12.3, 4.3 Hz, 1H), 1.63 (dtd, J = 12.4, 10.0, 6.5 Hz, 1H).	314.15	E	
I-1285		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.62 (s, 1H), 7.90 (d, J = 7.4 Hz, 1H), 7.15 - 6.99 (m, 4H), 3.95 (s, 1H), 3.12 (p, J = 9.1 Hz, 1H), 2.94 (dd, J = 16.2, 5.1 Hz, 1H), 2.81 (q, J = 6.0 Hz, 2H), 2.72 (ddd, J = 12.0, 10.4, 3.0 Hz, 2H), 2.60 (dd, J = 16.4, 9.7 Hz, 1H), 2.23 - 2.13 (m, 2H), 1.95 - 1.88 (m, 1H), 1.63 (dtd, J = 12.5, 10.1, 6.5 Hz, 1H).	314.15	E	

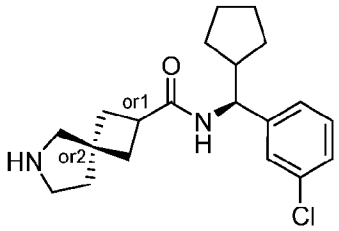
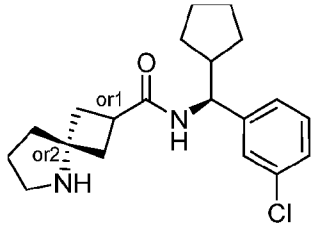
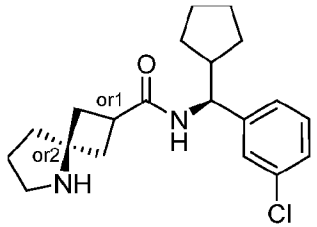
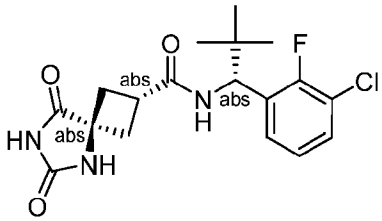
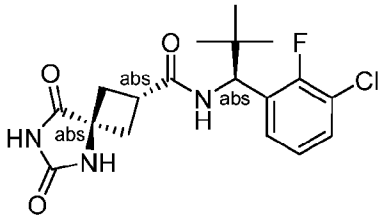
I-1286		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.19 (d, J = 8.3 Hz, 1H), 7.24 (d, J = 6.1 Hz, 1H), 7.20 (d, J = 6.2 Hz, 3H), 5.30 (q, J = 8.1 Hz, 1H), 3.15 (p, J = 9.0 Hz, 1H), 2.92 (ddd, J = 15.8, 8.8, 3.2 Hz, 1H), 2.78 (ddd, J = 15.8, 8.9, 4.7 Hz, 3H), 2.37 (dtd, J = 11.4, 7.8, 3.2 Hz, 1H), 2.25 (d, J = 9.9 Hz, 1H), 2.20 (td, J = 9.2, 8.4, 4.5 Hz, 1H), 1.78 (dq, J = 12.5, 8.7 Hz, 1H).	300.1	E	
I-1287		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.88 (d, J = 4.5 Hz, 1H), 8.62 (d, J = 8.4 Hz, 1H), 8.32 (d, J = 8.5 Hz, 1H), 8.26 (d, J = 1.7 Hz, 1H), 8.03 (dd, J = 8.4, 1.3 Hz, 1H), 7.76 (ddd, J = 8.3, 6.8, 1.3 Hz, 1H), 7.64 (ddd, J = 8.3, 6.8, 1.4 Hz, 1H), 7.51 (d, J = 4.6 Hz, 1H), 5.49 (t, J = 8.8 Hz, 1H), 3.18 - 3.05 (m, 1H), 2.51 - 2.46 (m, 3H), 2.42 - 2.26 (t, J = 10.4 Hz, 2H), 1.74 - 1.60 (m, 1H), 1.57 - 1.41 (m, 4H), 1.33 (s, 1H), 1.14 - 1.00 (m, 1H), 1.07 (s, 1H).	393.1	E	
I-1288		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.88 (d, J = 4.5 Hz, 1H), 8.62 (d, J = 8.5 Hz, 1H), 8.32 (d, J = 8.5 Hz, 1H), 8.26 (d, J = 1.7 Hz, 1H), 8.03 (d, J = 8.4 Hz, 1H), 7.80 - 7.72 (m, 1H), 7.68 - 7.60 (m, 1H), 7.51 (d, J = 4.6 Hz, 1H), 5.49 (t, J = 8.8 Hz, 1H), 3.11 (p, J = 9.0 Hz, 1H), 2.49 - 2.35 (m, 2H), 2.34 (td, J = 8.1, 7.5, 3.9 Hz, 1H), 2.26 (t, J = 10.4 Hz, 1H), 1.70 (d, J = 9.8 Hz, 1H), 1.47 (s, 6H), 1.35 (dd, J = 12.2, 7.7 Hz, 1H), 1.07 (s, 1H).	393.15	E	
I-1289		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.88 (d, J = 4.6 Hz, 1H), 8.60 (s, 1H), 8.49 (d, J = 8.5 Hz, 1H), 8.33 (d, J = 8.5 Hz, 1H), 8.03 (d, J = 8.4 Hz, 1H), 7.76 (t, J = 7.5 Hz, 1H), 7.64 (t, J = 7.6 Hz, 1H), 7.54 (d, J = 4.6 Hz, 1H), 5.49 (t, J = 9.0 Hz, 1H), 3.13 (p, J = 9.2 Hz, 1H), 2.75 - 2.65 (m, 1H),	393.15	E	

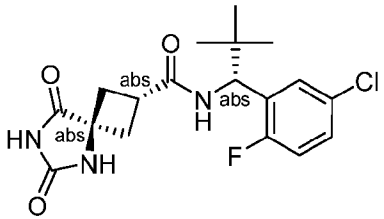
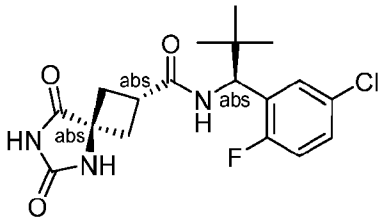
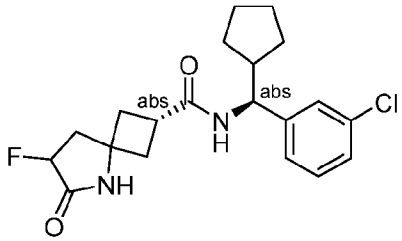
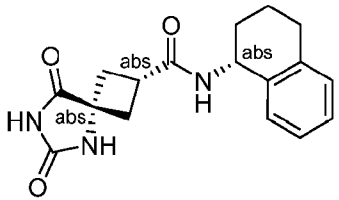
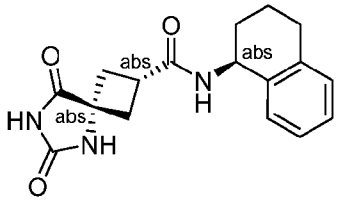
		2.47 (s, 1H), 2.25 (d, J = 10.8 Hz, 1H), 2.11 (s, 1II), 1.49 (s, 8II), 1.06 (s, 1II).			
I-1290		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.88 (d, J = 4.5 Hz, 1H), 8.60 (d, J = 1.7 Hz, 1H), 8.49 (d, J = 8.5 Hz, 1H), 8.33 (d, J = 8.4 Hz, 1H), 8.03 (dd, J = 8.5, 1.3 Hz, 1H), 7.76 (ddd, J = 8.3, 6.8, 1.3 Hz, 1H), 7.64 (ddd, J = 8.3, 6.8, 1.4 Hz, 1H), 7.54 (d, J = 4.5 Hz, 1H), 5.49 (t, J = 8.9 Hz, 1H), 3.14 (p, J = 9.0 Hz, 1H), 2.70 (dd, J = 12.1, 9.1 Hz, 1H), 2.61 (dd, J = 12.1, 9.1 Hz, 1H), 2.29 - 2.18 (m, 1H), 2.11 (ddd, J = 12.8, 8.9, 4.3 Hz, 1H), 1.80 - 1.62 (m, 3H), 1.54 (d, J = 5.8 Hz, 1H), 1.48 (d, J = 7.3 Hz, 1H), 1.38 - 1.30 (m, 2H), 1.24 (s, 1H), 1.13 - 0.99 (m, 1H).	393.15	D	
I-1291		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.49 (d, J = 8.3 Hz, 1H), 8.25 (d, J = 1.1 Hz, 2H), 7.47 (d, J = 8.5 Hz, 1H), 7.31 (dd, J = 8.4, 7.0 Hz, 1H), 7.04 (d, J = 7.0 Hz, 1H), 4.88 (dd, J = 10.0, 8.3 Hz, 1H), 4.02 (s, 3H), 3.17 - 3.04 (m, 1H), 2.47-2.37 (m, 3H), 2.35-2.27 (m, 1H), 2.25-2.17 (m, 1H), 1.79 (td, J = 12.1, 7.4 Hz, 1H), 1.66-1.46 (m, 3H), 1.44-1.30 (m, 2H), 1.21 (td, J = 11.9, 11.0, 6.3 Hz, 1H), 1.14 -1.01 (m, 1H).	396.15	E	
I-1292		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.49 (d, J = 8.4 Hz, 1H), 8.25 (d, J = 1.0 Hz, 2H), 7.47 (d, J = 8.4 Hz, 1H), 7.31 (dd, J = 8.4, 7.0 Hz, 1H), 7.04 (d, J = 7.0 Hz, 1H), 4.92- 4.85 (m, 1H), 4.02 (s, 3H), 3.10 (p, J = 8.8 Hz, 1H), 2.47 - 2.36 (m, 3H), 2.30 (dd, J = 7.9, 4.0 Hz, 1H), 2.24 - 2.17 (m, 1H), 1.84 - 1.72 (m, 1H), 1.66 - 1.45 (m, 3H), 1.43 - 1.29 (m, 2H), 1.26 -1.15 (m, 1H), 1.09 (td, J = 12.7, 6.3 Hz, 1H).	396.15	E	

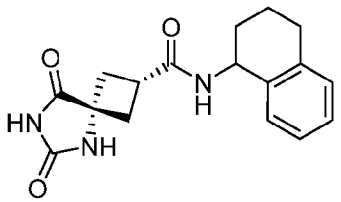
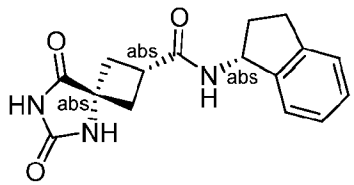
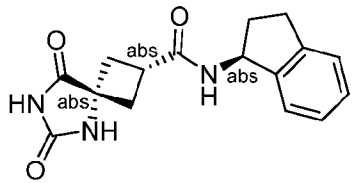
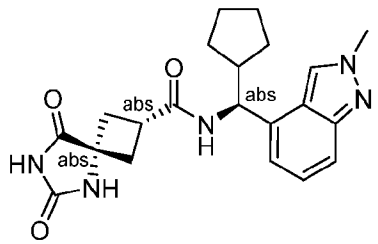
I-1293		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.60 (d, J = 1.6 Hz, 1H), 8.37 (d, J = 8.4 Hz, 1H), 8.25 (d, J = 0.9 Hz, 1H), 7.47 (d, J = 8.4 Hz, 1H), 7.32 (dd, J = 8.4, 7.0 Hz, 1H), 7.05 (d, J = 7.0 Hz, 1H), 4.90 (dd, J = 10.1, 8.3 Hz, 1H), 4.02 (s, 3H), 3.13 (p, J = 9.1 Hz, 1H), 2.74-2.64 (m, 1H), 2.62 - 2.54 (m, 1H), 2.43 (dt, J = 16.8, 8.1 Hz, 1H), 2.21 (ddd, J = 12.5, 8.9, 4.5 Hz, 1H), 2.09 (ddt, J = 13.9, 9.6, 4.9 Hz, 1H), 1.81 (td, J = 12.2, 7.3 Hz, 1H), 1.68 - 1.45 (m, 3H), 1.45 -1.31 (m, 2H), 1.27 - 1.16 (m, 1H), 1.14- 1.00 (m, 1H)	396.15	E	
I-1294		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.60 (d, J = 1.6 Hz, 1H), 8.37 (d, J = 8.4 Hz, 1H), 8.25 (d, J = 1.0 Hz, 1H), 7.47 (d, J = 8.4 Hz, 1H), 7.32 (dd, J = 8.4, 7.0 Hz, 1H), 7.06 (t, J = 8.0 Hz, 1H), 4.90 (dd, J = 10.1, 8.3 Hz, 1H), 4.02 (s, 3H), 3.13 (p, J = 9.1 Hz, 1H), 2.68 (d, J = 21.3 Hz, 1H), 2.60 - 2.54 (m, 1H), 2.44 (q, J = 8.3 Hz, 1H), 2.21 (ddd, J = 12.6, 9.0, 4.6 Hz, 1H), 2.09 (ddd, J = 12.8, 8.9, 4.5 Hz, 1H), 1.81 (h, J = 7.1 Hz, 1H), 1.68 - 1.45 (m, 3H), 1.45- 1.31 (m, 2H), 1.22 (dd, J = 13.3, 5.6 Hz, 1H), 1.13 -1.02 (m, 1H).	396.2	E	
I-1295		(400 MHz, DMSO-d6) 13.02 (s, 1H), 10.57 (s, 1H), 8.49 (d, J = 8.4 Hz, 1H), 8.27 (d, J = 7.6 Hz, 2H), 7.38 (d, J = 8.4 Hz, 1H), 7.30 - 7.22 (m, 1H), 7.01 (d, J = 7.0 Hz, 1H), 4.91 (t, J = 9.1 Hz, 1H), 3.11 (p, J = 9.1 Hz, 1H), 2.43 (t, J = 8.7 Hz, 3H), 2.32 (s, 1H), 2.24 (q, J = 12.1, 10.6 Hz, 1H), 1.84 - 1.74 (m, 1H), 1.57 (d, J = 32.3 Hz, 3H), 1.53 - 1.31 (m, 1H), 1.23 (d, J = 12.9 Hz, 2H), 1.09 (dt, J = 12.6, 7.5 Hz, 1H).	382.15	E	

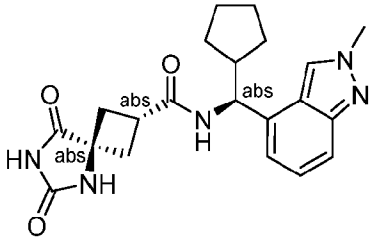
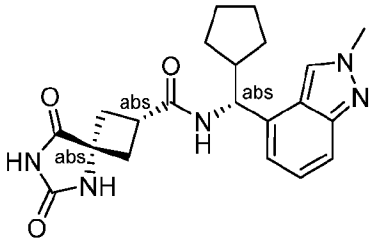
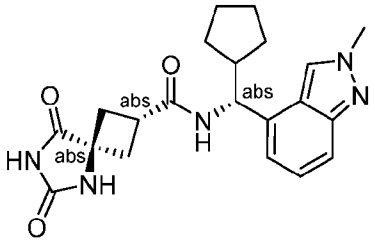
I-1296		(400 MHz, DMSO-d6) 13.02 (s, 1H), 10.58 (s, 1H), 8.49 (d, J = 8.4 Hz, 1H), 8.27 (d, J = 7.7 Hz, 2H), 7.38 (d, J = 8.3 Hz, 1H), 7.26 (dd, J = 8.3, 7.0 Hz, 1H), 7.01 (d, J = 7.0 Hz, 1H), 4.90 (t, J = 9.1 Hz, 1H), 3.11 (p, J = 9.0 Hz, 1H), 2.47 - 2.36 (m, 3H), 2.36 - 2.27 (m, 1H), 2.27 - 2.18 (m, 1H), 1.84 - 1.73 (m, 1H), 1.52 (s, 3H), 1.47 - 1.31 (m, 1H), 1.24 (s, 2H), 1.15 - 1.02 (m, 1H).	382.15	E	
I-1297		(400 MHz, DMSO-d6) 13.02 (s, 1H), 10.55 (s, 1H), 8.60 (s, 1H), 8.37 (d, J = 8.4 Hz, 1H), 8.27 (s, 1H), 7.38 (d, J = 8.4 Hz, 1H), 7.26 (t, J = 7.7 Hz, 1H), 7.02 (d, J = 7.0 Hz, 1H), 4.92 (t, J = 9.2 Hz, 1H), 3.14 (p, J = 9.2 Hz, 1H), 2.69 (dd, J = 12.0, 9.2 Hz, 1H), 2.58 (dd, J = 12.0, 9.3 Hz, 1H), 2.50 - 2.44 (s, 1H), 2.22 (ddd, J = 12.4, 8.9, 4.3 Hz, 1H), 2.15 - 2.07 (d, J = 4.5 Hz, 1H), 1.86 - 1.77 (m, 1H), 1.60 (dd, J = 12.4, 8.5 Hz, 1H), 1.53 (tt, J = 10.9, 5.9 Hz, 1H), 1.48 - 1.34 (m, 3H), 1.26 - 1.19 (m, 1H), 1.09 (qd, J = 13.9, 12.3, 7.7 Hz, 1H).	382.15	E	
I-1298		(400 MHz, DMSO-d6) 13.02 (s, 1H), 10.55 (s, 1H), 8.60 (s, 1H), 8.37 (d, J = 8.4 Hz, 1H), 8.27 (s, 1H), 7.38 (d, J = 8.3 Hz, 1H), 7.26 (dd, J = 8.3, 7.0 Hz, 1H), 7.02 (d, J = 7.0 Hz, 1H), 4.97 - 4.87 (m, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.69 (dd, J = 12.0, 9.2 Hz, 1H), 2.58 (dd, J = 12.0, 9.3 Hz, 1H), 2.45 (q, J = 8.3 Hz, 1H), 2.22 (ddd, J = 12.4, 9.0, 4.4 Hz, 1H), 2.09 (ddd, J = 12.8, 7.7, 4.4 Hz, 1H), 1.88 - 1.77 (m, 1H), 1.59 - 1.31 (m, 5H), 1.24 (s, 1H), 1.16 - 1.02 (m, 1H).	382.15	D	

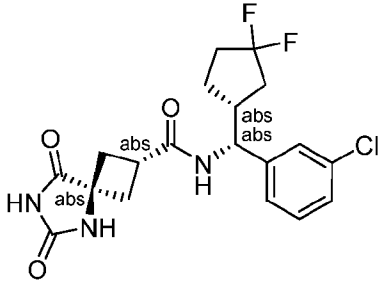
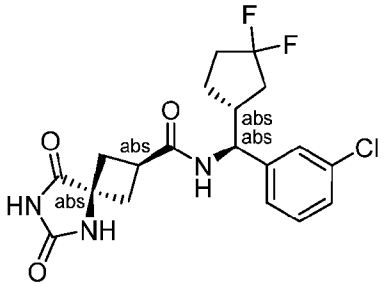
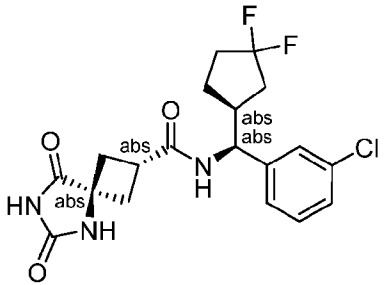
I-1299		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.52 (d, J = 8.7 Hz, 1H), 8.27 (s, 1H), 7.45 - 7.25 (m, 4H), 4.67 (dd, J = 10.2, 8.7 Hz, 1H), 3.79 - 3.68 (m, 2H), 3.57 (q, J = 7.7 Hz, 1H), 3.43 (dd, J = 8.6, 6.5 Hz, 1H), 3.05 (tt, J = 9.6, 8.1 Hz, 1H), 2.69 - 2.54 (m, 1H), 2.47 - 2.24 (m, 4H), 1.58 (dtd, J = 12.5, 7.8, 4.8 Hz, 1H), 1.48 - 1.38 (m, 1H).	378.1	E	
I-1300		(400 MIIz, DMSO-d6) 10.53 (s, 1I1), 8.58 (s, 1H), 8.37 (d, J = 8.6 Hz, 1H), 7.46 - 7.25 (m, 4H), 4.75 - 4.62 (m, 1H), 3.80 - 3.70 (m, 2H), 3.58 (q, J = 7.7 Hz, 1H), 3.46 (dd, J = 8.6, 6.5 Hz, 1H), 3.10 (p, J = 9.1 Hz, 1H), 2.73 - 2.54 (m, 3H), 2.29 - 2.05 (m, 2H), 1.58 (dt, J = 12.6, 6.3 Hz, 1H), 1.48 - 1.36 (m, 1H).	378.1	D	
I-1301		(400 MHz, Methanol-d4) 7.44 - 7.23 (m, 4H), 4.81 (d, J = 10.5 Hz, 1H), 3.94 (td, J = 8.3, 5.0 Hz, 1H), 3.79 (q, J = 7.7 Hz, 1H), 3.54 (dd, J = 8.8, 7.3 Hz, 1H), 3.40 - 3.35 (m, 1H), 3.22 (tt, J = 9.6, 8.2 Hz, 1H), 2.90 (dddd, J = 12.4, 6.7, 3.4, 1.3 Hz, 2H), 2.83 - 2.69 (m, 1H), 2.55 - 2.38 (m, 2H), 2.14 (dtd, J = 12.8, 7.8, 5.0 Hz, 1H), 1.86 (dq, J = 12.6, 7.5 Hz, 1H).	378.1	E	
I-1302				D	

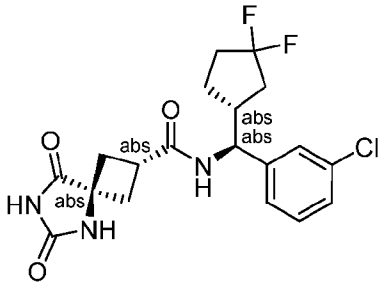
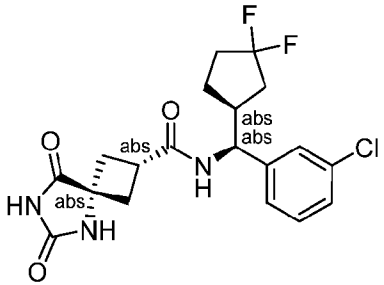
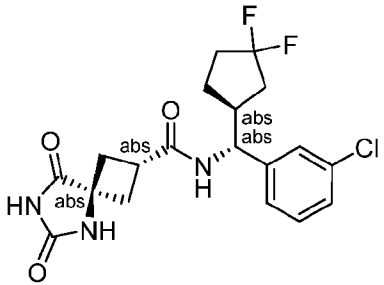
I-1303				D	
I-1304				D	
I-1305				D	
I-1306				E	
I-1307				B	

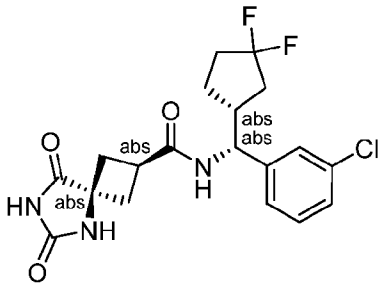
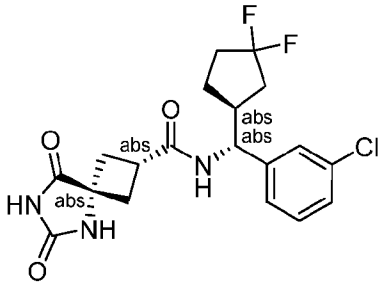
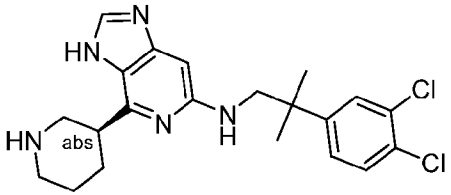
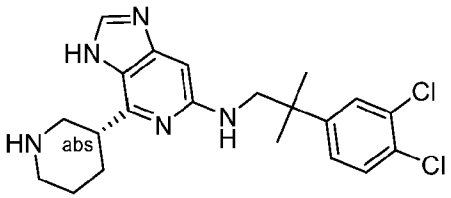
I-1308				E	
I-1309				B	B
I-1310			379.23	D	
I-1311		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.59 (s, 1H), 8.20 (d, J = 8.6 Hz, 1H), 7.14 (d, J = 3.1 Hz, 3H), 7.09 (p, J = 3.1 Hz, 1H), 5.00 (d, J = 8.8 Hz, 1H), 3.15 (p, J = 9.1 Hz, 1H), 2.73 (td, J = 19.1, 16.6, 10.6 Hz, 4H), 2.21 (q, J = 9.3 Hz, 2H), 1.87 (d, J = 10.8 Hz, 2H), 1.69 (tt, J = 17.2, 9.4 Hz, 2H).	314.15	E	
I-1312		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.59 (s, 1H), 8.20 (d, J = 8.7 Hz, 1H), 7.14 (d, J = 3.2 Hz, 3H), 7.11 - 7.06 (m, 1H), 4.98 (d, J = 8.2 Hz, 1H), 3.15 (p, J = 9.0 Hz, 1H), 2.82 - 2.64 (m, 4H), 2.22 (qd, J = 9.8, 9.4, 5.1 Hz, 2H), 1.92 - 1.81 (m, 2H), 1.69 (tt, J = 16.8, 9.6 Hz, 2H).	314.15	E	

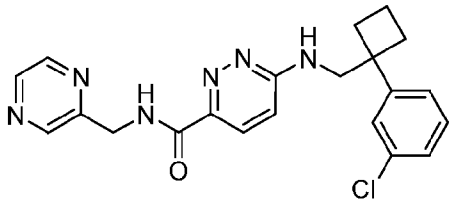
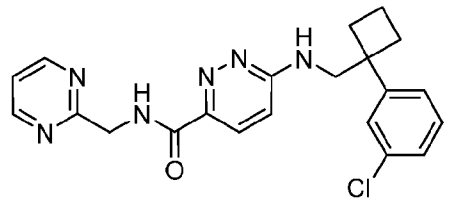
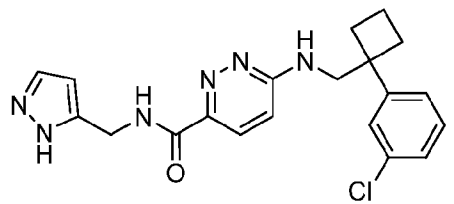
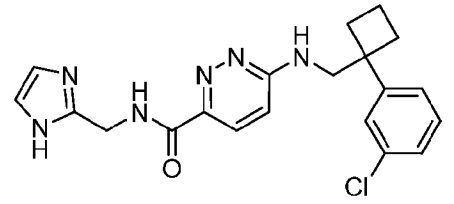
I-1313		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.60 (s, 1H), 8.20 (d, J = 8.7 Hz, 1H), 7.14 (d, J = 3.1 Hz, 3H), 7.08 (dd, J = 7.2, 2.8 Hz, 1H), 5.03 - 4.93 (m, 1H), 3.15 (p, J = 9.0 Hz, 1H), 2.73 (dtd, J = 23.9, 11.7, 11.2, 4.5 Hz, 4H), 2.22 (qd, J = 10.0, 9.5, 5.2 Hz, 2H), 1.87 (dt, J = 11.1, 3.9 Hz, 2H), 1.68 (ddd, J = 18.9, 14.9, 8.1 Hz, 2H).	314.2	E	
I-1314		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.19 (d, J = 8.3 Hz, 1H), 7.28 - 7.14 (m, 4H), 5.30 (q, J = 8.0 Hz, 1H), 3.15 (p, J = 9.0 Hz, 1H), 2.92 (ddd, J = 15.8, 8.8, 3.2 Hz, 1H), 2.78 (ddd, J = 15.2, 8.4, 4.0 Hz, 3H), 2.37 (dtd, J = 12.5, 7.8, 3.2 Hz, 1H), 2.29 - 2.15 (m, 2H), 1.78 (dq, J = 12.5, 8.7 Hz, 1H).	300.05	E	
I-1315		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.59 (s, 1H), 8.19 (d, J = 8.3 Hz, 1H), 7.27 - 7.15 (m, 4H), 5.30 (q, J = 7.9 Hz, 1H), 3.15 (p, J = 9.0 Hz, 1H), 2.97 - 2.86 (m, 1H), 2.79 (td, J = 13.5, 10.8, 7.5 Hz, 3H), 2.36 (dt, J = 12.8, 4.0 Hz, 1H), 2.23 (s, 1H), 2.22 (q, J = 11.0, 10.6 Hz, 1H), 1.78 (dq, J = 12.0, 8.7 Hz, 1H).	300.1	E	
I-1316		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.49 (d, J = 0.9 Hz, 1H), 8.39 (d, J = 8.6 Hz, 1H), 8.26 (s, 1H), 7.43 (d, J = 8.6 Hz, 1H), 7.15 (dd, J = 8.6, 6.8 Hz, 1H), 6.93 (d, J = 6.8 Hz, 1H), 4.84 (t, J = 9.2 Hz, 1H), 4.16 (s, 3H), 3.17 - 3.03 (m, 1H), 2.50 - 2.37 (m, 3H), 2.37 - 2.22 (m, 2H), 1.73 (ddd, J = 12.1, 8.3, 4.6 Hz, 1H), 1.66-1.31 (m, 5H), 1.30 - 1.20 (m, 1H), 1.09 (dq, J = 12.8, 8.2 Hz, 1H).	396.1	E	

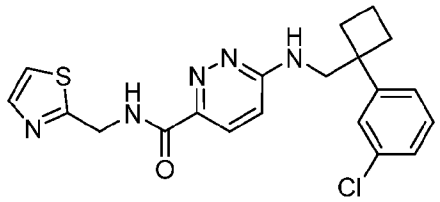
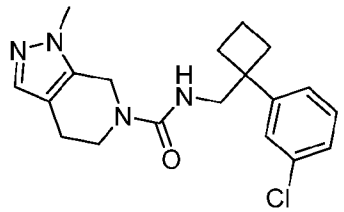
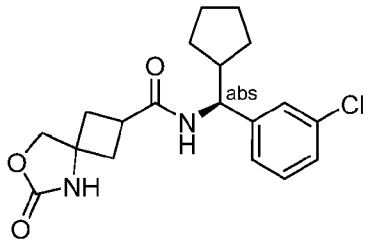
I-1317		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.49 (d, J = 1.0 Hz, 1H), 8.39 (d, J = 8.6 Hz, 1H), 8.26 (s, 1H), 7.43 (dt, J = 8.7, 0.9 Hz, 1H), 7.15 (dd, J = 8.6, 6.8 Hz, 1H), 6.93 (d, J = 6.8 Hz, 1H), 4.84 (t, J = 9.1 Hz, 1H), 4.16 (s, 3H), 3.10 (tt, J = 9.7, 8.2 Hz, 1H), 2.50 - 2.34 (m, 3H), 2.34 - 2.16 (m, 2H), 1.74 (td, J = 12.2, 7.4 Hz, 1H), 1.66 - 1.27 (m, 6II), 1.24 (s, 1II), 1.21 - 1.02 (m, 1II),	396.3	E	
I-1318		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.58 (s, 1H), 8.47 (d, J = 1.0 Hz, 1H), 8.25 (d, J = 8.6 Hz, 1H), 7.43 (dt, J = 8.7, 0.9 Hz, 1H), 7.16 (dd, J = 8.6, 6.8 Hz, 1H), 6.95 (d, J = 6.8 Hz, 1H), 4.87 (t, J = 9.3 Hz, 1H), 4.16 (s, 3H), 3.12 (p, J = 9.1 Hz, 1H), 2.70 (dd, J = 12.1, 9.1 Hz, 1H), 2.60 (dd, J = 12.1, 9.1 Hz, 1H), 2.50- 2.39 (m, 1H), 2.23 (ddd, J = 12.4, 8.9, 4.3 Hz, 1H), 2.16- 2.05 (m, 1H), 1.75 (dt, J = 14.5, 6.1 Hz, 1H), 1.68 - 1.22 (m, 6H), 1.19 - 1.03 (m, 1H).	396.35	E	
I-1319		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.58 (s, 1H), 8.47 (s, 1H), 8.25 (d, J = 8.6 Hz, 1H), 7.43 (d, J = 8.7 Hz, 1H), 7.16 (dd, J = 8.6, 6.8 Hz, 1H), 6.95 (d, J = 6.8 Hz, 1H), 4.87 (t, J = 9.2 Hz, 1H), 4.16 (s, 3H), 3.12 (p, J = 9.2 Hz, 1H), 2.70 (dd, J = 12.0, 9.1 Hz, 1H), 2.60 (dd, J = 12.1, 9.1 Hz, 1H), 2.45 (dd, J = 9.5, 7.6 Hz, 1H), 2.23 (ddd, J = 12.6, 9.0, 4.4 Hz, 1H), 2.11 (ddd, J = 12.9, 9.0, 4.5 Hz, 1H), 1.82 - 1.70 (m, 1H), 1.66 - 1.22 (m, 6H), 1.20- 1.03 (m, 1H).	396.35	E	

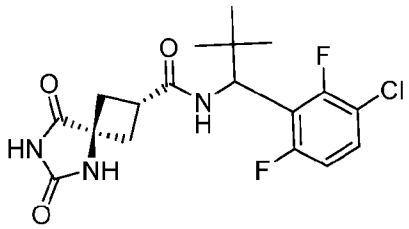
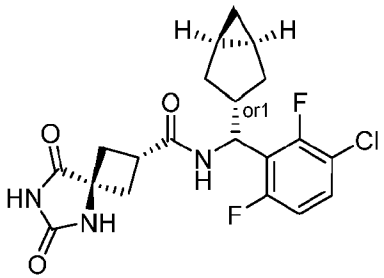
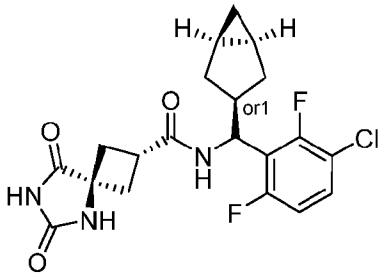
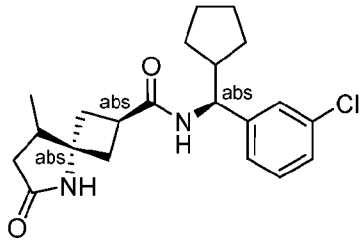
I-1320		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.49 (d, J = 8.5 Hz, 1H), 8.28 (s, 1H), 7.48 - 7.19 (m, 4H), 4.78 (s, 1H), 3.11 (s, 1H), 2.48 - 2.22 (m, 5H), 2.15 (s, 1H), 2.01 (s, 1H), 1.81 (s, 3H), 1.55 (s, 1H).	412	D	
I-1321		(400 MHz, DMSO-d6) 10.72 -10.41 (m, 1H), 8.51 (d, J = 8.8 Hz, 1H), 8.27 (d, J = 1.7 Hz, 1H), 7.49 -7.21 (m, 4H), 4.73 (t, J = 9.1 Hz, 1H), 3.14 - 3.02 (m, 1H), 2.48- 2.35 (m, 3H), 2.35 -2.27 (m, 1H), 2.25 -2.05 (m, 2H), 2.03 - 1.79 (m, 2H), 1.42 (q, J = 8.7 Hz, 2H).	412	E	
I-1322		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.60 (d, J = 1.7 Hz, 1H), 8.34 (d, J = 8.8 Hz, 1H), 7.49 - 7.23 (m, 3H), 4.78 (t, J = 9.1 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.67 (ddd, J = 15.8, 12.1, 9.0 Hz, 2H), 2.46 (d, J = 8.6 Hz, 1H), 2.25 (ddd, J = 12.3, 9.1, 4.1 Hz, 1H), 2.16 (ddt, J = 14.4, 10.0, 4.8 Hz, 2H), 2.09 - 1.93 (m, 1H), 1.92- 1.71 (m, 3H), 1.57 (dq, J = 13.0, 9.1 Hz, 1H).	412.05	C	

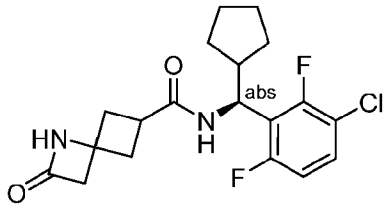
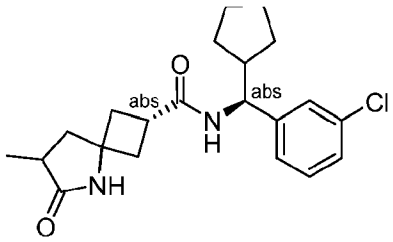
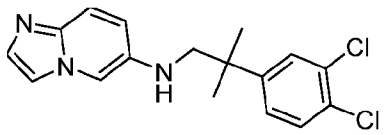
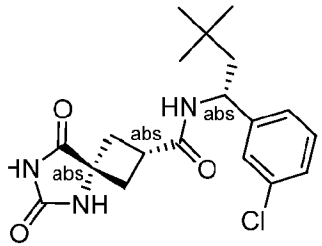
I-1323		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.59 (d, J = 1.6 Hz, 1H), 8.36 (d, J = 8.7 Hz, 1H), 7.42 (t, J = 1.8 Hz, 1H), 7.38- 7.33 (m, 1H), 7.30 (tt, J = 6.5, 1.5 Hz, 2H), 4.72 (t, J = 9.2 Hz, 1H), 3.12 (p, J = 9.0 Hz, 1H), 2.66 (ddd, J = 21.8, 12.1, 8.8 Hz, 2H), 2.46 (d, J = 8.7 Hz, 1H), 2.30 - 2.05 (m, 4H), 2.04 - 1.81 (m, 2H), 1.50- 1.34 (m, 2H).	412.15	C	
I-1324		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.49 (d, J = 8.6 Hz, 1H), 8.28 (s, 1H), 7.44 - 7.23 (m, 4H), 4.78 (t, J = 9.2 Hz, 1H), 3.15 - 3.06 (m, 1H), 2.42 (d, J = 10.3 Hz, 4H), 2.34 (d, J = 9.2 Hz, 1H), 2.14 (s, 1H), 2.02 (s, 1H), 1.82 (d, J = 14.4 Hz, 3H), 1.56 (d, J = 11.7 Hz, 1H).	412.05	D	
I-1325		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.51 (d, J = 8.7 Hz, 1H), 8.27 (d, J = 1.7 Hz, 1H), 7.44 - 7.22 (m, 4H), 4.73 (t, J = 9.1 Hz, 1H), 3.08 (dd, J = 9.7, 8.0 Hz, 1H), 2.49 - 2.35 (m, 4H), 2.29 (d, J = 10.6 Hz, 1H), 2.15 (ddt, J = 36.6, 13.8, 7.7 Hz, 2H), 2.04 - 1.78 (m, 2H), 1.42 (q, J = 8.6 Hz, 2H).	412.05	E	

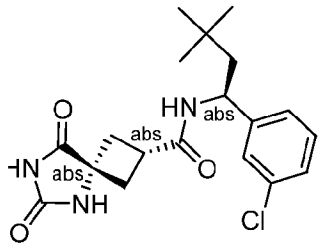
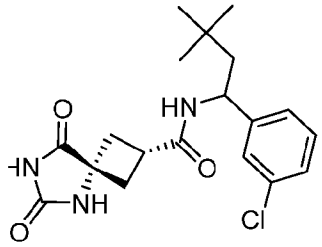
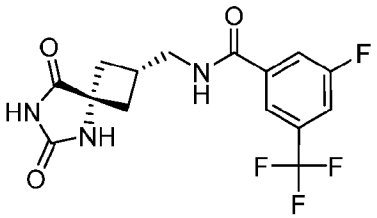
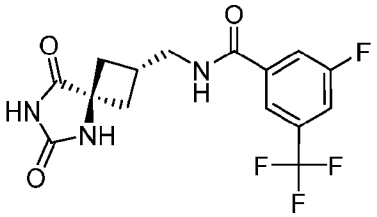
I-1326		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.60 (d, J = 1.7 Hz, 1H), 8.34 (d, J = 8.8 Hz, 1H), 7.42 (t, J = 1.8 Hz, 1H), 7.39 - 7.34 (m, 1H), 7.30 (ddt, J = 7.4, 5.9, 1.5 Hz, 2H), 4.78 (t, J = 9.1 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.67 (ddd, J = 15.8, 12.1, 9.0 Hz, 2H), 2.48- 2.40 (m, 1H), 2.25 (ddd, J = 12.4, 9.1, 4.2 Hz, 1H), 2.16 (ddt, J = 14.5, 10.0, 4.6 Hz, 2H), 2.01 (dtd, J = 17.3, 13.7, 8.9 Hz, 1H), 1.92 -1.72 (m, 3H), 1.57 (dq, J = 12.9, 9.1 Hz, 1H).	412.05	E	
I-1327		(400 MHz, DMSO-d6) 10.59 - 10.50 (m, 1H), 8.59 (d, J = 1.7 Hz, 1H), 8.36 (d, J = 8.7 Hz, 1H), 7.42 (t, J = 1.9 Hz, 1H), 7.38 -7.27 (m, 3H), 4.73 (t, J = 9.2 Hz, 1H), 3.12 (p, J = 9.1 Hz, 1H), 2.66 (ddd, J = 21.6, 12.2, 8.8 Hz, 2H), 2.46 (d, J = 8.6 Hz, 1H), 2.31 - 2.06 (m, 4H), 2.01 -1.80 (m, 2H), 1.42 (q, J = 9.0 Hz, 2H).	412.15	E	
I-1328		(400 MHz, DMSO-d6) 7.88 (s, 1H), 7.63 (q, J = 2.9, 2.3 Hz, 1H), 7.57- 7.49 (m, 1H), 7.46 - 7.40 (m, 1H), 6.30 (s, 1H), 5.65 (s, 1H), 3.55 (d, J = 6.3 Hz, 2H), 2.99 (s, 3H), 2.68 - 2.57 (m, 1H), 2.33 (s, 1H), 1.88 (s, 2H), 1.66 (s, 1H), 1.50 (s, 1H), 1.32 (s, 6H).	418.1	E	
I-1329		(400 MHz, DMSO-d6) 11.95 (s, 1H), 7.88 (s, 1H), 7.63 (d, J = 2.2 Hz, 1H), 7.53 (d, J = 8.5 Hz, 1H), 7.43 (dd, J = 8.4, 2.2 Hz, 1H), 6.31 (s, 1H), 5.65 (s, 1H), 3.55 (d, J = 6.3 Hz, 2H), 3.14 - 2.80 (m, 3H), 2.68-2.52 (m, 2H), 1.91 - 1.85 (m, 2H), 1.66 (s, 1H), 1.51 (s, 1H), 1.32 (s, 6H).	418.1	E	

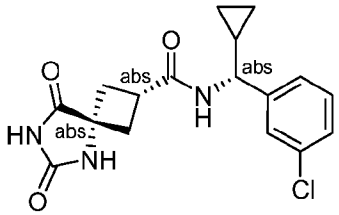
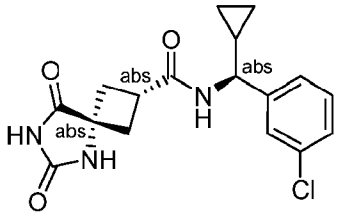
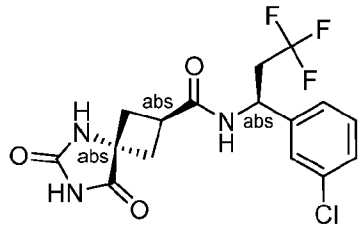
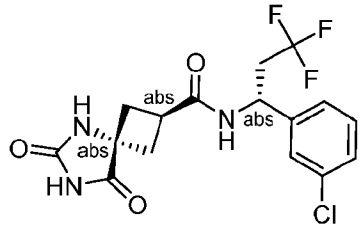
I-1330		NMR (400 MHz, DMSO-d6) δ 9.40 (t, J = 6.1 Hz, 1H), 8.60 (d, J = 1.4 Hz, 1H), 8.58 (dd, J = 2.4, 1.6 Hz, 1H), 8.52 (d, J = 2.5 Hz, 1H), 7.66 (d, J = 9.3 Hz, 1H), 7.36 - 7.27 (overlapping m, 1H), 7.31 (overlapping dd, J = 8.4, 7.7 Hz, 1H), 7.25 – 7.18 (m, 2H), 7.14 (td, J = 7.7, 1.3 Hz, 1H), 6.85 (br d, J = 8.7 Hz, 1H), 4.63 (d, J = 6.1 Hz, 2H), 3.87 (d, J = 5.4 Hz, 2H), 2.42 – 2.19 (m, 4H), 2.18 – 2.02 (m, 1H), 1.91 – 1.69 (m, 1H). Minor formate signal	409.2	D	
I-1331		NMR (400 MHz, DMSO-d6) δ 9.15 (t, J = 5.7 Hz, 1H), 8.78 (d, J = 4.9 Hz, 2H), 7.66 (d, J = 9.3 Hz, 1H), 7.41 (t, J = 4.9 Hz, 1H), 7.37 - 7.24 (two overlapping ms, 2H), 7.24 – 7.18 (m, 2H), 7.18 – 7.12 (m, 1H), 6.86 (br d, J = 8.8 Hz, 1H), 4.68 (d, J = 5.7 Hz, 2H), 3.88 (d, J = 5.4 Hz, 2H), 2.40 – 2.20 (m, 4H), 2.19 – 2.03 (m, 1H), 1.89 – 1.74 (m, 1H). Minor formate signal	409.2	D	
I-1332		NMR (400 MHz, DMSO-d6) δ 12.59 (br s, 1H), 8.97 (br s, 1H), 7.66 (d, J = 9.3 Hz, 1H), 7.54 (br s, 1H), 7.32 - 7.24 (overlapping m, 1H), 7.31 (dd, J = 8.4, 7.7, 1H), 7.24 – 7.17 (m, 2H), 7.14 (dt, J = 7.7, 1.2 Hz, 1H), 6.84 (br d, J = 9.0 Hz, 1H), 6.14 (d, J = 1.5 Hz, 1H), 4.45 (d, J = 6.0 Hz, 2H), 3.85 (d, J = 5.5 Hz, 2H), 2.39 – 2.15 (m, 4H), 2.16 – 1.89 (m, 2H), 1.87 – 1.62 (m, 2H). Minor formate signal	397.2	D	
I-1333		NMR (400 MHz, DMSO-d6) δ 9.02 (t, J = 5.9 Hz, 1H), 8.24 (s, 1H), 7.66 (d, J = 9.3 Hz, 1H), 7.32 (two overlapping ms, 2H), 7.25 – 7.18 (m, 2H), 7.14 (dt, J = 7.7, 1.2 Hz, 1H), 6.90 (s, 2H), 6.84 (br d, J = 8.2 Hz, 1H), 4.48 (d, J = 5.9 Hz, 2H), 3.86 (d, J = 5.6 Hz, 2H), 2.39 – 2.16 (m, 4H), 2.16	397.2	D	

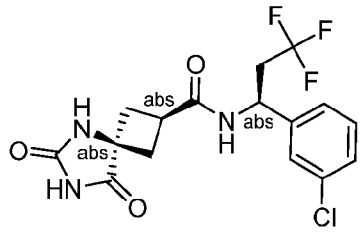
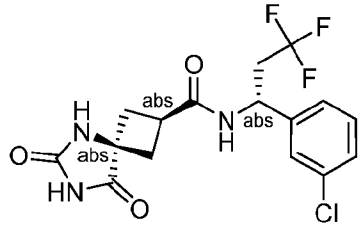
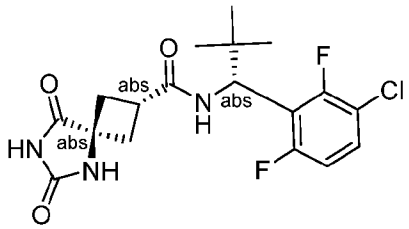
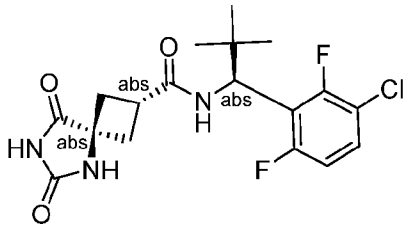
		– 1.96 (m, 1H), 1.87 – 1.66 (m, 1H). ~ 15-20% of impurity (known/assayed compound)			
I-1334		NMR (400 MHz, DMSO-d6) δ 9.61 (t, J = 6.2 Hz, 1H), 7.71 (d, J = 3.3 Hz, 1H), 7.67 (d, J = 9.3 Hz, 1H), 7.59 (d, J = 3.3 Hz, 1H), 7.36 (submerged m, 1H), 7.31 (dd, J = 8.4, 7.7 Hz, 1H), 7.25 – 7.18 (m, 2H), 7.14 (td, J = 7.7, 1.3 Hz, 1H), 6.85 (d, J = 8.8 Hz, 1H), 4.72 (d, J = 6.3 Hz, 2H), 3.88 (d, J = 5.3 Hz, 2H), 2.42 – 2.19 (m, 4H), 2.18 – 1.97 (m, 1H), 1.89 – 1.66 (m, 1H). Minor formate signal. ~ 5-10% mixed impurities	414.3	D	
I-1335		(400 MHz, DMSO-d6) δ 7.42 (s, 1H), 7.32 (t, J = 7.8 Hz, 1H), 7.22 (ddd, J = 8.0, 2.1, 1.0 Hz, 1H), 7.10 (t, J = 1.8 Hz, 1H), 7.06 (ddd, J = 7.6, 1.5, 1.1 Hz, 1H), 6.32 (t, J = 6.0 Hz, 1H), 3.63 (s, 3H), 3.42 (d, J = 6.1 Hz, 2H), 3.33 – 3.31 (m, 2H), 2.62 (t, J = 6.4 Hz, 2H), 2.34 – 2.25 (m, 2H), 2.21 – 2.12 (m, 2H), 2.05 – 1.93 (m, 1H), 1.79 – 1.70 (m, 1H). 2H multiplet at 3.33 – 3.31 ppm is partially obscured by peak for residual H2O. Contains impurity that may bc THF.	359.3	E	
I-1336				C	

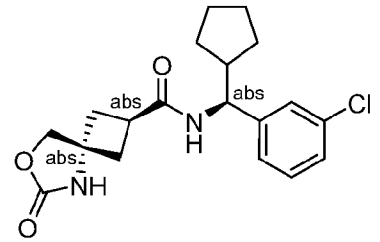
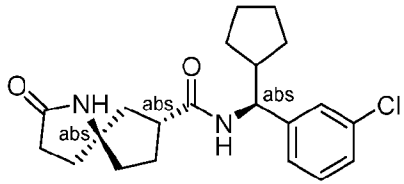
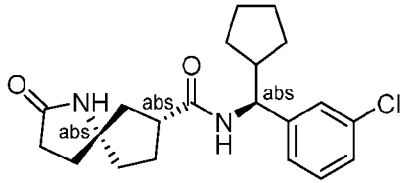
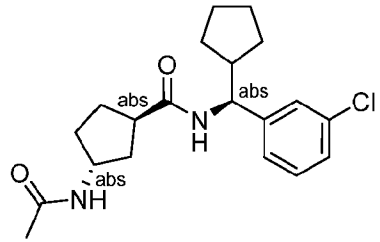
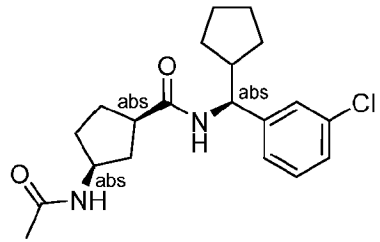
I-1337				A	B
I-1338				A	B
I-1339				B	
I-1340				C	

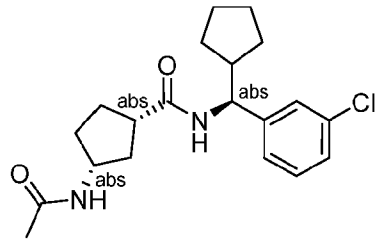
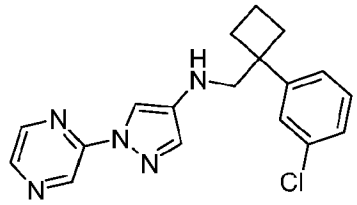
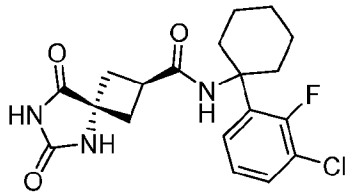
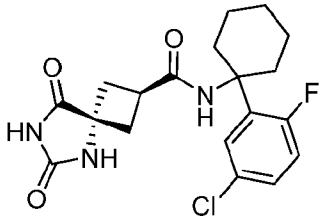
I-1341			383.33	A	B
I-1342			375.23	D	
I-1343		(400 MIIz, dmso) δ 8.19 (d, J = 0.8 IIz, 1II), 7.66 – 7.62 (m, 3H), 7.56 (dd, J = 8.5, 0.7 Hz, 1H), 7.42 (ddd, J = 8.5, 2.2, 0.7 Hz, 1H), 7.32 (s, 1H), 7.26 (d, J = 9.6 Hz, 1H), 6.90 (dd, J = 9.7, 2.1 Hz, 1H), 5.11 (t, J = 5.8 Hz, 1H), 3.13 (d, J = 5.6 Hz, 2H), 1.37 (s, 6H). Extra proton at 8.19 corresponds to formate salt.	334.1	D	
I-1344		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.60 (s, 1H), 8.27 (d, J = 8.6 Hz, 1H), 7.38 - 7.30 (m, 2H), 7.29 - 7.20 (m, 2H), 4.92 (td, J = 9.1, 3.0 Hz, 1H), 3.10 (q, J = 9.1 Hz, 1H), 2.67 (t, J = 10.6 Hz, 2H), 2.17 (dddd, J = 16.2, 12.9, 8.9, 4.5 Hz, 2H), 1.74 (dd, J = 14.3, 9.7 Hz, 1H), 1.46 (dd, J = 14.3, 3.1 Hz, 1H), 0.91 (s, 9H).	378.1	D	

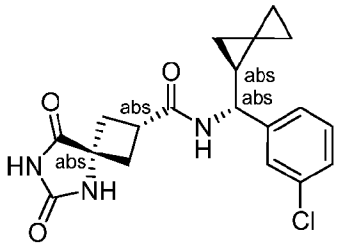
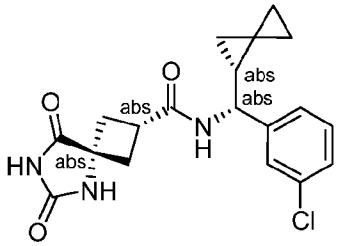
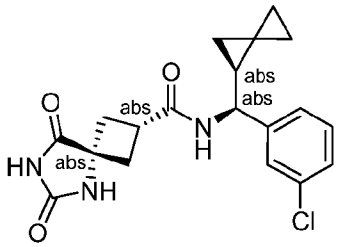
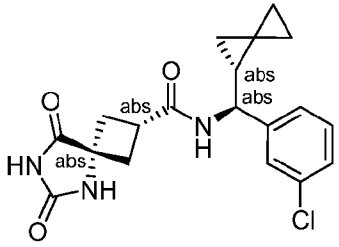
I-1345		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.60 (s, 1H), 8.27 (d, J = 8.6 Hz, 1H), 7.38 - 7.30 (m, 2H), 7.25 (ddt, J = 13.9, 7.4, 1.4 Hz, 2H), 4.92 (td, J = 9.2, 3.0 Hz, 1H), 3.12 (t, J = 9.1 Hz, 1H), 2.67 (dd, J = 11.9, 9.4 Hz, 2H), 2.25 - 2.01 (m, 2H), 1.72 (d, J = 9.6 Hz, 1H), 1.46 (dd, J = 14.3, 3.2 Hz, 1H), 0.91 (s, 9H).	378.05	D	
I-1346		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.60 (s, 1H), 8.27 (d, J = 8.6 Hz, 1H), 7.38 - 7.30 (m, 2H), 7.25 (ddt, J = 13.8, 7.4, 1.4 Hz, 2H), 4.92 (td, J = 9.1, 3.1 Hz, 1H), 3.19 - 3.05 (m, 1H), 2.67 (dd, J = 12.1, 9.3 Hz, 2H), 2.17 (dd, J = 11.8, 7.5 Hz, 2H), 1.74 (dd, J = 14.3, 9.7 Hz, 1H), 1.46 (dd, J = 14.3, 3.2 Hz, 1H), 0.91 (s, 9H).	378.25	D	
I-1347		(400 MHz, DMSO-d6)10.55 (s, 1H), 8.84 (t, J = 5.7 Hz, 1H), 8.25 (s, 1H), 8.06 (s, 1H), 8.03-7.96 (m, 1H), 7.94-7.88 (m, 1H), 3.31 (s, 2H), 2.56 (d, J = 8.2 Hz, 1H), 2.43 (ddd, J = 10.8, 7.7, 2.8 Hz, 2H), 2.04 (dt, J = 12.4, 9.7 Hz, 2H).	360	D	
I-1348		(400 MHz, DMSO-d6)10.64-10.49 £¨m, 1H£©8.91 (t, J = 5.6 Hz, 1H), 8.45 (s, 1H), 8.08 (s, 1H), 7.99 (d, J = 9.4 Hz, 1H), 7.91 (d, J = 8.5 Hz, 1H), 3.52-3.43 (m, 2H), 2.60 (dd, J = 15.9, 7.9 Hz, 1H), 2.38-2.20 (m, 4H).	360	D	

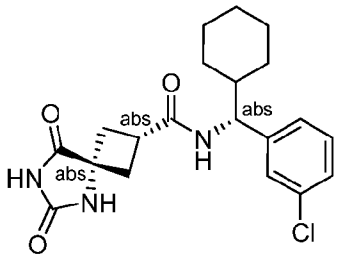
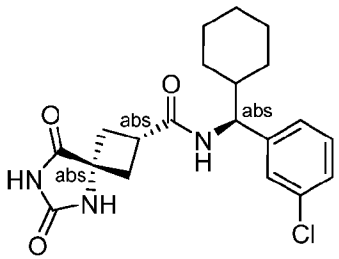
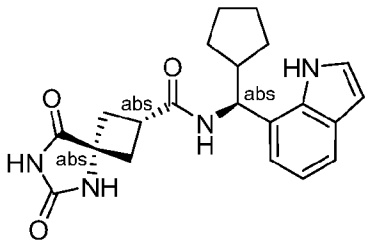
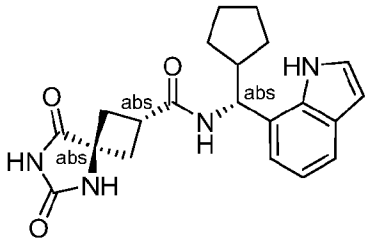
I-1349		(400 MHz, DMSO-d6) 10.45 (s, 1H), 8.62 (s, 1H), 8.45 (d, J = 8.3 Hz, 1H), 7.41 (t, J = 1.9 Hz, 1H), 7.38 - 7.27 (m, 3H), 4.21 (t, J = 8.6 Hz, 1H), 3.17 (p, J = 9.1 Hz, 1H), 2.68 (dtd, J = 20.3, 9.1, 2.0 Hz, 2H), 2.27 - 2.13 (m, 2H), 1.18 - 1.03 (m, 1H), 0.49 (dd, J = 8.2, 4.2 Hz, 2H), 0.42 - 0.28 (m, 2H).	348.1	D	
I-1350		(400 MHz, DMSO-d6) 10.45 (s, 1H), 8.62 (s, 1H), 8.45 (d, J = 8.3 Hz, 1H), 7.41 (t, J = 1.9 Hz, 1H), 7.38 - 7.27 (m, 3H), 4.21 (t, J = 8.6 Hz, 1H), 3.17 (p, J = 9.0 Hz, 1H), 2.76 - 2.61 (m, 2H), 2.29 - 2.13 (m, 2H), 1.12 (ddt, J = 12.4, 8.2, 3.5 Hz, 1H), 0.49 (dd, J = 8.2, 4.2 Hz, 2H), 0.42 - 0.25 (m, 2H).	348	D	
I-1351		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.66 (d, J = 8.6 Hz, 1H), 8.30 (s, 1H), 7.46 (d, J = 1.9 Hz, 1H), 7.43- 7.28 (m, 3H), 5.20 (td, J = 9.0, 5.0 Hz, 1H), 3.11- 3.00 (m, 1H), 2.83 - 2.64 (m, 2H), 2.41 (dqd, J = 20.4, 10.8, 6.7 Hz, 4H).	390.1	D	
I-1352		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.66 (d, J = 8.6 Hz, 1H), 8.30 (s, 1H), 7.46 (t, J = 1.8 Hz, 1H), 7.43 - 7.28 (m, 3H), 5.20 (td, J = 9.0, 5.1 Hz, 1H), 3.11 - 2.98 (m, 1H), 2.82 - 2.62 (m, 2H), 2.48 - 2.29 (m, 4H).	390.1	D	

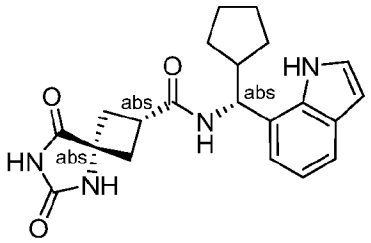
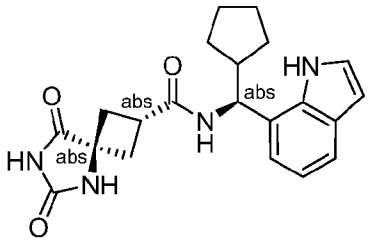
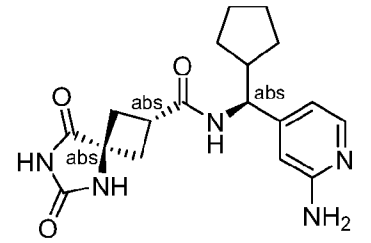
I-1353		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.61 (d, J = 1.4 Hz, 1H), 8.50 (d, J = 8.6 Hz, 1H), 7.47 (t, J = 1.9 Hz, 1H), 7.43 - 7.27 (m, 3H), 5.20 (td, J = 8.6, 5.8 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.83 - 2.72 (m, 2H), 2.72- 2.62 (m, 2H), 2.26 - 2.12 (m, 2H).	390.25	D	
I-1354		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.61 (d, J = 1.3 Hz, 1H), 8.50 (d, J = 8.6 Hz, 1H), 7.46 (t, J = 1.9 Hz, 1H), 7.42 - 7.30 (m, 3H), 5.20 (td, J = 8.6, 5.7 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.83 - 2.72 (m, 2H), 2.72-2.62 (m, 2H), 2.20 (dddd, J = 15.3, 12.8, 9.1, 4.2 Hz, 2H).	390.2	D	
I-1355				E	
I-1356			400.23	A	B

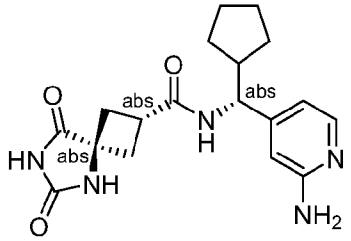
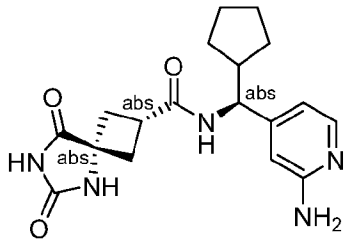
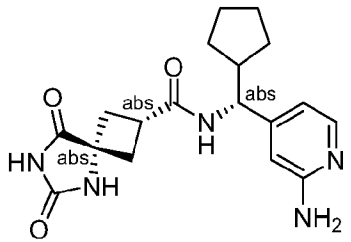
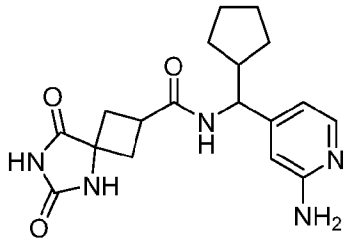
I-1357				B	
I-1358				B	
I-1359				C	
I-1360		NMR (400 MHz, DMSO-d6) δ 8.26 (d, J = 8.7 Hz, 1H), 7.80 (d, J = 7.0 Hz, 1H), 7.36 (t, J = 1.8 Hz, 1H), 7.35 – 7.30 (m, 1H), 7.28 – 7.23 (m, 2H), 4.55 (t, J = 9.3 Hz, 1H), 4.07 – 3.97 (m, 1H), 2.75 (p, J = 7.9 Hz, 1H), 2.21 – 2.10 (m, 1H), 1.89 – 1.78 (m, 2H), 1.76 (s, 3H), 1.75 – 1.32 (m, 9H), 1.31 – 1.21 (m, 2H), 1.07 (dq, J = 12.7, 8.6 Hz, 1H).	363.3	B	
I-1361		NMR (400 MHz, DMSO-d6) δ 8.29 (d, J = 8.8 Hz, 1H), 7.88 (d, J = 7.4 Hz, 1H), 7.36 (t, J = 1.8 Hz, 1H), 7.35 – 7.30 (m, 1H), 7.28 – 7.23 (m, 2H), 4.56 (t, J = 9.3 Hz, 1H), 4.02 – 3.92 (m, 1H), 2.70 – 2.60 (m, 1H), 2.20 – 2.09 (m, 1H), 2.10 – 2.02 (m, 1H), 1.75 (s, 3H), 1.78 – 1.68 (m, 2H),	363.3	D	

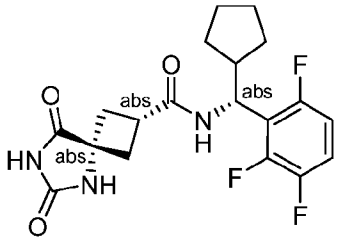
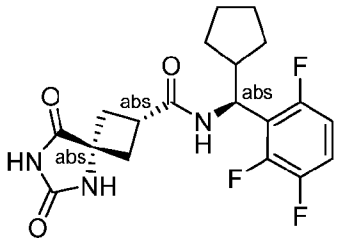
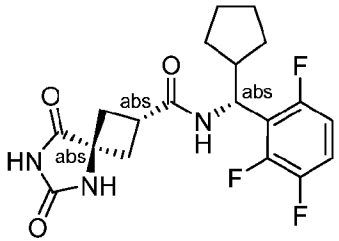
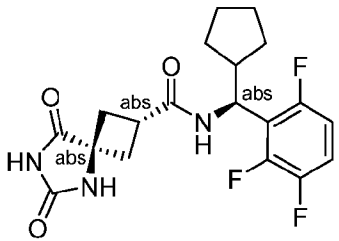
		1.63 (m, 2H), 1.59 – 1.34 (m, 6H), 1.30 – 1.20 (m, 2H), 1.08 (dq, J = 13.0, 8.6 Hz, 1H).			
I-1362		NMR (400 MHz, DMSO-d6) δ 8.33 (d, J = 8.8 Hz, 1H), 7.87 (d, J = 7.5 Hz, 1H), 7.37 (t, J = 1.8 Hz, 1H), 7.35 – 7.30 (m, 1H), 7.28 – 7.23 (m, 2H), 4.56 (t, J = 9.3 Hz, 1H), 4.02 – 3.91 (m, 1H), 2.67 (p, J = 8.2 Hz, 1H), 2.21 – 2.10 (m, 1H), 1.94 (dt, J = 12.5, 7.4 Hz, 1H), 1.81 – 1.67 (m, 4H), 1.73 (s, 3H), 1.62 – 1.34 (m, 5H), 1.32 – 1.21 (m, 3H), 1.08 (dq, J = 12.5, 8.4 Hz, 1H).	363.3	D	
I-1363		(400 MHz, dmso) δ 9.04 (t, J = 1.0 Hz, 1H), 8.44 – 8.39 (m, 2H), 7.67 (br. s, 1H), 7.41 (br. s, 1H), 7.32 (t, J = 7.8 Hz, 1H), 7.24 – 7.22 (m, 1H), 7.22 – 7.18 (m, 1H), 7.18 – 7.14 (m, 1H), 4.88 (t, J = 6.4 Hz, 1H), 3.28 (d, J = 6.4 Hz, 2H), 2.30 – 2.22 (m, 4H), 2.16 – 2.05 (m, 1H), 1.86 – 1.76 (m, 1H).	340.1	E	
I-1364		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 7.95 (s, 1H), 7.42 (ddd, J = 8.2, 6.7, 1.6 Hz, 1H), 7.32 (td, J = 7.8, 1.7 Hz, 1H), 7.15 (t, J = 8.0 Hz, 1H), 3.23 (q, J = 9.1 Hz, 1H), 2.69 - 2.58 (m, 2H), 2.44 (d, J = 12.6 Hz, 2H), 2.20 (td, J = 9.6, 2.8 Hz, 2H), 1.77 - 1.65 (m, 2H), 1.65 - 1.46 (m, 5H), 1.23 (d, J = 11.9 Hz, 1H).	394.15	E	
I-1365		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 7.94 (s, 1H), 7.35 - 7.25 (m, 2H), 7.15 (dd, J = 12.2, 8.5 Hz, 1H), 3.23 (q, J = 9.1 Hz, 1H), 2.63 (dd, J = 12.8, 9.4 Hz, 2H), 2.41 (d, J = 12.8 Hz, 2H), 2.25 - 2.14 (m, 2H), 1.75 - 1.65 (m, 2H), 1.53 (s, 5H), 1.24 (s, 1H).	394.1	B	C

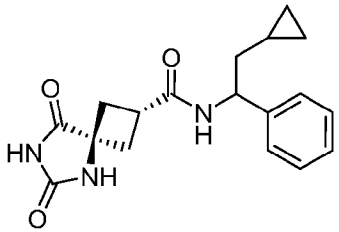
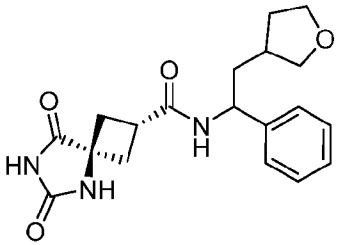
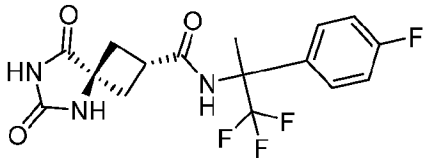
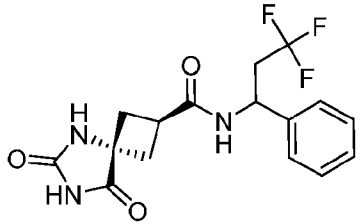
I-1366		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.59 (s, 1H), 8.36 (d, J = 7.9 Hz, 1H), 7.40 (t, J = 1.8 Hz, 1H), 7.38 - 7.27 (m, 3H), 4.29 (dd, J = 9.9, 7.9 Hz, 1H), 3.11 (p, J = 9.1 Hz, 1H), 2.65 (dt, J = 12.0, 8.7 Hz, 2H), 2.28 - 2.13 (m, 2H), 1.46 (ddd, J = 9.9, 7.8, 4.3 Hz, 1H), 0.99 (dd, J = 7.8, 4.3 Hz, 1H), 0.87 (t, J = 4.4 Hz, 1H), 0.82 - 0.74 (m, 3H), 0.70 (dd, J = 8.2, 4.0 Hz, 1H).	374.15	E	
I-1367		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.46 (d, J = 8.7 Hz, 1H), 7.39 - 7.24 (m, 3H), 7.17 (dt, J = 7.6, 1.6 Hz, 1H), 4.48 (t, J = 8.8 Hz, 1H), 3.16 (p, J = 9.0 Hz, 1H), 2.80 - 2.65 (m, 2H), 2.21 (ddt, J = 19.5, 12.8, 4.3 Hz, 2H), 1.62 - 1.51 (m, 1H), 1.00 (dd, J = 7.8, 4.2 Hz, 1H), 0.80 (t, J = 4.3 Hz, 1H), 0.77 - 0.67 (m, 3H), 0.64 - 0.56 (m, 1H).	374.15	E	
I-1368		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.47 (d, J = 8.7 Hz, 1H), 7.38 - 7.24 (m, 3H), 7.16 (dt, J = 7.6, 1.6 Hz, 1H), 4.48 (t, J = 8.9 Hz, 1H), 3.16 (p, J = 9.1 Hz, 1H), 2.71 (ddd, J = 15.8, 11.7, 8.8 Hz, 2H), 2.29 - 2.13 (m, 2H), 1.62 - 1.49 (m, 1H), 1.00 (dd, J = 7.8, 4.2 Hz, 1H), 0.80 (t, J = 4.3 Hz, 1H), 0.77 - 0.67 (m, 3H), 0.63 - 0.57 (m, 1H).	374.15	D	
I-1369		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.59 (s, 1H), 8.36 (d, J = 7.9 Hz, 1H), 7.44 - 7.26 (m, 4H), 4.29 (dd, J = 10.0, 7.9 Hz, 1H), 3.11 (p, J = 9.1 Hz, 1H), 2.65 (dt, J = 11.9, 8.7 Hz, 2H), 2.29 - 2.12 (m, 2H), 1.46 (ddd, J = 9.9, 7.8, 4.3 Hz, 1H), 0.99 (dd, J = 7.8, 4.3 Hz, 1H), 0.87 (t, J = 4.3 Hz, 1H), 0.83 - 0.74 (m, 3H), 0.73 - 0.66 (m, 1H).	374.2	E	

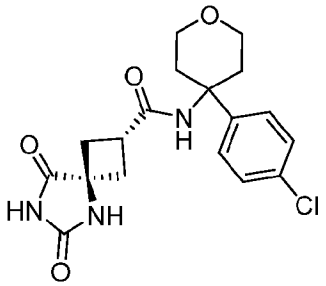
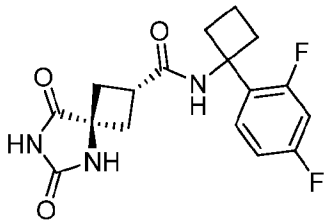
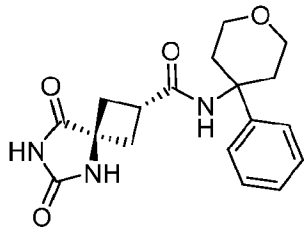
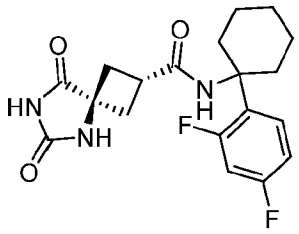
I-1370		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.24 (d, J = 8.9 Hz, 1H), 7.36 - 7.30 (m, 2H), 7.27 (dt, J = 8.1, 1.3 Hz, 1H), 7.21 (dt, J = 7.6, 1.4 Hz, 1H), 4.55 (t, J = 8.8 Hz, 1H), 3.15 (p, J = 9.1 Hz, 1H), 2.74 - 2.58 (m, 2H), 2.18 (dddd, J = 34.1, 12.9, 9.0, 4.4 Hz, 2H), 1.73 (dd, J = 28.7, 11.7 Hz, 2H), 1.58 (s, 3H), 1.42 - 1.00 (m, 4H), 0.91 (dt, J = 35.4, 11.5 Hz, 2H).	390.2	E	
I-1371		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.63 (s, 1H), 8.24 (d, J = 8.9 Hz, 1H), 7.36 - 7.30 (m, 2H), 7.30 -7.25 (m, 1H), 7.21 (dt, J = 7.6, 1.4 Hz, 1H), 4.55 (t, J = 8.8 Hz, 1H), 3.15 (p, J = 9.2 Hz, 1H), 2.65 (ddd, J = 21.5, 12.1, 9.2 Hz, 2H), 2.18 (dddd, J = 34.3, 13.0, 9.0, 4.4 Hz, 2H), 1.73 (dd, J = 29.2, 11.9 Hz, 2H), 1.56 (d, J = 12.0 Hz, 3H), 1.22 (d, J = 14.6 Hz, 1H), 1.11 (dd, J = 16.4, 6.5 Hz, 3H), 0.89 (dq, J = 33.6, 11.4 Hz, 2H).	390.2	D	
I-1372		(400 MHz, DMSO-d6) 10.98 (s, 1H), 10.59 (s, 1H), 8.45 (d, J = 8.8 Hz, 1H), 8.28 (s, 1H), 7.39 (d, J = 7.7 Hz, 1H), 7.32 (t, J = 2.8 Hz, 1H), 7.04 (dd, J = 7.3, 1.1 Hz, 1H), 6.94 (t, J = 7.5 Hz, 1H), 6.42 (dd, J = 3.1, 1.8 Hz, 1H), 5.11 (t, J = 9.1 Hz, 1H), 3.18 - 3.04 (m, 1H), 2.48 - 2.37 (m, 1H), 2.37 - 2.20 (m, 4H), 1.69 (dt, J = 12.1, 5.9 Hz, 1H), 1.65 - 1.51 (m, 2H), 1.50 - 1.33 (m, 3H), 1.31 - 1.23 (m, 1H), 1.15 (dq, J = 12.5, 8.2 Hz, 1H).	381.3	E	
I-1373		(400 MHz, DMSO-d6) 10.98 (s, 1H), 10.59 (s, 1H), 8.45 (d, J = 8.8 Hz, 1H), 8.28 (s, 1H), 7.39 (d, J = 7.8 Hz, 1H), 7.32 (t, J = 2.8 Hz, 1H), 7.04 (dd, J − 7.3, 1.1 Hz, 1H), 6.94 (t, J − 7.6 Hz, 1H), 6.42 (dd, J = 3.1, 1.8 Hz, 1H), 5.11 (t, J = 9.1 Hz, 1H), 3.17 - 3.04 (m, 1H), 2.48 - 2.41 (m, 1H), 2.40 - 2.25 (m, 4H), 1.65 - 1.52 (m, 1H), 1.51 -	381.3	E	

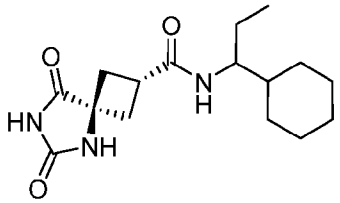
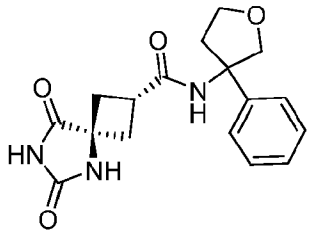
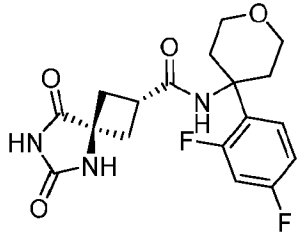
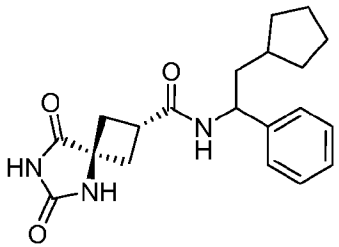
		1.33 (m, 2H), 1.29 (dd, J = 12.2, 7.3 Hz, 3H), 1.24 (s, 1H), 1.21 - 1.07 (m, 1H).			
I-1374		(400 MHz, DMSO-d6) 10.95 (s, 1H), 10.56 (s, 1H), 8.61 (s, 1H), 8.33 (d, J = 8.7 Hz, 1H), 7.39 (d, J = 7.7 Hz, 1H), 7.33 (t, J = 2.8 Hz, 1H), 7.05 (dd, J = 7.3, 1.1 Hz, 1H), 6.94 (t, J = 7.5 Hz, 1H), 6.42 (dd, J = 3.1, 1.8 Hz, 1H), 5.09 (t, J = 9.3 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.74 - 2.59 (m, 2H), 2.43 (p, J = 8.4 Hz, 1H), 2.25 (ddd, J = 12.4, 8.9, 4.4 Hz, 1H), 2.17 - 2.04 (m, 1H), 1.79 - 1.68 (m, 1H), 1.67 - 1.53 (m, 2H), 1.53 - 1.43 (m, 1H), 1.43 - 1.34 (m, 2H), 1.28 (td, J = 13.3, 12.7, 8.0 Hz, 1H), 1.19 - 1.09 (m, 1H).	381.15	E	
I-1375		(400 MHz, DMSO-d6) 10.95 (s, 1H), 10.56 (s, 1H), 8.61 (s, 1H), 8.34 (d, J = 8.7 Hz, 1H), 7.39 (d, J = 7.8 Hz, 1H), 7.33 (d, J = 2.9 Hz, 1H), 7.05 (d, J = 7.2 Hz, 1H), 6.94 (t, J = 7.5 Hz, 1H), 6.42 (dd, J = 3.2, 1.7 Hz, 1H), 5.09 (t, J = 9.2 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.67 (ddd, J = 25.0, 12.0, 9.2 Hz, 2H), 2.47 - 2.38 (m, 1H), 2.25 (ddd, J = 12.4, 9.0, 4.3 Hz, 1H), 2.11 (ddd, J = 15.7, 8.3, 3.6 Hz, 1H), 1.75 (h, J = 6.8, 6.0 Hz, 1H), 1.68 - 1.59 (m, 1H), 1.58 - 1.44 (m, 2H), 1.43 - 1.33 (m, 2H), 1.33- 1.22 (m, 1H), 1.20 - 1.05 (m, 1H).	379.2	D	
I-1376		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.35 (d, J = 8.7 Hz, 1H), 8.29 (s, 1H), 7.80 (d, J = 5.3 Hz, 1H), 6.42 (dd, J = 5.3, 1.5 Hz, 1H), 6.30 (s, 1H), 5.80 (s, 2H), 4.37 (t, J = 9.1 Hz, 1H), 3.09 (p, J = 8.9 Hz, 1H), 2.47 - 2.29 (m, 4H), 2.11 (h, J = 8.3 Hz, 1H), 1.67 (t, J = 6.4 Hz, 1H), 1.59 - 1.49 (m, 2H), 1.47 (q, J = 5.4, 3.1 Hz, 2H), 1.46 - 1.31 (m, 1H), 1.25 (td, J = 11.7, 7.3 Hz, 1H), 1.09 (dd, J = 12.5, 7.8 Hz, 1H).	358.15	E	

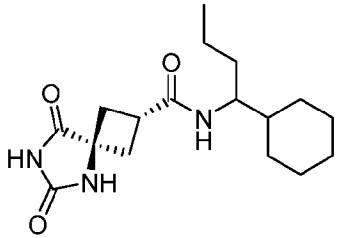
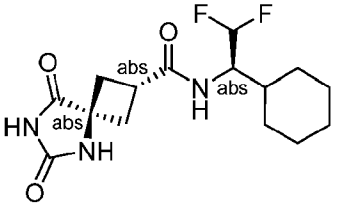
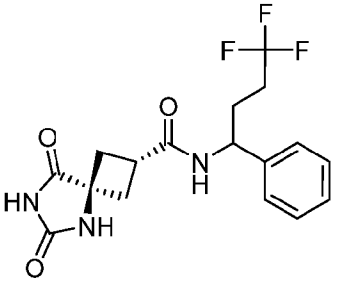
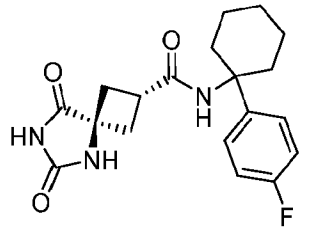
I-1377		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.35 (d, J = 8.6 Hz, 1H), 8.29 (s, 1H), 7.80 (d, J = 5.3 Hz, 1H), 6.42 (dd, J = 5.3, 1.5 Hz, 1H), 6.31 (s, 1H), 5.83 (s, 2H), 4.37 (t, J = 9.0 Hz, 1H), 3.09 (p, J = 9.0 Hz, 1H), 2.44 (d, J = 3.6 Hz, 2H), 2.33 (d, J = 11.1 Hz, 2H), 2.13 (p, J = 8.2 Hz, 1H), 1.67 (t, J = 6.2 Hz, 1H), 1.59 - 1.53 (m, 2H), 1.46 (d, J = 7.3 Hz, 2H), 1.38 - 1.32 (m, 1H), 1.23 (d, J = 11.8 Hz, 1H), 1.10 (dt, J = 13.0, 7.8 Hz, 1H).	358.15	E	
I-1378		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.22 (d, J = 8.6 Hz, 1H), 7.80 (d, J = 5.3 Hz, 1H), 6.43 (dd, J = 5.4, 1.5 Hz, 1H), 6.31 (s, 1H), 5.79 (s, 2H), 4.37 (t, J = 9.2 Hz, 1H), 3.12 (p, J = 9.1 Hz, 1H), 2.67 (ddd, J = 12.0, 9.1, 6.1 Hz, 2H), 2.27 - 2.06 (m, 3H), 1.70 (s, 1H), 1.56 (tq, J = 10.2, 6.6, 5.0 Hz, 2H), 1.51 - 1.41 (m, 2H), 1.37 (dd, J = 12.1, 7.1 Hz, 1H), 1.25 (tt, J = 12.0, 6.2 Hz, 1H), 1.09 (dt, J = 12.8, 7.4 Hz, 1H).	358.15	E	
I-1379		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.23 (d, J = 8.6 Hz, 1H), 7.80 (d, J = 5.3 Hz, 1H), 6.43 (d, J = 5.3 Hz, 1H), 6.31 (s, 1H), 5.81 (s, 2H), 4.37 (t, J = 9.2 Hz, 1H), 3.13 (p, J = 9.2 Hz, 1H), 2.67 (ddd, J = 11.9, 9.2, 6.1 Hz, 2H), 2.27 - 2.06 (m, 3H), 1.69 (dd, J = 12.0, 6.6 Hz, 1H), 1.56 (tt, J = 10.3, 5.0 Hz, 2H), 1.47 (hept, J = 6.8 Hz, 2H), 1.40 - 1.32 (m, 1H), 1.30 - 1.21 (m, 1H), 1.10 (dt, J = 12.8, 7.7 Hz, 1H).	358.15	E	
I-1380		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.63 (s, 1H), 8.23 (d, J = 8.7 Hz, 1H), 7.80 (d, J = 5.3 Hz, 1H), 6.43 (dd, J = 5.3, 1.5 Hz, 1H), 6.31 (s, 1H), 5.80 (s, 2H), 4.37 (t, J − 9.2 Hz, 1H), 3.12 (p, J − 9.2 Hz, 1H), 2.67 (ddd, J = 11.9, 9.1, 6.2 Hz, 2H), 2.18 (dddd, J = 30.9, 13.3, 9.2, 4.5 Hz, 3H), 1.74 - 1.66 (m, 1H), 1.59 (dd, J = 7.8, 3.7 Hz, 2H), 1.58	358.15	E	

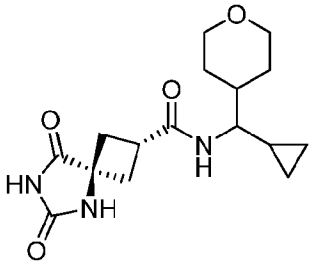
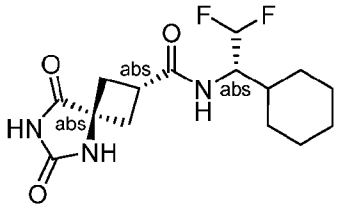
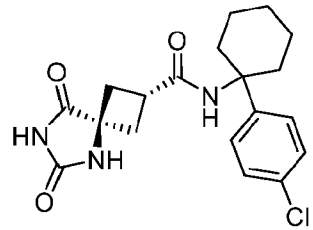
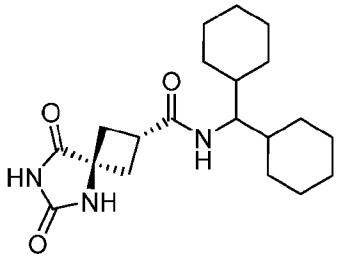
		- 1.41 (m, 2H), 1.45 - 1.31 (m, 1H), 1.31 - 1.19 (m, 1H), 1.09 (dt, J = 12.9, 7.9 Hz, 1H).			
I-1381		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.55 (d, J = 7.4 Hz, 1H), 8.25 (s, 1H), 7.38 (qd, J = 9.4, 4.8 Hz, 1H), 7.08 (tdt, J = 9.1, 5.6, 2.7 Hz, 1H), 4.83 (dd, J = 11.0, 7.5 Hz, 1H), 3.19- 3.05 (m, 1H), 2.47- 2.31 (m, 4H), 2.25 (t, J = 10.4 Hz, 1H), 1.94 -1.86 (m, 1H), 1.67 - 1.40 (m, 4H), 1.36 (dd, J = 7.7, 4.7 Hz, 1H), 1.31 - 1.21 (m, 1H), 1.02 (dt, J = 12.7, 7.7 Hz, 1H).	396.2	E	
I-1382		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.54 (d, J = 7.5 Hz, 1H), 8.25 (s, 1H), 7.38 (qd, J = 9.4, 4.8 Hz, 1H), 7.13-7.02 (m, 1H), 4.83 (dd, J = 11.0, 7.4 Hz, 1H), 3.19- 3.05 (m, 1H), 2.47-2.33 (m, 4H), 2.25 (t, J = 10.4 Hz, 1H), 1.88 (s, 1H), 1.64 - 1.43 (m, 4H), 1.37 (dd, J = 12.2, 7.3 Hz, 1H), 1.25 (dq, J = 15.5, 8.0, 7.6 Hz, 1H), 1.01 (s, 1H).	396.2	E	
I-1383		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.45 (d, J = 7.4 Hz, 1H), 7.38 (qd, J = 9.4, 4.8 Hz, 1H), 7.08 (tdd, J = 9.4, 3.9, 2.0 Hz, 1H), 4.83 (dd, J = 11.1, 7.4 Hz, 1H), 3.15 (p, J = 9.1 Hz, 1H), 2.62 (ddd, J = 28.8, 12.1, 8.9 Hz, 2H), 2.42 (p, J = 8.3 Hz, 1H), 2.18 (dddd, J = 28.1, 12.8, 9.0, 4.2 Hz, 2H), 1.98 - 1.84 (m, 1H), 1.68 - 1.42 (m, 4H), 1.41- 1.20 (m, 2H), 1.09-0.95 (m, 1H).	396.15	E	
I-1384		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.46 (d, J = 7.4 Hz, 1H), 7.38 (qd, J = 9.3, 4.8 Hz, 1H), 7.08 (tdd, J = 9.5, 3.9, 2.0 Hz, 1H), 4.83 (dd, J = 11.1, 7.4 Hz, 1H), 3.15 (p, J = 9.1 Hz, 1H), 2.62 (ddd, J = 28.9, 12.0, 8.9 Hz, 2H), 2.43 (q, J = 8.5 Hz, 1H), 2.18 (dddd, J = 28.0, 12.8, 9.0, 4.2 Hz, 2H), 1.91 (ddd, J = 15.8, 13.7,	396.15	D	

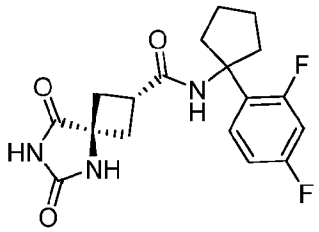
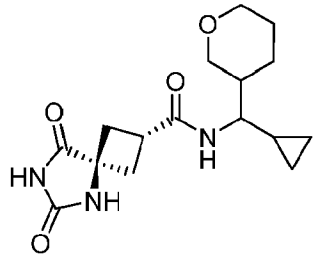
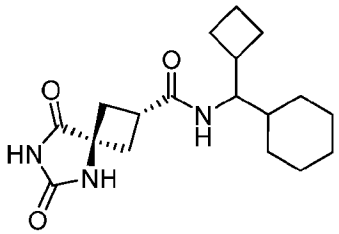
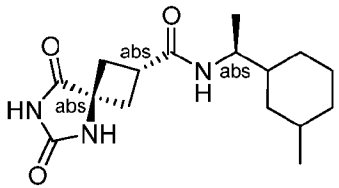
		9.6 Hz, 1H), 1.68 - 1.41 (m, 4H), 1.31 (ddt, J = 35.9, 12.8, 7.8 Hz, 2H), 1.09 - 0.95 (m, 1H).			
I-1385		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.37 (d, J = 8.5 Hz, 1H), 8.29 (s, 1H), 7.41 – 7.24 (m, 4H), 7.19 (ddd, J = 8.6, 5.6, 2.3 Hz, 1H), 4.84 (td, J = 8.5, 5.9 Hz, 1H), 3.10 (p, J = 8.8 Hz, 1H), 2.46 – 2.18 (m, 4H), 1.66 – 1.39 (m, 2H), 0.59 (d, J = 5.7 Hz, 1H), 0.34 (ddt, J = 21.0, 8.5, 4.3 Hz, 2H), 0.10 (dq, J = 8.8, 4.6 Hz, 1H).	328	E	
I-1386		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.42 (t, J = 9.0 Hz, 1H), 8.30 (s, 1H), 7.30 (d, J = 6.6 Hz, 4H), 7.22 (d, J = 6.8 Hz, 1H), 4.78 (dt, J = 16.6, 8.7 Hz, 1H), 3.83 – 3.61 (m, 2H), 3.57 (p, J = 7.5 Hz, 1H), 3.20 (dt, J = 15.3, 7.7 Hz, 1H), 3.08 (q, J = 9.0 Hz, 1H), 2.48 – 2.26 (m, 4H), 2.10 – 1.84 (m, 2H), 1.70 (ddd, J = 29.1, 13.4, 7.0 Hz, 2H), 1.52 – 1.39 (m, 1H).	358	E	
I-1387		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.97 (s, 1H), 8.27 (s, 1H), 7.42 (t, J = 7.0 Hz, 2H), 7.20 (t, J = 8.6 Hz, 2H), 3.41 – 3.33 (m, 1H), 2.47 – 2.21 (m, 4H), 1.91 (s, 3H).	374.2	E	
I-1388		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.47 (d, J = 8.6 Hz, 1H), 7.41 – 7.31 (m, 4H), 7.27 (td, J = 6.4, 5.9, 2.8 Hz, 1H), 5.20 (q, J = 8.3 Hz, 1H), 3.13 (p, J = 9.2 Hz, 1H), 2.84 – 2.59 (m, 4H), 2.28 – 2.07 (m, 2H).	356.2	E	

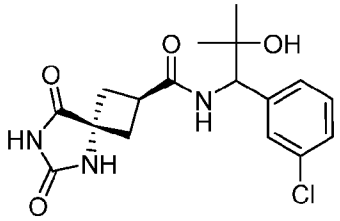
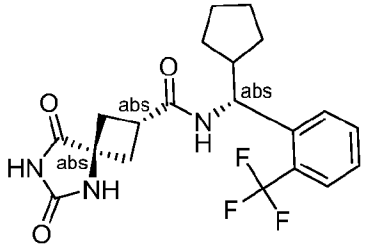
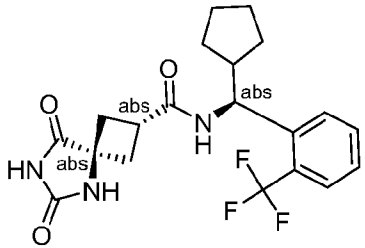
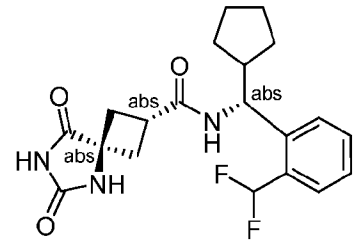
I-1389		(400 MHz, DMSO-d6) 10.66 (s, 1H), 8.22 (d, J = 21.9 Hz, 2H), 7.44 – 7.25 (m, 4H), 3.71 (d, J = 11.2 Hz, 2H), 3.58 (t, J = 11.6 Hz, 2H), 3.20 (t, J = 9.0 Hz, 1H), 2.42 (t, J = 9.3 Hz, 2H), 2.31 (t, J = 10.5 Hz, 2H), 2.23 (d, J = 13.5 Hz, 2H), 1.85 (t, J = 11.2 Hz, 2H).	378	E	
I-1390		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.66 (s, 1H), 8.22 (s, 1H), 7.54 – 7.38 (m, 1H), 7.10 (ddd, J = 11.7, 9.2, 2.6 Hz, 1H), 7.04 – 6.91 (m, 1H), 3.03 (p, J = 9.1 Hz, 1H), 2.45 (d, J = 8.1 Hz, 3H), 2.35 (td, J = 8.7, 2.6 Hz, 2H), 2.25 (td, J = 9.6, 2.7 Hz, 2H), 2.07 (s, 2H), 2.05 – 1.93 (m, 1H), 1.74 (d, J = 4.9 Hz, 1H).	350.2	E	
I-1391		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.25 (s, 1H), 8.13 (s, 1H), 7.38 – 7.12 (m, 5H), 3.72 (d, J = 11.3 Hz, 2H), 3.59 (t, J = 11.6 Hz, 2H), 3.28 – 3.16 (m, 1H), 2.44 (td, J = 8.5, 2.6 Hz, 2H), 2.39 – 2.22 (m, 4H), 1.87 (td, J = 13.0, 4.5 Hz, 2H).	344	E	
I-1392		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.23 (s, 1H), 7.98 (s, 1H), 7.33 (td, J = 9.3, 6.7 Hz, 1H), 7.08 (ddd, J = 12.4, 9.1, 2.8 Hz, 1H), 6.98 (td, J = 8.6, 2.7 Hz, 1H), 3.22 (p, J = 8.8 Hz, 1H), 2.46 – 2.35 (m, 4H), 2.30 (dd, J = 11.9, 9.3 Hz, 2H), 1.74 – 1.45 (m, 7H), 1.21 (d, J = 13.1 Hz, 1H).	378	E	

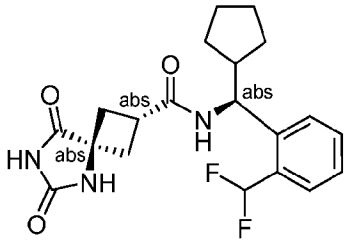
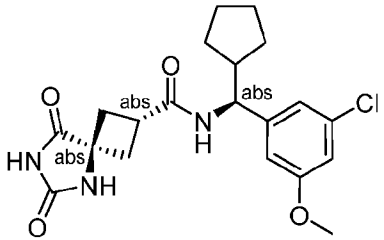
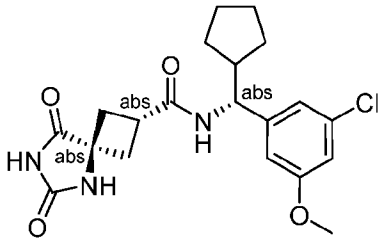
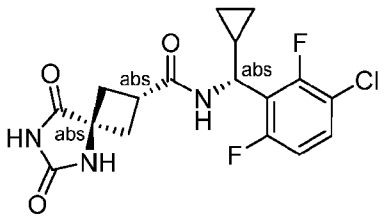
I-1393		(400 MIIz, DMSO-d6) 10.49 (s, 1I1), 8.29 (s, 1H), 7.52 (d, J = 9.2 Hz, 1H), 3.46 (d, J = 9.0 Hz, 1H), 3.05 (q, J − 8.7 Hz, 1H), 2.40 (d, J − 8.6 Hz, 4H), 1.62 (d, J = 24.4 Hz, 5H), 1.46 (s, 1H), 1.33 – 1.01 (m, 5H), 0.90 (t, J = 11.8 Hz, 2H), 0.75 (t, J = 7.3 Hz, 3H).	308.2	E	
I-1394		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.64 (s, 1H), 8.46 (s, 1H), 7.40 – 7.13 (m, 5H), 4.10 – 3.93 (m, 2H), 3.93 – 3.77 (m, 2H), 3.19 (p, J = 9.0 Hz, 1H), 2.72 – 2.57 (m, 3H), 2.20 (p, J = 8.3 Hz, 3H).	330	E	
I-1395		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.28 (s, 1H), 8.23 (s, 1H), 7.36 (td, J = 9.1, 6.5 Hz, 1H), 7.12 (ddd, J = 12.4, 9.2, 2.7 Hz, 1H), 7.01 (td, J = 8.5, 2.7 Hz, 1H), 3.75 – 3.54 (m, 4H), 3.20 (p, J = 9.1 Hz, 1H), 2.46 – 2.22 (m, 6H), 1.95 (td, J = 13.1, 12.6, 4.7 Hz, 2H).	380.2	E	
I-1396		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.36 (d, J = 8.6 Hz, 1H), 8.29 (s, 1H), 7.28 (ddd, J = 10.5, 8.2, 6.3 Hz, 4H), 7.24 – 7.16 (m, 1H), 4.85 – 4.72 (m, 1H), 3.07 (p, J = 9.0 Hz, 1H), 2.46 – 2.27 (m, 4H), 1.67 (dq, J = 10.7, 7.2, 5.4 Hz, 4H), 1.55 (qd, J = 10.0, 9.6, 5.6 Hz, 3H), 1.43 (dq, J = 12.6, 7.1, 6.2 Hz, 2H), 1.09 (d, J = 9.6 Hz, 2H).	356	E	

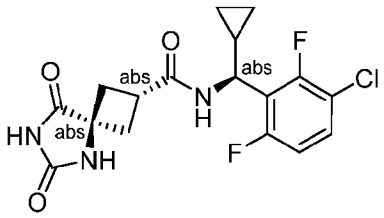
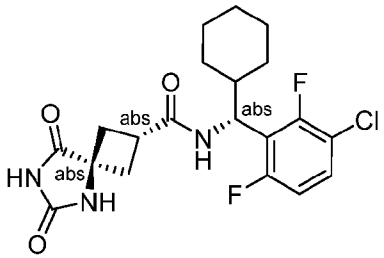
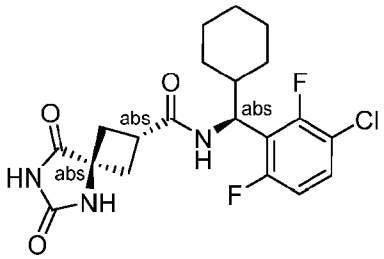
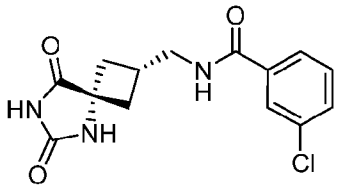
I-1397		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.29 (s, 1H), 7.52 (d, J = 9.2 Hz, 1H), 3.54 (s, 1H), 3.03 (q, J = 8.9 Hz, 1H), 2.40 (d, J = 8.8 Hz, 4H), 1.75 – 1.51 (m, 5H), 1.36 (s, 1H), 1.33 – 0.96 (m, 7H), 0.89 (d, J = 12.5 Hz, 2H), 0.82 (t, J = 7.1 Hz, 3H).	322.2	E	
I-1398		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.31 (s, 1H), 8.04 (d, J = 9.5 Hz, 1H), 6.06 (td, J = 55.1, 3.0 Hz, 1H), 3.97 (dd, J = 20.2, 10.1 Hz, 1H), 3.14 (p, J = 8.8 Hz, 1H), 2.47 – 2.33 (m, 4H), 1.80 – 1.43 (m, 6H), 1.07 (ddt, J = 53.3, 30.3, 13.3 Hz, 5H).	330.2	E	
I-1399		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.47 (d, J = 8.5 Hz, 1H), 8.28 (s, 1H), 7.42 – 7.15 (m, 5H), 4.87 (q, J = 8.0 Hz, 1H), 3.11 (p, J = 8.7 Hz, 1H), 2.47 – 2.38 (m, 3H), 2.32 (t, J = 10.2 Hz, 1H), 2.19 (dq, J = 10.3, 5.0, 4.5 Hz, 2H), 1.93 – 1.76 (m, 2H).	370.2	E	
I-1400		(400 MHz, DMSO-d6) 10.49 (s, 1H), 8.24 (s, 1H), 7.88 (s, 1H), 7.43 – 7.26 (m, 2H), 7.15 – 6.94 (m, 2H), 3.22 (p, J = 9.0 Hz, 1H), 2.42 (td, J = 8.6, 2.6 Hz, 2H), 2.38 – 2.20 (m, 4H), 1.55 (d, J = 33.8 Hz, 7H), 1.23 (s, 1H).	360.2	E	

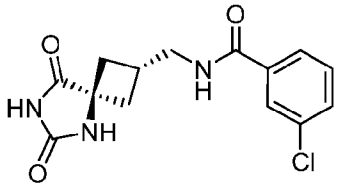
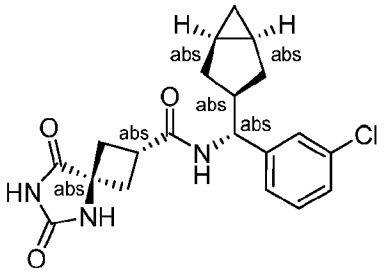
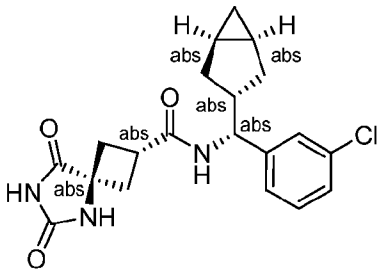
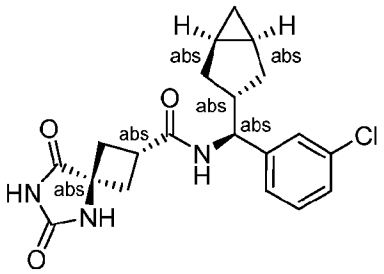
I-1401		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.30 (s, 1H), 7.75 (d, J = 9.2 Hz, 1H), 3.92 – 3.78 (m, 2H), 3.30 – 3.15 (m, 2H), 3.04 (p, J = 9.1 Hz, 2H), 2.40 (dd, J = 9.7, 5.2 Hz, 4H), 1.73 – 1.56 (m, 2H), 1.51 (d, J = 13.3 Hz, 1H), 1.22 (t, J = 13.5 Hz, 2H), 0.79 (dq, J = 8.1, 4.1, 3.4 Hz, 1H), 0.44 (dd, J = 8.7, 4.5 Hz, 1H), 0.27 (tt, J = 9.0, 4.0 Hz, 1H), 0.14 (ddq, J = 18.3, 8.8, 4.5 Hz, 2H).	322.2	E	
I-1402		(400 MHz, DMSO-d6) 10.50 (s, 1H), 8.30 (s, 1H), 8.03 (d, J = 9.5 Hz, 1H), 6.05 (td, J = 55.0, 3.0 Hz, 1H), 3.96 (dt, J = 16.8, 8.7 Hz, 1H), 3.24 – 3.07 (m, 1H), 2.47 – 2.34 (m, 4H), 1.79 – 1.44 (m, 6H), 1.29 – 0.83 (m, 5H).	330.2	E	
I-1403		(400 MHz, DMSO-d6) 10.47 (s, 1H), 8.24 (s, 1H), 7.93 (s, 1H), 7.31 (d, J = 1.6 Hz, 4H), 3.22 (p, J = 9.1 Hz, 1H), 2.41 (td, J = 8.6, 2.6 Hz, 2H), 2.37 – 2.19 (m, 4H), 1.68 – 1.39 (m, 7H), 1.22 (s, 1H).	376.2	E	
I-1404		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.28 (s, 1H), 7.38 (d, J = 9.9 Hz, 1H), 3.53 – 3.39 (m, 1H), 3.10 (p, J = 9.1 Hz, 1H), 2.41 (d, J = 8.9 Hz, 4H), 1.65 (s, 4H), 1.61 – 1.47 (m, 6H), 1.39 (d, J = 8.5 Hz, 2H), 1.24 – 0.97 (m, 6H), 0.87 (p, J = 12.1 Hz, 4H).	362.2	E	

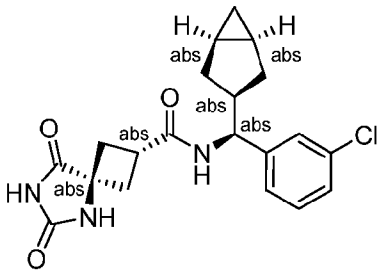
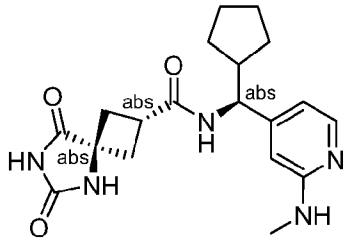
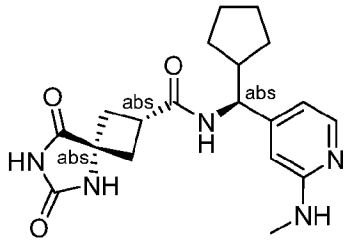
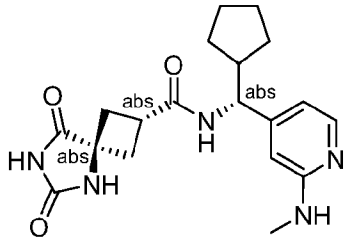
I-1405		(400 MHz, DMSO-d6) 10.52 (s, 1H), 8.22 (s, 1H), 8.16 (s, 1H), 7.37 (td, J = 9.1, 6.7 Hz, 1H), 7.08 (ddd, J = 12.0, 9.2, 2.7 Hz, 1H), 6.95 (td, J = 8.4, 2.6 Hz, 1H), 3.06 (p, J = 9.1 Hz, 1H), 2.37 (td, J = 12.8, 11.0, 5.7 Hz, 4H), 2.26 (td, J = 9.5, 2.7 Hz, 2H), 1.94 – 1.79 (m, 2H), 1.78 – 1.58 (m, 4H).	364.2	E	
I-1406		(400 MHz, DMSO-d6) 10.09 (s, 1H), 8.44 (d, J = 119.0 Hz, 1H), 7.71 (dd, J = 56.4, 9.2 Hz, 1H), 3.98 – 3.63 (m, 2H), 3.28 – 3.11 (m, 2H), 3.05 (ddd, J = 18.0, 10.8, 6.8 Hz, 2H), 2.47 – 2.31 (m, 3H), 2.26 – 1.89 (m, 1H), 1.85 – 1.49 (m, 3H), 1.39 (q, J = 11.5 Hz, 1H), 1.21 (dq, J = 21.0, 10.0 Hz, 1H), 0.88 – 0.69 (m, 1H), 0.45 (dq, J = 9.1, 4.9 Hz, 1H), 0.27 (td, J = 8.7, 4.1 Hz, 1H), 0.21 – 0.02 (m, 2H).	332.2	E	
I-1407		(400 MHz, DMSO-d6) 10.41 (s, 1H), 8.29 (s, 1H), 7.50 (d, J = 9.6 Hz, 1H), 3.56 (q, J = 8.4 Hz, 1H), 3.09 (t, J = 8.8 Hz, 1H), 2.41 (d, J = 8.7 Hz, 5H), 1.92 – 1.70 (m, 3H), 1.64 (s, 5H), 1.54 (d, J = 12.9 Hz, 3H), 1.22 (s, 1H), 1.06 (d, J = 10.8 Hz, 3H), 0.88 (d, J = 11.4 Hz, 2H).	334.2	E	
I-1408		(400 MHz, DMSO-d6) 10.30 (s, 1H), 8.30 (s, 1H), 7.69 (dd, J = 8.6, 3.0 Hz, 1H), 3.58 (p, J = 7.1 Hz, 1H), 3.02 (p, J = 8.8 Hz, 1H), 2.39 (dd, J = 9.1, 2.5 Hz, 4H), 1.78 – 1.52 (m, 4H), 1.26 (d, J = 3.5 Hz, 2H), 1.16 (s, 1H), 0.95 (d, J = 6.8 Hz, 3H), 0.85 (dd, J = 6.5, 3.4 Hz, 3H), 0.81 – 0.69 (m, 2H), 0.55 (tt, J = 12.9, 6.4 Hz, 1H).	308.2	E	

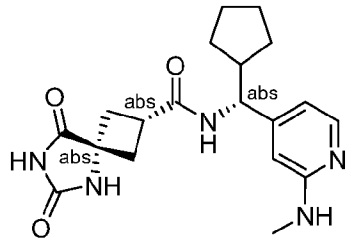
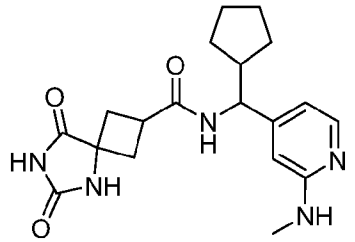
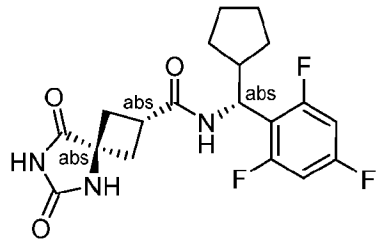
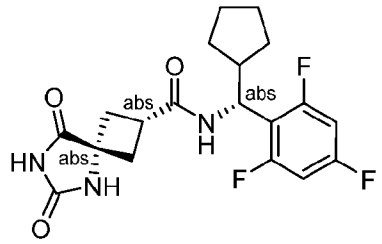
I-1409			348.13	E	
I-1410		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.62 (s, 1H), 8.18 (d, J = 8.8 Hz, 1H), 7.76 (d, J = 7.9 Hz, 1H), 7.72-7.62 (m, 2H), 7.45 (t, J = 7.6 Hz, 1H), 5.16 (t, J = 9.0 Hz, 1H), 3.11 (p, J = 9.1 Hz, 1H), 2.66 (ddd, J = 15.7, 12.1, 9.2 Hz, 2H), 2.34-2.17 (m, 2H), 2.10 (ddd, J = 12.9, 8.8, 4.5 Hz, 1H), 1.77-1.35 (m, 6H), 1.20 (ddd, J = 11.7, 7.6, 4.3 Hz, 1H), 1.01 (dq, J = 12.4, 8.0 Hz, 1H).	410.3	E	
I-1411		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.62 (s, 1H), 8.18 (d, J = 8.8 Hz, 1H), 7.76 (d, J = 7.9 Hz, 1H), 7.72-7.62 (m, 2H), 7.49-7.41 (m, 1H), 5.15 (t, J = 9.0 Hz, 1H), 3.11 (p, J = 9.1 Hz, 1H), 2.66 (ddd, J = 15.7, 12.1, 9.0 Hz, 2H), 2.34-2.17 (m, 2H), 2.10 (ddd, J = 12.8, 8.8, 4.5 Hz, 1H), 1.72-1.37 (m, 6H), 1.21 (dtd, J = 11.6, 7.4, 4.2 Hz, 1H), 1.01 (dq, J = 12.5, 8.1 Hz, 1H).	410.2	D	
I-1412		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.44 (d, J = 8.0 Hz, 1H), 7.69-7.46 (m, 4H), 7.42-7.32 (m, 1H), 4.70 (dd, J = 10.4, 8.2 Hz, 1H), 3.07 (p, J = 9.1 Hz, 1H), 2.63 (ddd, J = 25.2, 12.1, 9.0 Hz, 2H), 2.41 (q, J = 8.3 Hz, 1H), 2.22 (ddd, J = 12.5, 9.0, 4.3 Hz, 1H), 2.09 (ddd, J = 12.8, 8.9, 4.3 Hz, 1H), 1.87-1.77 (m, 1H), 1.66-1.55 (m, 1H), 1.56-1.46 (m, 2H), 1.46-1.28 (m, 2H), 1.25-1.13 (m, 1H), 0.99-0.88 (m, 1H).	392.3	E	

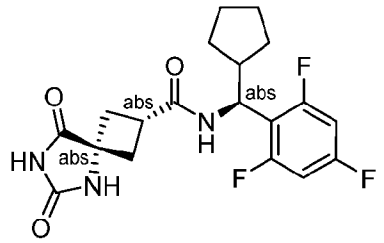
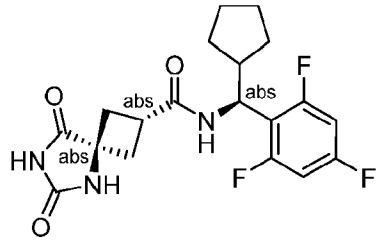
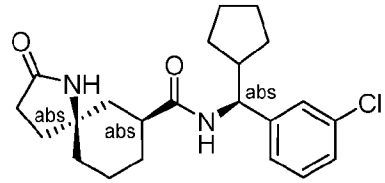
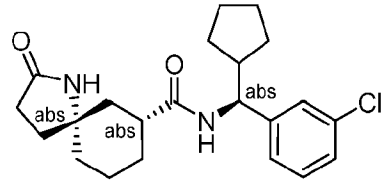
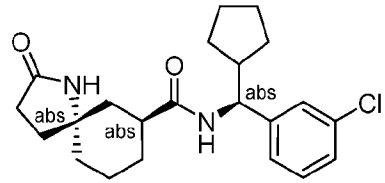
I-1413		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.44 (d, J = 8.0 Hz, 1H), 7.68-7.45 (m, 4H), 7.42-7.34 (m, 1H), 4.70 (dd, J = 10.4, 8.1 Hz, 1H), 3.07 (p, J = 9.1 Hz, 1H), 2.63 (ddd, J = 25.2, 12.0, 9.0 Hz, 2H), 2.46- 2.35 (m, 1H), 2.22 (ddd, J = 12.6, 9.0, 4.3 Hz, 1H), 2.09 (ddd, J = 12.9, 9.0, 4.4 Hz, 1H), 1.83 (td, J = 12.3, 7.2 Hz, 1H), 1.68-1.46 (m, 3H), 1.45-1.27 (m, 2H), 1.19 (tt, J = 11.2, 7.7 Hz, 1H), 1.00-0.86 (m, 1H).	392.3	D	
I-1414		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.61 (s, 1H), 8.26 (d, J = 8.8 Hz, 1H), 6.95 (t, J = 1.7 Hz, 1H), 6.86 (dt, J = 5.5, 2.2 Hz, 2H), 4.53 (t, J = 9.3 Hz, 1H), 3.76 (s, 3H), 3.12 (p, J = 9.1 Hz, 1H), 2.72-2.59 (m, 2H), 2.28-2.08 (m, 3H), 1.69 (s, 1H), 1.57 (s, 2H), 1.46 (qd, J = 10.3, 4.4 Hz, 2H), 1.28 (d, J = 8.0 Hz, 2H), 1.18-1.06 (m, 1H).	406.15	E	
I-1415		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 8.26 (d, J = 8.8 Hz, 1H), 6.95 (t, J = 1.6 Hz, 1H), 6.86 (dt, J = 5.4, 2.2 Hz, 2H), 4.53 (t, J = 9.3 Hz, 1H), 3.76 (s, 3H), 3.12 (p, J = 9.1 Hz, 1H), 2.72-2.59 (m, 2H), 2.28-2.08 (m, 3H), 1.70 (s, 1H), 1.57 (s, 2H), 1.53-1.37 (m, 2H), 1.32-1.20 (m, 2H), 1.18-1.06 (m, 1H).	406.1	E	
I-1416		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.72 (d, J = 6.7 Hz, 1H), 8.61 (s, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (td, J = 9.3, 1.7 Hz, 1H), 4.29 (dd, J = 10.0, 6.7 Hz, 1H), 3.17 (p, J = 9.1 Hz, 1H), 2.67 (dd, J = 11.9, 9.1 Hz, 1H), 2.58 (dd, J = 12.0, 9.1 Hz, 1H), 2.25- 2.09 (m, 2H), 1.39 (s, 1H), 0.61 (ddt, J = 13.3, 8.4, 4.2 Hz, 1H), 0.45 (dtt, J = 32.3, 9.8, 4.6 Hz, 2H), 0.18 (dt, J = 9.6, 5.1 Hz, 1H).	384.1	E	

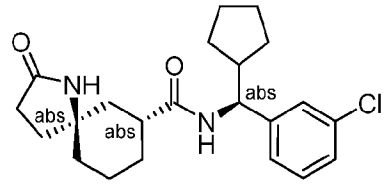
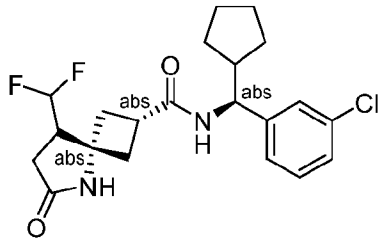
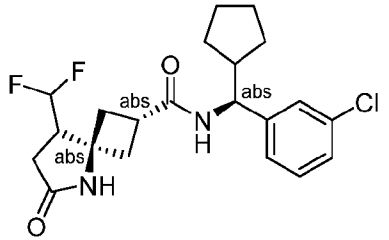
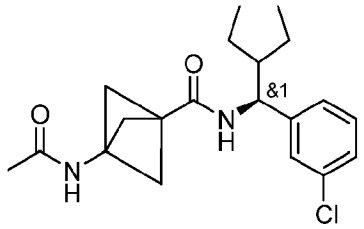
I-1417		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.72 (d, J = 6.7 Hz, 1H), 8.61 (s, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (td, J = 9.4, 1.7 Hz, 1H), 4.29 (dd, J = 10.0, 6.7 Hz, 1H), 3.17 (p, J = 9.1 Hz, 1H), 2.67 (dd, J = 11.9, 9.2 Hz, 1H), 2.58 (dd, J = 11.9, 9.1 Hz, 1H), 2.17 (dddd, J = 20.6, 15.7, 11.0, 4.5 Hz, 2H), 1.39 (s, 1H), 0.60 (td, J = 8.6, 4.1 Hz, 1H), 0.45 (dtt, J = 32.6, 9.9, 4.7 Hz, 2H), 0.18 (dt, J = 9.8, 4.9 Hz, 1H).	384.1	C	
I-1418		(400 MHz, DMSO-d6) 10.53 (s, 1H), 8.59 (s, 1H), 8.37 (d, J = 7.7 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.12 (td, J = 9.4, 1.6 Hz, 1H), 4.85 (dd, J = 10.4, 7.8 Hz, 1H), 3.16 (p, J = 9.2 Hz, 1H), 2.62 (ddd, J = 26.9, 12.0, 9.0 Hz, 2H), 2.27-2.17 (m, 1H), 2.14 (td, J = 13.7, 12.8, 4.9 Hz, 1H), 2.03-1.94 (m, 1H), 1.83 (d, J = 11.3 Hz, 1H), 1.72 (d, J = 11.2 Hz, 1H), 1.60 (s, 2H), 1.21 (d, J = 13.4 Hz, 2H), 1.20-1.07 (m, 2H), 0.99-0.90 (m, 1H), 0.87 (d, J = 12.1 Hz, 1H).	426.15	E	
I-1419		(400 MHz, DMSO-d6) 10.53 (s, 1H), 8.59 (s, 1H), 8.37 (d, J = 7.7 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.12 (td, J = 9.3, 1.6 Hz, 1H), 4.85 (dd, J = 10.4, 7.7 Hz, 1H), 3.16 (p, J = 9.1 Hz, 1H), 2.62 (ddd, J = 26.9, 12.1, 9.0 Hz, 2H), 2.18 (dddd, J = 30.9, 12.9, 9.1, 4.3 Hz, 2H), 2.03-1.94 (m, 1H), 1.83 (d, J = 11.3 Hz, 1H), 1.72 (d, J = 10.9 Hz, 1H), 1.60 (s, 2H), 1.25-1.07 (m, 4H), 0.99-0.90 (m, 1H), 0.87 (d, J = 12.0 Hz, 1H).	426.15	B	
I-1420		(400 MHz, DMSO-d6)10.51 (s, 1H), 8.63 (t, J = 5.6 Hz, 1H), 8.24 (s, 1H), 7.89 (t, J = 1.9 Hz, 1H), 7.81 (dd, J = 7.8, 1.4 Hz, 1H), 7.61 (dt, J = 8.0, 1.6 Hz, 1H), 7.51 (t, J = 7.9 Hz, 1H), 3.29 (t, J = 6.2 Hz, 2H), 2.59-2.53 (m, 1H), 2.42 (td, J = 8.9, 8.4, 2.8 Hz, 2H), 2.08-1.94 (m, 2H).	307.95	E	

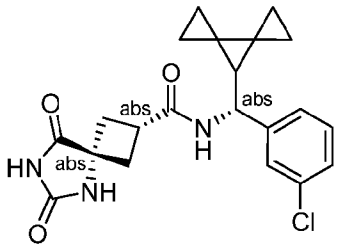
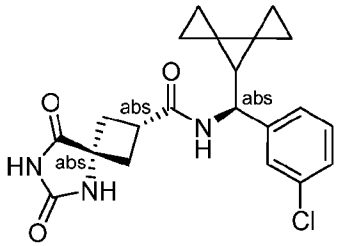
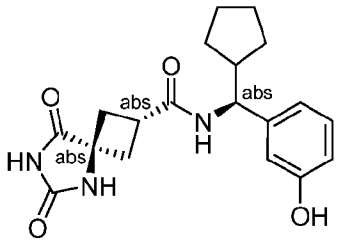
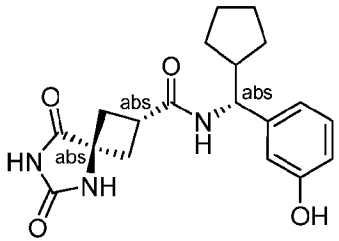
I-1421		(400 MHz, DMSO-d6)10.56(s, 1H),8.68 (s, 1H), 8.39 (d, J = 45.4 Hz, 1H), 7.90 (d, J = 1.8 Hz, 1H), 7.83-7.78 (m, 1H), 7.63-7.57 (m, 1H), 7.50 (t, J = 7.9 Hz, 1H), 3.43 (t, J = 6.4 Hz, 2H), 2.68 (t, J = 1.9 Hz, 1H), 2.39-2.14 (m, 4H).	307.95	E	
I-1422		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.26 (d, J = 8.6 Hz, 1H), 7.38-7.17 (m, 4H), 4.57 (t, J = 9.0 Hz, 1H), 3.11 (p, J = 9.1 Hz, 1H), 2.64 (ddd, J = 20.8, 12.0, 9.1 Hz, 2H), 2.18 (dddd, J = 32.2, 13.0, 9.0, 4.4 Hz, 2H), 1.97-1.77 (m, 2H), 1.53-1.35 (m, 2H), 1.21 (tt, J = 10.5, 6.8 Hz, 3H), 0.25 (td, J = 7.9, 4.7 Hz, 1H), 0.13 (q, J = 4.1 Hz, 1H).	388.25	E	
I-1423		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.21 (d, J = 8.7 Hz, 1H), 7.36 - 7.30 (m, 2H), 7.27 (dt, J = 8.1, 1.5 Hz, 1H), 7.21 (dt, J = 7.5, 1.5 Hz, 1H), 4.45 (dd, J = 10.9, 8.7 Hz, 1H), 3.09 (p, J = 9.1 Hz, 1H), 2.71-2.61 (m, 3H), 2.23 (ddd, J = 12.5, 9.0, 4.3 Hz, 1H), 2.10 (dddd, J = 19.7, 14.5, 9.1, 5.0 Hz, 2H), 1.69 (ddd, J = 14.4, 9.6, 5.9 Hz, 1H), 1.39-1.31 (m, 1H), 1.30-1.15 (m, 2H), 1.10-0.99 (m, 1H), 0.65 (td, J = 8.2, 4.4 Hz, 1H), 0.10 (q, J = 4.1 Hz, 1H).	388.25	E	
I-1424		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.60 (s, 1H), 8.26 (d, J = 8.6 Hz, 1H), 7.37 - 7.18 (m, 4H), 4.57 (t, J = 9.0 Hz, 1H), 3.11 (p, J = 9.1 Hz, 1H), 2.64 (ddd, J = 20.7, 12.0, 9.1 Hz, 2H), 2.27-2.06 (m, 2H), 1.86 (ddd, J = 28.6, 10.7, 6.8 Hz, 2H), 1.56-1.41 (m, 2H), 1.22 (ddd, J = 12.4, 10.3, 5.6 Hz, 3H), 0.25 (td, J = 7.9, 4.7 Hz, 1H), 0.13 (q, J = 4.1 Hz, 1H).	388.25	B	D

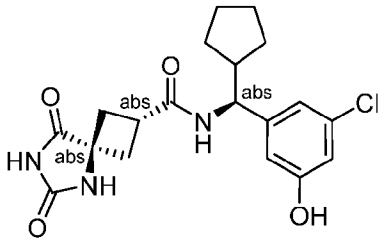
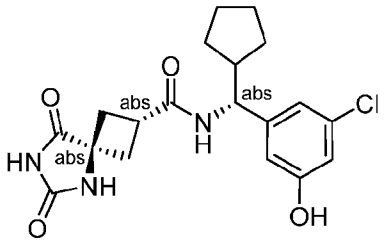
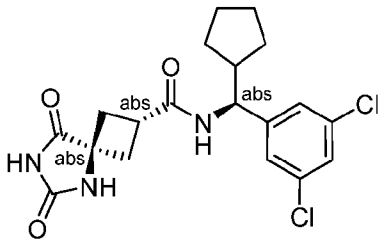
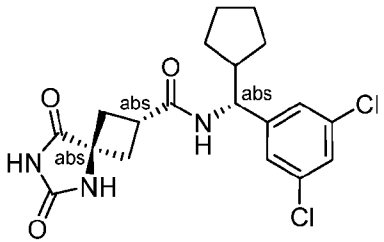
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I-1426		(400 MHz, MeOD) 1.12-1.26 (1H, m), 1.27-1.41 (2H, m), 1.41-1.52 (1H, m), 1.52-1.74 (4H, m), 1.85 (1H, dt), 2.26 (1H, dt), 2.48 (1H, dd), 2.52-2.71 (3H, m), 2.87 (3H, s), 3.13-3.28 (1H, m), 4.47 (1H, d), 6.44 (1H, s), 6.52 (1H, dd), 7.87 (1H, d).	372.25	E	
I-1427		(400 MHz, MeOD) 0.12 (1H, s), 1.18 (1H, dd), 1.31 (2H, s), 1.41 (2H, d), 1.46 (2H, d), 1.55 (1H, s), 1.64 (2H, s), 1.68 (3H, s), 1.79-1.93 (1H, m), 2.16-2.34 (1H, m), 2.49 (1H, d), 2.55-2.69 (3H, m), 2.87 (3H, s), 3.13-3.25 (1H, m), 4.47 (1H, d), 4.62 (1H, s), 6.45 (1H, s), 6.53 (1H, dd), 7.86 (1H, d).	372.25	E	
I-1428		(400 MHz, MeOD) 1.11-1.27 (1H, m), 1.27-1.44 (2H, m), 1.43-1.55 (1H, m), 1.55-1.77 (4H, m), 1.83-1.97 (1H, m), 2.21-2.35 (1H, m), 2.38-2.57 (2H, m), 2.87 (3H, s), 2.9-2.97 (2H, m), 3.13-3.28 (1H, m), 4.51 (1H, d), 6.47 (1H, s), 6.54-6.6 (1H, m), 7.87 (1H, d).	372.25	E	

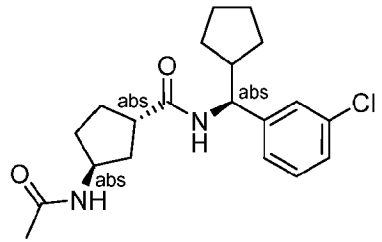
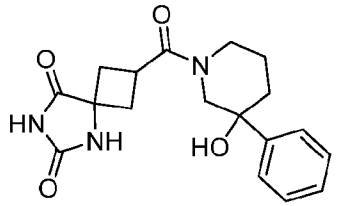
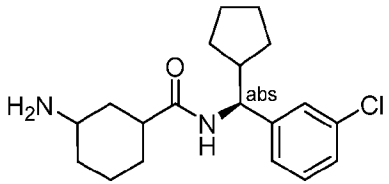
I-1429		(400 MHz, MeOD) 1.20 (1H, tt), 1.31 (1H, s), 1.35-1.44 (1H, m), 1.49 (H, dt), 1.55-1.78 (4H, m), 1.88 (1H, dt), 2.19-2.37 (1H, m), 2.45 (2H, dddd), 2.89 (3H, s), 2.9-2.96 (2H, m), 3.17-3.25 (1H, m), 4.51 (1H, d), 6.47 (1H, s), 6.55 (1H, dd), 7.83-7.92 (1H, m).	372.2	E	
I-1430		(400 MHz, MeOD)1.11-1.26 (1H, m), 1.31 (1H, s), 1.40 (1H, t), 1.44-1.63 (3H, m), 1.67 (2H, d), 1.88 (1H, d), 2.29 (1H, dt), 2.45 (2H, ddd), 2.54-2.66 (1H, m), 2.87 (3H, s), 2.92 (1H, dd), 3.20 (1H, dt), 4.4-4.63 (1H, m), 6.46 (1H, d), 6.51-6.62 (1H, m), 7.87 (1H, d).	372.2	E	
I-1431		(400 MHz, DMSO-d6) 10.53 (s, 1H), 8.48 (d, J = 7.6 Hz, 1H), 8.26 (s, 1H), 7.12 (t, J = 9.0 Hz, 2H), 4.79 (dd, J = 11.0, 7.6 Hz, 1H), 3.11 (p, J = 8.9 Hz, 1H), 2.45-2.33 (m, 4H), 2.25 (t, J = 10.4 Hz, 1H), 1.90 (s, 1H),1.62-1.42 (m, 4H), 1.33 (s, 1H), 1.24 (s, 1H), 1.06-0.94 (m, 1H).	396.1	E	
I-1432		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.48 (d, J = 7.6 Hz, 1H), 8.26 (s, 1H), 7.12 (t, J = 9.0 Hz, 2H), 4.79 (dd, J = 11.1, 7.6 Hz, 1H), 3.11 (p, J = 8.9 Hz, 1H), 2.45-2.32 (m, 4H), 2.25 (t, J = 10.4 Hz, 1H), 1.86 (dt, J = 12.3, 6.2 Hz, 1H), 1.62-1.42 (m, 4H), 1.35 (dd, J = 12.1, 7.5 Hz, 1H), 1.24 (s, 1H), 0.99 (p, J = 8.0 Hz, 1H).	396.1	E	

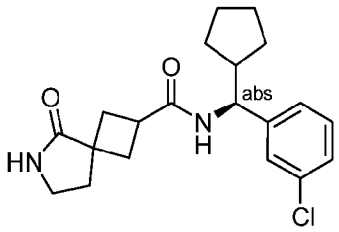
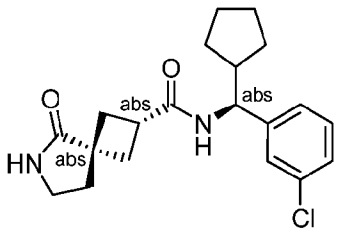
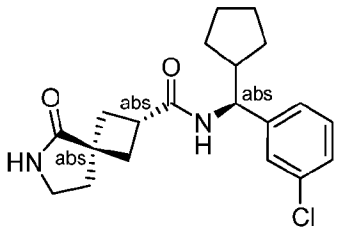
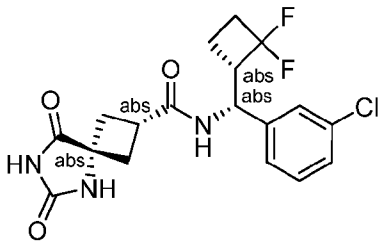
I-1433		(400 MHz, DMSO-d6) 10.53 (s, 1H), 8.58 (s, 1H), 8.38 (d, J = 7.5 Hz, 1H), 7.12 (t, J = 8.9 Hz, 2H), 4.79 (dd, J = 11.1, 7.5 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.70-2.52 (m, 2H), 2.40 (q, J = 8.7 Hz, 1H), 2.17 (dddd, J = 28.3, 12.8, 9.0, 4.2 Hz, 2H), 1.92-1.85 (m, 1H), 1.65 (s, 4H), 1.60-1.42 (m, 1H), 1.40-1.18 (m, 1H), 1.00 (dd, J = 12.7, 7.6 Hz, 1H).	396.15	E	
I-1434		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.59 (s, 1H), 8.38 (d, J = 7.6 Hz, 1H), 7.12 (t, J = 8.9 Hz, 2H), 4.79 (dd, J = 11.1, 7.6 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.62 (ddd, J = 27.5, 12.0, 9.0 Hz, 2H), 2.40 (q, J = 8.5 Hz, 1H), 2.26 - 2.08 (m, 2H), 1.87 (dt, J = 12.3, 6.1 Hz, 1H), 1.65-1.43 (m, 4H), 1.40-1.31 (m, 1H), 1.24 (p, J = 7.9 Hz, 1H), 1.07-0.95 (m, 1H).	396.1	C	
I-1435				D	
I-1436				D	
I-1437				E	

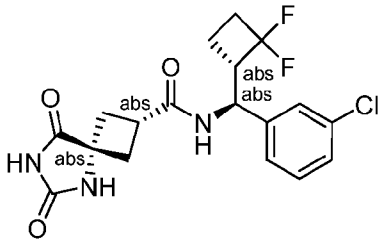
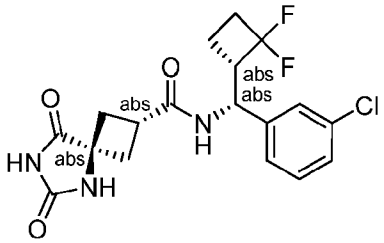
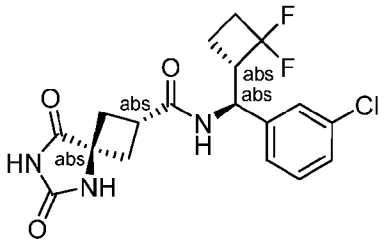
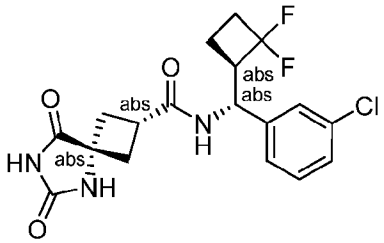
I-1438				E	
I-1439			411.34	C	
I-1440			411.34	C	
I-1441		(400 MHz, DMSO-d6) δ 8.42 (s, 1H), 8.11 (d, J = 8.8 Hz, 1H), 7.41 (t, J = 1.6 Hz, 1H), 7.35 – 7.30 (m, 1H), 7.28 – 7.25 (m, 2H), 4.50 (dd, J = 10.4, 9.0 Hz, 1H), 2.30 – 2.18 (m, 1H), 2.11 (s, 6H), 1.79 – 1.70 (overlapping m, 1H), 1.74 (overlapping s, 3H), 1.62 – 1.38 (m, 4H), 1.27 – 1.17 (m, 2H), 1.10 – 0.99 (m, 1H).	361.3	E	

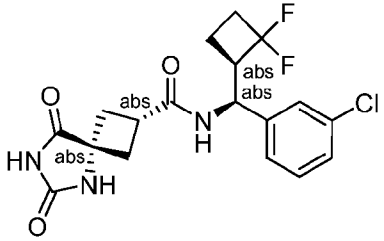
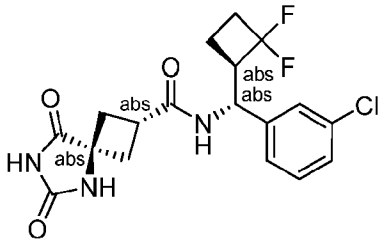
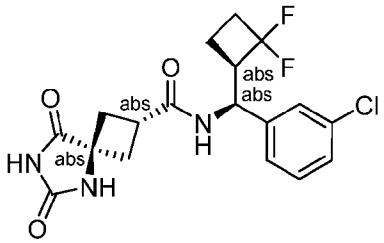
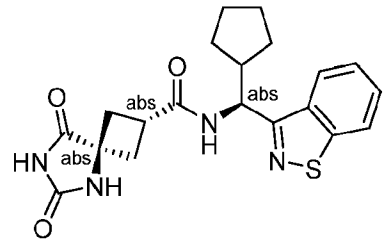
I-1442		(400 MHz, DMSO) 0.52-0.72 (m, 5H), 0.74 (tq, J = 6.8, 3.9 Hz, 1H), 0.81-0.91 (m, 2H), 1.87 (d, J = 9.9 Hz, 1H), 2.20 (dddd, J = 25.4, 13.0, 9.1, 4.3 Hz, 2H), 2.66 (td, J = 11.4, 9.0 Hz, 2H), 3.09 (p, J = 9.1 Hz, 1H), 4.57 (dd, J = 10.0, 8.3 Hz, 1H), 7.15 (dt, J = 7.6, 1.5 Hz, 1H), 7.22 (t, J = 1.9 Hz, 1H), 7.25-7.31 (m, 1H), 7.34 (t, J = 7.7 Hz, 1H), 8.36 (d, J = 8.3 Hz, 1H), 8.58 (s, 1H), 10.58 (s, 1H).	400.15	D	
I-1443		(400 MHz, DMSO) 0.52-0.71 (m, 5H), 0.75 (ddd, J = 7.9, 5.4, 3.3 Hz, 1H), 0.81-0.91 (m, 2H), 1.87 (d, J = 9.9 Hz, 1H), 2.12-2.28 (m, 2H), 2.66 (td, J = 11.4, 9.0 Hz, 2H), 3.09 (p, J = 9.1 Hz, 1H), 4.57 (dd, J = 10.0, 8.3 Hz, 1H), 7.15 (dt, J = 7.7, 1.5 Hz, 1H), 7.22 (t, J = 1.9 Hz, 1H), 7.28 (ddd, J = 8.0, 2.2, 1.3 Hz, 1H), 7.34 (t, J = 7.8 Hz, 1H), 8.36 (d, J = 8.3 Hz, 1H), 8.56-8.6 (m, 1H), 10.58 (s, 1H).	400.15	D	
I-1444		(400 MHz, DMSO) 1.07 (dd, J = 12.6, 7.8 Hz, 1H), 1.27 (ddd, J = 16.3, 12.5, 7.8 Hz, 2H), 1.53 (s, 4H), 1.64-1.74 (m, 1H), 2.16 (dddd, J = 30.2, 16.5, 8.6, 4.1 Hz, 3H), 2.6-2.73 (m, 2H), 3.12 (p, J = 9.1 Hz, 1H), 4.46 (t, J = 9.4 Hz, 1H), 6.60 (ddd, J = 8.0, 2.5, 1.0 Hz, 1H), 6.66-6.74 (m, 2H), 7.07 (t, J = 7.8 Hz, 1H), 8.20 (d, J = 8.8 Hz, 1H), 8.62 (s, 1H), 9.27 (s, 1H), 10.55 (s, 1H).	358.15	E	
I-1445		(400 MHz, DMSO) 1.02-1.14 (m, 1H), 1.2-1.35 (m, 2H), 1.41-1.6 (m, 4H), 1.68-1.76 (m, 1H), 2.06-2.27 (m, 3H), 2.64 (d, J = 10.5 Hz, 1H), 2.69 (d, J = 10.3 Hz, 1H), 3.12 (p, J = 9.1 Hz, 1H), 4.46 (t, J = 9.4 Hz, 1H), 6.56-6.63 (m, 1H), 6.66-6.74 (m, 2H), 7.07 (t, J = 7.8 Hz, 1H), 8.20 (d, J = 8.8 Hz, 1H), 8.62 (s, 1H), 9.26 (s, 1H), 10.55 (s, 1H).	358.15	E	

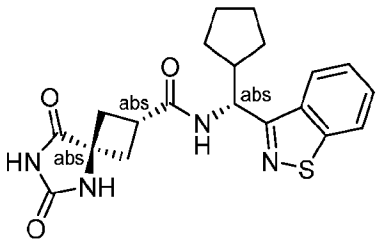
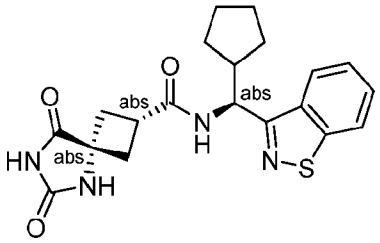
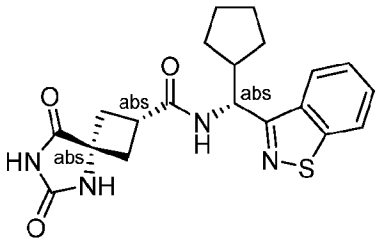
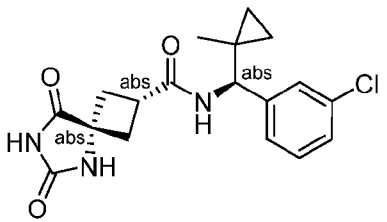
I-1446		(400 MHz, DMSO) 1.07 (dd, J = 12.7, 7.9 Hz, 1H), 1.22-1.38 (m, 2H), 1.42-1.52 (m, 2H), 1.56 (s, 2H), 1.70 (s, 1H), 2.06-2.27 (m, 3H), 2.65 (dt, J = 11.9, 9.3 Hz, 2H), 3.11 (p, J = 9.2 Hz, 1H), 4.44 (t, J = 9.3 Hz, 1H), 6.64 (d, J = 1.8 Hz, 2H), 6.78 (t, J = 1.7 Hz, 1H), 8.25 (d, J = 8.7 Hz, 1H), 8.62 (s, 1H), 9.84 (s, 1H), 10.57 (s, 1H).	392.1	A	B
I-1447		(400 MHz, DMSO) 1.07 (s, 1H), 1.28 (s, 2H), 1.4-1.53 (m, 2H), 1.57 (s, 2H), 1.66-1.74 (m, 1H), 2.12 (dd, J = 10.5, 5.3 Hz, 2H), 2.16-2.28 (m, 1H), 2.6-2.72 (m, 2H), 3.12 (p, J = 9.1 Hz, 1H), 4.44 (t, J = 9.3 Hz, 1H), 6.64 (d, J = 1.9 Hz, 2H), 6.78 (t, J = 1.7 Hz, 1H), 8.24 (d, J = 8.7 Hz, 1H), 8.61 (d, J = 1.6 Hz, 1H), 9.83 (s, 1H), 10.57 (s, 1H).	392.1	E	
I-1448		(400 MHz, DMSO) 1.05-1.18 (m, 1H), 1.27 (dd, J = 12.9, 7.0 Hz, 2H), 1.38-1.53 (m, 2H), 1.58 (s, 2H), 1.71 (dd, J = 12.5, 7.8 Hz, 1H), 2.15 (dq, J = 8.7, 4.6 Hz, 2H), 2.24 (ddd, J = 12.7, 9.2, 4.4 Hz, 1H), 2.65 (td, J = 11.9, 9.0 Hz, 2H), 3.12 (p, J = 9.1 Hz, 1H), 4.58 (t, J = 9.2 Hz, 1H), 7.38 (d, J = 1.9 Hz, 2H), 7.45 (t, J = 2.0 Hz, 1H), 8.30 (d, J = 8.6 Hz, 1H), 8.60 (s, 1H), 10.56 (s, 1H).	410	B	
I-1449		(400 MHz, DMSO) 1.04-1.18 (m, 1H), 1.27 (dd, J = 13.1, 6.8 Hz, 2H), 1.39-1.52 (m, 2H), 1.55 (d, J = 19.2 Hz, 2H), 1.70 (dd, J = 11.9, 7.1 Hz, 1H), 2.16 (dd, J = 10.2, 6.4 Hz, 2H), 2.21-2.28 (m, 1H), 2.65 (td, J = 11.9, 9.0 Hz, 2H), 3.11 (q, J = 9.1 Hz, 1H), 4.58 (t, J = 9.3 Hz, 1H), 7.41 (dd, J = 27.7, 1.9 Hz, 3H), 8.30 (d, J = 8.6 Hz, 1H), 8.60 (s, 1H), 10.56 (s, 1H).	410	E	

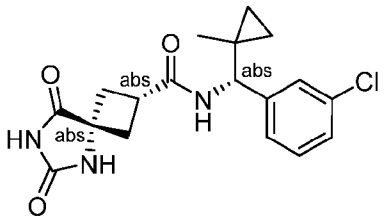
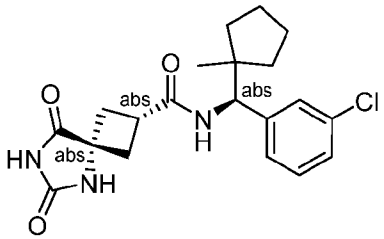
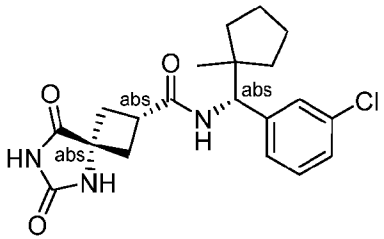
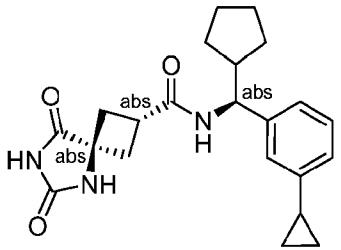
I-1450		NMR (400 MHz, DMSO-d6) δ 8.24 (d, J = 8.7 Hz, 1H), 7.76 (d, J = 6.9 Hz, 1H), 7.36 (t, J = 1.7 Hz, 1H), 7.35 – 7.30 (m, 1H), 7.28 – 7.23 (m, 2H), 4.55 (t, J = 9.3 Hz, 1H), 4.05 – 3.95 (m, 1H), 2.82 – 2.71 (m, 1H), 2.22 – 2.09 (m, 1H), 1.95 – 1.81 (m, 2H), 1.75 (overlapping s, 3H), 1.74 (overlapping m, 2H), 1.65 – 1.33 (m, 7H), 1.31 – 1.20 (m, 2H), 1.14 – 1.02 (m, 1H).	363.3	C	
I-1451		NMR (400 MHz, DMSO-d6) δ 8.49 (br s, 0.05H), 8.41 (br s, 0.1H), 8.30 (br s, 0.25H), 8.25 (br s, 0.6H), 7.59 – 7.48 (m, 2H), 7.40 – 7.30 (m, 2H), 7.30 – 7.20 (m, 1H), 5.14 (br s, 0.6H), 5.10 (br s, 0.1H), 4.98 (br s, 0.05H), 4.94 (br s, 0.25H), 4.41 (d, J = 12.9 Hz, 0.6H), 4.04 (overlapping d, J = 12.7, 0.1H), 4.01 (submerged d, J = 12.7, 0.05H), 3.62 (d, J = 13.2 Hz, 0.25H), 3.56 – 3.42 (m, 0.4H), 3.31 – 3.17 (submerged m, 1.6H), 3.16 – 3.07 (m, 0.4H), 3.05 (d, J = 13.0 Hz, 0.4H), 2.95 – 2.79 (m, 0.15H), 2.69 – 2.58 (m, 1.2H), 2.58 – 2.52 (overlapping m, 2H), 2.48 – 2.36 (m, 1.5H), 2.34 – 2.26 (m, 0.6H), 2.25 – 2.08 (m, 0.4H), 2.09 – 1.94 (m, 1H), 1.91 – 1.75 (m, 1H), 1.72 (br d, J = 14.1 Hz, 1H), 1.47 (br d, J = 12.6 Hz, 1H). Mixture of 4 cmpds ~ 12 : 5 : 2 : 1 (average of peaks reported) -- by LC (3:1 ratio)	344.2	E	
I-1452			335.22	D	

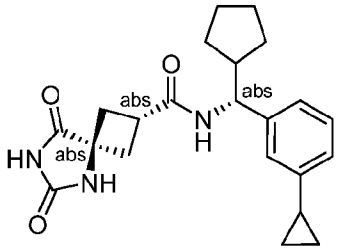
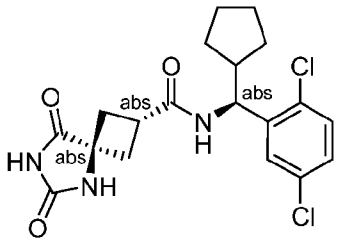
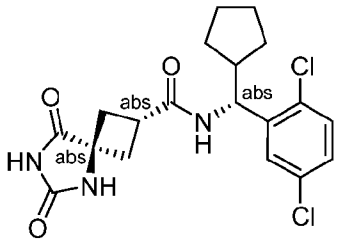
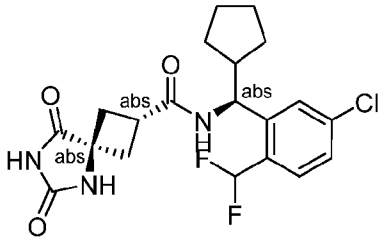
I-1453		(400 MHz, DMSO) 1.09 (ddd, J = 12.8, 8.6, 4.7 Hz, 1H), 1.26 (pd, J = 8.1, 7.5, 4.0 Hz, 2H), 1.36-1.68 (m, 5H), 1.76-1.85 (m, 1H), 1.93-2.1 (m, 2H), 2.12-2.37 (m, 2H), 2.50 (s, 1H), 2.52 (s, 1H), 2.74 (dt, J = 14.5, 3.6 Hz, 1H), 3.02-3.17 (m, 2H), 4.56 (ddd, J = 12.1, 10.7, 8.6 Hz, 1H), 5.35 (t, J = 2.0 Hz, 1H), 5.60 (d, J = 5.2 Hz, 1H), 7.2-7.4 (m, 3H), 7.42-7.48 (m, 1H), 7.60 (d, J = 5.7 Hz, 1H), 8.49 (d, J = 8.6 Hz, 1H).	361.2	E	
I-1454		(400 MHz, DMSO) 1.08 (dq, J = 17.0, 8.1 Hz, 1H), 1.27 (d, J = 24.3 Hz, 3H), 1.37-1.67 (m, 5H), 1.80 (s, 1H), 1.95-2.07 (m, 2H), 2.31 (p, J = 8.8 Hz, 2H), 2.50 (s, 1H), 2.52 (s, 1H), 2.74 (dd, J = 14.4, 3.8 Hz, 1H), 3.04-3.17 (m, 2H), 4.58 (dd, J = 10.5, 8.6 Hz, 1H), 5.36 (s, 1H), 5.59 (s, 1H), 7.24-7.38 (m, 3H), 7.45 (d, J = 1.9 Hz, 1H), 7.61 (s, 1H), 8.49 (d, J = 8.7 Hz, 1H).	361.2	E	
I-1455		(400 MHz, DMSO) 1.10 (dd, J = 12.5, 8.3 Hz, 1H), 1.27 (dt, J = 20.7, 6.5 Hz, 2H), 1.37-1.76 (m, 5H), 1.83 (s, 1H), 2.01 (td, J = 15.5, 14.9, 10.7 Hz, 2H), 2.13-2.4 (m, 2H), 2.50 (s, 1H), 2.52 (s, 1H), 2.73 (dd, J = 14.4, 3.8 Hz, 1H), 3.01-3.17 (m, 2H), 4.55 (dd, J = 10.5, 8.6 Hz, 1H), 5.35 (s, 1H), 5.61 (s, 1H), 7.23-7.38 (m, 3H), 7.44 (d, J = 1.7 Hz, 1H), 7.60 (s, 1H), 8.50 (d, J = 8.6 Hz, 1H).	361.2	E	
I-1456		(400 MHz, DMSO-d6) 10.51 (s, 1H), 8.60 (s, 1H), 8.35 (d, J = 8.8 Hz, 1H), 7.45 - 7.20 (m, 4H), 5.04 (dd, J = 11.2, 8.8 Hz, 1H), 3.14 (dq, J = 27.2, 10.2, 9.0 Hz, 2H), 2.66 (q, J = 10.5 Hz, 2H), 2.42 (dd, J = 12.1, 8.5 Hz, 2H), 2.28 - 2.11 (m, 2H), 1.94 (d, J = 10.1 Hz, 1H), 1.53 (q, J = 9.2, 8.4 Hz, 1H).	398.25	E	

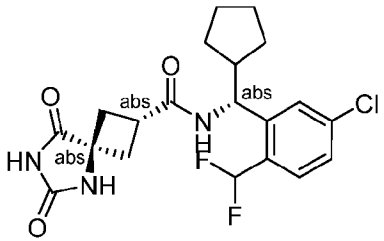
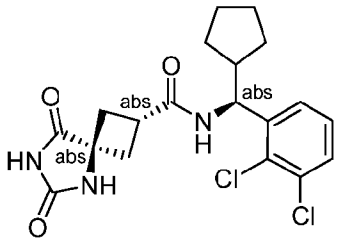
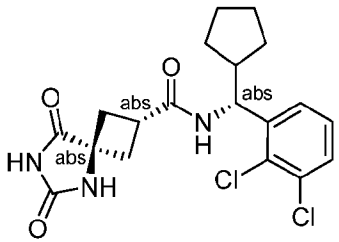
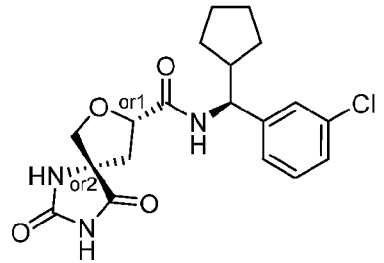
I-1457		(400 MHz, DMSO-d6) 10.53 (s, 1H), 8.60 (s, 1H), 8.35 (d, J = 8.7 Hz, 1H), 7.42 -7.25 (m, 4H), 5.03 (d, J = 9.9 Hz, 1H), 3.10 (q, J = 9.1 Hz, 2H), 2.71- 2.60 (m, 2H), 2.43-2.29 (m, 2H), 2.26 - 2.11 (m, 2H), 1.92 (s, 1H), 1.58 -1.49 (m, 1H).	398.25	E	
I-1458		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.51 (d, J = 8.8 Hz, 1H), 8.29 (s, 1H), 7.42 - 7.23 (m, 4H), 5.02 (dd, J = 11.0, 8.8 Hz, 1H), 3.05 (tt, J = 9.6, 8.1 Hz, 2H), 2.47 - 2.28 (m, 6H), 1.91 (d, J = 9.6 Hz, 1H), 1.51 (q, J = 9.6 Hz, 1H).	398.25	E	
I-1459		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.51 (d, J = 8.8 Hz, 1H), 8.30 (s, 1H), 7.39 - 7.25 (m, 4H), 5.05- 4.99 (m, 1H), 3.12- 2.99 (m, 2H), 2.48- 2.29 (m, 6H), 1.92 (s, 1H), 1.52 (t, J = 9.6 Hz, 1H).	398.25	E	
I-1460		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.63 - 8.56 (m, 1H), 8.49 (d, J = 8.7 Hz, 1H), 7.44 (t, J = 1.9 Hz, 1H), 7.39 - 7.27 (m, 3H), 5.00 (dd, J = 11.5, 8.6 Hz, 1H), 3.18 -3.06 (m, 2H), 2.69- 2.57 (m, 2H), 2.44 -2.34 (m, 2H), 2.17 (dq, J = 20.5, 9.0, 6.7 Hz, 2H), 1.56 (s, 1H), 1.45 (t, J = 9.6 Hz, 1H).	398.25	E	

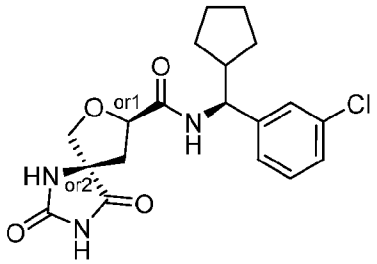
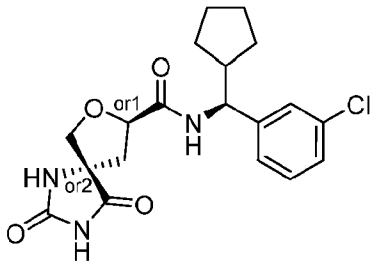
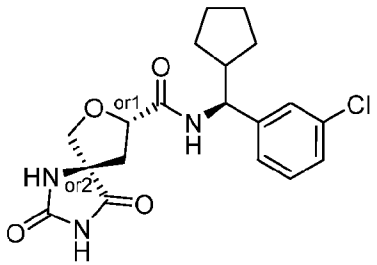
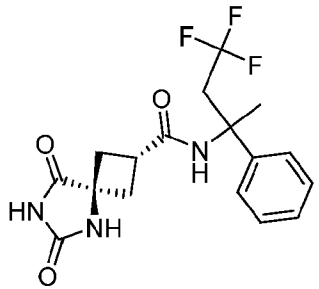
I-1461		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.61 (d, J = 9.8 Hz, 1H), 8.46 (d, J = 8.6 Hz, 1H), 7.44 (d, J = 1.9 Hz, 1H), 7.39 - 7.27 (m, 3H), 5.03 - 4.97 (m, 1H), 3.11 (t, J = 9.3 Hz, 2H), 2.62 (dd, J = 20.0, 9.7 Hz, 2H), 2.46 - 2.32 (m, 2H), 2.16 (dt, J = 16.4, 10.7 Hz, 2H), 1.56 (s, 1H), 1.49 - 1.39 (m, 1H).	398.25	D	
I-1462		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.61 (d, J = 8.7 Hz, 1H), 8.28 (s, 1H), 7.43 (t, J = 1.8 Hz, 1H), 7.38 - 7.29 (m, 3H), 5.02 - 4.96 (m, 1H), 3.03 (p, J = 8.4 Hz, 2H), 2.44 - 2.30 (m, 6H), 1.54 (s, 1H), 1.44 (t, J = 9.4 Hz, 1H).	398.25	E	
I-1463		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (d, J = 8.8 Hz, 1H), 8.28 (s, 1H), 7.43 (t, J = 1.8 Hz, 1H), 7.38 - 7.29 (m, 3H), 4.99 (dd, J = 11.4, 8.7 Hz, 1H), 3.03 (p, J = 8.4 Hz, 2H), 2.44 - 2.30 (m, 6H), 1.52 (d, J = 18.7 Hz, 1H), 1.44 (t, J = 9.6 Hz, 1H).	398.25	E	
I-1464		(400 MHz, DMSO-d6) 10.53 (s, 1H), 8.58 (s, 1H), 8.51 (d, J = 8.7 Hz, 1H), 8.24 (d, J = 8.1 Hz, 1H), 8.18 (d, J = 8.1 Hz, 1H), 7.60 (ddd, J = 8.2, 6.9, 1.1 Hz, 1H), 7.50 (dd, J = 8.2, 6.6 Hz, 1H), 5.33 (t, J = 9.2 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.78 - 2.66 (m, 2H), 2.66 - 2.58 (m, 1H), 2.29 - 2.16 (m, 1H), 2.15 - 2.05 (m, 1H), 1.81 (s, 1H), 1.68 - 1.33 (m, 6H), 1.24 (s, 1H), 1.11 (s, 1H).	399.15	B	B

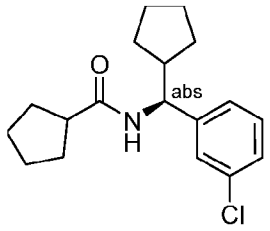
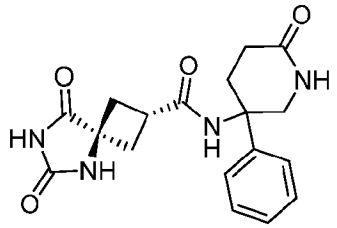
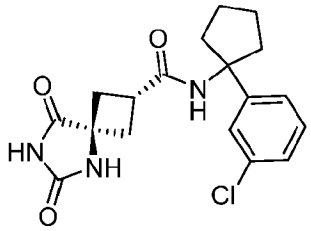
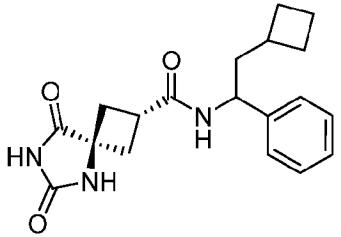
I-1465		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (d, J = 8.5 Hz, 1H), 8.32 - 8.20 (m, 2H), 8.20 - 8.14 (m, 1H), 7.60 (ddd, J = 8.2, 7.0, 1.1 Hz, 1H), 7.49 (ddd, J = 8.1, 6.9, 1.1 Hz, 1H), 5.34 - 5.19 (m, 1H), 3.09 (p, J = 8.9 Hz, 1H), 2.44 (dd, J = 8.8, 5.4 Hz, 2H), 2.37 - 2.24 (m, 2H), 1.81 (d, J = 11.4 Hz, 1H), 1.68 - 1.31 (m, 7H), 1.24 (s, 1H), 1.13 (d, J = 21.2 Hz, 1H).	399.15	E	
I-1466		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (d, J = 8.5 Hz, 1H), 8.32 - 8.22 (m, 2H), 8.22 - 8.15 (m, 1H), 7.60 (t, J = 7.5 Hz, 1H), 7.49 (t, J = 7.4 Hz, 1H), 5.29 (t, J = 9.1 Hz, 1H), 3.24 - 2.91 (m, 1H), 2.44 (d, J = 9.5 Hz, 2H), 2.38 - 2.25 (m, 2H), 1.81 (s, 1H), 1.52 (d, J = 41.0 Hz, 7H), 1.29 - 1.21 (m, 1H), 1.11 (s, 1H).	399.15	D	
I-1467		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.58 (s, 1H), 8.51 (d, J = 8.6 Hz, 1H), 8.24 (d, J = 8.2 Hz, 1H), 8.21 - 8.15 (m, 1H), 7.60 (t, J = 7.6 Hz, 1H), 7.50 (t, J = 7.7 Hz, 1H), 5.33 (t, J = 9.3 Hz, 1H), 3.21 - 3.08 (m, 1H), 2.79 - 2.67 (m, 2H), 2.62 (t, J = 11.0 Hz, 1H), 2.23 (s, 1H), 2.11 (d, J = 11.4 Hz, 1H), 1.81 (s, 1H), 1.57 (s, 3H), 1.43 (d, J = 57.7 Hz, 4H), 1.24 (s, 1H), 1.13 (d, J = 15.9 Hz, 1H).	399.2	E	
I-1468		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.66 (s, 1H), 8.32 (d, J = 8.7 Hz, 1H), 7.41-7.25 (m, 4H), 4.55 (d, J = 8.7 Hz, 1H), 3.24 (q, J = 9.1 Hz, 1H), 2.72 (t, J = 10.3 Hz, 1H), 2.67 (d, J = 11.2 Hz, 1H), 2.24 (s, 1H), 2.21 (d, J = 10.0 Hz, 1H), 0.89 (s, 3H), 0.69 (d, J = 9.6 Hz, 1H), 0.51-0.44 (m, 1H), 0.29 (q, J = 1.9 Hz, 2H).	362	D	

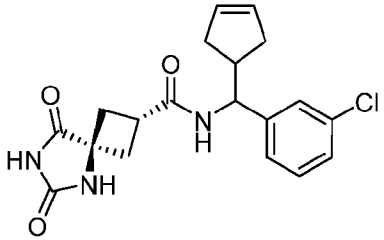
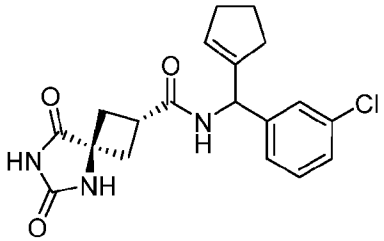
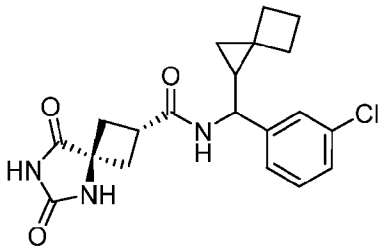
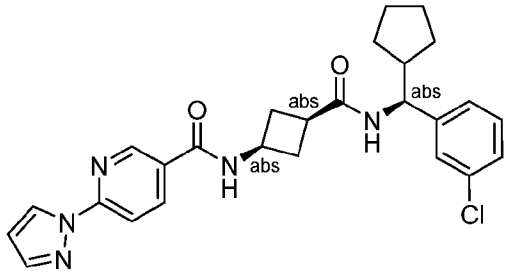
I-1469		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.66 (s, 1H), 8.32 (d, J = 8.8 Hz, 1H), 7.41-7.25 (m, 4H), 4.55 (d, J = 8.7 Hz, 1H), 3.25 (p, J = 9.1 Hz, 1H), 2.70 (ddd, J = 15.3, 11.4, 8.8 Hz, 2H), 2.30-2.16 (m, 2H), 0.89 (s, 3H), 0.73- 0.65 (m, 1H), 0.52-0.42 (m, 1H), 0.29 (q, J = 1.9 Hz, 2H).	362	E	
I-1470		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.64 (s, 1H), 8.23 (d, J = 9.6 Hz, 1H), 7.42 (t, J = 1.8 Hz, 1H), 7.37 - 7.24 (m, 3H), 4.85 (d, J = 9.5 Hz, 1H), 3.23 (p, J = 9.1 Hz, 1H), 2.73 - 2.62 (m, 2H), 2.27 (ddd, J = 12.5, 9.1, 4.3 Hz, 1H), 2.16 (ddd, J = 12.8, 9.1, 4.4 Hz, 1H), 1.58 (s, 6H), 1.24 (s, 1H), 1.16 (t, J = 7.3 Hz, 1H), 1.05 (t, J = 6.1 Hz, 1H), 0.82 (s, 3H).	390.2	B	B
I-1471		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.63 (s, 1H), 8.24 (d, J = 9.5 Hz, 1H), 7.40 (t, J = 1.8 Hz, 1H), 7.38 - 7.20 (m, 3H), 4.84 (d, J = 9.5 Hz, 1H), 3.23 (p, J = 9.0 Hz, 1H), 2.66 (ddd, J = 12.2, 9.1, 5.3 Hz, 2H), 2.37 - 2.22 (m, 1H), 2.17 (ddd, J = 12.8, 9.0, 4.3 Hz, 1H), 1.57 (s, 6H), 1.24 (t, J = 5.8 Hz, 1H), 1.04 (t, J = 6.3 Hz, 1H), 0.82 (s, 3H).	390.2	E	
I-1472		(400 MHz, DMSO-d6) 10.52 (s, 1H), 8.63 (s, 1H), 8.24 (d, J = 8.9 Hz, 1H), 7.15 (t, J = 7.6 Hz, 1H), 7.08 -6.98 (m, 2H), 6.88 (dt, J = 7.7, 1.5 Hz, 1H), 4.52 (t, J = 9.4 Hz, 1H), 3.12 (p, J = 9.2 Hz, 1H), 2.72- 2.59 (m, 2H), 2.27-2.07 (m, 3H), 1.95-1.81 (m, 1H), 1.73-1.65 (m, 1H), 1.56 (dd, J = 7.6, 3.9 Hz, 1H), 1.52 (s, 2H), 1.44 (dt, J = 13.6, 7.8 Hz, 1H), 1.34-1.23 (m, 1H), 1.24 (s, 1H), 1.20-1.02 (m, 1H), 0.98-0.89 (m, 2H), 0.69-0.60 (m, 2H).	382.1	E	

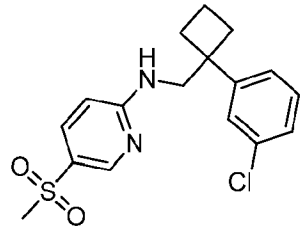
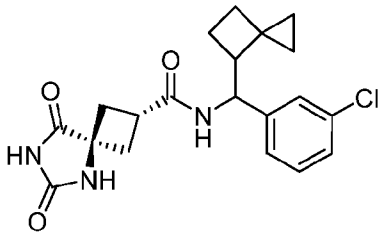
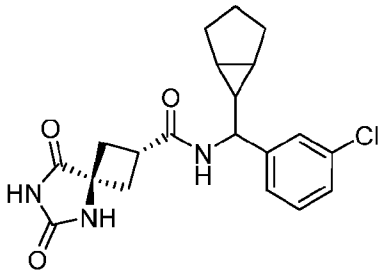
I-1473		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.63 (s, 1H), 8.24 (d, J = 8.9 Hz, 1H), 7.15 (t, J = 7.6 Hz, 1H), 7.08-6.98 (m, 2H), 6.89 (dd, J = 7.7, 1.6 Hz, 1H), 4.52 (t, J = 9.4 Hz, 1H), 3.12 (p, J = 9.3 Hz, 1H), 2.72 -2.59 (m, 2H), 2.21 (s, 1H), 2.22-2.07 (m, 2H), 1.93-1.81 (m, 1H), 1.56 (s, 2H), 1.49 (dd, J = 17.6, 8.1 Hz, 3H), 1.44 (s, 1H), 1.25 (s, 1H), 1.07 (s, 1H), 0.94 (dt, J = 8.4, 3.1 Hz, 2H), 0.68-0.60 (m, 2H).	382.15	E	
I-1474		(400 MHz, DMSO) 1.15 (dd, J = 12.7, 7.5 Hz, 1H), 1.34 (td, J = 11.9, 7.4 Hz, 2H), 1.49 (q, J = 8.6, 7.0 Hz, 2H), 1.57 (dd, J = 11.3, 6.3 Hz, 2H), 1.69 (s, 1H), 2.15-2.25 (m, 3H), 2.65 (ddd, J = 14.7, 12.1, 8.9 Hz, 2H), 3.13 (p, J = 9.2 Hz, 1H), 5.09 (t, J = 9.0 Hz, 1H), 7.32 (dd, J = 8.6, 2.6 Hz, 1H), 7.43 (d, J = 8.6 Hz, 1H), 7.56 (d, J = 2.6 Hz, 1H), 8.31 (d, J = 8.6 Hz, 1H), 8.60 (s, 1H), 10.56 (s, 1H).	410.05	D	
I-1475		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.60 (s, 1H), 8.31 (d, J = 8.6 Hz, 1H), 7.56 (d, J = 2.6 Hz, 1H), 7.43 (d, J = 8.6 Hz, 1H), 7.32 (dd, J = 8.6, 2.6 Hz, 1H), 5.09 (t, J = 9.0 Hz, 1H), 3.13 (p, J = 9.2 Hz, 1H), 2.72 - 2.59 (m, 2H), 2.30 - 2.10 (m, 3H), 1.73 - 1.63 (m, 1H), 1.62 - 1.56 (m, 2H),1.52 - 1.43 (m, 2H), 1.41 - 1.27 (m, 2H), 1.22 - 1.10 (m, 1H).	410.1	E	
I-1476		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.58 (s, 1H), 8.44 (d, J = 8.1 Hz, 1H), 7.82 - 7.17 (m, 4H), 4.71 (t, J = 9.2 Hz, 1H), 3.07 (p, J = 9.1 Hz, 1H), 2.63 (ddd, J = 17.7, 12.1, 8.9 Hz, 2H), 2.38 (dd, J − 17.2, 8.7 Hz, 1H), 2.24 (ddd, J − 12.6, 9.1, 4.3 Hz, 1H), 2.11 (ddd, J = 12.8, 8.9, 4.1 Hz, 1H), 1.86 - 1.76 (m, 1H), 1.69 - 1.39 (m, 4H), 1.39 -	426.25	D	

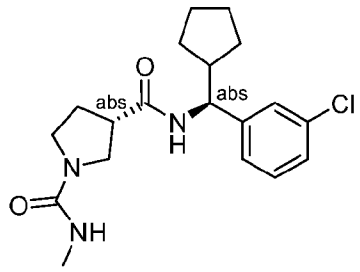
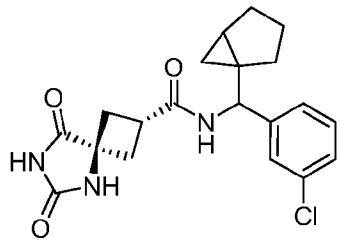
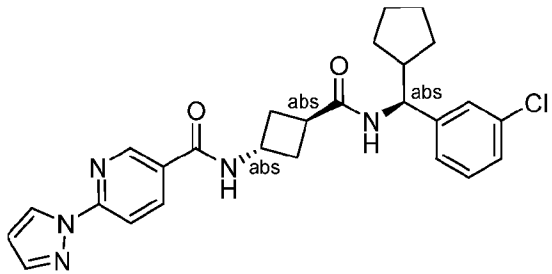
		1.27 (m, 1H), 1.27 - 1.16 (m, 1H), 1.01 -0.87 (m, 1H).			
I-1477		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.58 (s, 1H), 8.44 (d, J = 8.1 Hz, 1H), 7.72 - 7.26 (m, 4H), 4.76 -4.67 (m, 1H), 3.07 (p, J = 9.0 Hz, 1H), 2.68 - 2.56 (m, 2H), 2.42 -2.33 (m, 1H), 2.24 (ddd, J = 12.5, 9.1, 4.2 Hz, 1H), 2.11 (ddd, J = 12.7, 9.0, 4.2 Hz, 1H), 1.82 (h, J = 7.2 Hz, 1H), 1.69 - 1.39 (m, 4H), 1.39- 1.28 (m, 1H), 1.27 - 1.19 (m, 1H), 1.02 - 0.89 (m, 1H).	426.3	E	
I-1478		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.60 (s, 1H), 8.36 (d, J = 8.3 Hz, 1H), 7.51 (dd, J = 7.8, 1.7 Hz, 1H), 7.44 (dd, J = 7.9, 1.7 Hz, 1H), 7.36 (t, J = 7.8 Hz, 1H), 5.14 (t, J = 8.9 Hz, 1H), 3.21 - 3.03 (m, 1H), 2.75 - 2.57 (m, 2H), 2.37 - 2.12 (m, 3H), 1.70 (s, 1H), 1.60 (s, 2H), 1.53 - 1.42 (m, 3H), 1.40 (s, 1H), 1.16 (d, J = 7.4 Hz, 1H).	410	A	B
I-1479		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.36 (d, J = 8.3 Hz, 1H), 7.51 (dd, J = 7.8, 1.6 Hz, 1H), 7.44 (dd, J = 7.9, 1.7 Hz, 1H), 7.36 (t, J = 7.8 Hz, 1H), 5.14 (s, 1H), 3.19 - 3.07 (m, 1H), 2.71 - 2.56 (m, 2H), 2.24 (d, J = 8.7 Hz, 3H), 1.76 - 1.67 (m, 1H), 1.60 (s, 2H), 1.54 - 1.42 (m, 2H), 1.34 (d, J = 27.7 Hz, 2H), 1.14 (dd, J = 12.9, 7.7 Hz, 1H).	410	D	
I-1480		(400 MHz, DMSO-d6) 10.83 (s, 1H), 8.60 (s, 1H), 8.45 (d, J = 8.8 Hz, 1H), 7.45 (t, J = 1.7 Hz, 1H), 7.37 - 7.23 (m, 3H), 4.58 - 4.42 (m, 2H), 3.99 (d, J = 9.2 Hz, 1H), 3.86 (dd, J = 9.2, 0.9 Hz, 1H), 2.40- 2.22 (m, 2H), 2.13 (dd, J = 13.1, 9.3 Hz, 1H), 1.74 (dd, J = 12.2, 7.5 Hz, 1H), 1.63-1.36 (m, 4H), 1.25 (td, J = 8.1, 4.1 Hz, 2H), 1.13 - 0.99 (m, 1H).	392.25	D	

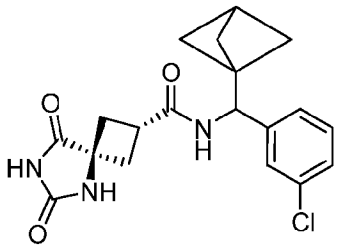
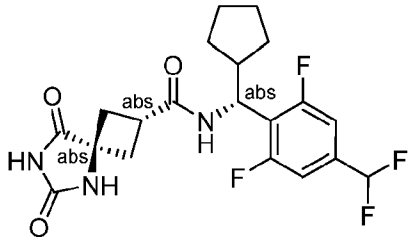
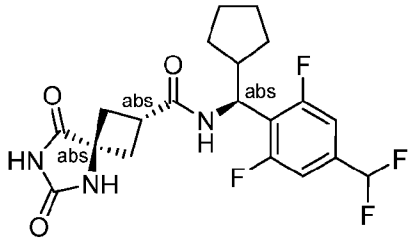
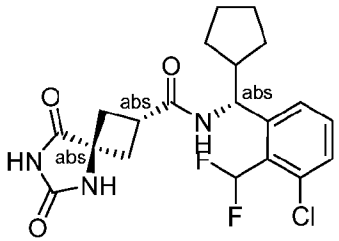
I-1481		(400 MHz, DMSO-d6) 10.85 (s, 1H), 8.59 (s, 1H), 8.43 (d, J = 9.0 Hz, 1H), 7.50 - 7.46 (m, 1H), 7.37- 7.25 (m, 3H), 4.56 (dd, J = 10.6, 8.9 Hz, 1H), 4.46 -4.40 (m, 1H), 4.02 (d, J = 9.2 Hz, 1H), 3.91 (d, J = 9.6 Hz, 1H), 2.41 - 2.31 (m, 2H), 2.28- 2.22 (m, 1H), 1.78 (dt, J = 12.3, 5.8 Hz, 1H), 1.64 -1.38 (m, 4H), 1.27 (dq, J = 21.1, 7.3, 6.8 Hz, 2H), 1.12- 0.99 (m, 1H).	392.25	E	
I-1482		(400 MHz, DMSO-d6) 10.80 (s, 1H), 8.52 (d, J = 8.7 Hz, 1H), 8.09 (s, 1H), 7.45 (t, J = 1.8 Hz, 1H), 7.38 - 7.26 (m, 3H), 4.59- 4.51 (m, 1H), 4.46 (t, J = 7.8 Hz, 1H), 3.88 (s, 2H), 2.55 (s, 1H), 2.26 (dt, J = 16.8, 8.3 Hz, 1H), 1.99 (dd, J = 13.1, 8.0 Hz, 1H), 1.73 (dd, J = 12.3, 7.6 Hz, 1H), 1.63 - 1.40 (m, 4H), 1.26 (dq, J = 8.2, 4.2, 3.6 Hz, 2H), 1.14-0.99 (m, 1H).	392.25	D	
I-1483		(400 MHz, DMSO-d6) 10.80 (s, 1H), 8.49 (d, J = 8.9 Hz, 1H), 8.13 (s, 1H), 7.44 (t, J = 1.8 Hz, 1H), 7.38 - 7.25 (m, 3H), 4.58 (t, J = 9.6 Hz, 1H), 4.42 (d, J = 7.7 Hz, 1H), 3.91 (q, J = 9.2 Hz, 2H), 2.55 (s, 1H), 2.29 (dd, J = 17.0, 8.6 Hz, 1H), 2.04 (dd, J = 13.1, 7.7 Hz, 1H), 1.84 - 1.72 (m, 1H), 1.52 (ddd, J = 30.5, 16.3, 5.0 Hz, 4H), 1.29 (dt, J = 12.4, 8.1 Hz, 2H), 1.14 - 1.02 (m, 1H).	392.25	D	
I-1484			369.3	E	

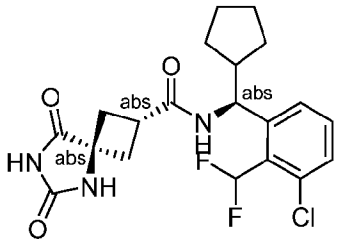
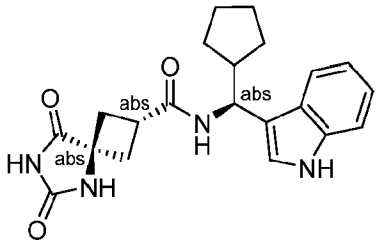
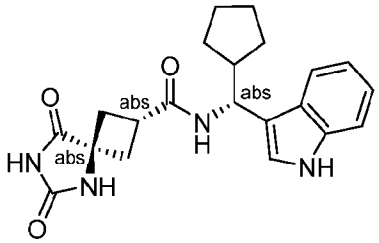
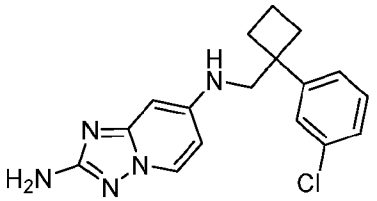
I-1485		(400 MHz, DMSO-d6) 8.22 (d, J = 8.7 Hz, 1H), 7.37 (t, J = 1.9 Hz, 1H), 7.37 - 7.29 (m, 1H), 7.29 - 7.22 (m, 2H), 4.56 (t, J = 9.3 Hz, 1H), 2.60 (p, J = 7.8 Hz, 1H), 2.16 (h, J = 8.3 Hz, 1H), 1.84 - 1.73 (m, 2H), 1.63 - 1.53 (m, 6H), 1.53 - 1.37 (m, 5H), 1.28 (dq, J = 11.6, 7.5 Hz, 2H), 1.09 (dt, J = 12.6, 8.1 Hz, 1H).	306.1	E	
I-1486			356.3	E	
I-1487			361.9	E	
I-1488			341.4	E	

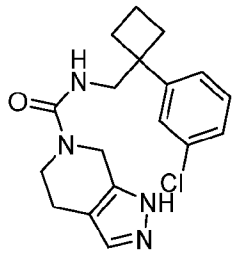
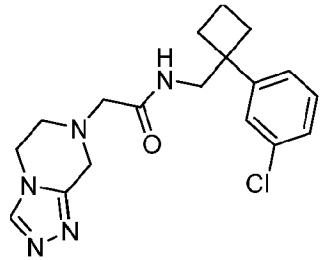
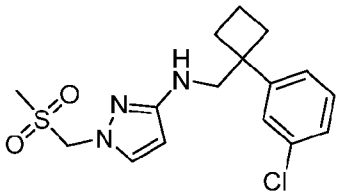
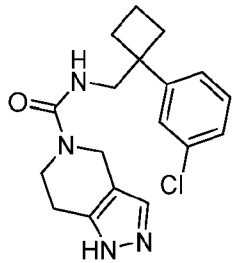
I-1489		NMR (400 MHz, DMSO-d6) δ 10.51 (br. s, 1H), 8.61 (s, 1H), 8.30 (d, J = 8.8 Hz, 1H), 7.40 (t, J = 1.7 Hz, 1H), 7.34 (dd, J = 8.9, 6.3 Hz, 1H), 7.30 – 7.26 (m, 2H), 5.64 (app. dddd, J = 9.7, 5.8, 4.1, 2.0 Hz, 2H), 4.69 (t, J = 9.4 Hz, 1H), 3.12 (p, J = 9.1 Hz, 1H), 2.71 – 2.59 (m, 3H), 2.38 (app. dd, J = 16.8, 8.6 Hz, 1H), 2.27 – 2.19 (m, 1H), 2.18 – 2.08 (m, 2H), 2.08 – 1.96 (m, 1H), 1.96 – 1.86 (m, 1H).	374.2	D	
I-1490		NMR (400 MHz, DMSO-d6) δ 10.43 (br. s, 1H), 8.62 (s, 1H), 8.48 (d, J = 8.7 Hz, 1H), 7.38 – 7.29 (m, 3H), 7.23 (dt, J = 7.4, 1.1 Hz, 1H), 5.54 (br. d, J = 8.4 Hz, 1H), 5.40 (br. app. q, J = 1.6 Hz, 1H), 3.20 (p, J = 9.1 Hz, 1H), 2.75 – 2.62 (m, 2H), 2.31 – 2.14 (m, 5H), 2.14 – 2.03 (m, 1H), 1.80 (app. p, J = 7.6 Hz, 2H).	374.2	D	
I-1491		NMR (400 MHz, DMSO D6) δ 10.42 (br s, 1H), 8.65 (d, J = 7.9 Hz, 1H), 8.62 (d, J = 10.0 Hz, 1H), 7.44 – 7.24 (m, 4H), 3.94 (dd, J = 10.5, 8.0 Hz, 1H), 3.26-3.16 (m, 1H), 2.76 – 2.62 (m, 2H), 2.33 – 2.24 (m, 1H), 2.18 (m, 2H), 2.13 – 1.93 (m, 6H), 1.02 (ddd, J = 10.5, 8.7, 5.4 Hz, 1H), 0.57 (dd, J = 8.6, 5.0 Hz, 1H), 0.45 (t, J = 5.2 Hz, 1H). Observed 5:4 mixture of diastereomers. Only the major has been described.	388.2	E	
I-1492		NMR (400 MHz, DMSOD6) δ 8.90 (submerged d, J = 5.7Hz, 1H), 8.89 (d, J = 1.6 Hz, 1H), 8.67 (dd, J = 2.6, 0.6 Hz, 1H), 8.40 (dd, J = 8.6, 2.3 Hz, 1H), 8.28 (d, J = 8.8 Hz, 1H), 7.97 (dd, J = 8.6, 0.5 Hz, 1H), 7.87 (dd, J = 1.6, 0.6 Hz, 1H), 7.38 (t, J = 1.6 Hz, 1H), 7.33 (dd, J = 8.9, 6.5 Hz, 1H), 7.28 – 7.24 (m, 2H), 6.61 (dd, J = 2.6, 1.7 Hz, 1H), 4.58 (t, J = 9.3 Hz, 1H), 4.44 – 4.32 (m, 1H), 2.82 – 2.71 (m, 1H), 2.47 – 2.37 (m, 1H), 2.37-	478.4	D	

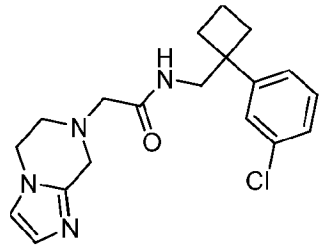
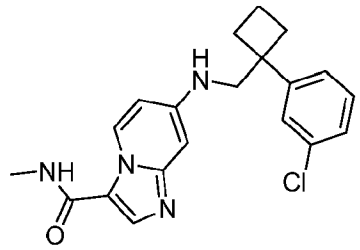
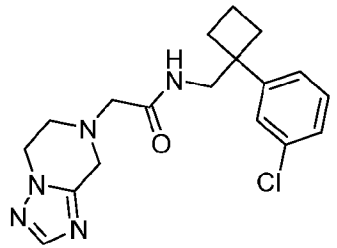
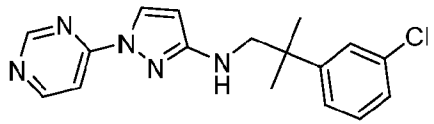
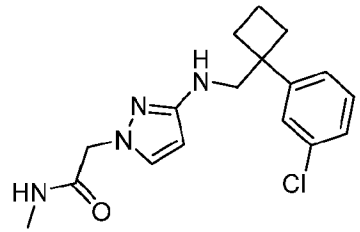
		2.28 (m, 1H), 2.23 (submerged q, J = 9.9 Hz, 1H), 2.21 – 2.11 (m, 2H), 1.76 - 1.67 (m, 1H), 1.62 – 1.50 (m, 2H), 1.50 – 1.37 (m, 2H), 1.32 - 1.20 (m, 2H), 1.13 – 1.01 (m, 1H). Unknown peak at 2.68 ppm.			
I-1493		(400 MHz, DMSO-d6) δ 8.27 (d, J = 2.4 Hz, 1H), 7.65 (dd, J = 9.0, 2.4 Hz, 1H), 7.44 (t, J = 5.9 Hz), 7.32 – 7.26 (m, 1H), 7.21 – 7.17 (m, 2H), 7.14 – 7.10 (m, 1H), 6.55 (br. s, 1H), 3.75 (br. s, 2H), 3.08 (s, 3H), 2.33 – 2.19 (m, 4H), 2.13 – 2.01 (m, 1H), 1.84 – 1.74 (m, 1H).	351.2	E	
I-1494		NMR (400 MHz, DMSO-d6) δ 9.82 (br s, 1H), 8.62 (s, 0.5H), 8.58 (s, 0.5H), 8.17 (d, J = 9.1 Hz, 0.5H), 8.06 (d, J = 8.7 Hz, 0.5H), 7.46 – 7.09 (m, 4H), 4.82 (t, J = 9.0 Hz, 0.5H), 4.69 (dd, J = 11.0, 8.7 Hz, 0.5H), 3.12 (p, J = 9.0 Hz, 0.5H), 3.01 (p, J = 9.2 Hz, 0.5H), 2.91 – 2.81 (m, 0.5H), 2.80 – 2.71 (m, 0.5H), 2.71 – 2.52 (m, 2H), 2.28 – 1.82 (m, 4.5H), 1.77 – 1.57 (m, 1.5H), 0.74 – 0.65 (m, 0.5H), 0.44 – 0.30 (m, 1.5H), 0.27 – 0.15 (m, 1H), 0.14 – 0.06 (m, 0.5H), -0.03 – -0.12 (m, 0.5H). Partial formate salt. Minor aliphatic impurities. 1:1 mix of diastereomers	388.3	D	
I-1495		NMR (400 MHz, DMSO-d6) δ 10.07 (br s, 1H), 8.62 (s, 1H), 8.39 (d, J = 8.2 Hz, 1H), 7.37-7.31 (m, 2H), 7.29-7.25 (m, 2H), 4.22 (t, J = 6.9 Hz, 1H), 3.15 (p, J = 9.0 Hz, 1H), 2.70 (dd, J = 12.2, 9.4 Hz, 1H), 2.64 (dd, J = 12.3, 9.6 Hz, 1H), 2.29 – 2.13 (m, 2H), 1.74 – 1.43 (m, 5H), 1.35 – 1.30 (m, 1H), 1.29 – 1.24 (m ,1H), 1.17 – 0.99 (m, 1H), 0.88 (dt, J = 9.3, 3.0 Hz, 1H). Partial formate salt. Minor aliphatic impurities. ~ 4% of the minor diastereomer based on LC and HNMR.	388.3	D	

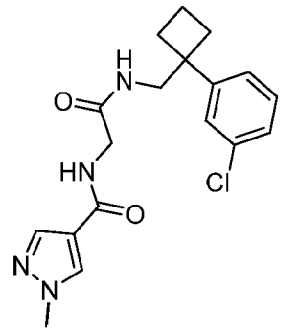
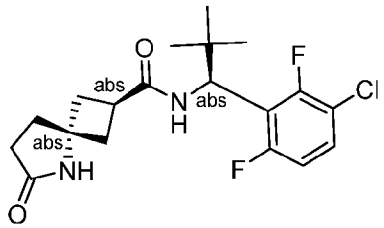
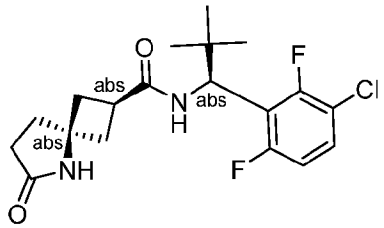
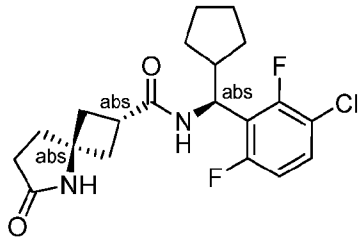
I-1496		NMR (400 MHz, DMSO-d6) δ 8.44 (d, J = 8.7 Hz, 1H), 7.37 (br. t, J = 1.7 Hz, 1H), 7.36 – 7.31 (m, 1H), 7.29 – 7.23 (m, 2H), 5.99 (q, J = 4.3 Hz, 1H), 4.57 (t, J = 9.3 Hz, 1H), 3.32 (submerged m, 2H), 3.20 – 3.11 (m, 2H), 2.93 (p, J = 7.6 Hz, 1H), 2.52 (d, J = 4.4 Hz, 3H), 2.24 – 2.11 (m, 1H), 2.08 – 1.98 (m, 1H), 1.94 – 1.85 (m, 1H), 1.78 – 1.68 (m, 1H), 1.62 – 1.38 (m, 4H), 1.32 – 1.21 (m, 2H), 1.14 – 1.01 (m, 1H).	364.3	D	
I-1497		NMR (400 MHz, DMSO-d6) δ 10.50 (br. s, 1H), 8.63 (s, 1H), 8.34 (d, J = 8.6 Hz, 0.6H), 8.22 (d, J = 8.8 Hz, 0.4H), 7.37 – 7.31 (m, 2H), 7.30 – 7.24 (m, 2H), 4.91 (d, J = 8.8 Hz, 0.4H), 4.83 (d, J = 8.5 Hz, 0.6H), 3.21 (p, J = 9.0 Hz, 0.4H), 3.20 (p, J = 9.1 Hz, 0.6H) 2.73 – 2.63 (m, 2H), 2.29 – 2.16 (m, 2H), 1.74 – 1.63 (m, 1H), 1.62 – 1.27 (m, 4.4H), 1.20 – 1.11 (submerged m, 0.6H), 1.09 (overlapping dt, J = 8.1, 3.9 Hz, 1H), 0.50 (td, J = 8.4, 5.2 Hz, 1H), 0.43 – 0.36 (m, 1H). 3:2 mixture of diastereomers	388.2	D	
I-1498		NMR (400 MHz, DMSOd6) δ 8.89 (d, J = 2.2 Hz, 1H), 8.85 (d, J = 7.3 Hz, 1H), 8.68 (d, J = 2.6 Hz, 1H), 8.38 (dd, J = 8.6, 2.2 Hz, 1H), 8.28 (d, J = 8.7 Hz, 1H), 8.00 (d, J = 8.6 Hz, 1H), 7.88 (d, J = 0.7 Hz, 1H), 7.38 (br s, 1H), 7.33 (dd, J = 9.6, 8.9 Hz, 1H), 7.29 - 7.25 (m, 2H), 6.62 (dd, J = 2.8, 1.8 Hz, 1H), 4.62 (t, J = 9.3 Hz, 1H), 4.54 (q, J = 7.8 Hz, 1H), 3.02 - 2.94 (m, 1H), 2.45 – 2.23 (m, 3H), 2.23 – 2.12 (m, 1H), 1.77-1.67 (m, 1H), 1.65 – 1.37 (m, 4H), 1.37 – 1.19 (m, 4H), 1.10 (tt, J = 16.4, 8.3 Hz, 1H).	478.4	D	

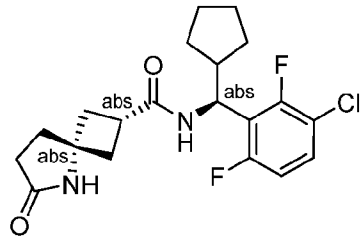
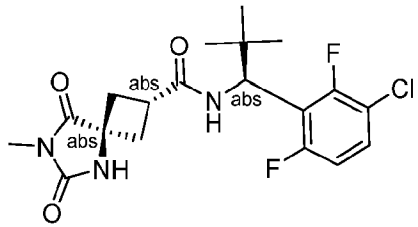
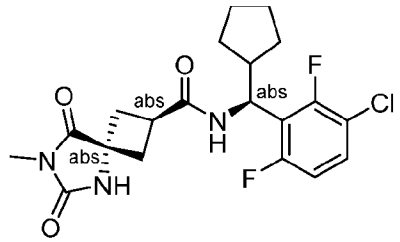
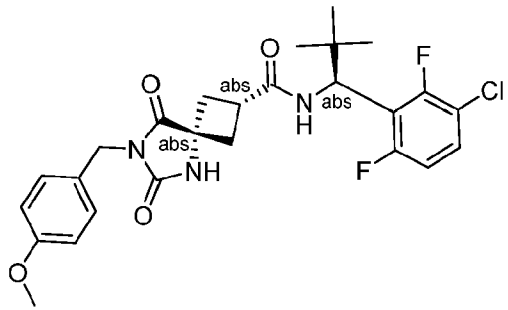
I-1499		NMR (400 MHz, DMSOd6) δ 10.39 (br s, 1H), 8.65 (s, 1H), 8.24 (d, J = 8.7 Hz, 1H), 7.34 (dd, J = 8.5, 7.5 Hz, 1H), 7.30-7.26 (m, 2H), 7.16 (dt, J = 7.6, 1.5 Hz, 1H), 4.89 (d, J = 8.7 Hz, 1H), 3.24 (p, J = 9.1 Hz, 1H), 2.74 - 2.62 (m, 2H), 2.46 (s, 1H), 2.30 - 2.14 (m, 2H), 1.56 (s, 6H).	374.3	C	
I-1500		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.45 (d, J = 7.4 Hz, 1H), 7.30 (d, J = 8.2 Hz, 2H), 7.01 (t, J = 55.5 Hz, 1H), 4.84 (dd, J = 11.1, 7.4 Hz, 1H), 3.15 (p, J = 9.1 Hz, 1H), 2.62 (ddd, J = 31.6, 12.1, 9.0 Hz, 2H), 2.43 (q, J = 8.5 Hz, 1H), 2.17 (dddd, J = 29.3, 12.8, 9.1, 4.2 Hz, 2H), 1.91 (dtd, J = 15.6, 8.6, 7.3, 4.7 Hz, 1H), 1.68-1.41 (m, 4H), 1.30 (dddd, J = 20.9, 15.9, 12.3, 7.8 Hz, 2H), 1.01 (dq, J = 12.4, 8.0 Hz, 1H).	428.35	E	
I-1501		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.45 (d, J = 7.4 Hz, 1H), 7.30 (d, J = 8.2 Hz, 2H), 7.01 (t, J = 55.5 Hz, 1H), 4.84 (dd, J = 11.1, 7.3 Hz, 1H), 3.15 (p, J = 9.1 Hz, 1H), 2.62 (ddd, J = 31.6, 12.0, 8.9 Hz, 2H), 2.43 (q, J = 8.5 Hz, 1H), 2.17 (dddd, J = 29.3, 12.9, 9.1, 4.2 Hz, 2H), 1.91 (dtd, J = 15.9, 8.4, 7.5, 4.7 Hz, 1H), 1.68-1.41 (m, 4H), 1.30 (dddd, J = 20.9, 15.8, 12.2, 7.7 Hz, 2H), 1.01 (dq, J = 15.1, 8.1 Hz, 1H).	428.35	D	
I-1502		(400 MHz, DMSO-d6) 10.50 (s, 1H), 8.60 (d, J = 2.5 Hz, 1H), 8.42 (d, J = 7.8 Hz, 1H), 7.80- 7.26 (m, 4H), 4.99 (t, J = 9.1 Hz, 1H), 3.10 (p, J = 9.3 Hz, 1H), 2.64 (dt, J = 21.8, 10.4 Hz, 2H), 2.34 - 2.18 (m, 2H), 2.16 - 2.06 (m, 1H), 1.78 (q, J = 8.4, 5.8 Hz, 1H), 1.74 - 1.24 (m, 5H), 1.23 - 1.12 (m, 1H), 0.99 (q, J = 11.2, 9.7 Hz, 1H).	426.3	D	

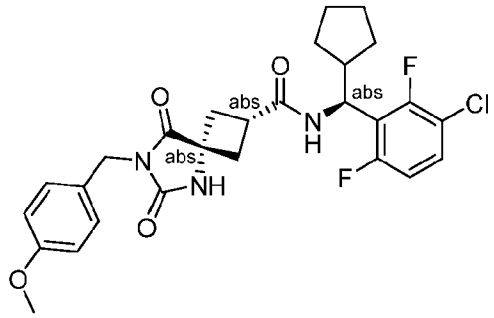
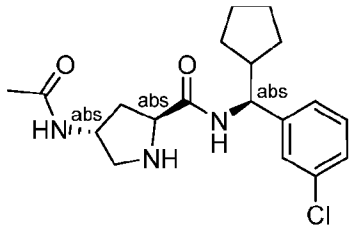
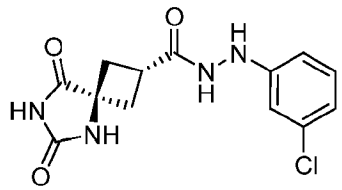
I-1503		(400 MHz, DMSO-d6) 10.50 (s, 1H), 8.60 (d, J = 2.5 Hz, 1H), 8.42 (d, J = 7.8 Hz, 1H), 7.80- 7.26 (m, 4H), 4.99 (t, J = 9.1 Hz, 1H), 3.10 (p, J = 9.3 Hz, 1H), 2.64 (dt, J = 21.8, 10.4 Hz, 2H), 2.34-2.18 (m, 2H), 2.16- 2.06 (m, 1H), 1.78 (q, J = 8.4, 5.8 Hz, 1H), 1.74-1.24 (m, 5H), 1.23- 1.12 (m, 1H), 0.99 (q, J = 11.2, 9.7 Hz, 1H).	426.3	C	
I-1504		(400 MHz, Methanol-d4) 7.65 (d, J = 7.9 Hz, 1H), 7.34 (d, J = 8.1 Hz, 1H), 7.20 (s, 1H), 7.09 (ddd, J = 8.2, 7.0, 1.2 Hz, 1H), 7.00 (td, J = 7.5, 7.0, 1.1 Hz, 1H), 5.11 (d, J = 10.0 Hz, 1H), 3.21 (q, J = 9.1 Hz, 1H), 2.95 - 2.83 (m, 2H), 2.66 (dt, J = 16.0, 7.8 Hz, 1H), 2.39 (dddd, J = 28.9, 13.1, 9.6, 3.9 Hz, 2H), 1.90 (dt, J = 12.6, 6.3 Hz, 1H), 1.75 - 1.45 (m, 5H), 1.30 (q, J = 7.0, 6.4 Hz, 2H).	381.3	E	
I-1505		(400 MHz, Methanol-d4) 7.67- 7.62 (m, 1H), 7.34 (dd, J = 8.1, 1.0 Hz, 1H), 7.20 (s, 1H), 7.09 (ddd, J = 8.2, 7.0, 1.2 Hz, 1H), 7.00 (ddd, J = 8.0, 7.0, 1.1 Hz, 1H), 5.11 (d, J = 10.0 Hz, 1H), 3.19 (t, J = 9.1 Hz, 1H), 2.92 (ddd, J = 13.5, 8.7, 5.6 Hz, 2H), 2.66 (p, J = 8.1 Hz, 1H), 2.46- 2.29 (m, 2H), 1.94- 1.84 (m, 1H), 1.76- 1.46 (m, 5H), 1.30 (q, J = 7.5 Hz, 2H).	381.3	D	
I-1506		7.94 (d, J = 7.2 Hz, 1H), 7.33 - 7.23 (m, 2H), 7.21 - 7.14 (m, 2H), 6.28 - 6.23 (m, 1H), 6.22 - 6.14 (m, 1H), 6.00 - 5.93 (m, 1H), 5.56 - 5.39 (m, 2H), 3.41 (br s, 2H), 2.35 - 2.19 (m, 4H), 2.15 - 2.02 (m, 1H), 1.87 - 1.74 (m, 1H), 0.48 - 0.45 (m, 1H)	328	D	

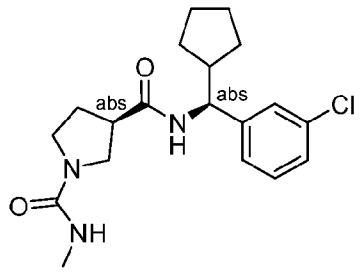
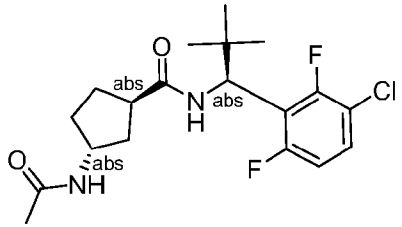
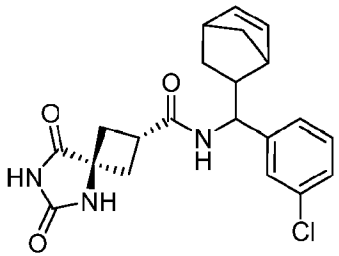
I-1507		- 12.44 (s, 1H), 7.43 (s, 1H), 7.28 (t, J = 8.0, 1H), 7.20 (d, J = 8.4, 1H), 7.07 (s, 1H), 7.01 (d, J = 7.6, 1H), 6.48 (s, 1H), 4.37 (s, 2H), 3.48 (t, J = 5.6, 2H), 3.36 (d, J = 6.0, 2H), 2.46 (s, 2H), 2.30 - 2.25 (m, 2H), 2.16 - 2.09 (m, 2H), 2.00 - 1.89 (m, 1H), 1.75 - 1.67 (m, 1H).	345.1	E	
I-1508		- 8.43 (s, 3H), 7.63 (br t, J = 6.0, 1H), 7.29 - 7.25 (m, 1H), 7.22 - 7.20 (m, 1H), 7.11 (s, 1H), 7.04 (d, J = 7.2, 1H), 3.97 (t, J = 5.2, 2H), 3.75 (s, 2H), 3.46 (d, J = 6.0, 2H), 3.16 (s, 2H), 2.81 (t, J = 5.2, 2H), 2.22 - 2.15 (m, 4H), 2.03 - 2.01 (m, 1H), 1.80 - 1.75 (m, 1H).	360.1	E	
I-1509		- 7.43 (d, J = 2.4 Hz, 1H), 7.35 - 7.28 (m, 1H), 7.24 - 7.18 (m, 2H), 7.13 (d, J = 7.6 Hz, 1H), 5.51 (d, J = 2.4 Hz, 1H), 5.34 (s, 2H), 5.28 (t, J = 6.4 Hz, 1H), 3.37 (d, J = 6.4 Hz, 2H), 2.94 (s, 3H), 2.33 - 2.15 (m, 4H), 2.11 - 1.98 (m, 1H), 1.84 - 1.71 (m, 1H)	354	E	
I-1510		- 12.42 (s, 1H), 7.39 (s, 1H), 7.28 (t, J = 8.0, 1H), 7.20 - 7.18 (m, 1H), 7.07 (t, J = 2.0, 1H), 7.01 (d, J = 7.6, 1H), 6.46 (t, J = 5.6, 1H), 4.29 (s, 2H), 3.53 (t, J = 6.0, 2H), 3.35 (d, J = 6.0, 2H), 2.57 (t, J = 5.6, 2H), 2.30 - 2.24 (m, 2H), 2.16 - 2.08 (m, 2H), 2.00 - 1.89 (m, 1H), 1.76 - 1.66 (m, 1H).	345.1	E	

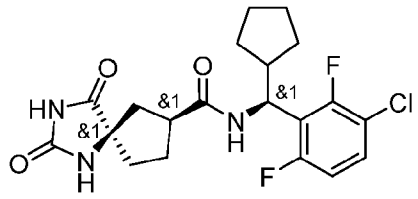
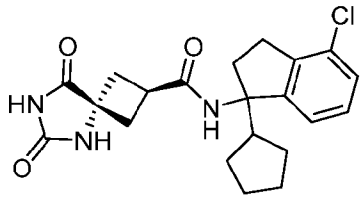
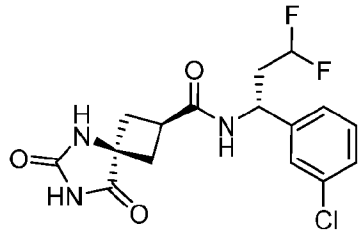
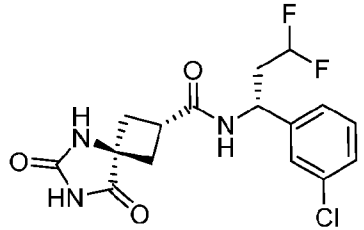
I-1511		7.59 (br t, J = 6.4, 1H), 7.25 - 7.22 (m, 2H), 7.11 (t, J = 1.6, 1H), 7.04 - 7.03 (m, 2H), 6.83 (d, J = 1.2, 1H), 3.89 (t, J = 5.2, 2H), 3.60 (s, 2H), 3.46 (d, J = 6.4, 2H), 3.11 (s, 2H), 2.78 (t, J = 5.2, 2H), 2.27 - 2.15 (m, 4H), 2.03 - 1.96 (m, 1H), 1.81 - 1.73 (m, 1H).	359.1	E	
I-1512		13.69 - 13.31 (m, 1H), 9.06 (br d, J = 7.6 Hz, 1H), 8.83 (br d, J = 4.8 Hz, 1H), 8.36 (s, 1H), 7.69 (br s, 1H), 7.34 - 7.14 (m, 4H), 7.03 - 6.84 (m, 1H), 6.59 - 6.25 (m, 1H), 3.56 (br d, J = 5.2 Hz, 2H), 2.78 (d, J = 4.8 Hz, 3H), 2.38 - 2.25 (m, 4H), 2.19 - 2.05 (m, 1H), 1.91 - 1.73 (m, 1H)	369	D	
I-1513		7.90 (s, 1H), 7.66 (br t, J = 6.2 Hz, 1H), 7.32 - 7.18 (m, 2H), 7.11 (t, J = 1.6 Hz, 1H), 7.05 (dd, J = 1.2, 7.6 Hz, 1H), 4.05 (t, J = 5.2 Hz, 2H), 3.74 (s, 2H), 3.46 (d, J = 6.4 Hz, 2H), 3.18 (s, 2H), 2.92 (t, J = 5.2 Hz, 2H), 2.27 - 2.15 (m, 4H), 2.09 - 1.94 (m, 1H), 1.83 - 1.68 (m, 1H)	360.1	E	
I-1514		8.91 (s, 1H), 8.69 (d, J = 6.0 Hz, 1H), 8.32 (d, J = 3.2 Hz, 1H), 7.61 (d, J = 6.0 Hz, 1H), 7.49 - 7.38 (m, 2H), 7.33 (t, J = 7.6 Hz, 1H), 7.28 - 7.21 (m, 1H), 6.03 (d, J = 2.8 Hz, 1H), 3.43 (s, 2H), 1.33 (s, 6H)	328.1	E	
I-1515		7.66 (br d, J = 4.4 Hz, 1H), 7.36 - 7.28 (m, 2H), 7.24 - 7.17 (m, 2H), 7.17 - 7.12 (m, 1H), 5.37 (d, J = 2.4 Hz, 1H), 4.86 (t, J = 6.4 Hz, 1H), 4.42 (s, 2H), 3.31 (d, J = 6.4 Hz, 2H), 2.58 (d, J = 4.8 Hz, 3H), 2.31 - 2.14 (m, 4H), 2.10 - 1.97 (m, 1H), 1.84 - 1.71 (m, 1H)	333.1	E	

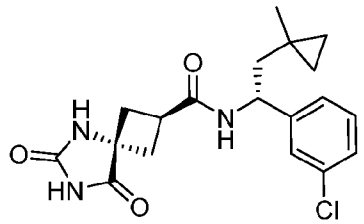
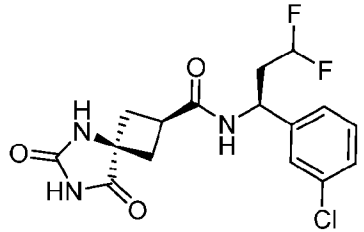
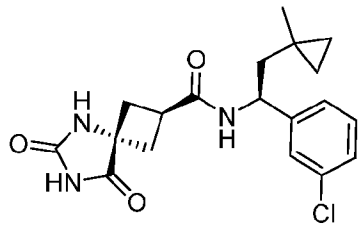
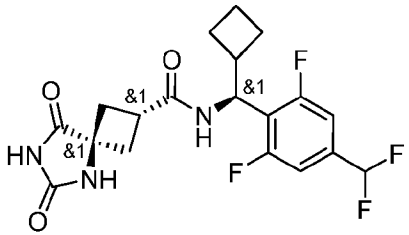
I-1516		8.27 (t, J = 6.0 Hz, 1H), 8.12 (s, 1H), 7.83 (d, J = 0.6 Hz, 1H), 7.64 (br t, J = 6.0 Hz, 1H), 7.29 - 7.17 (m, 2H), 7.11 (t, J = 1.6 Hz, 1H), 7.04 (td, J = 1.2, 8.4 Hz, 1H), 3.85 (s, 3H), 3.73 (d, J = 6.0 Hz, 2H), 3.41 (d, J = 6.0 Hz, 2H), 2.27 - 2.10 (m, 4H), 2.08 - 1.96 (m, 1H), 1.80 - 1.66 (m, 1H)	361.1	E	
I-1517			385.28	B	C
I-1518			385.38	D	
I-1519			397.34	A	B

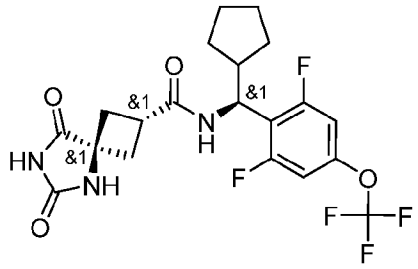
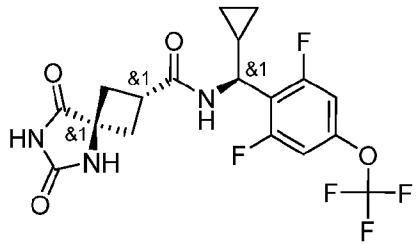
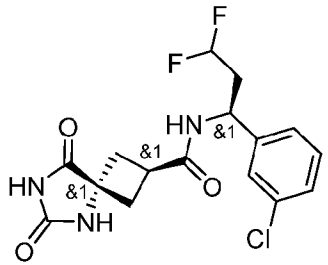
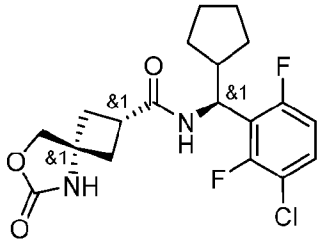
I-1520			397.34	C	
I-1521			414.24	A	B
I-1522			426.49	B	B
I-1523			520.32	A	B

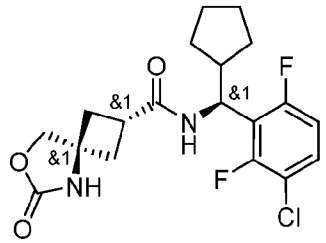
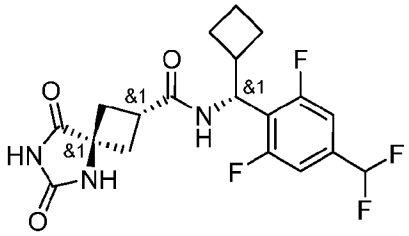
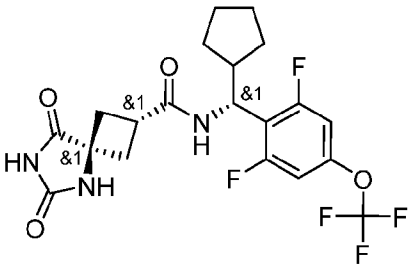
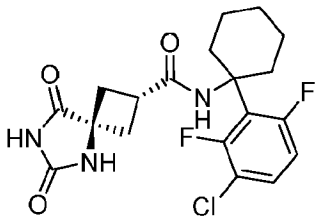
I-1524			532.3	A	B
I-1525		NMR (400 MHz, DMSO-d6) - 8.38 (d, J = 9.0 Hz, 1H), 7.88 (d, J = 6.8 Hz, 1H), 7.42 (t, J = 1.7 Hz, 1H), 7.35 - 7.30 (m, 1H), 7.30 - 7.25 (m, 2H), 4.52 (t, J = 9.5 Hz, 1H), 4.07 - 3.98 (m, 1H), 3.63 (dd, J = 8.4, 6.7 Hz, 1H), 3.18 (submerged br. s, 1H), 2.95 (dd, J = 10.8, 5.7 Hz, 1H), 2.69 (dd, J = 10.8, 4.6 Hz, 1H), 2.38 - 2.25 (m, 1H), 1.83 (overlapping m, 2H), 1.77 (overlapping s, 3H), 1.75 - 1.65 (m, 1H), 1.62 - 1.38 (m, 4H), 1.32 - 1.16 (m, 2H), 1.11 - 1.01 (m, 1H).	364.3	E	
I-1526		NMR (400 MHz, DMSO-d6) 10.29 (br s, 1H), 9.72 (s, 1H), 8.63 (s, 1H), 8.02 (s, 1H), 7.14 (t, J = 8.0 Hz, 1H), 6.71 (ddd, J = 7.8, 2.0, 0.8 Hz, 1H), 6.67 (t, J = 2.0 Hz, 1H), 6.66 - 6.61 (m, 1H), 3.23 (p, J = 9.0 Hz, 1H), 2.80 - 2.69 (m, 2H), 2.33 - 2.23 (m, 2H). Compound appears as 15% in rotameric form. Sample includes 0.45 eq of DIPEA. Formate salt 20% by weight. Minor aliphatic impurities.	309.2	E	

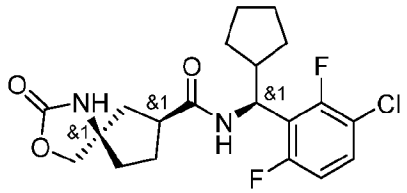
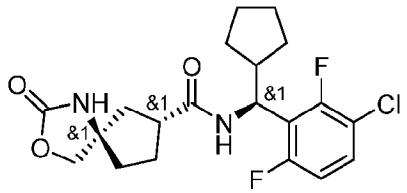
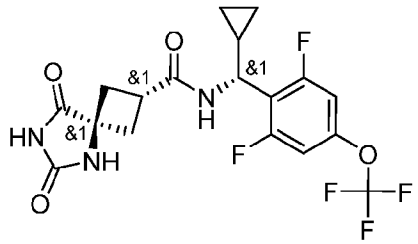
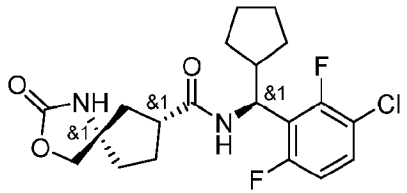
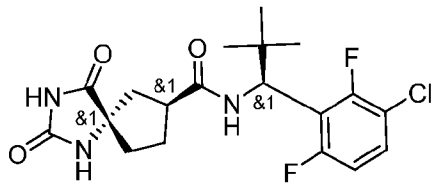
I-1527		NMR (400 MHz, DMSO-d6) - 8.44 (d, J = 8.7 Hz, 1H), 7.37 (t, J = 1.7 Hz, 1H), 7.36 - 7.31 (m, 1H), 7.29 - 7.24 (m, 2H), 5.99 (q, J = 4.2 Hz, 1H), 4.57 (t, J = 9.3 Hz, 1H), 3.32 (submerged m, 2H), 3.20 - 3.11 (m, 2H), 2.93 (p, J = 7.6 Hz, 1H), 2.52 (overlapping d, J = 4.4 Hz, 3H), 2.24 - 2.11 (m, 1H), 2.08 - 1.99 (m, 1H), 1.97 - 1.85 (m, 1H), 1.78 - 1.66 (m, 1H), 1.64 - 1.37 (m, 4H), 1.31 - 1.21 (m, 2H), 1.14 - 1.02 (m, 1H).	364.3	D	
I-1528		(400 MHz, DMSO-d6) - 8.08 (d, J = 8.8 Hz, 1H), 7.77 (d, J = 7.2 Hz, 1H), 7.56 (td, J = 8.8, 5.6 Hz, 1H), 7.14 (t, J = 9.3 Hz, 1H), 5.07 (d, J = 8.9 Hz, 1H), 4.04 - 3.94 (m, 1H), 2.97 (p, J = 7.9 Hz, 1H), 1.89 - 1.78 (m, 3H), 1.76 (s, 3H), 1.66 - 1.57 (m, 1H), 1.49 - 1.30 (m, 2H), 0.93 (s, 9H). Contains an unknown aliphatic impurity.	387.3	B	B
I-1529		NMR (400 MHz, DMSO-d6) - 10.29 (br. s, 1H), 8.59 (s, 0.1H), 8.56 (3 overlapping s, 3x0.3H), 8.38 - 8.26 (m, 1H), 7.37 - 7.19 (m, 3.7H), 7.15 (dt, J = 7.4, 1.4 Hz, 0.3H), 6.22 (dd, J = 5.7, 3.0 Hz, 0.3H), 6.17 (dd, J = 5.6, 2.9 Hz, 0.3H), 6.10 (dd, J = 5.6, 3.0 Hz, 0.1H), 6.05 (dd, J = 5.6, 2.9 Hz, 03H), 6.03 (submerged dd, J = 5.6, 2.9 Hz, 0.1H), 6.01 (dd, J = 5.5, 2.7 Hz, 0.3H), 5.93 (dd, J = 5.6, 3.1 Hz, 0.3H), 5.89 (dd, J = 5.6, 2.8 Hz, 0.3H), 4.55 - 4.46 (m, 0.4H), 4.08 - 3.98 (m, 0.6H), 3.02 (4 overlaping p, 9.1 Hz, 1H), 2.89 (br. s, 0.3H), 2.79 (br. s, 0.3H), 2.74 (br. s, 0.3H), 2.71 (br. s, 0.1H), 2.70 - 2.50 (m, 2.4H), 2.44 - 2.30 (m, 0.6H), 2.28 - 2.01 (m, 2.7H), 1.84 - 1.76 (m, 0.3H), 1.74 - 1.67 (m, 0.1H), 1.66 - 1.58 (m, 0.3H), 1.49 - 1.38 (m, 0.7H), 1.33 - 1.13 (m, 2.2H), 1.05 - 0.95 (m, 0.1H), 0.74 (dd, J = 10.5, 8.0 Hz, 0.1H), 0.69 - 0.60 (m, 0.3H), 0.38 (ddd, J =	400.3	C	

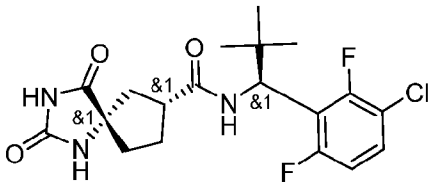
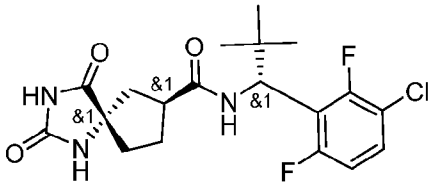
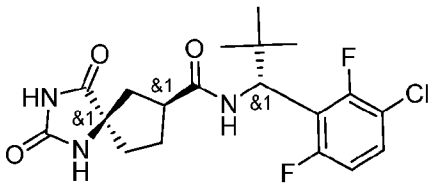
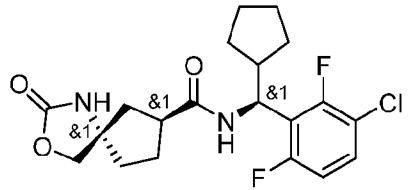
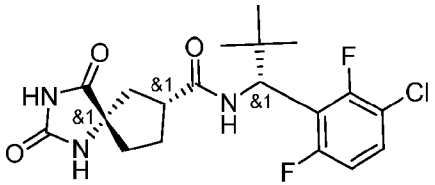
		11.6, 4.1, 2.3 Hz, 0.3H). 1:1:1:0.3 Mixture of 4 isomers.			
I-1530		(400 MHz, DMSO-d6) 10.62 (s, 1H), 8.51 (d, J = 7.4 Hz, 1H), 8.30 (s, 1H), 7.52 (dd, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 4.81 (dd, J = 11.1, 7.4 Hz, 1H), 2.92 (p, J = 8.2 Hz, 1H), 2.47 - 2.33 (m, 1H), 2.17 - 2.04 (m, 1H), 2.01 - 1.82 (m, 4H), 1.72 - 1.41 (m, 6H), 1.39 - 1.30 (m, 1H), 1.27 - 1.16 (m, 1H), 1.01 (q, J = 10.9, 9.4 Hz, 1H).	426.05	A	B
I-1531		(400 MHz, DMSO-d6) - 10.55 (br. s, 1H), 8.61 (s, 1H), 7.86 (s, 1H), 7.24 - 7.19 (m, 1H), 7.19 - 7.15 (m, 2H), 3.11 (p, J = 9.1 Hz, 1H), 2.99 (ddd, J = 16.1, 9.6, 4.8 Hz, 1H), 2.79 (ddd, J = 16.5, 9.3, 5.7 Hz, 1H), 2.71 - 2.43 (overlapping m, 3H), 2.36 (ddd, J = 11.6, 8.8, 4.6 Hz, 1H), 2.17 - 2.06 (m, 3H), 1.80 - 1.71 (m, 1H), 1.57 - 1.37 (m, 4H), 1.32 - 1.13 (m, 2H), 1.08 - 0.98 (m, 1H). Partial formate salt. Contains an unknown aliphatic impurity. Impurity at 3.57 ppm may be 1,4-dioxane.	402.3	D	
I-1532		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.59 (s, 1H), 8.42 (d, J = 8.5 Hz, 1H), 7.44 - 7.22 (m, 4H), 6.24 - 5.90 (m, 1H), 5.06 (td, J = 9.2, 4.7 Hz, 1H), 3.13 (p, J = 9.0 Hz, 1H), 2.76 - 2.61 (m, 2H), 2.43 - 2.15 (m, 4H).	372.05	E	
I-1533		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.58 (d, J = 8.4 Hz, 1H), 8.28 (s, 1H), 7.47 - 7.23 (m, 4H), 6.03 (tt, J = 56.1, 4.7 Hz, 1H), 5.03 (td, J = 9.1, 5.2 Hz, 1H), 3.08 (p, J = 8.9 Hz, 1H), 2.43 (ddt, J = 9.7, 7.6, 3.4 Hz, 3H), 2.37 - 2.12 (m, 3H).	372.1	E	

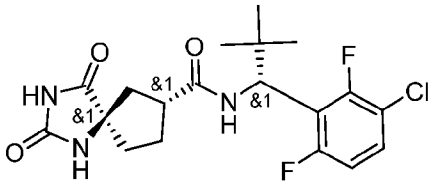
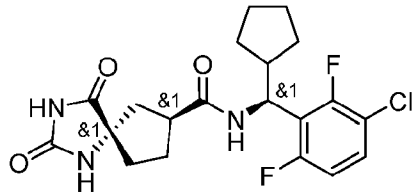
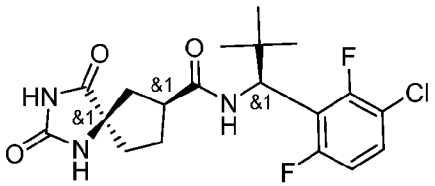
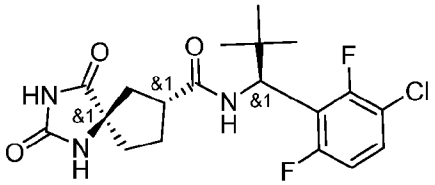
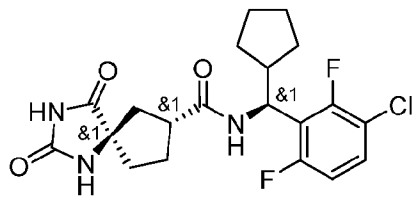
I-1534		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.62 (s, 1H), 8.17 (d, J = 8.8 Hz, 1H), 7.41-7.31 (m, 2H), 7.27 (ddt, J = 7.0, 5.2, 1.5 Hz, 2H), 5.03 (td, J = 9.4, 5.0 Hz, 1H), 3.15 (p, J = 9.2 Hz, 1H), 2.70 (ddd, J = 11.8, 9.2, 7.1 Hz, 2H), 2.20 (dddd, J = 26.1, 12.9, 8.9, 4.4 Hz, 2H), 1.71 (dd, J = 14.0, 5.0 Hz, 1H), 1.47 (dd, J = 14.0, 10.0 Hz, 1H), 1.03 (s, 3H), 0.47 (dt, J = 9.2, 4.8 Hz, 1H), 0.23-0.04 (m, 3H).	376	E	
I-1535		(400 MHz, DMSO-d6) 10.65 - 10.48 (m, 1H), 8.59 (s, 1H), 8.42 (d, J = 8.4 Hz, 1H), 7.47 - 7.24 (m, 4H), 6.24 - 5.90 (m, 1H), 5.06 (td, J = 9.4, 4.8 Hz, 1H), 3.14 (p, J = 9.0 Hz, 1H), 2.78 - 2.60 (m, 2H), 2.43 - 2.15 (m, 4H).	372.05	E	
I-1536		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.62 (s, 1H), 8.16 (d, J = 8.8 Hz, 1H), 7.39-7.31 (m, 2H), 7.27 (ddt, J = 6.8, 5.2, 1.5 Hz, 2H), 5.03 (td, J = 9.4, 5.0 Hz, 1H), 3.15 (p, J = 9.2 Hz, 1H), 2.70 (ddd, J = 11.9, 9.2, 7.1 Hz, 2H), 2.20 (dddd, J = 26.0, 12.9, 8.9, 4.4 Hz, 2H), 1.71 (dd, J = 14.0, 5.0 Hz, 1H), 1.47 (dd, J = 14.0, 10.0 Hz, 1H), 1.03 (s, 3H), 0.47 (dt, J = 9.2, 4.4 Hz, 1H), 0.23-0.04 (m, 3H).	376.05	D	
I-1537		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.59 (s, 1H), 8.32 (d, J = 7.1 Hz, 1H), 7.29 (d, J = 7.9 Hz, 2H), 7.00 (t, J = 55.5 Hz, 1H), 5.06 (dd, J = 10.8, 7.1 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.80 (q, J = 8.3, 7.2 Hz, 1H), 2.66 (dd, J = 11.9, 9.0 Hz, 1H), 2.57 (dd, J = 11.9, 9.0 Hz, 1H), 2.25 - 2.03 (m, 3H), 1.92 - 1.67 (m, 4H), 1.59 - 1.50 (m, 1H).	414.3	D	

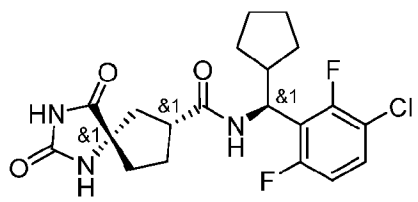
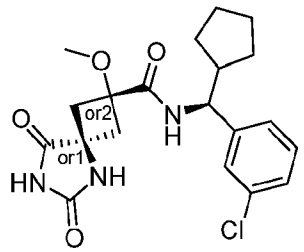
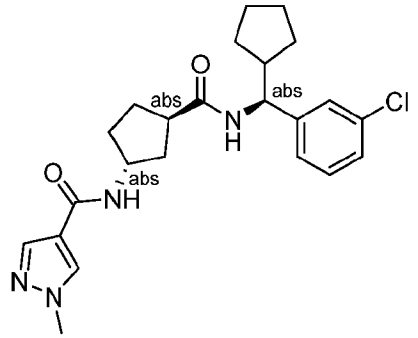
I-1538		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.59 (s, 1H), 8.44 (d, J = 7.4 Hz, 1H), 7.27 (d, J = 8.5 Hz, 2H), 4.81 (dd, J = 11.1, 7.4 Hz, 1H), 3.23 - 3.07 (m, 1H), 2.63 (ddd, J = 23.3, 12.1, 8.9 Hz, 2H), 2.47 - 2.32 (m, 1H), 2.22 (ddd, J = 12.5, 9.1, 4.2 Hz, 1H), 2.14 (ddd, J = 12.8, 9.0, 4.2 Hz, 1H), 1.99 - 1.81 (m, 1H), 1.69 - 1.41 (m, 4H), 1.39 - 1.21 (m, 2H), 1.00 (dq, J = 16.1, 7.9 Hz, 1H).	462.1	E	
I-1539		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.70 (d, J = 6.7 Hz, 1H), 8.62 (s, 1H), 7.29 (d, J = 8.2 Hz, 2H), 4.33 - 4.05 (m, 1H), 3.25 - 3.07 (m, 1H), 2.73 - 2.64 (m, 1H), 2.58 (dd, J = 12.0, 9.2 Hz, 1H), 2.26 - 2.07 (m, 2H), 1.31 (d, J = 54.3 Hz, 1H), 0.60 (tt, J = 8.6, 4.6 Hz, 1H), 0.43 (ddq, J = 31.6, 9.6, 4.7 Hz, 2H), 0.17 (dq, J = 9.6, 4.7 Hz, 1H).	434.1	E	
I-1540		(400 MIIz, DMSO-d6) 10.61 (s, 1I1), 8.58 (d, J = 8.4 Hz, 1H), 8.28 (s, 1H), 7.44 - 7.26 (m, 4H), 6.22 - 5.86 (m, 1H), 5.03 (q, J = 8.5 Hz, 1H), 3.08 (p, J = 9.0 Hz, 1H), 2.43 (dd, J = 9.7, 5.2 Hz, 3H), 2.37 - 2.15 (m, 3H).	372.05	E	
I-1541		(400 MHz, DMSO-d6) 8.38 (d, J = 7.5 Hz, 1H), 8.04 (s, 1H), 7.53 (q, J = 7.8 Hz, 1H), 7.11 (d, J = 9.4 Hz, 1H), 4.83 (dd, J = 11.0, 7.5 Hz, 1H), 4.32 (d, J = 1.5 Hz, 2H), 2.76 -2.66 (m, 1H), 2.43- 2.28 (m, 2H), 2.23 (dd, J = 20.8, 8.6 Hz, 3H), 1.88 (d, J = 7.4 Hz, 1H), 1.66- 1.41 (m, 4H), 1.34 (d, J = 8.1 Hz, 1H), 1.27 - 1.15 (m, 1H), 1.01 (d, J = 9.3 Hz, 1H).	399.25	B	

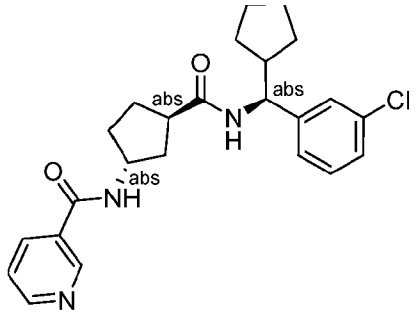
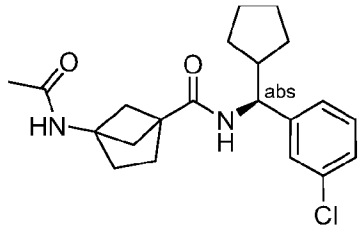
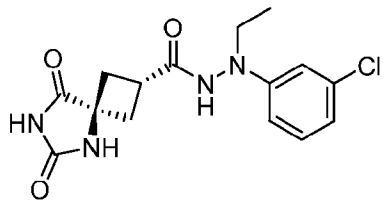
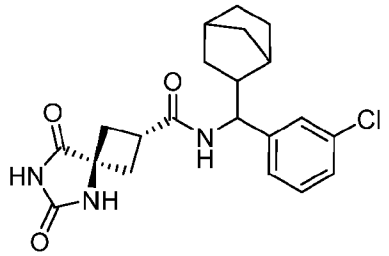
I-1542		(400 MHz, DMSO-d6) 8.45 (d, J = 7.5 Hz, 1H), 8.13 (s, 1H), 7.54 (q, J = 7.8 Hz, 1H), 7.13 (t, J = 9.4 Hz, 1H), 4.84 (t, J = 9.5 Hz, 1H), 4.22 (q, J = 9.3 Hz, 2H), 2.97- 2.83 (m, 1H), 2.41 (d, J = 10.3 Hz, 2H), 2.30 (t, J = 13.0 Hz, 2H), 2.18 (d, J = 12.2 Hz, 1H), 1.94- 1.83 (m, 1H), 1.68- 1.41 (m, 4H), 1.34 (d, J = 7.4 Hz, 1H), 1.24 (s, 1H), 1.00 (s, 1H).	397.15	B	B
I-1543		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.59 (s, 1H), 8.32 (d, J = 7.1 Hz, 1H), 7.30 (d, J = 7.9 Hz, 2H), 7.00 (t, J = 55.5 Hz, 1H), 5.06 (dd, J = 10.8, 7.1 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.80 (q, J = 7.8, 7.3 Hz, 1H), 2.66 (dd, J = 12.1, 9.0 Hz, 1H), 2.57 (dd, J = 11.9, 9.0 Hz, 1H), 2.16 (dtd, J = 23.9, 9.0, 4.7 Hz, 3H), 1.86 - 1.68 (m, 4H), 1.59 - 1.48 (m, 1H).	414.25	E	
I-1544		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.44 (d, J = 7.4 Hz, 1H), 7.27 (d, J = 8.5 Hz, 2H), 4.81 (dd, J = 11.1, 7.4 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.63 (ddd, J = 23.3, 12.1, 8.9 Hz, 2H), 2.46 - 2.32 (m, 1H), 2.22 (ddd, J = 12.5, 9.2, 4.1 Hz, 1H), 2.14 (ddd, J = 12.8, 9.0, 4.2 Hz, 1H), 1.96 - 1.83 (m, 1H), 1.65 - 1.54 (m, 2H), 1.54 - 1.41 (m, 2H), 1.35 (dt, J = 12.7, 7.7 Hz, 1H), 1.30 - 1.19 (m, 1H), 1.00 (dq, J = 16.2, 8.2 Hz, 1H).	462.15	E	
I-1545		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.60 (s, 1H), 8.17 (s, 1H), 7.49 (dt, J = 8.5, 4.3 Hz, 1H), 7.04 (ddd, J = 12.4, 9.0, 1.8 Hz, 1H), 3.20 (p, J = 9.1 Hz, 1H), 2.69- 2.55 (m, 4H), 2.16 (td, J = 9.5, 2.8 Hz, 2H), 1.86 (t, J = 12.6 Hz, 2H), 1.61 (dt, J = 22.3, 12.0 Hz, 4H), 1.48 (d, J = 13.3 Hz, 2H), 1.26 (d, J = 12.6 Hz, 1H).		C	

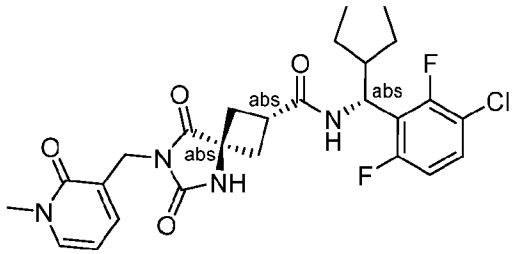
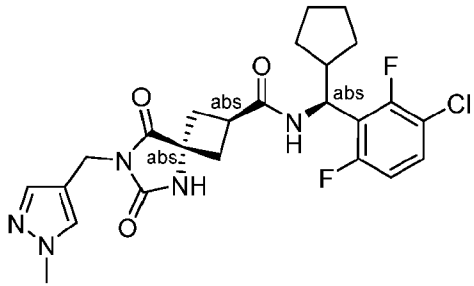
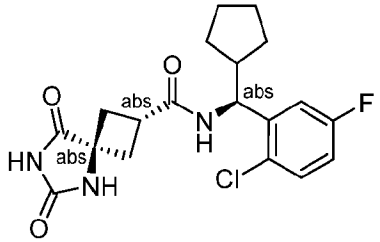
I-1546		(400 MHz, DMSO-d6) 8.41 (d, J = 7.5 Hz, 1H), 7.70 (s, 1H), 7.54 (td, J = 8.6, 5.3 Hz, 1H), 7.13 (t, J = 9.4 Hz, 1H), 4.83 (dd, J = 11.1, 7.5 Hz, 1H), 4.09 (s, 2H), 2.73 (d, J = 8.7 Hz, 1H), 2.42 (d, J = 9.1 Hz, 1H), 1.95 - 1.40 (dt, 11H), 1.39 - 1.19 (m, 2H), 1.02 (q, J = 10.9, 9.1 Hz, 1H).	413.1	C	
I-1547		(400 MHz, DMSO-d6) 8.41 (d, J = 7.6 Hz, 1H), 7.73 (s, 1H), 7.54 (td, J = 8.6, 5.4 Hz, 1H), 7.13 (t, J = 9.3 Hz, 1H), 4.84 (dd, J = 11.1, 7.5 Hz, 1H), 4.16 - 4.06 (m, 2H), 2.74 (p, J = 7.9 Hz, 1H), 2.42 (t, J = 9.0 Hz, 1H), 1.94 (tt, J = 12.3, 6.6 Hz, 2H), 1.82 (dd, J = 12.7, 9.8 Hz, 1H), 1.77 - 1.43 (m, 8H), 1.41 - 1.22 (m, 2H), 1.01 (dd, J = 12.3, 7.4 Hz, 1H).	413.1	B	
I-1548		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.75 - 8.48 (m, 2H), 7.29 (d, J = 8.2 Hz, 2H), 4.39 - 4.09 (m, 1H), 3.23 - 3.05 (m, 1H), 2.72 - 2.64 (m, 1H), 2.58 (dd, J = 12.0, 9.2 Hz, 1H), 2.16 (dddd, J = 24.7, 20.8, 12.5, 8.0 Hz, 2H), 1.31 (d, J = 53.4 Hz, 1H), 0.59 (td, J = 8.4, 4.1 Hz, 1H), 0.48 (tq, J = 8.5, 4.8, 4.2 Hz, 1H), 0.39 (dt, J = 9.7, 4.7 Hz, 1H), 0.17 (dd, J = 9.7, 5.0 Hz, 1H).	434.05	E	
I-1549		(400 MHz, DMSO-d6) 8.47 (d, J = 7.4 Hz, 1H), 7.92 (s, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.7 Hz, 1H), 4.81 (dd, J = 11.1, 7.4 Hz, 1H), 4.15 (d, J = 8.6 Hz, 1H), 4.10 (d, J = 8.6 Hz, 1H), 2.97 - 2.82 (m, 1H), 2.47 - 2.36 (m, 1H), 1.99 - 1.71 (m, 5H), 1.68 - 1.41 (m, 6H), 1.40 - 1.19 (m, 2H), 1.07 - 0.95 (m, 1H).	413.1	B	B
I-1550		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.30 (s, 1H), 8.23 (d, J = 8.8 Hz, 1H), 7.56 (d, J = 5.4 Hz, 1H), 7.15 (d, J = 9.9 Hz, 1H), 5.10 (d, J = 8.6 Hz, 1H), 3.11 - 2.95 (m, 1H), 2.09 - 1.95 (m, 3H), 1.87 - 1.73 (m, 2H), 1.68 (dt, J = 12.0, 5.9 Hz, 1H), 0.95 (s, 9H).	414.1	B	

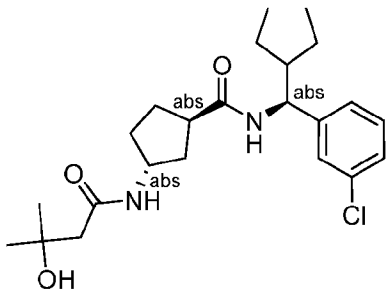
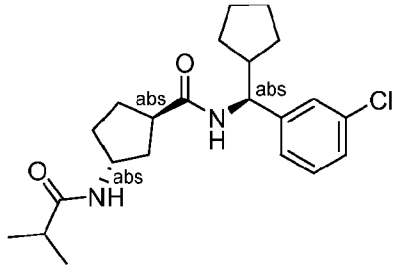
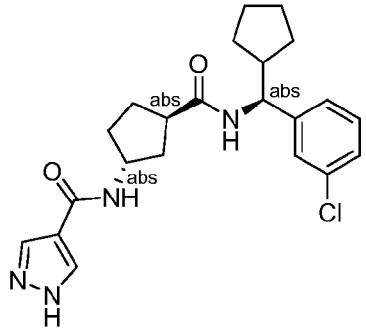
I-1551		(400 MHz, DMSO-d6) 10.63 (s, 1H), 8.44 - 8.08 (m, 2H), 7.72 - 7.48 (m, 1H), 7.15 (s, 1H), 5.09 (d, J = 8.7 Hz, 1H), 3.13 - 3.01 (m, 1H), 2.19 - 2.05 (m, 1H), 1.95 (ddd, J = 17.7, 12.0, 7.0 Hz, 3H), 1.66 (t, J = 10.8 Hz, 2H), 0.94 (s, 9H).	414.1	E	
I-1552		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.30 (d, J = 8.8 Hz, 1H), 7.99 (s, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.07 (s, 1H), 3.21 - 3.03 (m, 1H), 2.21 - 2.05 (m, 1H), 1.97 - 1.84 (m, 3H), 1.75 (t, J = 8.7 Hz, 1H), 1.66 (d, J = 13.6 Hz, 1H), 0.94 (s, 9H).	414.1	E	
I-1553		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.31 (d, J = 8.8 Hz, 1H), 7.96 (s, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.10 (d, J = 8.8 Hz, 1H), 3.15 (dd, J = 16.9, 6.9 Hz, 1H), 2.17 - 1.87 (m, 3H), 1.87 - 1.68 (m, 3H), 0.94 (s, 9H).	414.1	E	
I-1554		(400 MHz, DMSO-d6) 8.47 (d, J = 7.4 Hz, 1H), 7.90 (s, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 4.81 (dd, J = 11.2, 7.4 Hz, 1H), 4.08 (s, 2H), 2.97 - 2.82 (m, 1H), 2.48 - 2.37 (m, 1H), 2.03 - 1.89 (m, 2H), 1.87 - 1.43 (m, 9H), 1.40 - 1.15 (m, 2H), 1.06 - 0.95 (m, 1H).	413.1	B	B
I-1555		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.32 (d, J = 8.9 Hz, 1H), 7.96 (s, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.15 (t, J = 9.5 Hz, 1H), 5.10 (d, J = 8.7 Hz, 1H), 3.15 (dd, J = 17.0, 6.9 Hz, 1H), 2.19 - 1.87 (m, 3H), 1.85 - 1.68 (m, 3H), 0.94 (s, 9H).	414.1	D	

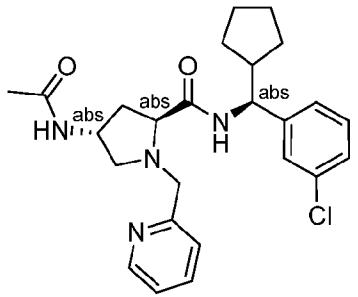
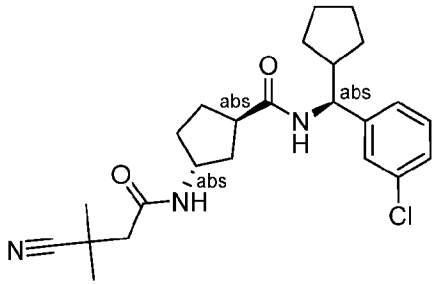
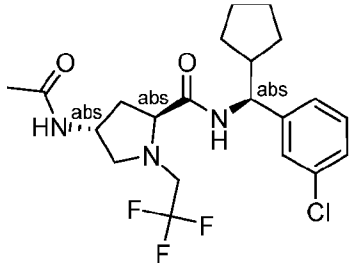
I-1556		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.30 (d, J = 8.8 Hz, 1H), 7.99 (s, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.32 - 7.02 (m, 1H), 5.08 (d, J = 8.7 Hz, 1H), 3.23 - 3.03 (m, 1H), 2.19 - 2.03 (m, 1H), 2.03 - 1.85 (m, 3H), 1.76 (d, J = 8.5 Hz, 1H), 1.73 - 1.55 (m, 1H), 0.94 (s, 9H).	414.1	C	
I-1557		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.50 (d, J = 7.4 Hz, 1H), 8.29 (s, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.29 - 7.05 (m, 1H), 4.83 (dd, J = 11.1, 7.4 Hz, 1H), 3.01 - 2.79 (m, 1H), 2.43 - 2.32 (m, 1H), 2.11 - 1.87 (m, 4H), 1.85 - 1.71 (m, 2H), 1.69 - 1.44 (m, 5H), 1.39 - 1.20 (m, 2H), 1.01 (s, 1H).	426.2	B	B
I-1558		(400 MHz, DMSO-d6) 10.62 (s, 1H), 8.43 - 8.14 (m, 2H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.16 (d, J = 9.5 Hz, 1H), 5.09 (d, J = 8.7 Hz, 1H), 3.13 - 3.01 (m, 1H), 2.18 - 2.07 (m, 1H), 1.94 (ddd, J = 26.0, 12.9, 8.0 Hz, 3H), 1.76 - 1.57 (m, 2H), 0.94 (s, 9H).	414.1	B	B
I-1559		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.43 - 8.06 (m, 2H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.14 (s, 1H), 5.10 (d, J − 8.6 Hz, 1H), 3.07 (dd, J − 9.7, 7.3 Hz, 1H), 2.13 - 1.95 (m, 3H), 1.82 (dt, J = 14.5, 7.2 Hz, 2H), 1.71 - 1.60 (m, 1H), 0.95 (s, 9H).	414.1	D	
I-1560		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.55 (d, J = 7.4 Hz, 1H), 7.98 (s, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 4.82 (dd, J = 11.1, 7.4 Hz, 1H), 2.97 (p, J = 8.4 Hz, 1H), 2.45 - 2.29 (m, 1H), 2.16 - 2.01 (m, 1H), 1.90 (tt, J = 12.2, 4.0 Hz, 4H), 1.81 - 1.42 (m, 6H), 1.38 - 1.18 (m, 2H), 1.00 (dd, J = 12.9, 7.6 Hz, 1H).	426.05	B	

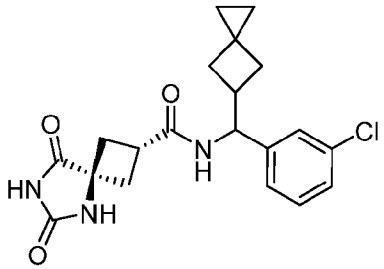
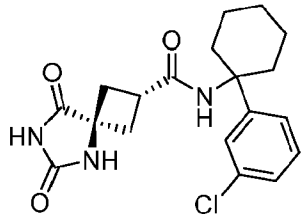
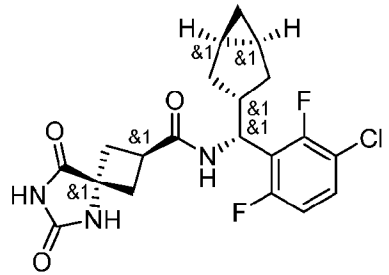
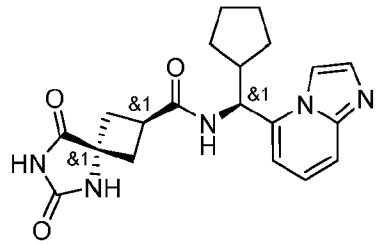
I-1561		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.55 (d, J = 7.5 Hz, 1H), 7.95 (s, 1H), 7.53 (td, J = 8.7, 5.6 Hz, 1H), 7.13 (td, J = 9.3, 1.6 Hz, 1H), 4.84 (dd, J = 11.1, 7.4 Hz, 1H), 3.05 - 2.79 (m, 1H), 2.43 - 2.27 (m, 1H), 2.11 - 1.87 (m, 4H), 1.87 - 1.69 (m, 3H), 1.63 - 1.44 (m, 4H), 1.42 - 1.21 (m, 2H), 1.00 (dd, J = 12.9, 7.5 Hz, 1H).	426.05	D	
I-1562		(400 MHz, DMSO-d6) - 9.09 (br. s, 1H), 8.59 (d, J = 8.7 Hz, 1H), 7.72 (s, 1H), 7.49 - 7.47 (m, 1H), 7.34 - 7.31 (m, 2H), 7.29 - 7.25 (m, 1H), 4.54 (dd, J = 10.6, 9.0 Hz, 1H), 3.05 (s, 3H), 2.66 (dd, J = 13.1, 2.3 Hz, 1H), 2.60 - 2.57 (m, 1H), 2.57 - 2.53 (m, 1H), 2.42 - 2.30 (m, 2H), 1.84 - 1.75 (m, 1H), 1.64 - 1.38 (m, 4H), 1.33 - 1.17 (m, 2H), 1.13 - 1.02 (m, 1H). Partial formate salt. Cis/trans geometry of cyclobutane substitution unknown.	406.3	E	
I-1563		NMR (400 MHz, DMSO-d6) - 8.27 (d, J = 8.8 Hz, 1H), 8.10 (s, 1H), 7.83 (overlapping s, 1H), 7.82 (submerged d, J = 8.1 Hz, 1H), 7.37 (t, J = 1.6 Hz, 1H), 7.35 - 7.29 (m, 1H), 7.26 (m, J = 7.3, 3.4, 1.9 Hz, 2H), 4.56 (t, J = 9.3 Hz, 1H), 4.26 - 4.14 (m, 1H), 3.83 (s, 3H), 2.81 (p, J = 7.8 Hz, 1H), 2.22 - 2.09 (m, 1H), 1.97 - 1.68 (m, 5H), 1.62 - 1.37 (m, 6H), 1.32 - 1.21 (m, 2H), 1.13 - 1.03 (m, 1H).	429.2	C	

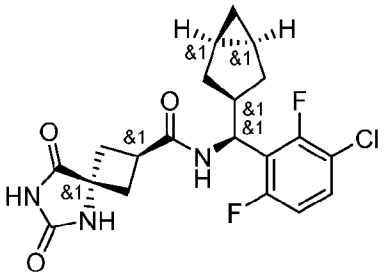
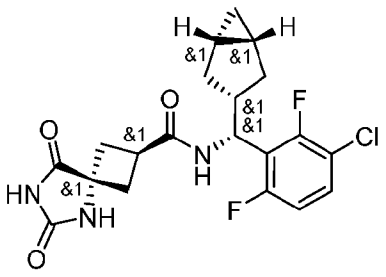
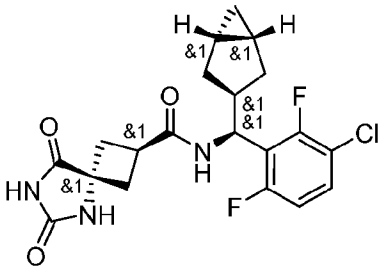
I-1564		NMR (400 MHz, DMSOd6) - 8.99 (d, J = 2.0 Hz, 1H), 8.69 (dd, J = 4.8, 1.5 Hz, 1H), 8.50 (d, J = 6.8 Hz, 1H), 8.28 (d, J = 8.8 Hz, 1H), 8.17 (dt, J = 7.9, 1.9 Hz, 1H), 7.49 (dd, J = 7.9, 4.8 Hz, 1H), 7.37 (t, J = 1.6 Hz, 1H), 7.33 (dd, J = 9.3, 6.0 Hz, 1H), 7.29 - 7.23 (m, 2H), 4.57 (t, J = 9.3 Hz, 1H), 4.35 - 4.23 (m, 1H), 2.85 (p, J = 7.9 Hz, 1H), 2.26 - 2.09 (m, 1H), 2.03 - 1.91 (m, 2H), 1.91 - 1.79 (m, 2H), 1.78-1.67 (dt, 1H), 1.67 - 1.50 (m, 5H), 1.50 - 1.36 (m, 1H), 1.34 - 1.20 (m, 2H), 1.15-1.02 (m, 1H).	426.4	C	
I-1565		(400 MHz, DMSO-d6) as a ~19:1 mixture of rotamers - 8.24 (s, 1H), 7.94 (d, J = 8.8 Hz, 1H), 7.42 (t, J = 1.6 Hz, 1H), 7.34 - 7.29 (m, 1H), 7.29 - 7.24 (m, 2H), 4.53 (dd, J = 10.3, 9.0 Hz, 1H), 2.31 - 2.19 (m, 1H), 1.99 - 1.94 (m, 2H), 1.76 (overlapping s, 3H), 1.79 - 1.69 (overlapping m, 5H), 1.61 - 1.37 (m, 6H), 1.28 - 1.17 (m, 2H), 1.11 - 1.01 (m, 1H).	375.3	E	
I-1566		NMR (400 MHz, DMSO-d6) - 10.32 (br s, 1H), 9.90 (s, 1H), 8.62 (s, 1H), 7.23 - 7.14 (m, 1H), 6.77 - 6.68 (m, 3H), 3.45 (q, J = 7.0 Hz, 2H), 3.29 - 3.19 (m, 1H), 2.81 - 2.72 (m, 2H), 2.35 - 2.26 (m, 2H), 1.08 (t, J = 7.1 Hz, 3H). Minor impurities. ~20 % of minor rotamer present. Only major is described.	337.2	E	
I-1567		NMR (400 MHz, DMSO-d6) - 10.47 (br. s, 1H), 8.61 (submerged s, 0.25H), 8.60 (overlapping s, 0.75H), 8.34 - 8.29 (m, 0.5H), 8.26 (dd, J = 8.7, 1.7 Hz, 0.25H), 8.19 (dd, J = 8.7, 2.1 Hz, 0.25H), 7.39 (br. s, 0.25H), 7.37 - 7.31 (m, 1.5H), 7.30 - 7.21 (m, 2.25H), 4.64 - 4.56 (m, 0.25H), 4.56 - 4.48 (m, 0.25H), 4.37 (ddd, J = 11.4, 8.3, 3.3 Hz, 0.5H), 3.13 - 2.99 (m, 1H), 2.62 (dd, J = 21.3, 9.7 Hz, 2H), 2.29 (br. s, 0.25H), 2.25 - 2.04 (m, 3.75H), 1.84 - 1.66 (m, 0.50H), 1.66 - 1.14 (m, 6.50H), 1.13 - 0.86 (m,	402.2	D	

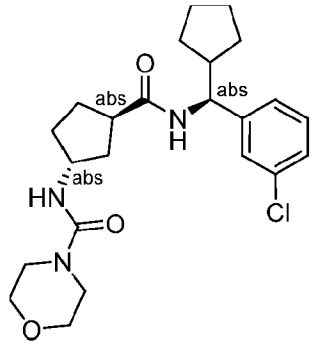
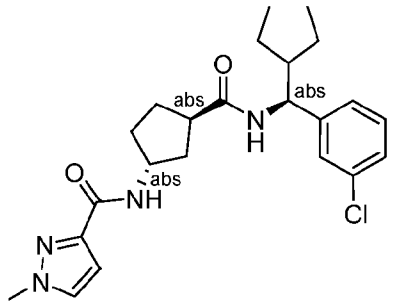
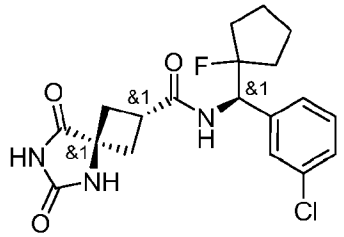
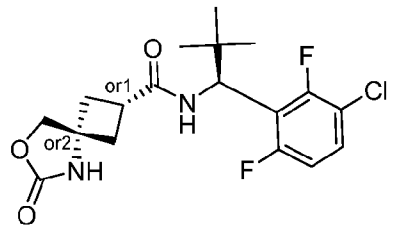
		1.5H), 0.78 (d, J = 12.3 Hz, 0.25H), 0.60 (d, J = 8.9 Hz, 0.25H). Appeared to be a 2:1:1 mixture of diastereomers, although may be a 1:1:1:1 mixture with overlapping peaks for 2 diastereomers.			
I-1568			533.37	B	B
I-1569			506.47	A	A
I-1570				D	

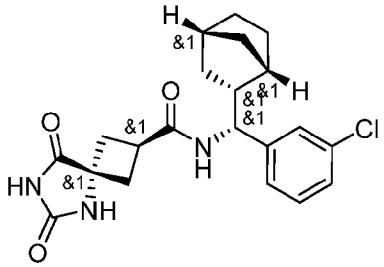
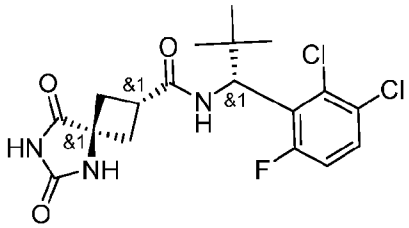
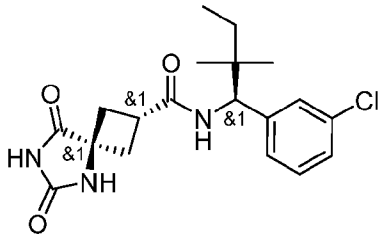
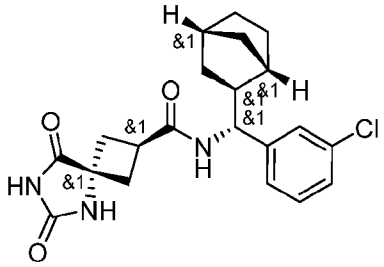
I-1571		NMR (400 MHz, DMSO-d6) - 8.26 (d, J = 8.7 Hz, 1H), 7.84 (d, J = 7.0 Hz, 1H), 7.36 (t, J = 1.5 Hz, 1H), 7.35 – 7.29 (m, 1H), 7.28 – 7.23 (m, 2H), 4.84 (s, 1H), 4.54 (app. t, J = 9.3 Hz, 1H), 4.10 – 4.01 (m, 1H), 2.82 – 2.72 (m, 1H), 2.21 – 2.10 (overlapping m, 1H), 2.16 (overlapping s, 2H), 1.94 – 1.34 (m, 11H), 1.31 – 1.19 (m, 2H), 1.13 (overlapping s, 6H), 1.16 – 1.02 (overlapping m, 1H). Minor aliphatic impurities present.	421.4	D	
I-1572		NMR (400 MHz, DMSOd6) - 8.25 (d, J = 8.7 Hz, 1H), 7.65 (d, J = 7.0 Hz, 1H), 7.37 (s, 1H), 7.35 – 7.29 (m, 1H), 7.28-7.23 (m, 2H), 4.54 (t, J = 9.3 Hz, 1H), 4.07 – 3.96 (m, 1H), 2.76 (p, J = 7.8 Hz, 1H), 2.36 – 2.25 (m, 1H), 2.21 – 2.09 (m, 1H), 1.92 – 1.67 (m, 4H), 1.67 – 1.32 (m, 7H), 1.31-1.20 (m, 2H), 1.14 – 1.02 (m, 1H), 0.98 (d, J = 2.3 Hz, 3H), 0.96 (d, J = 2.3 Hz, 3H).	391.4	D	
I-1573		NMR (400 MHz, DMSO-d6) - 13.08 (br. s, 1H), 8.27 (d, J = 8.8 Hz, 1H), 8.14 (br. s, 1H), 7.90 (br. s, 1H), 7.82 (d, J = 7.0 Hz, 1H), 7.37 (t, J = 1.5 Hz, 1H), 7.35 – 7.30 (m, 1H), 7.28 – 7.23 (m, 2H), 4.56 (t, J = 9.2 Hz, 1H), 4.26 – 4.17 (m, 1H), 2.82 (app. p, J = 7.8 Hz, 1H), 2.21 – 2.10 (m, 1H), 1.98 – 1.66 (m, 5H), 1.62 – 1.36 (m, 6H), 1.33 – 1.20 (m, 2H), 1.13 – 1.02 (m, 1H). Singlets at 8.14 and 7.90 ppm are broadened as a result of tautomerization of the pyrazole N–H.	415.3	B	D

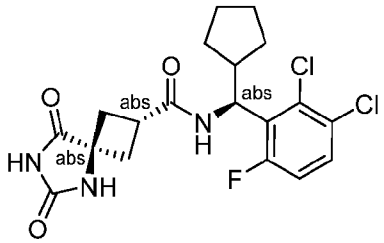
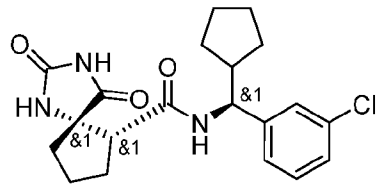
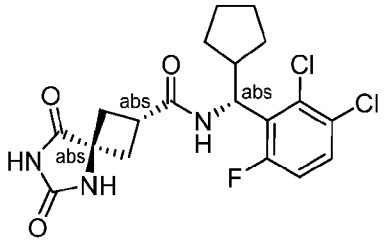
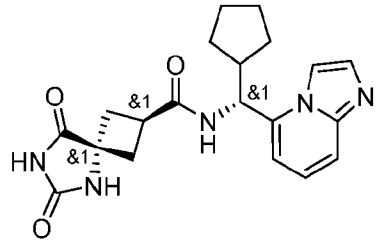
I-1574		NMR (400 MHz, DMSO-d6) - 8.77 (d, J = 9.1 Hz, 0.8H), 8.69 (d, J = 5.6 Hz, 0.2H), 8.54 – 8.51 (m, 0.8H), 8.36 – 8.30 (m, 0.4H), 8.26 (d, J = 7.7 Hz, 0.2H), 8.07 (d, J = 7.2 Hz, 0.2H, 8.00 (d, J = 7.0 Hz, 0.8H), 7.74 (td, J = 7.6, 1.6 Hz, 0.8H), 7.70 (overlapping m, 0.2H), 7.45 (s, 0.8H), 7.37 (d, J = 7.7 Hz, 0.8H), 7.31 – 7.18 (m, 3.8H), 7.16 – 7.12 (m, 0.2H), 4.61 (t, J = 9.3 Hz, 0.8H), 4.51 (t, J = 9.5 Hz, 0.2H), 4.40 – 4.30 (m, 0.2H), 4.22 – 4.07 (m, 1H), 3.97 (d, J = 17.4 Hz, 0.2H), 3.77 (d, J = 13.7 Hz, 0.8H), 3.62 (d, J = 13.6 Hz, 0.8H), 3.54 (dd, J = 8.2, 6.5 Hz, 0.2H), 3.39 (t, J = 7.7 Hz, 1H), 3.10 (dd, J = 8.7, 6.5 Hz, 1H), 2.39 – 2.16 (m, 2H), 2.05 – 1.90 (m, 2H), 1.79 (s, 0.6H), 1.76 (overlapping s, 2.4H), 1.74 – 1.66 (m, 0.8H), 1.64 – 1.39 (m, 4H), 1.37 – 1.19 (m, 1.8H), 1.18 – 0.95 (m, 1.2H). Plausibly 4:1 mixture of 2 rotamers.	455.1	E	
I-1575		NMR (400 MHz, DMSO-d6) - 8.26 (d, J = 8.7 Hz, 1H), 7.96 (d, J = 7.0 Hz, 1H), 7.37 (t, J = 1.6 Hz, 1H), 7.35 – 7.29 (m, 1H), 7.28 – 7.22 (m, 2H), 4.55 (t, J = 9.3 Hz, 1H), 4.10 – 4.00 (m, 1H), 2.78 (app. p, J = 7.8 Hz, 1H), 2.35 (d, A of AB, JAB = 14.5 Hz, 1H), 2.31 (d, B of AB, JAB = 14.5 Hz, 1H), 2.22 – 2.10 (m, 1H), 1.95 – 1.36 (m, 11H), 1.34 (s, 6H), 1.31 – 1.20 (m, 2H), 1.13 – 1.02 (m, 1H). Contains unknown aliphatic impurity.	430.4	D	
I-1576		NMR (400 MHz, DMSO-d6) - 8.18 (d, J = 8.9 Hz, 1H), 8.00 (d, J = 6.8 Hz, 1H), 7.37 (br. t, J = 1.4 Hz 1H), 7.35 – 7.29 (m, 1H), 7.27 – 7.22 (m, 2H), 4.58 (t, J = 9.3 Hz, 1H), 4.20 (app. h, J = 7.1 Hz, 1H), 3.51 (dd, J = 7.7, 5.5 Hz, 1H), 3.37 (overlapping m, 2H), 3.29 (overlapping m, 1H), 2.54 (dd, J = 8.8, 7.1 Hz, 1H), 2.32 – 2.20 (m, 1H), 1.97 – 1.86 (m, 2H), 1.78 (s, 3H), 1.76 – 1.67 (m, 1H), 1.63 – 1.38 (m, 4H), 1.32 – 1.18 (m, 2H), 1.14 – 1.03 (m, 1H).	446.2	E	

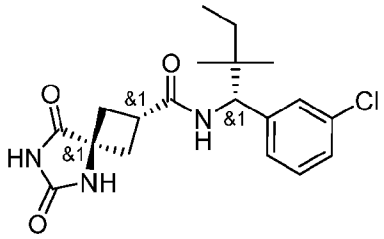
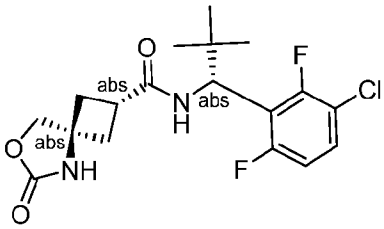
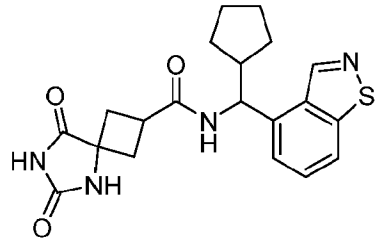
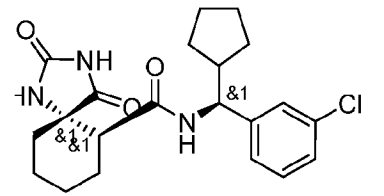
I-1577		NMR (400 MHz, DMSo-d6) - 10.06 (br s, 1H), 8.62 (s, 1H), 8.25 (d, J = 8.6 Hz, 1H), 7.36 (t, J = 1.6 Hz, 1H), 7.35 – 7.29 (m, 1H), 7.29 – 7.24 (m, 2H), 4.89 – 4.82 (appt dd, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.77 – 2.59 (m, 3H), 2.27 – 2.10 (m, 2H), 2.08 – 2.00 (m, 1H), 1.99 – 1.91 (m, 1H), 1.89 – 1.77 (m, 2H), 0.40 – 0.32 (m, 4H). Only one diastereomer obtained. Minor aliphatic impurities.	388.3	D	
I-1578		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (d, J = 1.7 Hz, 1H), 7.80 (s, 1H), 7.33- 7.28 (m, 3H), 7.23 (dt, J = 7.0, 1.8 Hz, 1H), 3.25 (t, J = 9.1 Hz, 1H), 2.70 - 2.63 (m, 2H), 2.31 (d, J = 11.6 Hz, 2H), 2.22 (td, J = 9.6, 2.8 Hz, 2H), 1.57 (d, J = 28.1 Hz, 6H), 1.25 (s, 1H).	376.2	D	
I-1579		(400 MHz, DMSO-d6) 10.53 (s, 1H), 8.58 (s, 1H), 8.37 (d, J = 7.6 Hz, 1H), 7.54 (td, J = 8.6, 5.5 Hz, 1H), 7.12 (t, J = 9.4 Hz, 1H), 4.75 (dd, J = 12.0, 7.5 Hz, 1H), 3.12 (p, J = 9.0 Hz, 1H), 2.84 (s, 1H), 2.61 (dt, J = 27.8, 10.5 Hz, 2H), 2.18 (ddt, J = 32.3, 12.5, 7.3 Hz, 3H), 1.89 - 1.70 (m, 1H), 1.46 - 1.26 (m, 3H), 1.24 (s, 1H), 0.96 (dd, J = 14.0, 5.3 Hz, 1H), 0.65 (s, 1H), 0.07 (q, J = 4.2 Hz, 1H).	424.1	B	C
I-1580		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.58 (s, 1H), 8.38 (d, J = 8.6 Hz, 1H), 7.96 (s, 1H), 7.62 (d, J = 1.3 Hz, 1H), 7.53 (d, J = 9.0 Hz, 1H), 7.27 (dd, J = 9.0, 7.0 Hz, 1H), 6.93 (d, J = 7.0 Hz, 1H), 5.08 (t, J = 9.2 Hz, 1H), 3.12 (p, J = 9.1 Hz, 1H), 2.76 - 2.57 (m, 3H), 2.24 (ddd, J = 12.8, 9.1, 4.3 Hz, 1H), 2.12 (ddt, J = 15.6, 10.5, 5.3 Hz, 1H), 1.77 (d, J = 10.7 Hz, 1H), 1.69 - 1.43 (m, 6H), 1.21 - 1.10 (m, 1H).	382.15	E	

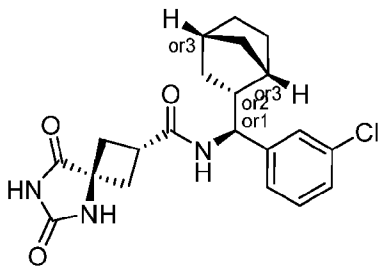
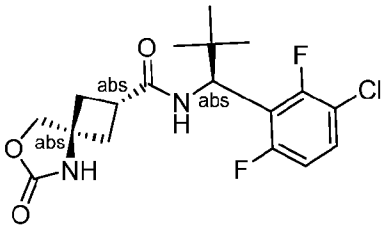
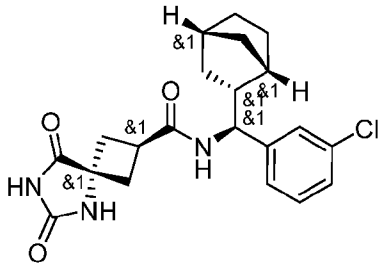
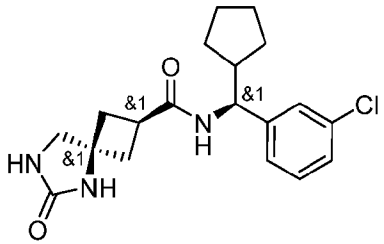
I-1581		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.58 (s, 1H), 8.40 (d, J = 7.4 Hz, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.12 (td, J = 9.4, 1.6 Hz, 1H), 4.83 (dd, J = 10.4, 7.3 Hz, 1H), 3.12 (p, J = 9.1 Hz, 1H), 2.60 (ddd, J = 31.8, 12.1, 9.0 Hz, 2H), 2.27 - 2.03 (m, 4H), 1.49 - 1.38 (m, 1H), 1.34 (dd, J = 8.8, 2.3 Hz, 2H), 1.24 (ddt, J = 17.4, 8.3, 3.8 Hz, 2H), 0.28 (td, J = 7.9, 4.8 Hz, 1H), 0.14 (q, J = 4.1 Hz, 1H).	424.15	A	B
I-1582		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.58 (s, 1H), 8.40 (d, J = 7.4 Hz, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.16 - 7.07 (m, 1H), 4.83 (dd, J = 10.4, 7.4 Hz, 1H), 3.12 (p, J = 9.0 Hz, 1H), 2.60 (ddd, J = 31.7, 12.0, 9.0 Hz, 2H), 2.32 - 2.02 (m, 4H), 1.44 (s, 1H), 1.37 - 1.30 (m, 2H), 1.29 - 1.17 (m, 2H), 0.28 (td, J = 7.9, 4.8 Hz, 1H), 0.15 (t, J = 4.2 Hz, 1H).	424.15	E	
I-1583		(400 MHz, DMSO-d6) 10.53 (s, 1H), 8.58 (s, 1H), 8.37 (d, J = 7.5 Hz, 1H), 7.54 (td, J = 8.7, 5.4 Hz, 1H), 7.12 (t, J = 9.5 Hz, 1H), 4.75 (dd, J = 12.2, 7.4 Hz, 1H), 3.12 (p, J = 9.0 Hz, 1H), 2.96 - 2.76 (m, 1H), 2.69- 2.53 (m, 2H), 2.32-2.05 (m, 3H), 1.92 - 1.70 (m, 1H), 1.46 - 1.27 (m, 3H), 1.24 (s, 1H), 0.96 (dd, J = 13.5, 5.4 Hz, 1H), 0.66 (q, J = 7.8 Hz, 1H), 0.07 (q, J = 4.2 Hz, 1H).	424.15	A	B

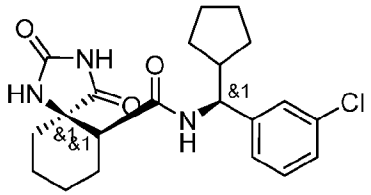
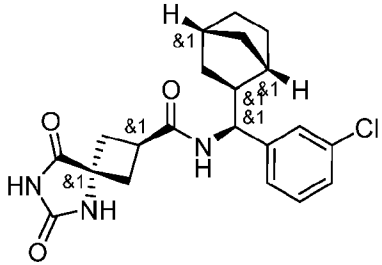
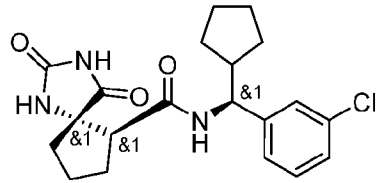
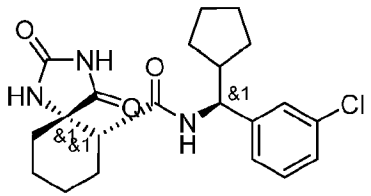
I-1584		(400 MHz, DMSO-d6) - 8.23 (d, J = 8.4 Hz, 1H), 7.38 – 7.35 (m, 1H), 7.35 – 7.29 (m, 1H), 7.29 – 7.23 (m, 2H), 6.25 (d, J = 6.3 Hz, 1H), 4.55 (app. t, J = 9.4 Hz, 1H), 3.97 (app. sext, J = 6.7 Hz, 1H), 3.55 – 3.49 (m, 4H), 3.25 – 3.21 (m, 4H), 2.76 (app. p, J – 7.6 Hz, 1H), 2.22 – 2.09 (m, 1H), 1.89 – 1.66 (m, 5H), 1.61 – 1.37 (m, 6H), 1.32 – 1.20 (m, 2H), 1.13 – 1.03 (m, 1H).	434.5	D	
I-1585		(400 MHz, DMSO-d6) - 8.26 (d, J = 8.7 Hz, 1H), 7.83 (d, J = 7.6 Hz, 1H), 7.75 (d, J = 2.2 Hz, 1H), 7.37 (t, J = 1.7 Hz, 1H), 7.35 – 7.30 (m, 1H), 7.28 – 7.23 (m, 2H), 6.59 – 6.58 (m, 1H), 4.56 (app. t, J = 9.3 Hz, 1H), 4.26 (app. sext, J = 7.0 Hz, 1H), 3.89 (s, 3H), 2.83 (app. p, J = 8.1 Hz, 1H), 2.21 – 2.10 (m, 1H), 1.96 – 1.77 (m, 4H), 1.77 – 1.67 (m, 1H), 1.62 – 1.37 (m, 6H), 1.33 – 1.21 (m, 2H), 1.13 – 1.03 (m, 1H). Contains an unknown aliphatic impurity.	429.4	D	
I-1586		NMR (400 MHz, DMSOd6) - 10.46 (br s, 1H), 8.67 (d, J = 9.4 Hz, 1H), 8.62 (s, 1H), 7.52 (s, 1H), 7.39-7.29 (m,, 3H), 5.09 (dd, J = 27.1, 9.2 Hz, 1H), 3.24 (p, J = 9.4 Hz, 1H), 2.72-2.62 (m, 2H), 2.26 (td, J = 15.1, 6.2 Hz, 1H), 2.17 (td, J = 15.2, 5.8 Hz, 1H), 1.92 – 1.77 (m, 2H), 1.77-1.56 (m, 5H), 1.39-1.20 (m, 1H).	394.3	D	
I-1587		(400 MHz, DMSO-d6) 8.12 (d, J = 8.9 Hz, 1H), 8.07 (s, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.16 (d, J = 9.8 Hz, 1H), 5.08 (d, J = 8.9 Hz, 1H), 4.34 (s, 2H), 2.90 (p, J = 8.9 Hz, 1H), 2.35 (t, J = 10.4 Hz, 1H), 2.24 (dd, J = 20.8, 8.4 Hz, 3H), 0.92 (s, 9H).	387.25	B	B

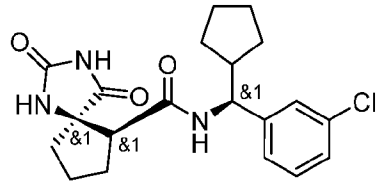
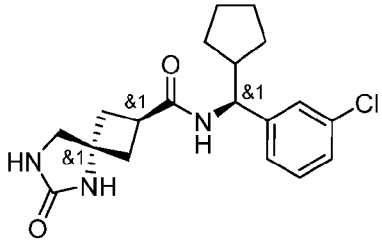
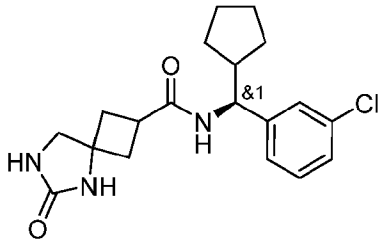
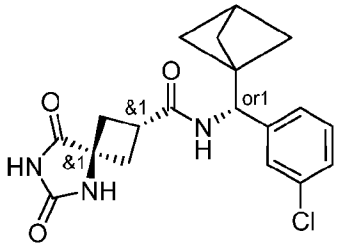
I-1588		(400 MIIz, DMSO-d6) 10.56 (s, 1II), 8.59 (d, J = 1.6 Hz, 1H), 8.19 (d, J = 8.8 Hz, 1H), 7.40 - 7.32 (m, 2H), 7.27 (ddt, J = 15.8, 7.5, 1.5 Hz, 2H), 4.38 (dd, J = 11.2, 8.7 Hz, 1H), 3.09 (p, J = 9.1 Hz, 1H), 2.64 (dt, J = 11.9, 9.1 Hz, 2H), 2.26 - 2.17 (m, 2H), 2.12 (ddd, J = 12.7, 8.9, 4.3 Hz, 1H), 1.72 (s, 1H), 1.60 (s, 1H), 1.47 - 1.32 (m, 4H), 1.18 (d, J = 12.9 Hz, 1H), 1.04 (ddt, J = 29.2, 20.0, 10.3 Hz, 3H).	402.1	E	
I-1589		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.62 (s, 1H), 8.19 (d, J = 8.7 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.40 (d, J = 8.6 Hz, 1H), 3.26 (d, J = 9.1 Hz, 1H), 2.77 - 2.59 (m, 2H), 2.37 - 2.10 (m, 2H), 0.97 (d, J = 1.9 Hz, 9H).	416	A	B
I-1590		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.63 (s, 1H), 8.19 (d, J = 9.7 Hz, 1H), 7.38 (t, J = 1.8 Hz, 1H), 7.35 - 7.27 (m, 2H), 7.23 (dt, J = 7.2, 1.7 Hz, 1H), 4.80 (d, J = 9.6 Hz, 1H), 3.23 (q, J = 9.1 Hz, 1H), 2.70 - 2.62 (m, 2H), 2.30 - 2.10 (m, 2H), 1.29 (dq, J = 15.0, 7.6 Hz, 1H), 1.16 (dq, J = 14.6, 7.4 Hz, 1H), 0.87 - 0.69 (m, 9II).	378.2	B	C
I-1591		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.32 (d, J = 8.6 Hz, 1H), 7.40 (t, J = 1.8 Hz, 1H), 7.36 - 7.22 (m, 3H), 4.53 (dd, J = 11.8, 8.6 Hz, 1H), 3.08 (p, J = 9.2 Hz, 1H), 2.63 (td, J = 12.0, 9.1 Hz, 2II), 2.30 (s, 1II), 2.27 - 2.07 (m, 4II), 1.49 (dd, J = 21.6, 11.2 Hz, 2H), 1.35 - 1.26 (m, 3H), 1.25 (s, 1H), 1.22 (s, 1H), 0.61 (dd, J = 12.3, 5.1 Hz, 1H).	402.1	E	

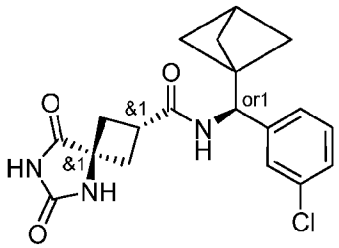
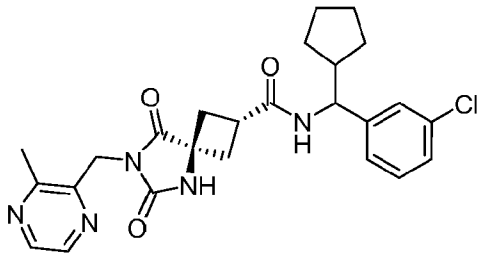
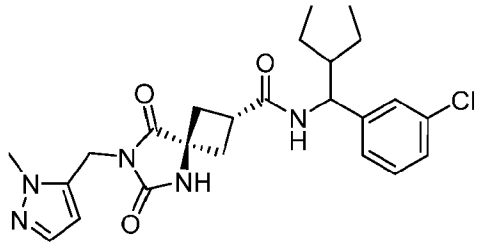
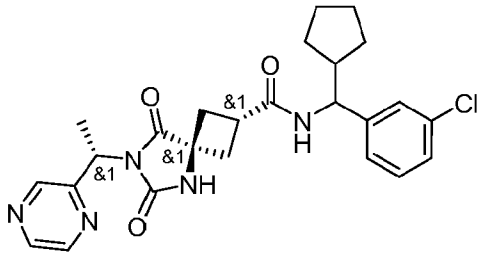
I-1592		(400 MHz, DMSO-d6) 10.51 (s, 1H), 8.60 (s, 1H), 8.44 (d, J = 7.2 Hz, 1H), 7.59 (dd, J = 9.0, 5.2 Hz, 1H), 7.25 (dd, J = 10.3, 8.9 Hz, 1H), 5.05 (dd, J = 11.0, 7.2 Hz, 1H), 3.15 (t, J = 9.1 Hz, 1H), 2.65 (dd, J = 12.1, 9.0 Hz, 1H), 2.59- 2.54 (m, 1H), 2.22- 2.12 (m, 2H), 1.96- 1.90 (m, 1H), 1.68 - 1.43 (m, 5H), 1.31 - 1.24 (m, 2H), 1.14- 1.06 (m, 1H).	428.25	A	A
I-1593		(400 MHz, DMSO-d6) 10.43 (s, 1H), 8.03 (d, J = 8.4 Hz, 1H), 7.77 (s, 1H), 7.36 (t, J = 1.8 Hz, 1H), 7.33 - 7.18 (m, 3H), 4.53 (dd, J = 9.9, 8.4 Hz, 1H), 2.89 (dd, J = 10.3, 8.1 Hz, 1H), 2.21 (h, J = 8.3 Hz, 1H), 2.03 (ddd, J = 11.5, 7.9, 3.7 Hz, 1H), 1.93 (tp, J = 12.8, 4.7, 4.1 Hz, 2H), 1.84 - 1.63 (m, 4H), 1.61 - 1.51 (m, 2H), 1.51 - 1.37 (m, 2H), 1.31 - 1.19 (m, 2H), 1.07 (dq, J = 12.2, 8.1 Hz, 1H).	390.1	E	
I-1594		(400 MHz, DMSO-d6) 10.52 (m,1H), 8.60 (s, 1H), 8.43 (d, J = 7.2 Hz, 1H), 7.59 (dd, J = 9.0, 5.1 Hz, 1H), 7.25 (t, J = 9.5 Hz, 1H), 5.06 (s, 1H), 3.15 (t, J = 9.2 Hz, 1H), 2.68 - 2.55 (m, 2H), 2.18 (dd, J = 23.7, 10.8 Hz, 2H), 1.94 (d, J = 16.9 Hz, 1H), 1.68 - 1.42 (m, 5H), 1.26 (d, J = 19.7 Hz, 2H), 1.18- 1.06 (m, 1H).	428.25	D	
I-1595		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.58 (s, 1H), 8.39 (d, J = 8.7 Hz, 1H), 7.96 (s, 1H), 7.62 (d, J = 1.3 Hz, 1H), 7.53 (d, J = 9.0 Hz, 1H), 7.27 (dd, J = 9.0, 7.0 Hz, 1H), 6.94 (d, J = 7.1 Hz, 1H), 5.08 (t, J = 9.1 Hz, 1H), 3.11 (q, J = 9.1 Hz, 1H), 2.76 - 2.59 (m, 3H), 2.24 (ddd, J = 12.4, 9.0, 4.2 Hz, 1H), 2.13 (ddd, J = 12.6, 9.0, 4.2 Hz, 1H), 1.77 (d, J = 10.7 Hz, 1H), 1.64 - 1.41 (m, 6H), 1.23 - 1.10 (m, 1H).	382.15	E	

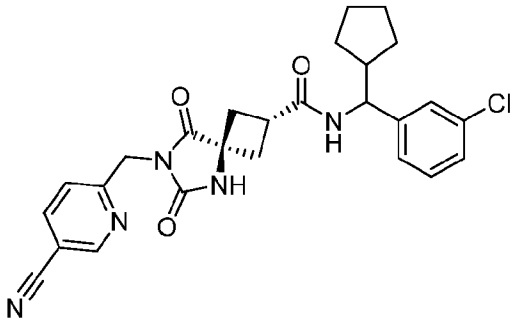
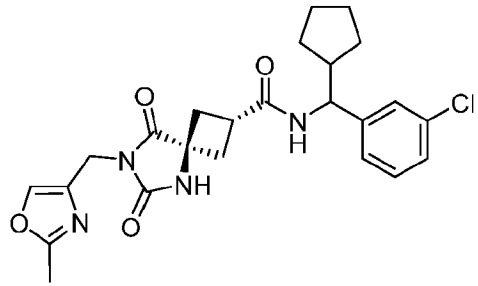
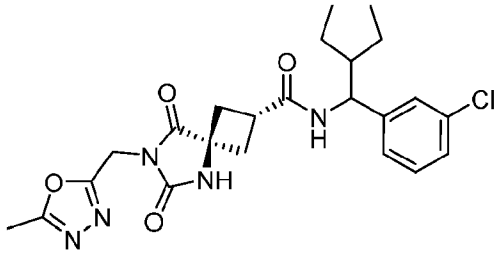
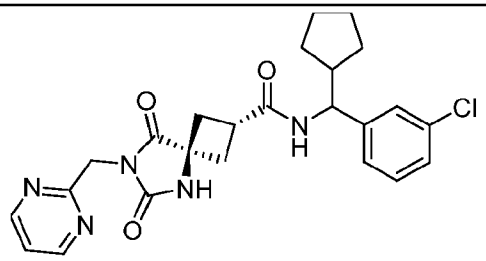
I-1596		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.64 (s, 1H), 8.19 (d, J = 9.7 Hz, 1H), 7.38 (t, J = 1.8 Hz, 1H), 7.35-7.26 (m, 2H), 7.23 (dt, J = 7.2, 1.7 Hz, 1H), 4.80 (d, J = 9.6 Hz, 1H), 3.24 (p, J = 9.1 Hz, 1H), 2.66 (dt, J = 12.0, 8.5 Hz, 2H), 2.26 (ddd, J = 12.4, 9.0, 4.2 Hz, 1H), 2.15 (ddd, J = 12.9, 8.9, 4.3 Hz, 1H), 1.29 (dq, J = 15.0, 7.5 Hz, 1H), 1.15 (ddd, J = 10.2, 7.3, 3.3 Hz, 1H), 0.84 -0.77 (m, 6H), 0.75 (s, 3H).	378.25	E	
I-1597		(400 MHz, DMSO-d6) 8.17 - 8.04 (m, 2H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.15 (s, 1H), 5.09 (d, J = 8.9 Hz, 1H), 4.34 (s, 2H), 2.90 (p, J = 8.8 Hz, 1H), 2.35 (t, J = 10.3 Hz, 1H), 2.24 (dd, J = 20.0, 7.6 Hz, 3H), 0.92 (s, 9H).	387.25	E	
I-1598		(400 MHz, DMSO-d6) 10.58 (s, 1H), 9.42 (d, J = 1.1 Hz, 1H), 8.70 - 8.48 (m, 1H), 8.33 - 8.16 (m, 1H), 8.09 (d, J = 8.1 Hz, 1H), 7.59 (q, J = 8.8, 7.8 Hz, 1H), 7.46 (dt, J = 22.2, 7.5 Hz, 1H), 5.22 (dt, J = 55.5, 9.7 Hz, 1H), 4.15 - 3.96 (m, 1H), 3.09 (p, J = 9.1, 8.3 Hz, 1H), 2.78 - 2.65 (m, 1H), 2.47 - 2.28 (m, 2H), 2.28 - 2.01 (m, 2H), 1.83 (d, J = 11.8 Hz, 1H), 1.54 (m, 5H), 1.40 (d, J = 21.9 Hz, 2H), 1.24 (m, 2H), 1.16 - 1.00 (m, 1H), 0.88 (t, J = 7.4 Hz, 1H).	399	D	
I-1599		(400 MHz, DMSO-d6) 10.41 (s, 1H), 8.21 (s, 1H), 8.11 (d, J = 8.5 Hz, 1H), 7.36 (t, J = 1.8 Hz, 1H), 7.33 - 7.27 (m, 1H), 7.24 (dt, J = 6.9, 1.8 Hz, 2H), 4.43 (t, J = 9.2 Hz, 1H), 2.57 (d, J = 4.9 Hz, 2H), 2.09 (q, J = 8.5 Hz, 1H), 1.73 (dd, J = 12.3, 7.5 Hz, 1H), 1.68 - 1.35 (m, 10H), 1.31 - 1.13 (m, 3H), 1.12 - 1.00 (m, 1H).	404.1	E	

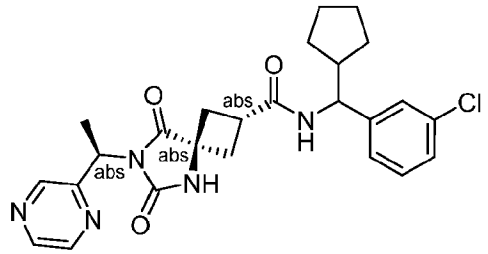
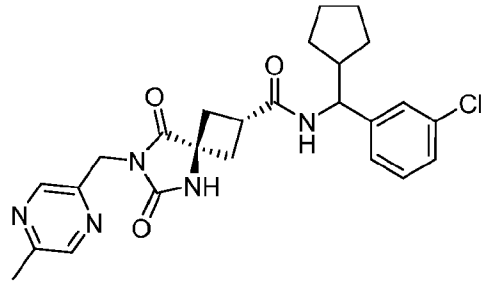
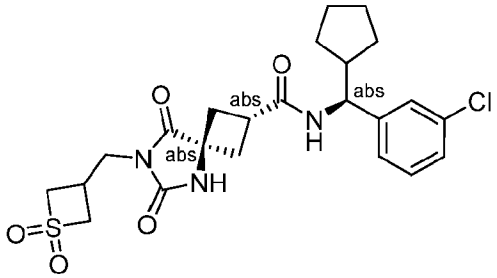
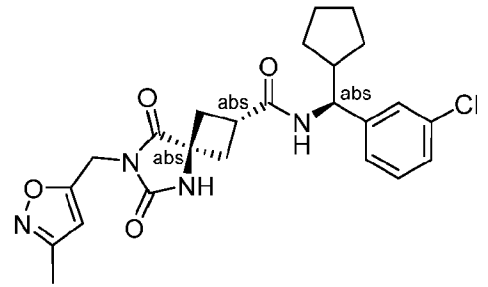
I-1600		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 8.31 (d, J = 8.5 Hz, 1H), 7.39 - 7.20 (m, 4H), 4.37 (dd, J = 11.3, 8.6 Hz, 1H), 3.10 (p, J = 9.1 Hz, 1H), 2.68 (dd, J = 12.0, 9.2 Hz, 1H), 2.61 (dd, J = 12.0, 9.2 Hz, 1H), 2.22 (ddd, J = 12.4, 9.0, 4.4 Hz, 1H), 2.18 - 2.06 (m, 3H), 1.81 (dt, J = 12.6, 6.9 Hz, 1H), 1.58 - 1.43 (m, 1H), 1.40 (d, J = 10.7 Hz, 2H), 1.20 (dd, J = 21.0, 10.9 Hz, 1H), 1.07 (d, J = 9.6 Hz, 2H), 0.90 (s, 2H).	402.15	A	B
I-1601		(400 MHz, DMSO-d6) 8.23 - 8.07 (m, 2H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.15 (s, 1H), 5.11 (d, J = 8.6 Hz, 1H), 4.29 - 4.18 (m, 2H), 3.07 (tt, J = 9.6, 4.8 Hz, 1H), 2.44 (d, J = 10.5 Hz, 1H), 2.41 - 2.32 (m, 1H), 2.28 (d, J = 12.4 Hz, 1H), 2.18 (d, J = 12.3 Hz, 1H), 0.93 (s, 9H).	387.2	A	B
I-1602		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.26 (d, J = 8.5 Hz, 1H), 7.39 - 7.31 (m, 2H), 7.31 - 7.24 (m, 2H), 4.61 (dd, J = 11.7, 8.4 Hz, 1H), 3.05 (q, J = 9.0 Hz, 1H), 2.67 - 2.57 (m, 1H), 2.21 (d, J = 12.3 Hz, 1H), 2.18 (s, 2H), 2.16 - 2.05 (m, 1H), 1.75 (s, 1H), 1.62 (s, 1H), 1.56 (s, 1H), 1.49 (s, 1H), 1.29 (d, J = 9.8 Hz, 1H), 1.19 (d, J = 9.2 Hz, 4H), 0.79 (d, J = 12.3 Hz, 1H).	402.1	D	
I-1603		(400 MHz, DMSO-d6) 8.25 (d, J = 8.7 Hz, 1H), 7.39 - 7.30 (m, 2H), 7.26 (ddt, J = 8.8, 7.4, 1.5 Hz, 2H), 6.83 (s, 1H), 6.05 (s, 1H), 4.56 (t, J = 9.3 Hz, 1H), 3.24 (dd, J = 2.6, 1.1 Hz, 2H), 2.86 (tt, J = 9.4, 5.4 Hz, 1H), 2.35 (dd, J = 11.7, 9.5 Hz, 1H), 2.30 - 2.09 (m, 4H), 1.76 - 1.65 (m, 1H), 1.63 - 1.37 (m, 4H), 1.26 (ddd, J = 16.5, 8.9, 3.7 Hz, 2H), 1.14 - 1.03 (m, 1H).	362.15	B	C

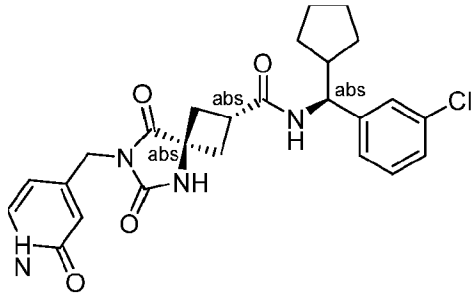
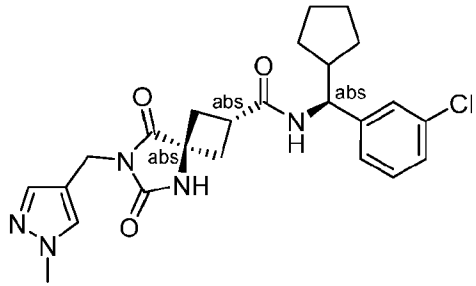
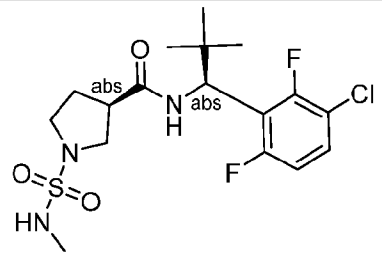
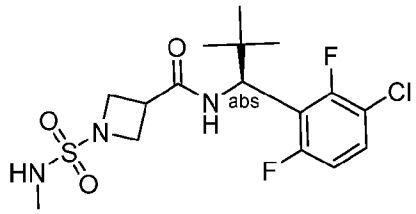
I-1604		(400 MHz, DMSO-d6) 10.08 (s, 1H), 8.29 (d, J = 9.1 Hz, 1H), 7.57 (s, 1H), 7.39 (t, J = 1.8 Hz, 1H), 7.35 - 7.22 (m, 3H), 4.58 (t, J = 9.2 Hz, 1H), 2.53 (d, J = 2.4 Hz, 1H), 2.45 (d, J = 3.8 Hz, 1H), 2.22 - 2.04 (m, 2H), 1.97 - 1.74 (m, 2H), 1.74 - 1.58 (m, 2H), 1.53 (d, J = 15.0 Hz, 3H), 1.49 - 1.34 (m, 3H), 1.25 (q, J = 12.0, 9.5 Hz, 3H), 1.16 - 0.98 (m, 1H).	404.05	E	
I-1605		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.61 (s, 1H), 8.31 (d, J = 8.6 Hz, 1H), 7.37 (d, J = 1.9 Hz, 1H), 7.35 - 7.27 (m, 1H), 7.30 - 7.21 (m, 2H), 4.37 (dd, J = 11.3, 8.6 Hz, 1H), 3.10 (t, J = 9.1 Hz, 1H), 2.73 - 2.58 (m, 2H), 2.23 (ddd, J = 12.4, 8.9, 4.3 Hz, 1H), 2.15 (s, 3H), 2.15 - 2.06 (m, 1H), 1.82 (dt, J = 12.7, 6.9 Hz, 1H), 1.58 - 1.36 (m, 2H), 1.19 (t, J = 10.7 Hz, 1H), 1.07 (d, J = 9.7 Hz, 2H), 0.90 (s, 2H).	402.1	E	
I-1606		(400 MHz, DMSO-d6) 10.20 (s, 1H), 8.11 (d, J = 8.8 Hz, 1H), 7.64 (s, 1H), 7.39 (t, J = 1.9 Hz, 1H), 7.36 - 7.30 (m, 1H), 7.26 (tt, J = 7.3, 1.5 Hz, 2H), 4.52 (t, J = 9.3 Hz, 1H), 2.83 (dt, J = 27.5, 13.8 Hz, 1H), 2.18 (q, J = 8.2 Hz, 2H), 2.11 - 1.97 (m, 1H), 1.94 - 1.80 (m, 2H), 1.78 - 1.66 (m, 3H), 1.56 (s,2H), 1.45 (dt, J = 11.7, 7.5 Hz, 2H), 1.31 - 1.18 (m, 2H), 1.06 (dq, J = 15.7, 8.0 Hz, 1H).	390.1	E	
I-1607		(400 MHz, DMSO-d6) 10.23 (s, 1H), 8.17 (s, 1H), 7.97 (d, J = 8.7 Hz, 1H), 7.50 - 6.99 (m, 4H), 4.51 (t, J = 9.2 Hz, 1H), 2.61 - 2.55 (m, 1H), 2.17 (hept, J = 7.9, 7.5 Hz, 1H), 1.94 (d, J = 12.7 Hz, 1H), 1.77 - 1.63 (m, 3H), 1.60 - 1.38 (m, 8H), 1.36 - 1.14 (m, 3H), 1.11 - 0.88 (m, 1H).	404.1	E	

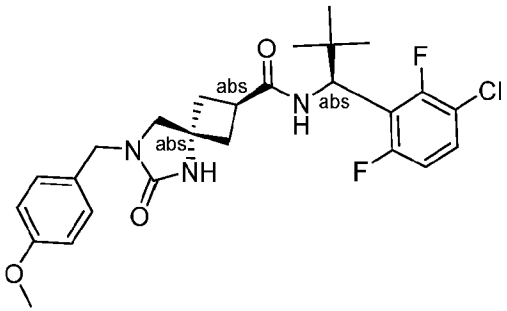
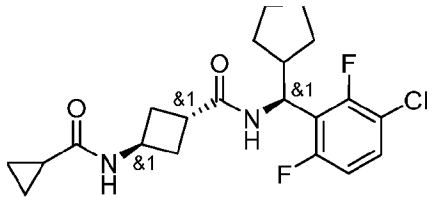
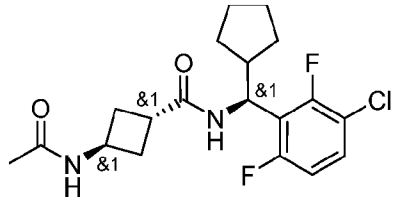
I-1608		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.23 (d, J = 8.6 Hz, 1H), 7.88 (s, 1H), 7.50 - 7.08 (m, 4H), 4.46 (t, J = 9.3 Hz, 1H), 2.94 (dd, J = 9.5, 8.0 Hz, 1H), 2.12 (h, J = 8.4 Hz, 1H), 2.01 - 1.86 (m, 2H), 1.84 - 1.63 (m, 5H), 1.59 - 1.50 (m, 2H), 1.50 - 1.34 (m, 2H), 1.21 (dt, J = 12.0, 7.5 Hz, 2H), 1.06 (dt, J = 12.6, 7.9 Hz, 1H).	390.05	E	
I-1609		(400 MIIz, DMSO-d6) 8.23 (d, J = 8.8 IIz, 1II), 7.39 - 7.29 (m, 2H), 7.26 (ddt, J = 10.3, 7.6, 1.4 Hz, 2H), 6.71 (s, 1H), 6.16 (s, 1H), 4.56 (t, J − 9.3 Hz, 1H), 3.35 (s, 2H), 2.73 - 2.60 (m, 1H), 2.30 -2.03 (m, 5H), 1.68 (dd, J = 12.1, 7.4 Hz, 1H), 1.49 (dddd, J = 34.8, 15.4, 7.9, 4.2 Hz, 4H), 1.30 - 1.21 (m, 2H), 1.15 - 1.03 (m, 1H).	362.2	D	
I-1610		(400 MHz, DMSO-d6) 8.24 (t, J = 9.0 Hz, 1H), 7.41 -7.20 (m, 4H), 6.77 (d, J = 48.7 Hz, 1H), 6.17 (s, 1H), 4.56 (t, J = 9.2 Hz, 1H), 3.35 (s, 1H), 3.29-3.19 (m, 1H), 2.94 - 2.60 (m, 1H), 2.43 - 2.02 (m, 5H), 1.70 (td, J = 8.0, 4.2 Hz, 1H), 1.59 - 1.37 (m, 4H), 1.25 (td, J = 8.2, 4.5 Hz, 2H), 1.08 (p, J = 8.1 Hz, 1H).	362.15	C	
I-1611				E	

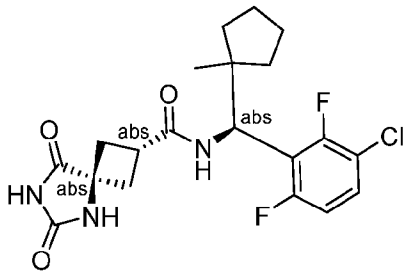
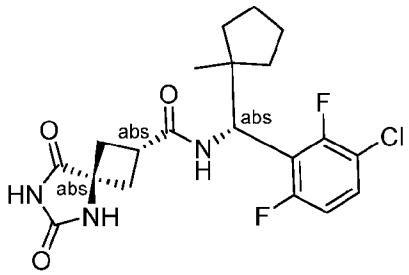
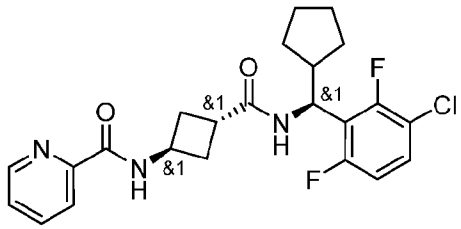
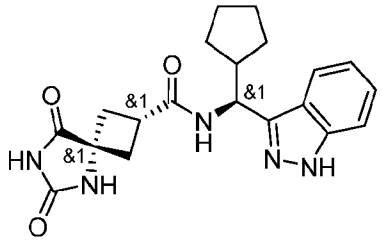
I-1612				B	
I-1613			482.4	D	
I-1614		(400 MHz, Methanol-d4) - 7.36 (d, J = 2.1 Hz, 2H), 7.35 – 7.15 (m, 3H), 6.23 (d, J = 2.0 Hz, 1H), 4.68 (s, 2H), 4.61 (d, J = 10.4 Hz, 1H), 3.95 (s, 3H), 3.21 (p, J = 8.9 Hz, 1H), 2.89 (dt, J = 13.4, 6.8 Hz, 2H), 2.58 – 2.26 (m, 3H), 1.93 – 1.80 (m, 1H), 1.80 – 1.48 (m, 4H), 1.48 – 1.34 (m, 2H), 1.23 – 1.05 (m, 1H).	470.2	C	
I-1615		(400 MHz, DMSO-d6) - 8.66 (s, 1H), 8.54 (dd, J = 7.2, 2.3 Hz, 2H), 8.30 (d, J = 8.8 Hz, 1H), 7.37 (s, 1H), 7.35 – 7.28 (m, 1H), 7.26 (t, J = 6.8 Hz, 2H), 5.34 – 5.18 (m, 1H), 4.56 (t, J = 8.9 Hz, 1H), 3.71 (s, 1H), 3.41 (dd, J = 10.8, 2.1 Hz, 1H), 3.23 – 3.06 (m, 1H), 2.64 (d, J = 30.0 Hz, 3H), 2.29 (s, 1H), 2.26 – 2.05 (m, 2H), 1.81 – 1.65 (m, 3H), 1.66 – 1.36 (m, 4H), 1.25 (d, J = 7.6 Hz, 2H), 1.19 – 0.99 (m, 1H).	482.2	D	

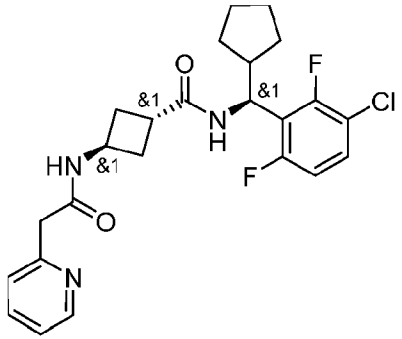
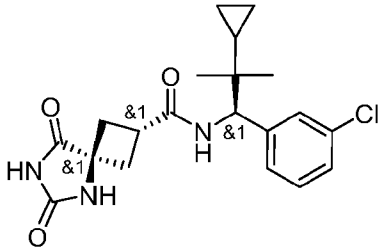
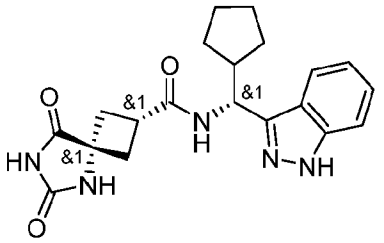
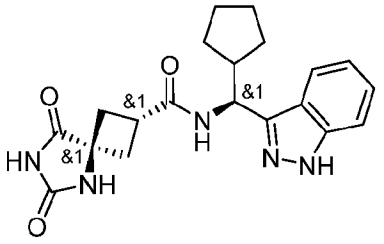
I-1616			492	D	
I-1617		(400 MHz, Methanol-d4) - 7.68 (s, 1H), 7.35 (d, J = 1.8 Hz, 1H), 7.34 – 7.21 (m, 3H), 4.61 (d, J = 10.5 Hz, 1H), 4.50 (s, 2H), 3.22 (p, J = 9.0 Hz, 1H), 2.91 (dt, J = 14.8, 7.7 Hz, 2H), 2.46 (ddt, J = 14.9, 9.5, 4.5 Hz, 1H), 2.40 (s, 3H), 2.39 – 2.19 (m, 2H), 1.96 – 1.82 (m, 1H), 1.77 – 1.48 (m, 4H), 1.48 – 1.35 (m, 2H), 1.15 (dq, J = 16.0, 8.3 Hz, 1H).	471.2	D	
I-1618		(400 MHz, Methanol-d4) - 7.35 (s, 1H), 7.34 – 7.10 (m, 3H), 4.84 (s, 2H), 4.61 (d, J = 10.4 Hz, 1H), 3.23 (q, J = 9.0 Hz, 1H), 3.02 – 2.83 (m, 2H), 2.52 (s, 3H), 2.48 – 2.36 (m, 1H), 2.30 (p, J = 8.2 Hz, 1H), 1.93 – 1.81 (m, 1H), 1.78 – 1.46 (m, 4H), 1.46 – 1.30 (m, 2H), 1.15 (dt, J = 12.9, 7.5 Hz, 1H).	472.2	D	
I-1619			468.2	D	

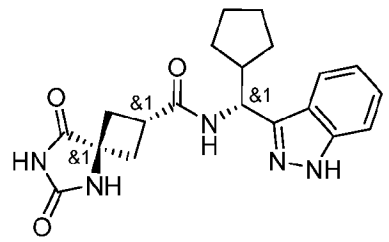
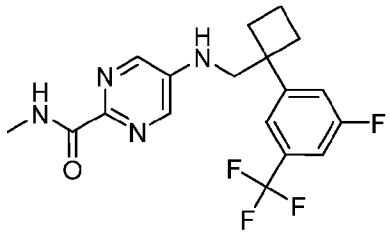
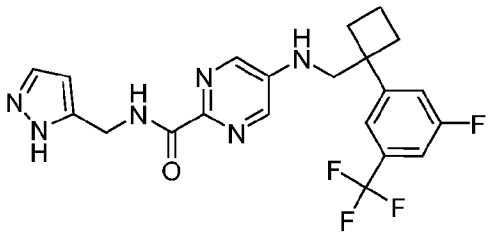
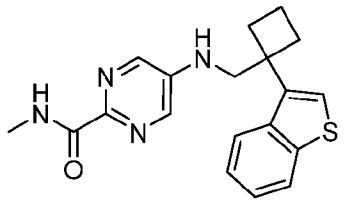
I-1620			482.2	D	
I-1621		(400 MHz, Methanol-d4) - 8.47 (d, J = 1.4 Hz, 1H), 8.44 (s, 1H), 7.33 (t, J = 1.9 Hz, 1H), 7.29 (d, J = 7.6 Hz, 1H), 7.24 (dq, J = 7.0, 1.9 Hz, 2H), 4.78 (s, 2H), 4.57 (d, J = 10.4 Hz, 1H), 3.22 (q, J = 8.8 Hz, 1H), 2.72 – 2.55 (m, 3H), 2.54 (s, 4H), 2.32 – 2.18 (m, 1H), 1.94 – 1.82 (m, 1H), 1.75 – 1.47 (m, 4H), 1.45 – 1.29 (m, 2H), 1.13 (dd, J = 12.8, 8.1 Hz, 1H).	482.4	D	
I-1622			494.2	D	
I-1623			471.2	C	

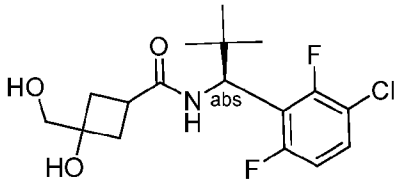
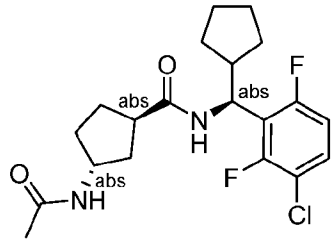
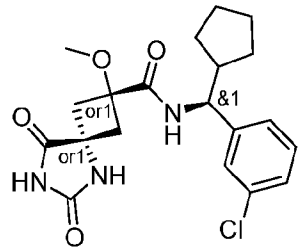
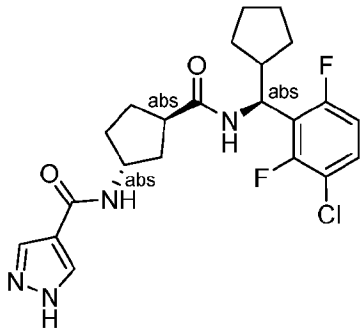
I-1624			483.2	C	
I-1625		(400 MHz, Methanol-d4) 7.57 (s, 1H), 7.42 (s, 1H), 7.35 (d, J = 1.9 Hz, 1H), 7.33 – 7.22 (m, 3H), 4.61 (d, J = 10.4 Hz, 1H), 4.46 (s, 2H), 3.83 (s, 3H), 3.20 (p, J = 9.0 Hz, 1H), 2.87 (dt, J = 13.3, 7.1 Hz, 2H), 2.48 – 2.27 (m, 3H), 1.92 – 1.83 (m, 1H), 1.78 – 1.47 (m, 4H), 1.41 (t, J = 10.3 Hz, 2H), 1.15 (dd, J = 13.1, 7.6 Hz, 1H).	470.2	C	
I-1626		NMR (400 MHz, DMSO-d6) 8.33 (d, J = 8.8 Hz, 1H), 7.57 (td, J = 8.7, 5.6 Hz, 1H), 7.15 (t, J = 9.4 Hz, 1H), 6.98 (br. s, 1H), 5.09 (br. d, J = 6.2 Hz, 1H), 3.34 (submerged m, 1H), 3.27 – 3.11 (m, 3H), 3.08 – 2.96 (m, 1H), 2.44 (s, 3H), 2.13 – 2.05 (m, 1H), 2.01 – 1.91 (m, 1H), 0.94 (s, 9H).	424.2	B	
I-1627		NMR (400 MHz, DMSO-d6) - 8.32 (d, J = 8.8 Hz, 1H), 7.58 (td, J = 8.7, 5.6 Hz, 1H), 7.21 - 7.12 (m, 1H), 7.08 (q, J = 4.8 Hz, 1H), 5.11 (d, J = 8.5 Hz, 1H), 3.80 (app. d, J = 7.7 Hz, 2H), 3.77 – 3.68 (m, 2H), 3.53 – 3.44 (m, 1H), 2.54 (d, J = 4.9 Hz, 3H), 0.93 (s, 9H).	410.3	C	

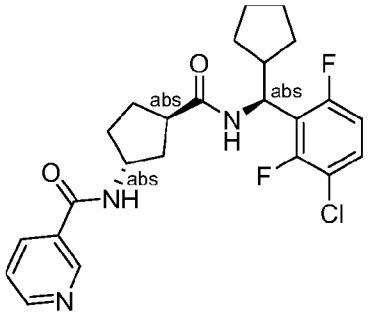
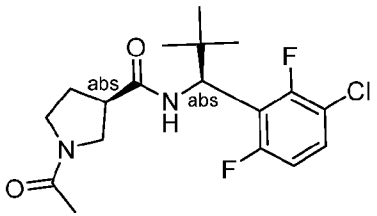
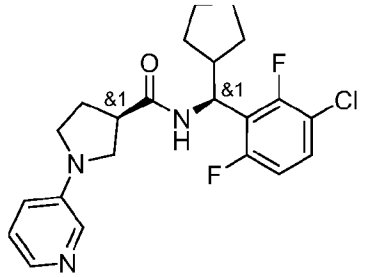
I-1628		NMR (400 MHz, DMSO-d6) - 8.11 (d, J = 8.7 Hz, 1H), 7.54 (td, J = 88.5, 5.6 Hz 1H), 7.15 – 7.05 (m, 3H), 7.04 (s, 1H), 690 - 6.85 (m, 2H), 5.07 - 5.01 (m, 1H), 4.11 (d A of AB, JAB = 15.1 Hz, 1H), 4.06 (d B of AB, JAB = 14.9 Hz, 1H), 3.73 (s, 1H, 3H), 3.16 – 3.06 (m, 2H), 3.02 (ddt, J = 13.6, 9.4, 4.5 Hz, 1H), 2.36 (app. t, J = 10.7 Hz, 1H), 2.28 (app. t, J = 10.9 Hz, 1H), 2.16 – 2.10 (m, 1H), 2.05 (br. d, J = 11.4 Hz, 1H), 0.89 (s, 9H). 6% of a side product.	506.4	A	B
I-1629		(400 MHz, DMSO-d6) 8.33 (d, J = 7.6 Hz, 1H), 8.28 (d, J = 7.7 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.3, 1.6 Hz, 1H), 4.85 (dd, J = 11.1, 7.5 Hz, 1H), 4.26 (h, J = 7.9 Hz, 1H), 2.99 - 2.89 (m, 1H), 2.41 (q, J = 8.6 Hz, 1H), 2.28 (tt, J = 7.9, 4.0 Hz, 1H), 2.19 - 1.96 (m, 3H), 1.89 (q, J = 5.3 Hz, 1H), 1.66 (s, 2H), 1.64 - 1.22 (m, 5H), 1.01 (dd, J = 12.4, 7.7 Hz, 1H), 0.61 (dq, J = 6.2, 2.3, 1.6 Hz, 4H).	411.15	B	C
I-1630		(400 MHz, DMSO-d6) 8.33 (d, J = 7.5 Hz, 1H), 8.06 (d, J = 7.7 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J − 9.3, 1.6 Hz, 1H), 4.85 (dd, J − 11.1, 7.5 Hz, 1H), 4.22 (h, J = 7.8 Hz, 1H), 2.97 - 2.88 (m, 1H), 2.41 (q, J = 8.7 Hz, 1H), 2.27 (td, J = 8.0, 4.1 Hz, 1H), 2.17 - 1.99 (m, 3H), 1.99 - 1.83 (m, 1H), 1.75 (s, 3H), 1.60 (s, 1H), 1.59 (s, 2H), 1.57 - 1.43 (m, 1H), 1.40 - 1.20 (m, 2H), 1.01 (t, J = 10.3 Hz, 1H).	385.1	B	D

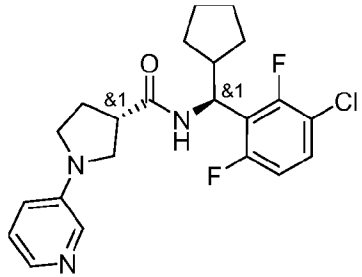
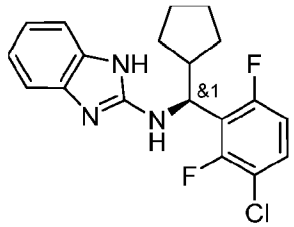
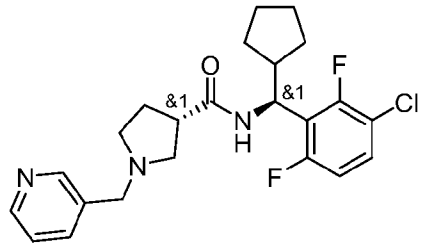
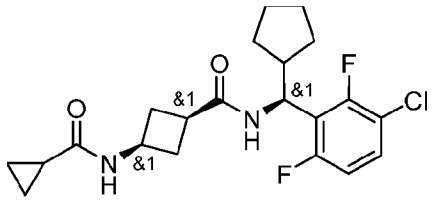
I-1631		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.27 (d, J = 8.6 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.25 - 7.05 (m, 1H), 5.21 (d, J = 8.6 Hz, 1H), 3.28 - 3.17 (m, 1H), 2.74 - 2.55 (m, 2H), 2.31 - 2.13 (m, 2H), 1.67 - 1.54 (m, 5H), 1.50 (dd, J = 11.9, 7.3 Hz, 1H), 1.36 (d, J = 8.8 Hz, 1H), 1.22 (dd, J = 11.9, 5.6 Hz, 1H), 0.96 (s, 3H).	426.05	A	A
I-1632		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.27 (d, J = 8.6 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.19 - 7.10 (m, 1H), 5.21 (d, J = 8.6 Hz, 1H), 3.25 (q, J = 9.0 Hz, 1H), 2.72 - 2.55 (m, 2H), 2.22 (dddd, J = 25.3, 12.7, 9.1, 4.1 Hz, 2H), 1.65 - 1.58 (m, 5H), 1.50 (dd, J = 12.2, 7.2 Hz, 1H), 1.36 (d, J = 7.3 Hz, 1H), 1.26 - 1.17 (m, 1H), 0.96 (s, 3H).	426.05	D	
I-1633		(400 MHz, DMSO-d6) 8.97 (d, J = 8.5 Hz, 1H), 8.64 (dt, J = 4.7, 1.3 Hz, 1H), 8.38 (d, J = 7.5 Hz, 1H), 8.04 - 7.94 (m, 2H), 7.64 - 7.49 (m, 2H), 7.14 (td, J = 9.3, 1.6 Hz, 1H), 4.88 (dd, J = 11.2, 7.5 Hz, 1H), 4.56 (p, J = 8.4 Hz, 1H), 3.02 - 2.93 (m, 1H), 2.38 (dq, J = 29.2, 9.9 Hz, 4H), 2.17 (td, J = 8.1, 4.1 Hz, 1H), 1.91 (h, J = 7.1 Hz, 1H), 1.62 (d, J = 8.2 Hz, 2H), 1.61 - 1.44 (m, 2H), 1.41 - 1.23 (m, 2H), 1.02 (s, 1H).	448.15	B	C
I-1634		(400 MHz, DMSO-d6) 12.74 (s, 1H), 10.55 (s, 1H), 8.59 (s, 1H), 8.32 (d, J = 8.9 Hz, 1H), 7.82 (d, J = 8.1 Hz, 1H), 7.46 (d, J = 8.4 Hz, 1H), 7.31 (t, J = 7.6 Hz, 1H), 7.06 (t, J = 7.5 Hz, 1H), 5.14 (t, J = 9.2 Hz, 1H), 3.14 (q, J = 9.0 Hz, 1H), 2.72 (d, J = 10.8 Hz, 2H), 2.64 (t, J = 10.7 Hz, 1H), 2.21 (s, 1H), 2.10 (s, 1H), 1.80 (s, 1H), 1.58 (s, 2H), 1.56 - 1.43 (m, 3H), 1.38 (d, J = 10.9 Hz, 1H), 1.24 (s, 1H), 1.16 (s, 2H).	382.3	E	

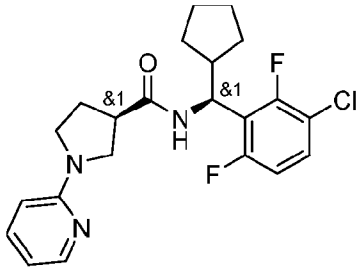
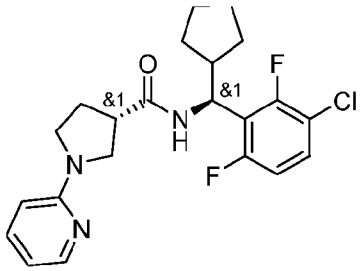
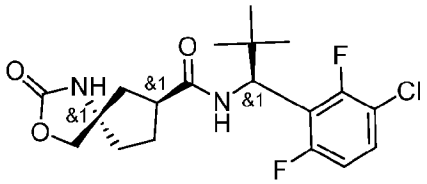
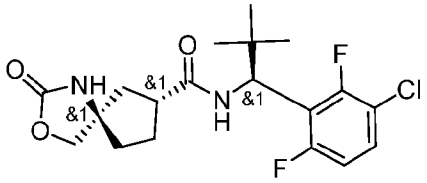
I-1635		(400 MHz, DMSO-d6) 8.46 (dd, J = 5.0, 1.9 Hz, 1H), 8.36 (dd, J = 11.4, 7.5 Hz, 2H), 7.71 (td, J = 7.7, 1.9 Hz, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.30 (d, J = 7.8 Hz, 1H), 7.23 (dd, J = 7.6, 4.9 Hz, 1H), 7.12 (td, J = 9.4, 1.6 Hz, 1H), 4.85 (dd, J = 11.1, 7.5 Hz, 1H), 4.24 (h, J = 7.9 Hz, 1H), 3.55 (s, 2H), 2.96 (td, J = 9.6, 8.9, 4.2 Hz, 1H), 2.44 - 2.35 (m, 1H), 2.29 (ddt, J = 11.7, 7.8, 3.7 Hz, 1H), 2.14 (dt, J = 13.7, 8.7 Hz, 2H), 2.09 - 1.98 (m, 1H), 1.90 (dt, J = 13.1, 5.8 Hz, 1H), 1.68 - 1.41 (m, 4H), 1.40 - 1.20 (m, 2H), 1.00 (dd, J = 12.6, 7.7 Hz, 1H).	462.2	B	B
I-1636		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.63 (s, 1H), 8.20 (d, J = 9.8 Hz, 1H), 7.45 (d, J = 2.0 Hz, 1H), 7.36 - 7.24 (m, 3H), 4.87 (d, J = 9.8 Hz, 1H), 3.24 (q, J = 9.1 Hz, 1H), 2.69 (ddd, J = 12.1, 9.1, 5.3 Hz, 2H), 2.28 (ddd, J = 12.6, 9.1, 4.3 Hz, 1H), 2.16 (ddd, J = 12.8, 9.0, 4.4 Hz, 1H), 0.66 (d, J = 25.2 Hz, 7H), 0.19 (ddq, J = 19.8, 9.2, 4.9, 4.2 Hz, 2H), 0.14- 0.01 (m, 2H).	390.15	E	
I-1637		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.63 (t, J = 5.7 Hz, 1H), 8.31 (s, 1H), 7.73 (d, J = 8.4 Hz, 1H), 7.55 (d, J = 8.7 Hz, 1H), 7.20 (dd, J = 8.6, 6.5 Hz, 1H), 7.00 (dd, J = 8.4, 6.5 Hz, 1H), 5.12 (p, J = 7.2 Hz, 1H), 4.76 (d, J = 5.6 Hz, 2H), 3.03 (p, J = 8.9 Hz, 1H), 2.41 (d, J = 8.9 Hz, 4H), 2.19 - 2.00 (m, 4H), 1.93 (q, J = 6.9, 6.3 Hz, 2H), 1.68 (s, 2H).	382.3	E	
I-1638		(400 MHz, DMSO-d6) 12.74 (s, 1H), 10.55 (s, 1H), 8.59 (s, 1H), 8.32 (d, J = 8.7 Hz, 1H), 7.82 (d, J = 8.2 Hz, 1H), 7.46 (d, J = 8.3 Hz, 1H), 7.31 (t, J = 7.6 Hz, 1H), 7.06 (t, J = 7.4 Hz, 1H), 5.14 (t, J = 9.3 Hz, 1H), 3.15 (t, J = 9.1 Hz, 1H), 2.72 (d, J = 10.9 Hz, 1H), 2.63 (d, J = 10.8 Hz, 2H), 2.27 - 2.16 (m, 1H), 2.10 (m, 1H), 1.80 (m, 1H), 1.71 - 1.33 (m,	382.3	E	

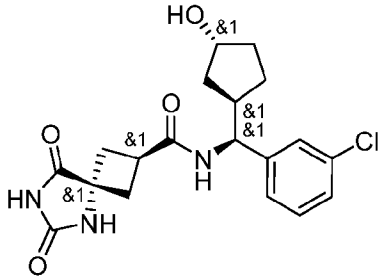
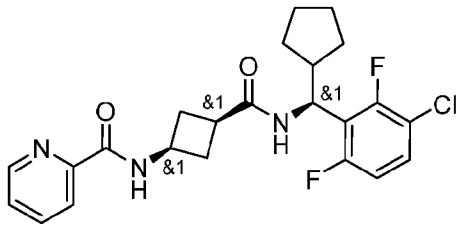
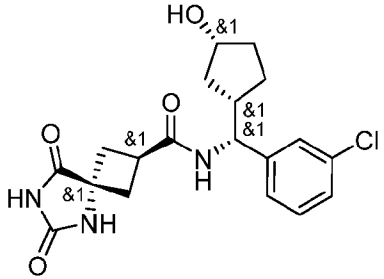
		6H), 1.24 (m, 1H), 1.17 (m, 2H), 0.85 (d, J = 7.3 Hz, 1H).			
I-1639		(400 MHz, DMSO-d6) 10.47 (s, 1H), 8.56 (s, 1H), 8.50 (t, J = 5.6 Hz, 1H), 7.74 (dt, J = 8.4, 1.1 Hz, 1H), 7.55 (dd, J = 8.7, 1.0 Hz, 1H), 7.20 (ddd, J = 8.7, 6.6, 1.1 Hz, 1H), 7.00 (ddd, J = 8.4, 6.6, 0.9 Hz, 1H), 5.13 (p, J = 7.2 Hz, 1H), 4.77 (d, J = 5.5 Hz, 2H), 3.12 (p, J = 9.1 Hz, 1H), 2.76 - 2.66 (m, 2H), 2.25 - 1.99 (m, 6H), 1.98 - 1.86 (m, 2H), 1.68 (q, J = 5.5, 4.6 Hz, 2H).	382.3	E	
I-1640				D	
I-1641				C	
I-1642				D	

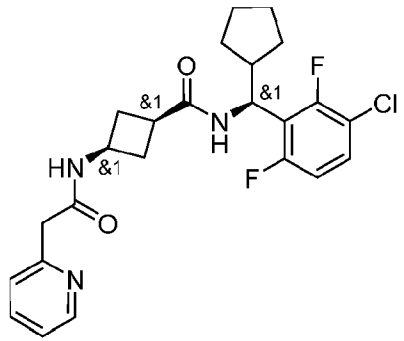
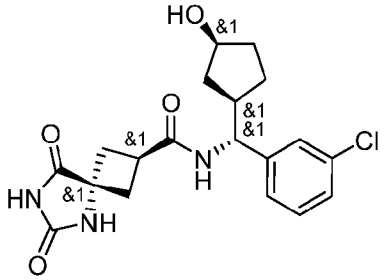
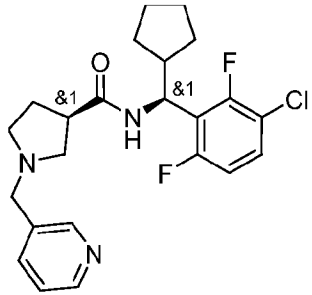
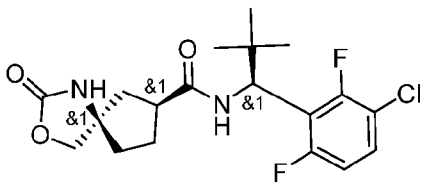
I-1643				D	
I-1644		NMR (400 MHz, DMSO-d6) - 8.36 (t, J = 7.3 Hz, 1H), 7.78 (t, J = 7.1 Hz, 1H), 7.57 – 7.48 (m, 1H), 7.17 – 7.07 (m, 1H), 4.81 (dt, J = 10.0, 8.1 Hz, 1H), 4.06 – 3.94 (m, 1H), 2.87 – 2.75 (m, 1H), 2.45 – 2.35 (m, 1H), 1.96 – 1.71 (m, 7H), 1.66 – 1.41 (m, 6H), 1.39 – 1.20 (m, 3H), 1.06 – 0.93 (m, 1H).	399.4	A	B
I-1645		NMR (400 MHz, DMSO-d6) - 10.45 (br. s, 1H), 8.48 (dd, J = 8.4, 3.2 Hz, 1H), 8.44 (d, J = 3.7 Hz, 1H), 7.44 (s, 1H), 7.33 – 7.23 (m, 3H), 4.56 – 4.49 (m, 1H), 2.98 – 2.95 (m, 3H), 2.95 – 2.82 (m, 2H), 2.34 – 2.26 (m, 2H), 2.24 – 2.17 (m, 1H), 1.83 – 1.73 (m, 1H), 1.64 – 1.37 (m, 4H), 1.35 – 1.18 (m, 2H), 1.15 – 1.03 (m, 1H). Indicated stereochemistry is arbitrary.	406.4	E	
I-1646		NMR (400 MHz, DMSO-d6) - 13.06 (br. s, 1H), 8.37 (d, J = 7.4 Hz, 1H), 8.15 (br. s, 1H), 7.88 (br. s, 1H), 7.79 (d, J − 7.1 Hz, 1H), 7.52 (td, J − 8.7, 5.5 Hz, 1H), 7.12 (td, J = 9.7, 1.5 Hz, 1H), 4.82 (dd, J = 11.1, 7.5 Hz, 1H), 4.24 – 4.15 (m, 1H), 2.87 (app. p, J = 7.9 Hz, 1H), 2.47 – 2.36 (m, 1H), 1.97 – 1.78 (m, 4H), 1.73 (ddd, J = 13.0, 8.9, 6.0 Hz, 1H), 1.66 – 1.42 (m, 6H), 1.37 – 1.21 (m, 2 H), 1.05 – 0.93 (m, 1H).	451.4	A	B

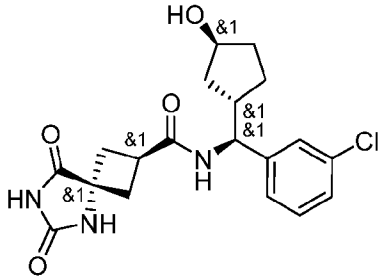
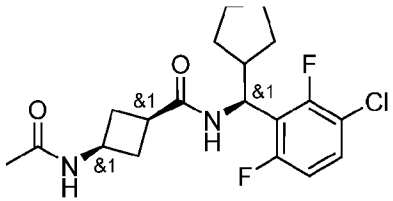
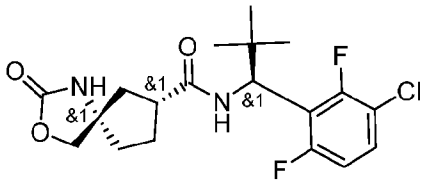
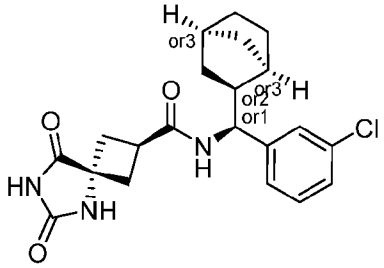
I-1647		NMR (400 MHz, DMSO-d6) - 8.98 (d, J = 1.5 Hz, 1H), 8.69 (dd, J = 4.8, 1.6 Hz, 1H), 8.46 (d, J = 6.8 Hz, 1H), 8.36 (d, J = 7.4 Hz, 1H), 8.18 – 8.15 (m, 1H), 7.56 – 7.46 (m, 2H), 7.12 (td, J = 9.6, 1.2 Hz, 1H), 4.84 (dd, J = 11.0, 7.7 Hz, 1H), 4.32 – 4.23 (m, 1H), 2.95 – 2.85 (m, 1H), 2.47 – 2.36 (m, 1H), 2.03 – 1.75 (m, 5II), 1.67 – 1.43 (m, 6II), 1.39 – 1.22 (m, 2H), 1.06 – 0.95 (m, 1H). Contains an unidentified aliphatic impurity. May be a partial salt.	462.4	B	B
I-1648		NMR (400 MHz, DMSO-d6) - 8.34 (d, J = 8.9 Hz, 0.5H), 8.30 (d, J = 8.9 Hz, 0.5H), 7.57 (td, J = 8.6, 5.6, Hz, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.11 (d, J = 8.9 Hz, 0.5H), 5.09 (submerged m, 0.5H), 3.57 – 3.36 (m, 3H), 3.27 – 3.07 (m, 2H), 2.15 – 2.02 (m, 1H), 2.00 – 1.93 (m, 0.5H), 1.89 (overlapping s, 1.5H), 1.86 (overlapping s, 1.5H), 1.86 (submerged m, 0.5H), 0.94 (s, 9H). 2 rotamers in a 1:1 mixture.	373.2	D	
I-1649		(400 MHz, Methanol-d4) 7.92 - 7.77 (m, 2H), 7.43 (ddd, J = 9.0, 8.3, 5.5 Hz, 1H), 7.24 (dd, J = 8.5, 4.7 Hz, 1H), 7.06 - 6.96 (m, 2H), 5.03 (d, J = 11.3 Hz, 1H), 3.57 (dd, J = 9.4, 8.0 Hz, 1H), 3.48 - 3.45 (m, 1H), 3.44- 3.35 (m, 2H), 3.25 (p, J = 7.6 Hz, 1H), 2.56 (dt, J = 18.9, 8.3 Hz, 1H), 2.24 (dtd, J = 12.0, 7.3, 4.6 Hz, 1H), 2.15 - 1.97 (m, 2H), 1.81 -1.52 (m, 4H), 1.51-1.29 (m, 2H), 1.16 (dq, J = 11.5, 7.9 Hz, 1H).	420.05	D	

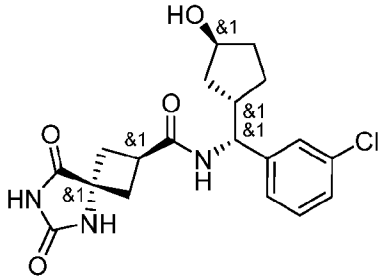
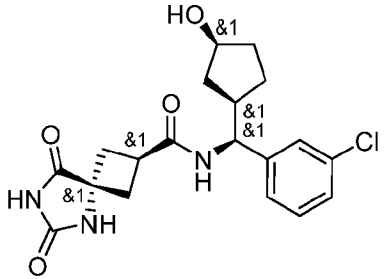
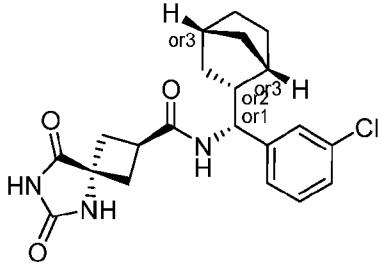
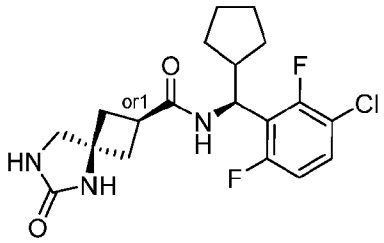
I-1650		(400 MHz, Methanol-d4) 7.84 (d, J = 2.9 Hz, 1H), 7.80 (dd, J = 4.8, 1.3 Hz, 1H), 7.42 (ddd, J = 9.0, 8.3, 5.6 Hz, 1H), 7.21 (ddd, J = 8.4, 4.6, 0.7 Hz, 1H), 7.03- 6.94 (m, 2H), 5.04 (d, J = 11.2 Hz, 1H), 3.51 - 3.37 (m, 3H), 3.27 - 3.22 (m, 1H), 2.61- 2.54 (m, 1H), 2.37- 2.21 (m, 2H), 2.06- 2.00 (m, 1H), 1.79 - 1.54 (m, 4H), 1.50 - 1.36 (m, 2H), 1.31 (s, 1H), 1.16 (dd, J = 12.6, 7.9 Hz, 1H).	420.35	B	
I-1651		(400 MHz, DMSO-d6) 10.31 (s, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.20 - 7.09 (m, 3H), 7.07 (d, J = 8.9 Hz, 1H), 6.84 (s, 2H), 5.13 (t, J = 9.7 Hz, 1H), 2.51 (s, 1H), 1.96 - 1.88 (m, 1H), 1.64 (s, 2H), 1.57 (dt, J = 15.2, 8.1 Hz, 2H), 1.44 (td, J = 12.5, 6.6 Hz, 2H), 1.17 - 1.09 (m, 1H).	362.05	C	
I-1652		(400 MHz, Methanol-d4) 8.52 (dd, J = 2.3, 0.8 Hz, 1H), 8.46 (dd, J = 4.9, 1.6 Hz, 1H), 7.84 (dt, J = 7.8, 1.9 Hz, 1H), 7.45 - 7.38 (m, 2H), 6.98 (td, J = 9.4, 1.8 Hz, 1H), 4.99 (d, J = 11.2 Hz, 1H), 3.76- 3.63 (m, 2H), 3.00 (dd, J = 11.4, 6.1 Hz, 1H), 2.78 (dd, J = 9.5, 7.8 Hz, 1H), 2.67 (q, J = 7.8 Hz, 2H), 2.57-2.50 (m, 2H), 2.14 - 2.08 (m, 1H), 2.00 - 1.95 (m, 1H), 1.90 - 1.85 (m, 1H), 1.74 - 1.54 (m, 4H), 1.45 - 1.40 (m, 1H), 1.35 - 1.31 (m, 1H), 1.16 (d, J = 8.8 Hz, 1H).	434.3	B	D
I-1653		(400 MHz, DMSO-d6) 8.32 (dd, J = 13.7, 7.8 Hz, 2H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.7 Hz, 1H), 4.84 (dd, J = 11.1, 7.5 Hz, 1H), 4.09 (p, J = 8.5 Hz, 1H), 2.78 - 2.69 (m, 1H), 2.44 - 2.35 (m, 2H), 2.32 - 2.15 (m, 1H), 1.99 (q, J = 9.9 Hz, 2H), 1.87 (q, J = 9.9 Hz, 5H), 1.64 - 1.47 (m, 1H), 1.45 (tt, J = 7.0, 5.1 Hz, 1H), 1.40 - 1.18 (m, 1H), 1.07 - 0.95 (m, 1H), 0.60 (ddd, J = 7.8, 3.8, 2.3 Hz, 4H).	411.3	C	

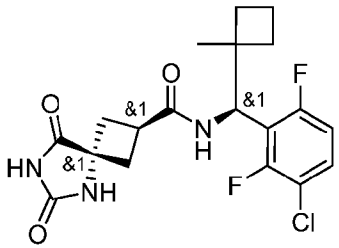
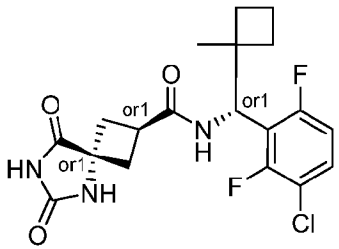
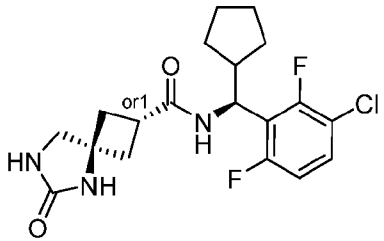
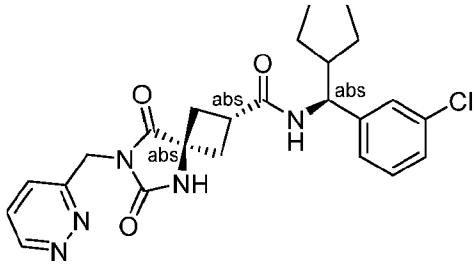
I-1654		(400 MHz, Methanol-d4) 7.99 (ddd, J = 5.3, 1.9, 0.8 Hz, 1H), 7.57 (ddd, J = 8.8, 7.1, 1.9 Hz, 1H), 7.43 (ddd, J = 9.0, 8.3, 5.5 Hz, 1H), 7.00 (td, J = 9.3, 1.8 Hz, 1H), 6.62 (ddd, J = 7.1, 5.2, 0.9 Hz, 1H), 6.56 (dt, J = 8.6, 1.0 Hz, 1H), 5.03 (d, J = 11.2 Hz, 1H), 3.73 (dd, J = 10.2, 7.9 Hz, 1H), 3.60 -3.50 (m, 2H), 3.43 (dt, J = 9.9, 7.5 Hz, 1H), 3.28 - 3.19 (m, 1H), 2.57 (h, J = 7.9 Hz, 1H), 2.22 (dtd, J = 11.9, 7.2, 4.6 Hz, 1H), 2.15 - 1.97 (m, 2H), 1.79 -1.53 (m, 4H), 1.51 - 1.32 (m, 2H), 1.23- 1.10 (m, 1H).	420.3	D	
I-1655		(400 MHz, DMSO-d6) 8.62 (d, J = 7.5 Hz, 1H), 8.03 (d, J = 5.1 Hz, 1H), 7.54 (td, J = 8.7, 5.4 Hz, 1H), 7.45 (ddd, J = 8.6, 6.2, 1.7 Hz, 1H), 7.14 (t, J = 9.3 Hz, 1H), 6.51 (t, J = 6.0 Hz, 1H), 6.37 (d, J = 8.5 Hz, 1H), 4.87 (dd, J = 11.2, 7.4 Hz, 1H), 3.56- 3.42 (m, 2H), 3.26 (dd, J = 10.3, 6.8 Hz, 2H), 3.13 (q, J = 7.4 Hz, 1H), 2.45 (t, J = 9.0 Hz, 1H), 2.18 (h, J = 7.2 Hz, 1H), 2.06 (dt, J = 12.3, 7.8 Hz, 1H), 1.96 (tt, J = 12.5, 5.6 Hz, 1H), 1.66 - 1.46 (m, 4H), 1.39 - 1.24 (m, 2H), 1.02 (dd, J = 12.8, 7.6 Hz, 1H).	420.3	B	C
I-1656		(400 MHz, DMSO-d6) 8.12 (d, J = 8.9 Hz, 1H), 7.70 (s, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.09 (d, J = 8.7 Hz, 1H), 4.16 - 4.06 (m, 2H), 2.96 - 2.83 (m, 1H), 1.93 - 1.63 (m, 6H), 0.94 (s, 9H).	401.15	C	
I-1657		(400 MHz, DMSO-d6) 8.12 (d, J = 9.0 Hz, 1H), 7.74 (s, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (t, J = 9.5 Hz, 1H), 5.10 (d, J = 8.8 Hz, 1H), 4.13 (q, J = 8.4 Hz, 2H), 2.96 - 2.84 (m, 1H), 1.98 (dd, J = 12.6, 7.7 Hz, 1H), 1.82 (dd, J = 12.6, 10.1 Hz, 1H), 1.78 - 1.54 (m, 4H), 0.94 (s, 9H).	401.15	B	C

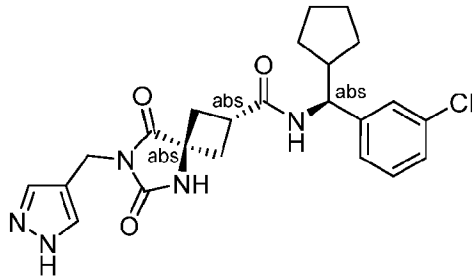
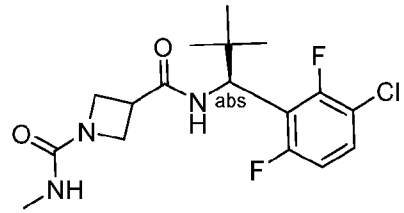
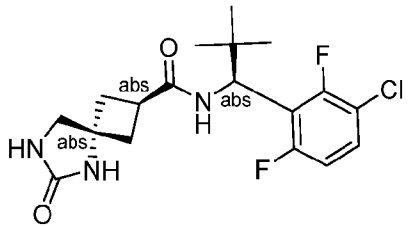
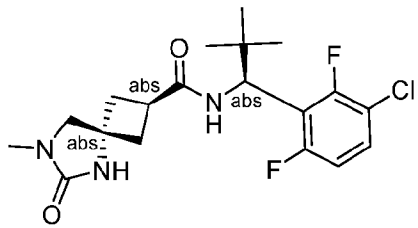
I-1658		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.28 (d, J = 8.3 Hz, 1H), 7.36 - 7.29 (m, 2H), 7.29 - 7.22 (m, 2H), 4.70 - 4.54 (m, 2H), 4.06 (h, J = 4.9 Hz, 1H), 3.13 (p, J = 9.0 Hz, 1H), 2.70 -2.60 (m, 2H), 2.28 - 2.07 (m, 3H), 1.89 (ddd, J = 13.9, 8.6, 5.9 Hz, 1H), 1.61 - 1.43 (m, 2H), 1.37 - 1.08 (m, 3H).	392.3	D	
I-1659		(400 MHz, DMSO-d6) 8.86 (d, J = 8.2 Hz, 1H), 8.64 (dt, J = 4.8, 1.4 Hz, 1H), 8.35 (d, J = 7.6 Hz, 1H), 8.07 - 7.91 (m, 2H), 7.59 (ddd, J = 6.3, 4.7, 2.8 Hz, 1H), 7.53 (td, J = 8.7, 5.6 Hz, 1H), 7.13 (td, J = 9.4, 1.7 Hz, 1H), 4.85 (dd, J = 11.1, 7.5 Hz, 1H), 4.34 (h, J = 8.4 Hz, 1H), 2.88 - 2.72 (m, 1H), 2.46 - 2.28 (m, 3H), 2.19 (dq, J = 35.5, 9.7 Hz, 2H), 1.92 (dq, J = 12.8, 7.1 Hz, 1H), 1.55 (ddt, J = 31.5, 16.6, 8.0 Hz, 4H), 1.42 - 1.20 (m, 2H), 1.02 (q, J = 10.8, 9.3 Hz, 1H).	448.35	C	
I-1660		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.61 (s, 1H), 8.28 (d, J = 8.2 Hz, 1H), 7.36 -7.29 (m, 2H), 7.29 - 7.20 (m, 2H), 4.68 - 4.56 (m, 2H), 4.05 (p, J = 5.0 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.73- 2.59 (m, 2H), 2.31 -2.09 (m, 3H), 1.89 (ddd, J = 13.9, 8.5, 5.9 Hz, 1H), 1.63 - 1.41 (m, 2H), 1.39 -1.18 (m, 3H).	392.25	E	

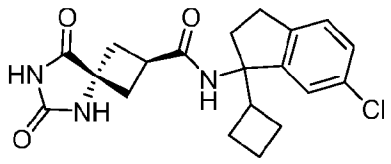
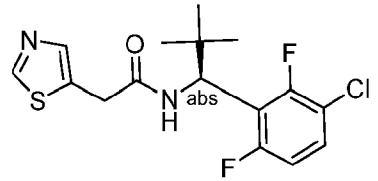
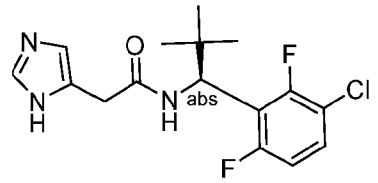
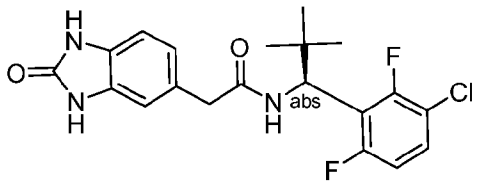
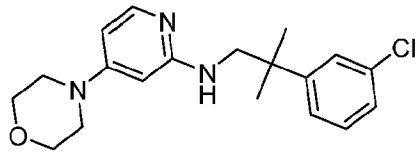
I-1661		(400 MHz, DMSO-d6) 8.45 (ddd, J = 4.9, 1.9, 0.9 Hz, 1H), 8.36 (dd, J = 14.7, 7.6 Hz, 2H), 7.71 (td, J = 7.6, 1.9 Hz, 1H), 7.54 (td, J = 8.8, 5.5 Hz, 1H), 7.28 (dt, J = 7.9, 1.1 Hz, 1H), 7.23 (ddd, J = 7.5, 4.9, 1.2 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 4.84 (dd, J = 11.1, 7.5 Hz, 1H), 4.14 - 3.97 (m, 1H), 3.53 (s, 2H), 2.82 - 2.65 (m, 1H), 2.41 (q, J = 8.5 Hz, 1H), 2.32 - 2.15 (m, 2H), 2.01 (q, J = 9.9 Hz, 1H), 1.89 (q, J = 9.8 Hz, 2H), 1.54 (ddt, J = 30.5, 15.9, 7.8 Hz, 4H), 1.35 (dd, J = 12.4, 7.4 Hz, 1H), 1.30 - 1.21 (m, 1H), 1.00 (dd, J = 12.4, 7.9 Hz, 1H).	462.35	C	
I-1662		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.25 (d, J = 8.4 Hz, 1H), 7.37 - 7.31 (m, 2H), 7.29-7.23 (m, 2H), 4.64 (t, J = 9.2 Hz, 1H), 4.53 (d, J = 3.8 Hz, 1H), 4.01 (d, J = 5.0 Hz, 1H), 3.11 (q, J = 9.2 Hz, 1H), 2.64 (dd, J = 10.4, 7.5 Hz, 2H), 2.19 (ddd, J = 33.4, 14.9, 6.4 Hz, 3H), 1.62 (d, J = 5.2 Hz, 2H), 1.58 - 1.42 (m, 3H), 1.12 - 1.03 (m, 1H).	392.25	E	
I-1663		(400 MHz, Methanol-d4) 8.60 - 8.43 (m, 2H), 7.89 (dt, J = 7.8, 2.0 Hz, 1H), 7.51 - 7.37 (m, 2H), 6.99 (td, J = 9.3, 1.8 Hz, 1H), 4.99 (d, J = 11.2 Hz, 1H), 3.82 (d, J = 2.6 Hz, 2H), 3.05 (ddt, J = 9.9, 7.5, 5.7 Hz, 1H), 2.95 (dd, J = 9.7, 7.8 Hz, 1H), 2.84 - 2.65 (m, 3H), 2.52 (h, J = 8.0 Hz, 1H), 2.12 (dddd, J = 13.0, 9.9, 7.9, 6.7 Hz, 1H), 1.90 (dddd, J = 13.3, 10.9, 8.9, 5.2 Hz, 2H), 1.78 -1.51 (m, 4H), 1.47 - 1.28 (m, 2H), 1.20-1.07 (m, 1H).	434.3	D	
I-1664		(400 MHz, DMSO-d6) 8.20 (d, J = 8.9 Hz, 1H), 7.89 (s, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.19 - 7.10 (m, 1H), 5.08 (d, J = 8.6 Hz, 1H), 4.09 (s, 2H), 3.04 (tt, J = 8.7, 6.6 Hz, 1H), 2.05 -1.91 (m, 1H), 1.90 -1.77 (m, 2H), 1.76 (s, 1H), 1.65 (ddt, J = 10.8, 7.5, 5.4 Hz, 2H), 0.94 (s, 9H).	401.15	B	B

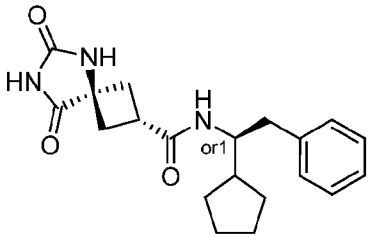
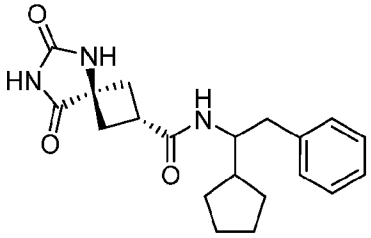
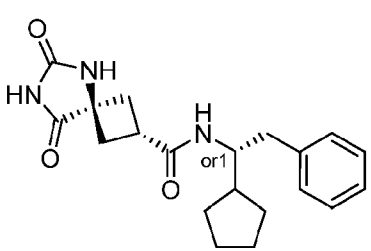
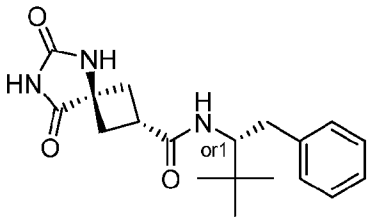
I-1665		(400 MHz, Methanol-d4) 7.38 (s, 1H), 7.35- 7.22 (m, 3H), 4.64 (d, J = 10.4 Hz, 1H), 4.34 (d, J = 5.9 Hz, 1H), 3.20 (q, J = 8.9 Hz, 1H), 2.90 (ddd, J = 12.6, 8.3, 4.1 Hz, 2H), 2.63 (q, J = 8.4 Hz, 1H), 2.52 - 2.34 (m, 2H), 1.99 - 1.83 (m, 2H), 1.69 - 1.50 (m, 3H), 1.21 (q, J = 9.2 Hz, 1H).	392.3	E	
I-1666		(400 MHz, DMSO-d6) 8.33 (d, J = 7.6 Hz, 1H), 8.08 (d, J = 7.9 Hz, 1H), 7.53 (td, J = 8.8, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.7 Hz, 1H), 4.83 (dd, J = 11.1, 7.5 Hz, 1H), 4.14 - 3.83 (m, 1H), 2.83 - 2.60 (m, 1H), 2.41 (q, J = 8.6 Hz, 1H), 2.31 - 2.13 (m, 2H), 1.96 (q, J = 9.9 Hz, 3H), 1.90 - 1.78 (m, 3H), 1.68 - 1.39 (m, 4H), 1.35 (dd, J = 12.3, 7.4 Hz, 1H), 1.25 (dq, J = 15.9, 7.9 Hz, 1H), 1.00 (dq, J = 16.8, 8.0 Hz, 1H).	385.25	C	
I-1667		(400 MHz, DMSO-d6) 8.19 (d, J = 8.8 Hz, 1H), 7.91 (s, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (t, J = 9.5 Hz, 1H), 5.07 (d, J = 8.7 Hz, 1H), 4.16 (d, J = 8.6 Hz, 1H), 4.10 (d, J = 8.6 Hz, 1H), 3.05 (tt, J = 8.8, 7.1 Hz, 1H), 1.97 (dd, J = 13.4, 9.1 Hz, 1H), 1.83 (dt, J = 14.3, 7.2 Hz, 2H), 1.75 (ddd, J = 13.2, 7.9, 5.8 Hz, 1H), 1.63 (dt, J = 12.5, 7.6 Hz, 1H), 1.57 - 1.45 (m, 1H), 0.94 (s, 9H).	401.15	B	B
I-1668		(400 MHz, DMSO-d6) 10.39 (s, 1H), 8.59 (s, 1H), 8.32 (d, J = 8.6 Hz, 1H), 7.40 (t, J = 1.8 Hz, 1H), 7.38 - 7.26 (m, 2H), 7.26 (dt, J = 7.2, 2.1 Hz, 1H), 4.53 (dd, J = 11.8, 8.6 Hz, 1H), 3.08 (p, J = 9.1 Hz, 1H), 2.70 - 2.63 (m, 1H), 2.30 (s, 2H), 2.27 - 2.07 (m, 4H), 1.48 (dd, J = 23.3, 10.2 Hz, 2H), 1.27 (dt, J = 23.2, 12.0 Hz, 5H), 0.65 - 0.56 (m, 1H).	402.1	C	

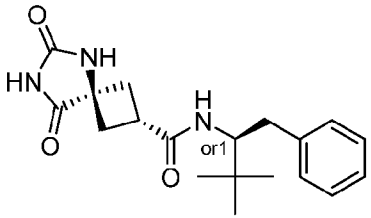
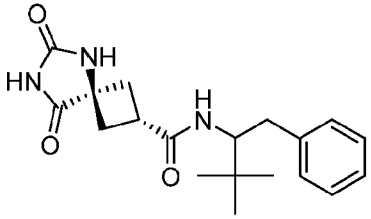
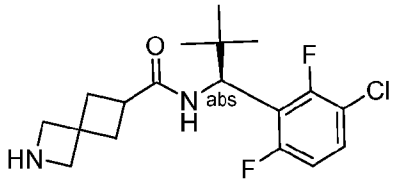
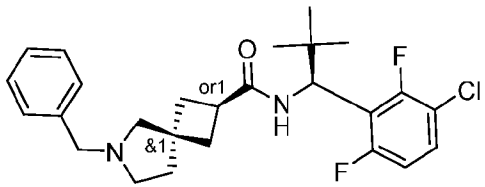
I-1669		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.25 (d, J = 8.5 Hz, 1H), 7.38 - 7.30 (m, 2H), 7.26 (ddt, J = 8.9, 7.6, 1.4 Hz, 2H), 4.64 (t, J = 9.1 Hz, 1H), 4.53 (d, J = 3.8 Hz, 1H), 4.01 (d, J = 5.1 Hz, 1H), 3.12 (p, J = 9.1 Hz, 1H), 2.66 (ddd, J = 17.8, 11.9, 9.1 Hz, 2H), 2.27 - 2.08 (m, 3H), 1.68 - 1.55 (m, 2H), 1.56 - 1.40 (m, 3H), 1.07 (ddd, J = 13.1, 8.1, 5.2 Hz, 1H).	392.25	E	
I-1670		(400 MHz, Methanol-d4) 7.38 (t, J = 1.8 Hz, 1H), 7.34- 7.22 (m, 3H), 4.65 (d, J = 10.3 Hz, 1H), 4.33 (tt, J = 5.6, 2.7 Hz, 1H), 3.21 (p, J = 9.0 Hz, 1H), 2.98 -2.83 (m, 2H), 2.63 (hept, J = 8.1, 7.7 Hz, 1H), 2.52 - 2.33 (m, 2H), 2.02- 1.81 (m, 2H), 1.59 (dddd, J = 20.3, 16.8, 10.0, 7.3 Hz, 3H), 1.20 (tt, J = 11.8, 7.7 Hz, 1H).	392.3	E	
I-1671		(400 MHz, DMSO-d6) 10.44 (s, 1H), 8.57 (s, 1H), 8.28 (d, J = 8.4 Hz, 1H), 7.39 - 7.31 (m, 2H), 7.28 (ddt, J = 7.3, 3.9, 1.7 Hz, 2H), 4.62 (dd, J = 11.8, 8.5 Hz, 1H), 3.06 (p, J = 9.1 Hz, 1H), 2.63 (dt, J = 12.1, 8.6 Hz, 2H), 2.26 - 2.16 (m, 3H), 2.16 - 2.05 (m, 1H), 1.75 (t, J = 12.1 Hz, 1H), 1.64 (d, J = 12.3 Hz, 1H), 1.56 (s, 1H), 1.29 (d, J = 9.5 Hz, 1H), 1.21 (t, J = 12.8 Hz, 4H), 0.79 (dd, J = 12.3, 4.8 Hz, 1H).	402.1	C	
I-1672		(400 MHz, DMSO-d6) 8.32 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.12 (td, J = 9.3, 1.6 Hz, 1H), 6.69 (s, 1H), 6.16 (s, 1H), 4.83 (dd, J = 11.1, 7.5 Hz, 1H), 3.33 (s, 2H), 2.78 - 2.65 (m, 1H), 2.40 (q, J = 8.6 Hz, 1H), 2.24 (t, J = 10.3 Hz, 1H), 2.20 - 2.01 (m, 3H), 1.89 (dt, J = 12.5, 5.8 Hz, 1H), 1.70 - 1.41 (m, 4H), 1.33 (ddd, J = 12.7, 10.3, 6.3 Hz, 1H), 1.22 (dq, J = 22.6, 7.3 Hz, 1H), 0.99 (dd, J = 13.0, 7.4 Hz, 1H).	398.2	B	B

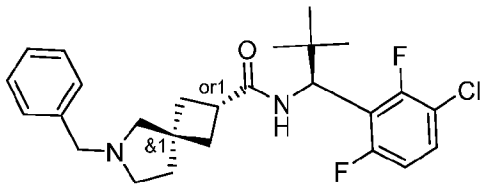
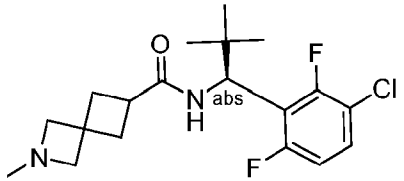
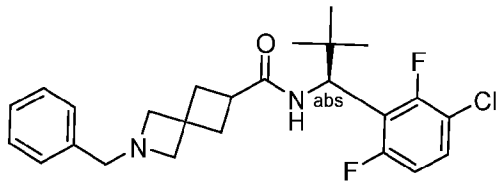
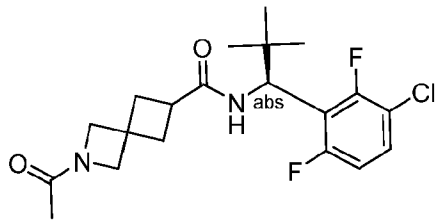
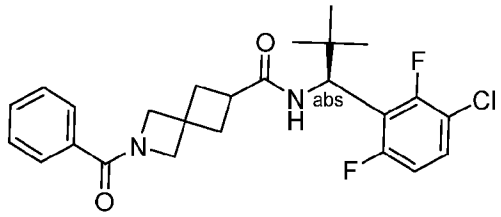
I-1673		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.24 (d, J = 8.5 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (td, J = 9.4, 1.6 Hz, 1H), 5.23 (d, J = 8.5 Hz, 1H), 3.27 (q, J = 9.1 Hz, 1H), 2.65 (ddd, J = 29.6, 11.9, 8.9 Hz, 2H), 2.29 - 2.15 (m, 2H), 2.06 (dq, J = 27.0, 9.4 Hz, 2H), 1.89 (dt, J = 10.9, 8.5 Hz, 1H), 1.70 (s, 1H), 1.59 (s, 1H), 1.50 (s, 1H), 1.14 (s, 3H).	412.05	A	A
I-1674		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.24 (d, J = 8.4 Hz, 1H), 7.56 (td, J = 8.8, 5.5 Hz, 1H), 7.20 - 7.10 (m, 1H), 5.23 (d, J = 8.5 Hz, 1H), 3.27 (d, J = 9.1 Hz, 1H), 2.74 - 2.59 (m, 2H), 2.31 - 2.21 (m, 2H), 2.12 - 1.95 (m, 2H), 1.95 - 1.83 (m, 1H), 1.70 (s, 1H), 1.58 (s, 1H), 1.50 (s, 1H), 1.14 (s, 3H).	412	D	D
I-1675		(400 MHz, DMSO-d6) 8.38 (d, J = 7.4 Hz, 1H), 7.53 (q, J = 7.9 Hz, 1H), 7.13 (t, J = 9.3 Hz, 1H), 6.81 (s, 1H), 6.04 (s, 1H), 4.83 (dd, J = 11.1, 7.4 Hz, 1H), 3.21 (q, J = 9.4 Hz, 2H), 2.90 (p, J = 7.7, 6.3 Hz, 1H), 2.41 (d, J = 8.9 Hz, 1H), 2.32 (t, J = 10.9 Hz, 1H), 2.23 (d, J = 9.7 Hz, 2H), 2.12 (s, 1H), 1.93 - 1.86 (m, 1H), 1.62 - 1.45 (m, 4H), 1.34 (d, J = 10.7 Hz, 1H), 1.28 - 1.22 (m, 1H), 1.01 (d, J = 10.5 Hz, 1H).	398.2	B	B
I-1676		(400 MHz, Methanol-d4) - 9.11 (s, 1H), 8.55 (s, 3H), 7.70 (d, J = 3.4 Hz, 2H), 7.39 – 7.12 (m, 4H), 4.57 (d, J = 10.5 Hz, 1H), 3.24 (t, J = 8.9 Hz, 1H), 2.67 (dd, J = 13.1, 10.2 Hz, 4H), 2.58 – 2.43 (m, 1H), 2.28 (s, 3H), 1.88 (s, 1H), 1.63 (s, 5H), 1.37 (s, 2H), 1.14 (s, 1H).	469.2	E	

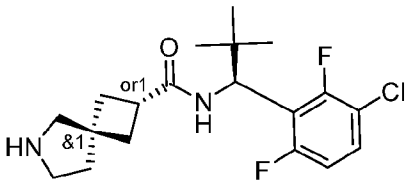
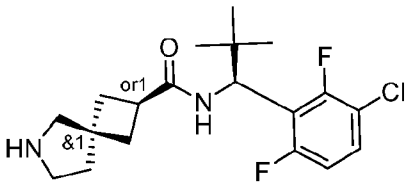
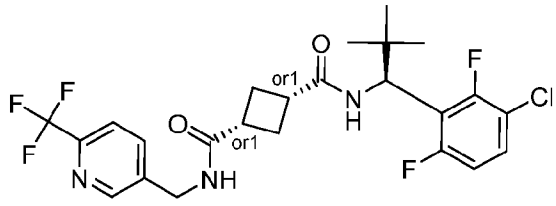
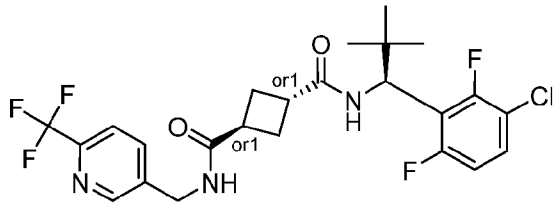
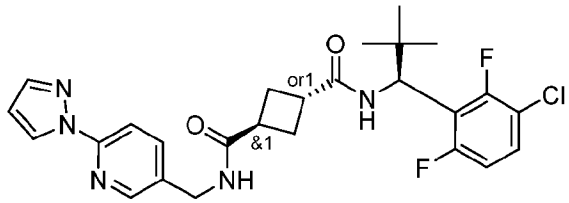
I-1677			456.2	C	
I-1678		NMR (400 MHz, DMSO-d6) - 8.29 (d, J = 8.8 Hz, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.21 – 7.09 (m, 1H), 6.19 (q, J = 4.3 Hz, 1H), 5.10 (br. dd, J = 8.3 Hz, 1H), 3.86 (app. t, J = 8.2 Hz, 1H), 3.81 (app. t, J = 8.2 Hz, 1H), 3.76 (dd, J = 7.6, 6.0 Hz, 1H), 3.63 (br. app. t, J = 5.7 Hz, 1H), 3.44 (tt, J = 8.7, 5.9 Hz, 1H), 2.49 (overlapping d, J = 4.6 Hz, 3H), 0.93 (s, 9H).	374.2	D	
I-1679		NMR (400 MHz, DMSO d6) - 8.11 (d, J = 8.9 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.14 (br. t, J = 8.4 Hz, 1H), 6.82 (s, 1H), 6.04 (s, 1H), 5.12 – 5.06 (m, 1H), 3.24 (d A of AB, JAB = 9.5 Hz, 1H), 3.19 (d B of AB, JAB = 9.5 Hz, 1H), 3.04 (tt, J = 9.7, 4.9 Hz, 1H), 2.34 (app. t, J = 10.7 Hz, 1H), 2.30 – 2.23 (m, 1H), 2.23 – 2.18 (m, 1H), 2.15 – 2.07 (m, 1H), 0.92 (s, 9H). 4% of an impurity.	386.2	B	B
I-1680		NMR (400 MHz, DMSO-d6) - 8.13 (d, J = 8.9 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.14 (br. t, J = 8.3 Hz, 1H), 6.94 (s, 1H), 5.10 (d, J = 8.5 Hz, 1H), 3.27 (d A of AB, JAB = 9.4 Hz, 1H), 3.22 (d B of AB, JAB = 9.5 Hz, 1H), 3.05 (app. tt, J = 9.7, 4.9 Hz, 1H), 2.53 (s, 3H), 2.40 – 2.18 (m, 3H), 2.16 – 2.07 (m, 1H), 0.92 (s, 9H). 5% of an unknown impurity	400.2	A	B

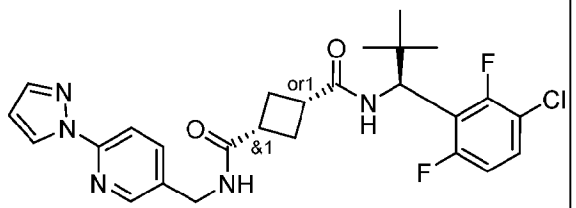
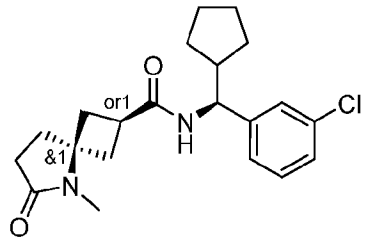
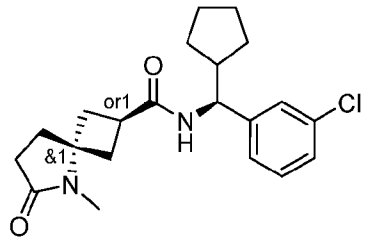
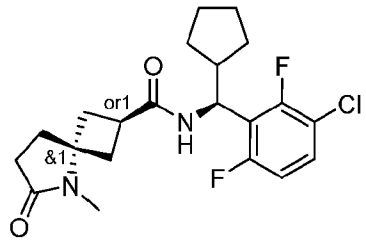
I-1681		NMR (400 MHz, DMSO-d6) - 10.54 (br. s, 1H), 8.61 (d, J = 1.7 Hz, 1H), 7.72 (br. s, 1H), 7.21 – 7.16 (m, 3H), 3.20 – 3.09 (m, 1H), 3.04 – 2.94 (m, 1H), 2.93 – 2.83 (m, 1H), 2.78 – 2.68 (m, 1H), 2.66 – 2.54 (m, 2H), 2.44 – 2.34 (m, 1H), 2.26 – 2.09 (m, 3H), 1.83 – 1.51 (m, 6H). Contains an unidentified minor aliphatic impurity.	388.3	D	D
I-1682			359.13	D	D
I-1683			342.17	D	
I-1684			408.34	D	D
I-1685				E	

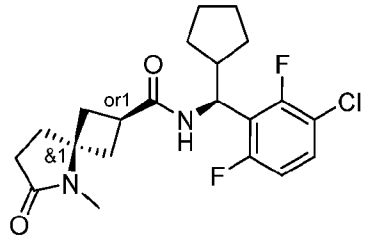
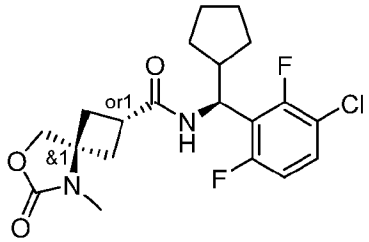
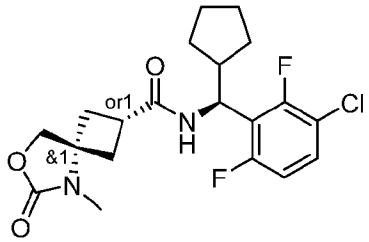
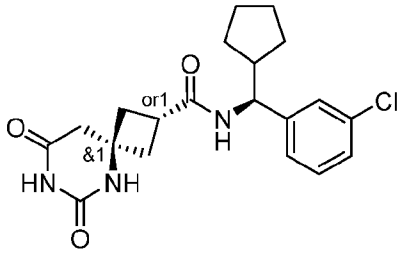
I-1686		(400 MHz, DMSO-d6) 10.75 - 10.47 (m, 1H), 8.57 (d, J = 1.6 Hz, 1H), 7.60 (d, J = 9.2 Hz, 1H), 7.26-7.19 (m, 2H), 7.18 - 7.12 (m, 3H), 3.85 (dd, J = 8.1, 4.2 Hz, 1H), 3.06 - 2.94 (m, 1H), 2.79 (dd, J = 13.7, 4.3 Hz, 1H), 2.70 - 2.54 (m, 2H), 2.47 (d, J = 9.4 Hz, 1H), 2.16 - 1.99 (m, 2H), 1.89 (s, 1H), 1.77- 1.66 (m, 1H), 1.61 (ddd, J = 11.8, 7.8, 3.9 Hz, 1H), 1.57-1.49 (m, 2H), 1.47 (d, J = 7.7 Hz, 1H), 1.43 (s, 1H), 1.37 - 1.13 (m, 3H).	356.3	E	
I-1687		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.57 (d, J = 1.6 Hz, 1H), 7.60 (d, J = 9.1 Hz, 1H), 7.23 (dd, J = 8.0, 6.7 Hz, 2H), 7.16 (dd, J = 7.5, 2.2 Hz, 3H), 3.85 (qd, J = 9.0, 4.2 Hz, 1H), 3.01 (p, J = 9.2 Hz, 1H), 2.79 (dd, J = 13.7, 4.3 Hz, 1H), 2.70 - 2.53 (m, 3H), 2.07 (dddd, J = 29.9, 13.1, 8.8, 4.6 Hz, 2H), 1.89 (p, J = 8.2 Hz, 1H), 1.76 - 1.66 (m, 1H), 1.63 (dd, J = 7.6, 4.5 Hz, 1H), 1.58 - 1.50 (m, 2H), 1.45 (dd, J = 17.8, 8.3 Hz, 2H), 1.37 - 1.15 (m, 2H).	35.15	E	
I-1688		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.57 (d, J = 1.5 Hz, 1H), 7.60 (d, J = 9.1 Hz, 1H), 7.26 - 7.20 (m, 2H), 7.18 - 7.12 (m, 3H), 3.85 (qd, J = 9.2, 4.2 Hz, 1H), 3.01 (p, J = 9.2 Hz, 1H), 2.79 (dd, J = 13.7, 4.3 Hz, 1H), 2.71 - 2.53 (m, 2H), 2.47 (d, J = 9.4 Hz, 1H), 2.07 (dddd, J = 30.0, 13.2, 8.9, 4.6 Hz, 2H), 1.89 (p, J = 8.2 Hz, 1H), 1.78 - 1.66 (m, 1H), 1.61 (ddd, J = 11.9, 7.8, 3.9 Hz, 1H), 1.58 - 1.49 (m, 2H), 1.47 (d, J = 7.9 Hz, 1H), 1.43 (s, 1H), 1.36 - 1.12 (m, 3H).	356.3	E	
I-1689		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.57 (s, 1H), 7.52 (d, J = 9.7 Hz, 1H), 7.25 - 7.07 (m, 5H), 3.74 (ddd, J = 12.0, 9.6, 2.5 Hz, 1H), 3.00 (p, J = 9.2 Hz, 1H), 2.86 (dd, J = 13.7, 2.6 Hz, 1H), 2.58 (dd, J = 11.9, 9.4 Hz, 1H), 2.41 (dd, J = 12.9, 10.9 Hz, 1H), 2.35 (dd, J = 11.2, 8.6 Hz, 1H), 2.10 (ddd, J = 12.4,	344.15	E	

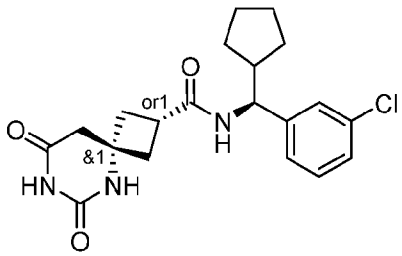
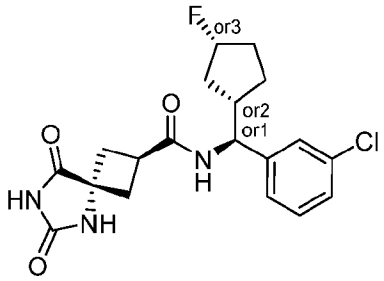
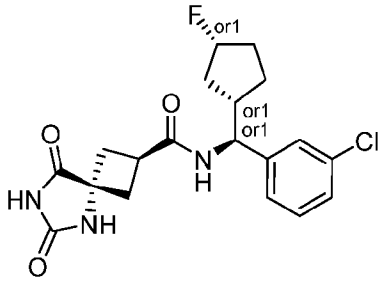
		8.7, 4.6 Hz, 1H), 1.98 (ddd, J = 13.0, 8.7, 4.6 Hz, 1H), 0.92 (s, 9H).			
I-1690		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.57 (s, 1H), 7.52 (d, J = 9.6 Hz, 1H), 7.25 - 7.07 (m, 5H), 3.74 (ddd, J = 12.0, 9.6, 2.5 Hz, 1H), 3.00 (p, J = 9.2 Hz, 1H), 2.86 (dd, J = 13.7, 2.6 Hz, 1H), 2.58 (dd, J = 11.9, 9.4 Hz, 1H), 2.46 - 2.31 (m, 2H), 2.10 (ddd, J = 12.4, 8.8, 4.6 Hz, 1H), 1.98 (ddd, J = 13.0, 9.0, 4.6 Hz, 1H), 0.92 (s, 9H).	344.2	E	
I-1691		(400 MHz, DMSO-d6) 10.47 (s, 1H), 8.56 (s, 1H), 7.52 (d, J = 9.6 Hz, 1H), 7.25 - 7.13 (m, 4H), 7.12 (td, J = 6.7, 1.8 Hz, 1H), 3.74 (ddd, J = 12.0, 9.6, 2.5 Hz, 1H), 3.00 (p, J = 9.2 Hz, 1H), 2.86 (dd, J = 13.7, 2.6 Hz, 1H), 2.58 (dd, J = 11.9, 9.4 Hz, 1H), 2.46 - 2.31 (m, 2H), 2.10 (ddd, J = 12.3, 8.7, 4.7 Hz, 1H), 1.98 (ddd, J = 12.9, 8.8, 4.6 Hz, 1H), 0.92 (s, 9H).	344.1	E	
I-1692		(400 MHz, DMSO-d6) 7.96 (d, J = 8.9 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.14 (s, 1H), 5.08 (d, J = 8.9 Hz, 1H), 3.73 (d, J = 66.9 Hz, 1H), 3.46 (s, 1H), 3.31 - 3.26 (m, 2H), 3.06 (p, J = 8.1 Hz, 1H), 2.28 - 2.11 (m, 3H), 2.03 (d, J = 8.9 Hz, 1H), 0.92 (s, 9H).	357.1	D	
I-1693		(400 MHz, DMSO-d6) 7.91 (d, J = 9.0 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.32 (d, J = 6.2 Hz, 4H), 7.24 (td, J = 6.0, 2.6 Hz, 1H), 7.14 (s, 1H), 5.07 (d, J = 8.8 Hz, 1H), 3.54 (s, 2H), 3.07 (p, J = 8.6 Hz, 1H), 2.69 - 2.57 (m, 1H), 2.45 (t, J = 7.3 Hz, 3H), 2.04 (q, J = 12.9, 11.6 Hz, 2H), 1.93 (d, J = 8.9 Hz, 2H), 1.73-1.65 (m, 2H), 0.90 (s, 9H).	461.4	D	D

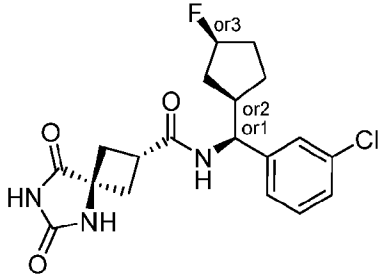
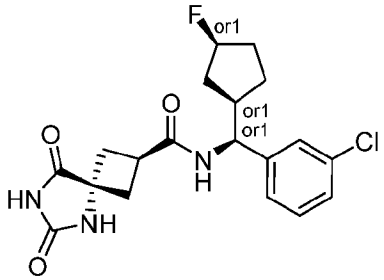
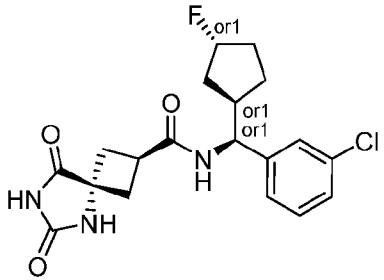
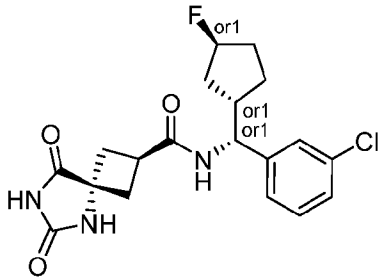
I-1694		(400 MHz, DMSO-d6) 7.97 (d, J = 9.0 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.30 (q, J = 7.5 Hz, 5H), 7.13 (s, 1H), 5.07 (d, J = 8.8 Hz, 1H), 3.52 (s, 2H), 3.15 (q, J = 8.4 Hz, 1H),2.69 -2.57(m,1H) 2.43 (s, 3H), 2.09 (dd, J = 10.9, 8.4 Hz, 1H), 1.99 (dt, J = 19.8, 9.9 Hz, 3H), 1.90 (d, J = 8.4 Hz, 2H), 0.91 (s, 9H).	461.4	D	D
I-1695		(400 MHz, DMSO-d6) 7.96 (d, J = 9.0 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (d, J = 9.8 Hz, 1H), 5.07 (d, J = 8.9 Hz, 1H), 3.20 - 3.05 (m, 3H), 2.99 - 2.87 (m, 2H), 2.18 - 2.09 (m, 5H), 2.08 - 1.98 (m, 2H), 0.91 (s, 9H).	371.1	C	
I-1696		(400 MHz, DMSO-d6) 7.98 (d, J = 9.0 Hz, 1H), 7.56 (td, J = 8.6, 5.4 Hz, 1H), 7.35 - 7.27 (m, 2H), 7.23 (d, J = 6.9 Hz, 3H), 7.14 (d, J = 9.1 Hz, 1H), 5.07 (d, J = 8.8 Hz, 1H), 3.50 (s, 2H), 3.26 - 3.05 (m, 3H), 3.01 (s, 2H), 2.33 - 1.86 (m, 4H), 0.91 (s, 9H).	447.35	C	D
I-1697		(400 MHz, DMSO-d6) 8.04 (t, J = 8.3 Hz, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.14 (s, 1H), 5.09 (d, J = 8.8 Hz, 1H), 4.10 (s, 1H), 4.00 - 3.90 (m, 1H), 3.81 (s, 1H), 3.71 - 3.60 (m, 1H), 3.11 (q, J = 7.6 Hz, 1H), 2.30 - 2.17 (m, 3H), 2.15 - 2.06 (m, 1H), 1.70 (d, J = 10.0 Hz, 3H), 0.92 (s, 9H).	399.05	C	D
I-1698		(400 MHz, DMSO-d6) 8.05 (t, J = 9.7 Hz, 1H), 7.59 (q, J = 11.3, 10.2 Hz, 3H), 7.49 (d, J = 6.6 Hz, 1H), 7.45 (d, J = 6.7 Hz, 2H), 7.14 (s, 1H), 5.09 (s, 1H), 4.30 (s, 1H), 4.16 (s, 1H), 4.05 (s, 1H), 3.91 (s, 1H), 3.20 - 3.05 (m, 1H), 2.33 (p, J = 1.9 Hz, 1H), 2.31 (s, 1H), 2.29 (s, 1H), 2.28 - 2.21 (m, 2H), 2.21 - 2.11 (m, 1H), 0.92 (s, 9H).	461.1	C	C

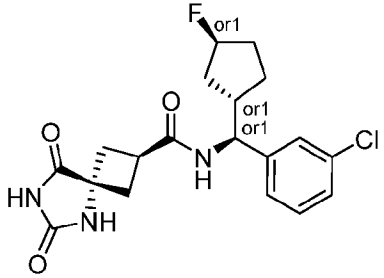
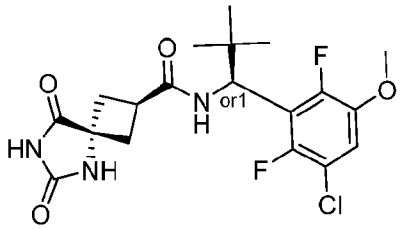
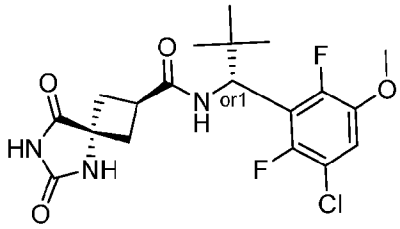
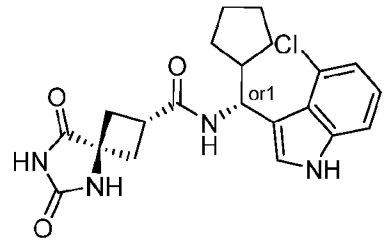
I-1699		(400 MHz, DMSO-d6) 7.98 (d, J = 9.3 Hz, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.14 (s, 1H), 5.09 (d, J = 8.7 Hz, 1H), 3.22 - 3.09 (m, 2H), 2.81 - 2.66 (m, 3H), 2.05 (dt, J = 15.2, 9.8 Hz, 2H), 1.95 (d, J = 8.5 Hz, 2H), 1.59 (dd, J = 7.9, 6.5 Hz, 1H), 1.24 (s, 1H), 0.92 (s, 9H).	371.25	D	
I-1700		(400 MHz, DMSO-d6) 8.00 (dd, J = 15.7, 8.8 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.14 (s, 1H), 5.09 (d, J = 8.8 Hz, 1H), 3.22 - 3.07 (m, 2H), 2.81 - 2.61 (m, 3H), 2.10 - 1.83 (m, 5H), 1.76 (t, J = 6.9 Hz, 1H), 1.24 (s, 1H), 0.92 (s, 9H).	371.25	C	
I-1701		(400 MHz, DMSO-d6)8.63 (d, J = 1.9 Hz, 1H), 8.36 (t, J = 5.9 Hz, 1H), 8.01 (d, J = 9.0 Hz, 1H), 7.92-7.82 (m, 2H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.14 (s, 1H), 5.09 (d, J = 8.9 Hz, 1H), 4.36 (d, J = 5.9 Hz, 2H), 3.12 (p, J = 8.9 Hz, 1H), 2.95 (p, J = 9.0 Hz, 1H), 2.20 (dq, J = 36.9, 9.7 Hz, 4H), 0.92 (s, 9H).	518.25	C	D
I-1702		(400 MHz, DMSO-d6) 8.65 (d, J = 1.9 Hz, 1H), 8.40 (t, J = 5.9 Hz, 1H), 8.09 (d, J = 8.9 Hz, 1H), 7.94-7.84 (m, 2H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (s, 1H), 5.11 (d, J = 8.8 Hz, 1H), 4.38 (d, J = 5.9 Hz, 2H), 3.25 (q, J = 7.6 Hz, 1H), 3.02 (t, J = 7.3 Hz, 1H), 2.38-2.16 (m, 3H), 2.15-2.06 (m, 1H), 0.93 (s, 9H).	518.25	D	D
I-1703		(400 MHz, DMSO-d6) 8.60 (dd, J = 2.7, 0.7 Hz, 1H), 8.33 (t, J = 2.2 Hz, 2H), 8.09 (d, J = 8.9 Hz, 1H), 7.89 (dd, J = 8.4, 0.8 Hz, 1H), 7.86-7.79 (m, 2H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.14 (s, 1H), 6.57 (dd, J = 2.6, 1.7 Hz, 1H), 5.11 (d, J = 8.8 Hz, 1H), 4.31 (d, J = 5.9 Hz, 2H), 3.26 (q, J = 7.5 Hz, 1H), 3.00 (p, J = 7.9 Hz, 1H), 2.31-2.16 (m, 3H), 2.12-2.05 (m, 1H), 0.93 (s, 9H).	516.25	D	D

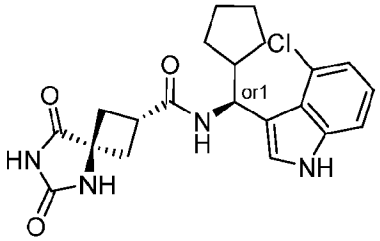
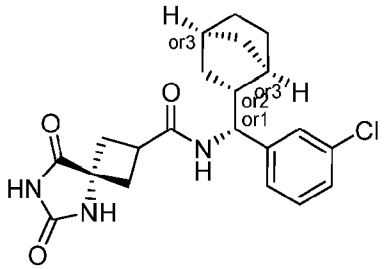
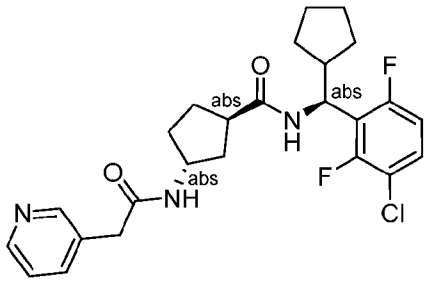
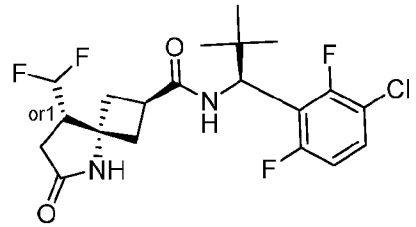
I-1704		(400 MHz, DMSO-d6) 8.60 (dd, J = 2.6, 0.7 Hz, 1H), 8.35-8.26 (m, 2H), 8.02 (d, J = 9.0 Hz, 1H), 7.88 (dd, J = 8.4, 0.8 Hz, 1H), 7.85-7.78 (m, 2H), 7.56 (td, J = 8.6, 5.5 Hz, 1H), 7.14 (s, 1H), 6.56 (dd, J = 2.6, 1.7 Hz, 1H), 5.09 (d, J = 8.8 Hz, 1H), 4.29 (d, J = 5.9 Hz, 2H), 3.11 (p, J = 8.9 Hz, 1H), 2.94 (p, J = 9.0 Hz, 1H), 2.31-2.10 (m, 4H), 0.93 (s, 9H).	516.3	B	D
I-1705		(400 MHz, DMSO-d6) 8.27 (d, J = 8.7 Hz, 1H), 7.42 - 7.31 (m, 2H), 7.27 (ddt, J = 7.6, 4.2, 1.4 Hz, 2H), 4.59 (t, J = 9.3 Hz, 1H), 3.01 - 2.89 (m, 1H), 2.79 (s, 3H), 2.60 (tt, J = 10.1, 1.6 Hz, 1H), 2.26 - 2.08 (m, 5H), 1.97 (dd, J = 8.6, 7.5 Hz, 2H), 1.77 - 1.67 (m, 1H), 1.62 - 1.39 (m, 4H), 1.28 (ddt, J = 10.8, 8.1, 5.4 Hz, 2H), 1.16 - 1.04 (m, 1H).	375.2	D	
I-1706		(400 MIIz, DMSO-d6) 8.33 (d, J = 8.7 IIz, 1II), 7.38 - 7.30 (m, 2H), 7.30 - 7.22 (m, 2H), 4.57 (t, J = 9.2 Hz, 1H), 2.82 (p, J = 8.7 Hz, 1H), 2.67 (s, 3H), 2.50 - 2.38 (m, 2H), 2.16 (dq, J = 32.2, 7.3 Hz, 5H), 2.02 (ddd, J = 11.5, 7.9, 5.1 Hz, 1H), 1.92 (ddd, J = 12.4, 7.8, 5.2 Hz, 1H), 1.74 - 1.66 (m, 1H), 1.64 - 1.36 (m, 4H), 1.33 - 1.22 (m, 2H), 1.08 (dd, J = 12.4, 7.9 Hz, 1H).	375.2	D	
I-1707		(400 MHz, DMSO-d6) 8.38 (d, J = 7.5 Hz, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.7 Hz, 1H), 4.85 (dd, J = 11.1, 7.5 Hz, 1H), 2.99 (tt, J = 10.0, 5.8 Hz, 1H), 2.77 (s, 3H), 2.62 - 2.52 (m, 1H), 2.51 - 2.35 (m, 2H), 2.22 - 2.13 (m, 1H), 2.15 - 2.03 (m, 3H), 2.01 - 1.86 (m, 3H), 1.67 - 1.41 (m, 4H), 1.37 - 1.21 (m, 2H), 1.01 (dd, J = 12.6, 7.8 Hz, 1H).	411.2	B	B

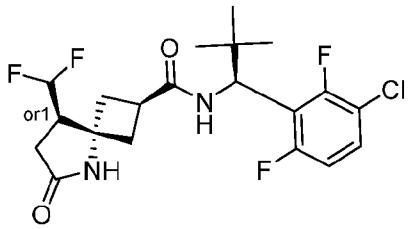
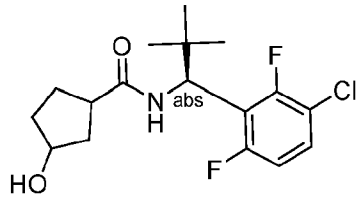
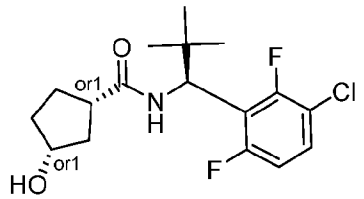
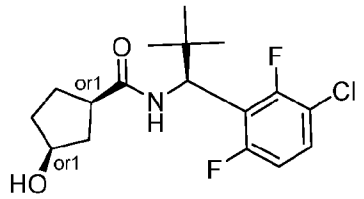
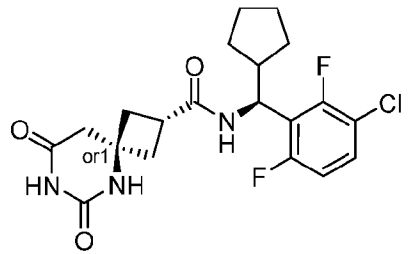
I-1708		(400 MHz, DMSO-d6) 8.44 (d, J = 7.5 Hz, 1H), 7.54 (td, J = 8.6, 5.4 Hz, 1H), 7.13 (td, J = 9.4, 1.7 Hz, 1H), 4.85 (dd, J = 11.1, 7.5 Hz, 1H), 2.88 (p, J = 8.5 Hz, 1H), 2.66 (s, 3H), 2.49 - 2.34 (m, 3H), 2.21 (t, J = 7.6 Hz, 2H), 2.09 (t, J = 7.7 Hz, 2H), 1.99 (dt, J = 11.3, 6.9 Hz, 1H), 1.94 - 1.79 (m, 2H), 1.67 - 1.41 (m, 4H), 1.40 - 1.14 (m, 2H), 1.07 - 0.94 (m, 1II).	411.2	C	C
I-1709		(400 MHz, DMSO-d6) 8.48 (d, J = 7.4 Hz, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.7 Hz, 1H), 4.84 (dd, J = 11.1, 7.5 Hz, 1H), 4.35 (s, 2H), 2.80 (p, J = 8.7 Hz, 1H), 2.72 (s, 3H), 2.60 - 2.53 (m, 1H), 2.49 - 2.35 (m, 2H), 2.14 (td, J = 11.2, 9.5, 5.8 Hz, 1H), 2.07 - 1.99 (m, 1H), 1.89 (q, J = 5.3 Hz, 1H), 1.67 - 1.43 (m, 4H), 1.34 (d, J = 8.7 Hz, 1H), 1.29 - 1.19 (m, 1H), 1.01 (q, J = 12.0, 9.9 Hz, 1H).	413.25	B	B
I-1710		(400 MHz, DMSO-d6) 8.48 (d, J = 7.5 Hz, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.14 (td, J = 9.4, 1.7 Hz, 1H), 4.85 (dd, J = 11.1, 7.5 Hz, 1H), 4.30 - 4.16 (m, 2H), 2.95 (dq, J = 9.8, 4.9 Hz, 1H), 2.82 (s, 3H), 2.75- 2.65 (m, 1H), 2.61 (dd, J = 12.9, 9.7 Hz, 1H), 2.41 (q, J = 8.6 Hz, 1H), 2.21-2.12 (m, 1H), 2.10 - 2.01 (m, 1H), 1.88 (dt, J = 12.2, 6.7 Hz, 1H), 1.55 (ddd, J = 32.5, 14.5, 7.2 Hz, 4H), 1.30 (ddd, J = 28.6, 12.9, 6.4 Hz, 2H), 1.00 (t, J = 9.7 Hz, 1H).	413.25	B	B
I-1711		(400 MHz, DMSO-d6) 10.09-10.04 (m, 1H), 8.22 (d, J = 8.7 Hz, 1H), 7.94 (s, 1H), 7.39-7.30 (m, 2H), 7.26 (ddt, J = 8.8, 7.4, 1.5 Hz, 2H), 4.56 (t, J = 9.2 Hz, 1H), 2.81 (p, J = 8.7 Hz, 1H), 2.64 (s, 2H), 2.26 (t, J = 10.2 Hz, 1H), 2.17 (dt, J = 18.5, 9.9 Hz, 3H), 2.13-2.02 (m, 1H), 1.71 (s, 1H), 1.56 (s, 3H), 1.45 (td, J = 13.8, 12.2, 7.8 Hz, 1H), 1.27 (dd, J = 20.2,	390.2	C	D

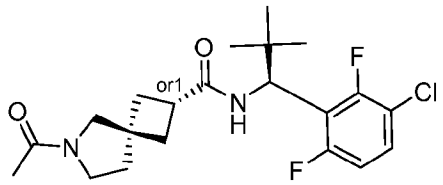
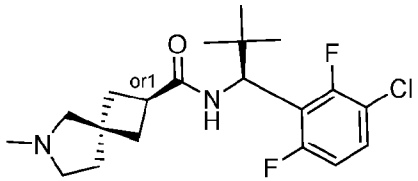
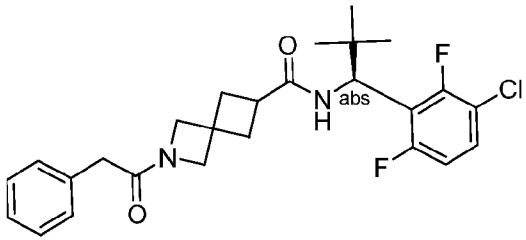
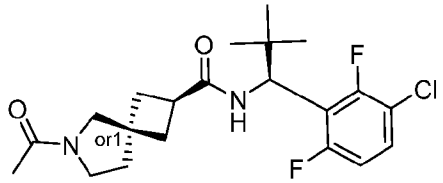
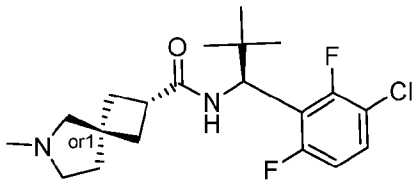
		7.7 Hz, 1H), 1.26 (s, 1H), 1.08 (dd, J = 12.6, 8.1 Hz, 1H).			
I-1712		(400 MHz, DMSO-d6) 10.07-10.02 (m, 1H), 8.30 (d, J = 8.7 Hz, 1H), 8.10-8.05 (m, 1H), 7.39-7.30 (m, 2H), 7.26 (ddt, J = 8.9, 7.4, 1.5 Hz, 2H), 4.57 (t, J = 9.3 Hz, 1H), 3.00 (tt, J = 10.0, 5.6 Hz, 1H), 2.61 (s, 2H), 2.36 (t, J = 11.0 Hz, 1H), 2.25 (t, J = 10.9 Hz, 1H), 2.15 (td, J = 14.6, 13.5, 7.8 Hz, 3H), 1.75-1.65 (m, 1H), 1.57 (s, 2H), 1.55-1.40 (m, 1H), 1.44 (s, 2H), 1.27 (dd, J = 19.9, 7.6 Hz, 1H), 1.26 (s, 2H), 1.08 (s, 1H).	390.15	C	D
I-1713		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.36 (d, J = 8.7 Hz, 1H), 7.40 (s, 1H), 7.38 -7.32 (m, 1H), 7.32 -7.24 (m, 2H), 5.16 (d, J = 54.5 Hz, 1H), 4.63 (t, J = 9.3 Hz, 1H), 3.13 (p, J = 8.9 Hz, 1H), 2.66 (dt, J = 19.9, 10.9 Hz, 2H), 2.45 (s, 1H), 2.29 - 2.19 (m, 1H), 2.17 (d, J = 11.8 Hz, 1H), 2.06 - 1.86 (m, 2H), 1.79 - 1.63 (m, 1H), 1.59 - 1.49 (m, 1H), 1.44 (td, J = 13.2, 12.7, 6.7 Hz, 2H), 1.28- 1.16 (m, 1H).	392.15	C	
I-1714		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.60 (s, 1H), 8.32 (d, J = 8.7 Hz, 1H), 7.39 (d, J = 5.5 Hz, 1H), 7.34 (d, J = 7.9 Hz, 1H), 7.29 (s, 2H), 5.12 (d, J = 54.8 Hz, 1H), 4.66 (q, J = 9.8, 9.4 Hz, 1H), 3.12 (t, J = 9.2 Hz, 1H), 2.66 (q, J = 12.1, 11.1 Hz, 2H), 2.27 (dd, J = 15.0, 9.6 Hz, 2H), 2.14 (d, J = 11.0 Hz, 2H), 1.95-1.45 (m, 4H), 1.42 - 1.09 (m, 3H).	394.2	E	

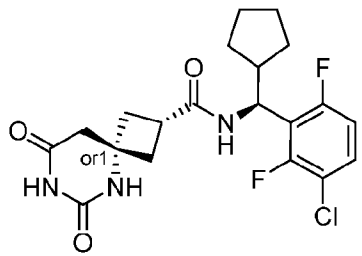
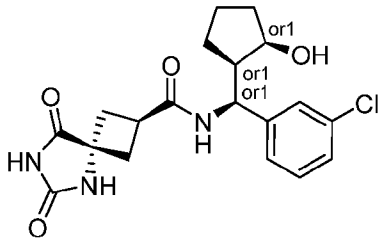
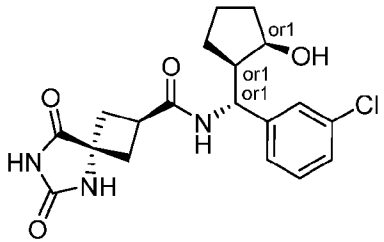
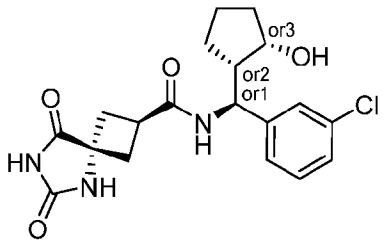
I-1715		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.33 (d, J = 8.8 Hz, 1H), 7.40 (d, J = 2.0 Hz, 1H), 7.38 - 7.32 (m, 1H), 7.31 - 7.13 (m, 2H), 5.12 (d, J = 54.6 Hz, 1H), 4.64 (t, J = 9.4 Hz, 1H), 3.11 (q, J = 9.1 Hz, 1H), 2.92 (d, J = 7.4 Hz, 1H), 2.73-2.61 (m, 2H), 2.36- 2.23 (m, 2H), 2.15 (h, J = 10.0 Hz, 2H), 1.84 (s, 1H), 1.74 -1.49 (m, 2H), 1.31 (d, J = 7.3 Hz, 1H), 1.16 (t, J = 7.2 Hz, 1H).	392.15	D	
I-1716		(400 MHz, Methanol-d4) 7.38 (t, J = 1.8 Hz, 1H), 7.35- 7.21 (m, 3H), 5.19 (s, 1H), 4.73 (d, J = 10.1 Hz, 1H), 3.21 (t, J = 9.0 Hz, 1H), 2.90 (dt, J = 13.2, 7.1 Hz, 2H), 2.54- 2.35 (m, 3H), 2.28 - 2.16 (m, 1H), 2.03 - 1.91 (m, 1H), 1.75 (dd, J = 24.3, 9.9 Hz, 2H), 1.49 - 1.38 (m, 2H), 1.37 - 1.25 (m, 2H), 0.12 (s, 1H).	392.1	E	
I-1717		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.60 (s, 1H), 8.35 (d, J = 8.7 Hz, 1H), 7.40 (s, 1H), 7.38 -7.32 (m, 1H), 7.32 - 7.18 (m, 2H), 5.10 (d, J = 54.1 Hz, 1H), 4.64 (t, J = 9.3 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.73 - 2.59 (m, 2H), 2.24 (t, J = 11.1 Hz, 1H), 2.15 (d, J = 9.2 Hz, 1H), 2.05-1.94 (m, 1H), 1.94 - 1.79 (m, 2H), 1.76 (t, J = 13.6 Hz, 1H), 1.47 (d, J = 8.4 Hz, 1H), 1.43 -1.31 (m, 2H), 1.24 (s, 1H).	394.25	D	
I-1718		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.36 (d, J = 8.7 Hz, 1H), 7.50- 7.03 (m, 4H), 5.27-4.98 (m, 1H), 4.63 (t, J = 9.3 Hz, 1H), 3.13 (p, J = 9.2 Hz, 1H), 2.66 (ddd, J = 20.2, 11.9, 9.0 Hz, 2H), 2.46 (d, J = 8.8 Hz, 1H), 2.24 (ddd, J = 12.5, 9.0, 4.1 Hz, 1H), 2.15 (ddd, J = 12.7, 9.0, 4.0 Hz, 1H), 2.07-1.86 (m, 2H), 1.71 (ddt, J = 28.9, 14.9, 7.7 Hz, 1H), 1.59- 1.36 (m, 2H), 1.29-1.12 (m, 1H).	392.15	E	

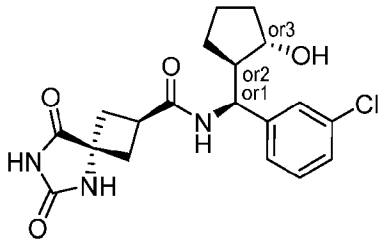
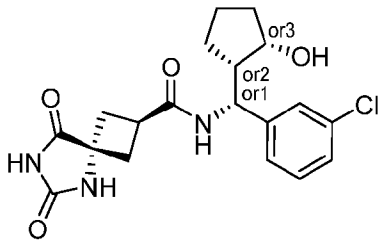
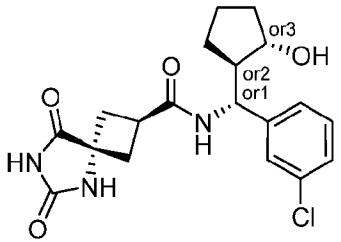
I-1719		(400 MHz, Methanol-d4) 7.40- 7.37 (m, 1H), 7.37 - 7.23 (m, 3H), 5.08 (dd, J = 54.0, 4.7 Hz, 1H), 4.66 (d, J = 10.3 Hz, 1H), 3.27 -3.16 (m, 1H), 2.94 - 2.83 (m, 2H), 2.63 (ddd, J = 17.9, 10.6, 7.6 Hz, 1H), 2.45 (dddd, J = 31.4, 13.0, 9.8, 3.6 Hz, 2H), 2.13-1.98 (m, 2H), 1.98 - 1.77 (m, 1H), 1.69 - 1.59 (m, 1H), 1.57 - 1.45 (m, 1H), 1.41 - 1.32 (m, 1H), 1.31 (s, 1H), 0.91 (d, J = 9.3 Hz, 1H).	394.25	E	
I-1720		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.63 (s, 1H), 8.26 - 8.17 (m, 1H), 7.36 (dd, J = 8.5, 7.0 Hz, 1H), 5.10 (s, 1H), 3.84 (s, 3H), 3.26 (q, J = 9.1 Hz, 1H), 2.67 (dd, J = 12.0, 9.1 Hz, 1H), 2.59 (dd, J = 12.1, 9.0 Hz, 1H), 2.29 - 2.12 (m, 2H), 0.93 (s, 9H).	430.3	E	
I-1721		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.63 (s, 1H), 8.22 (d, J = 8.7 Hz, 1H), 7.36 (dd, J = 8.5, 7.0 Hz, 1H), 5.09 (d, J = 9.4 Hz, 1H), 3.84 (s, 3H), 3.26 (q, J = 9.1 Hz, 1H), 2.67 (dd, J = 12.0, 9.0 Hz, 1H), 2.61 - 2.55 (m, 1H), 2.29- 2.13 (m, 2H), 0.93 (s, 9H).	430.3	E	
I-1722		(400 MHz, DMSO-d6) 11.28 (s, 1H), 10.55 (s, 1H), 8.60 (s, 1H), 7.91 (d, J = 9.2 Hz, 1H), 7.59-7.25 (m, 2H), 7.11-6.83 (m, 2H), 5.69 (t, J = 8.6 Hz, 1H), 3.13 (q, J = 9.0 Hz, 1H), 2.71 (t, J = 10.8 Hz, 2H), 2.43-2.06 (m, 3H), 1.51 (d, J = 36.1 Hz, 7H), 1.37-1.15 (m, 1H).	415.2	E	D

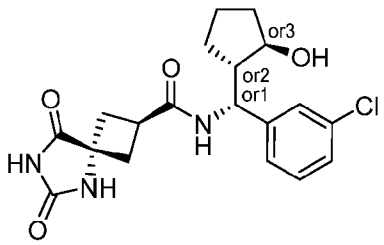
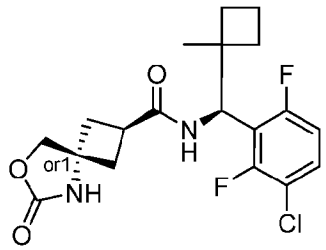
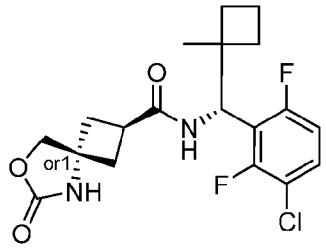
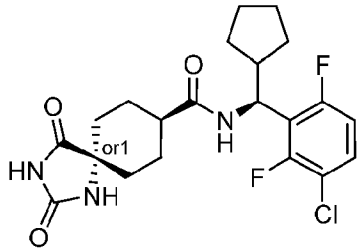
I-1723		(400 MHz, DMSO-d6) 11.28 (s, 1H), 10.55 (s, 1H), 8.60 (s, 1H), 7.91 (d, J = 9.2 Hz, 1H), 7.43 (d, J = 2.5 Hz, 1H), 7.33 (d, J = 7.6 Hz, 1H), 7.11-6.94 (m, 2H), 5.69 (t, J = 8.6 Hz, 1H), 3.14 (t, J = 9.2 Hz, 1H), 2.71 (d, J = 21.2 Hz, 2H), 2.40 (s, 1H), 2.30-2.02 (m, 2H), 1.51 (d, J = 37.4 Hz, 7H), 1.27 (d, J = 17.6 Hz, 1H).	415.15	B	D
I-1724		(400 MHz, DMSO-d6) 7.37 - 7.27 (m, 3H), 7.26 (dt, J = 7.2, 2.1 Hz, 1H), 4.37 (dd, J = 11.8, 8.6 Hz, 1H), 3.00 (p, J = 9.1 Hz, 1H), 2.71 - 2.68 (m, 1H), 2.31 (s, 2H), 2.23 - 2.04 (m, 4H), 1.43 (dd, J = 23.3, 10.2 Hz, 2H), 1.23 (dt, J = 23.2, 12.0 Hz, 5H), 0.88 - 0.79 (m, 1H).	402.15	E	
I-1725		(400 MHz, DMSO-d6) - 8.44 – 8.41 (m, 2H), 8.37 (d, J = 7.4 Hz, 1H), 8.11 (d, J = 6.9 Hz, 1H), 7.66 – 7.62 (m, 1H), 7.52 (td, J = 8.7, 5.6 Hz, 1H), 7.32 (ddd, J = 7.8, 4.8, 0.6 Hz, 1H), 7.11 (td, J = 9.6, 1.4 Hz, 1H), 4.80 (dd, J = 11.0, 7.5 Hz, 1H), 4.05 – 3.95 (m, 1H), 3.42 (d, A of AB, JAB = 14.7 Hz, 1H), 3.39 (d, B of AB, JAB = 14.8 Hz, 1H), 2.83 (app. p, J = 7.5 Hz, 1H), 2.47 – 2.35 (m, 1H), 1.95 – 1.75 (m, 4H), 1.66 – 1.19 (m, 9H), 1.04 – 0.93 (m, 1H).	476.4	B	B
I-1726				A	B

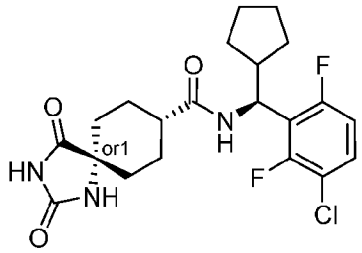
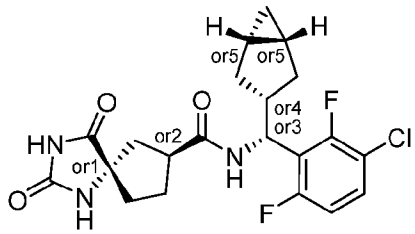
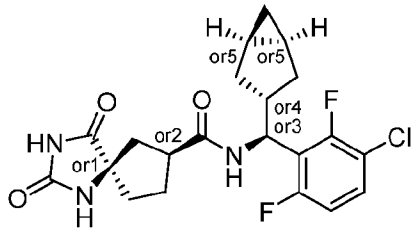
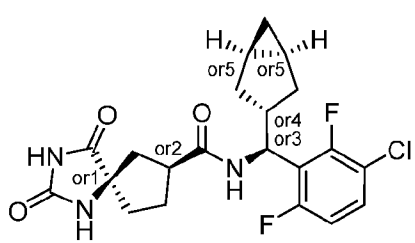
I-1727				B	
I-1728		NMR (400 MHz, d6-DMSO) - 8.25 – 8.15 (m, 1H), 7.56 (app td, J = 8.7, 5.6 Hz, 1H), 7.14 (app t, J = 9.3 Hz, 1H), 5.07 (d, J = 9.0 Hz, 1H), 4.89 (br s, 1H), 4.14 – 4.06 (m, 1H), 2.79 (app p, J = 7.8 Hz, 1H), 2.00 – 1.84 (m, 1H), 1.81 – 1.45 (m, 5H), 0.92 (s, 9H). Mixture of stereoisomers.	346.3	D	
I-1729				D	
I-1730				D	
I-1731		(400 MHz, DMSO-d6)10.06 (s, 1H), 8.32 (d, J = 7.6 Hz, 1H), 7.92 (s, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (t, J = 9.2 Hz, 1H), 4.83 (dd, J = 11.1, 7.5 Hz, 1H), 2.84 (p, J = 8.8 Hz, 1H), 2.62 (s, 2H), 2.44-2.35 (m, 1H), 2.24 (t, J = 10.2 Hz, 1H), 2.12 (q, J = 13.7, 12.2 Hz, 2H), 2.09-2.03 (m, 1H), 1.88 (dd, J = 12.6, 5.4 Hz, 1H), 1.59 (s, 2H), 1.55 (s, 1H), 1.50 (dd, J = 14.8, 8.1 Hz, 1H), 1.38-1.30 (m, 1H), 1.25 (dd, J = 13.3, 7.1 Hz, 1H), 1.00 (s, 1H).	426.15	B	

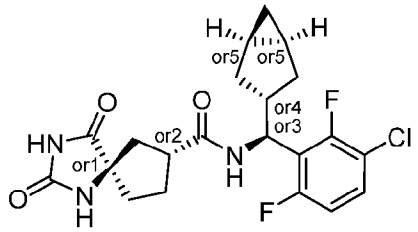
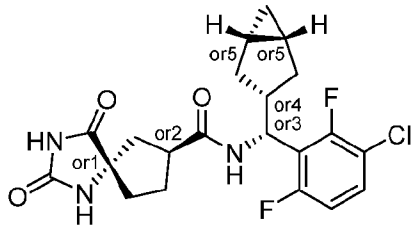
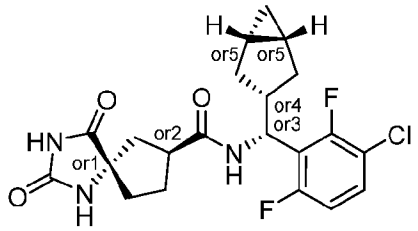
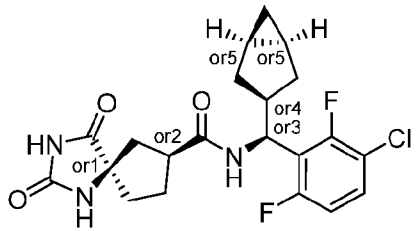
I-1732		(400 MHz, DMSO-d6) 8.01 (d, J = 8.9 Hz, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.14 (s, 1H), 5.10 (d, J − 8.8 Hz, 1H), 3.44 - 3.40 (m, 1H), 3.19 (t, J − 7.0 Hz, 4H), 2.14 - 1.67 (m, 9H), 0.93 (s, 9H).	413.15	C	
I-1733		(400 MIIz, DMSO-d6) 7.98 (d, J = 9.0 IIz, 1II), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.14 (s, 1H), 5.08 (d, J = 8.8 Hz, 1H), 3.18 - 3.15 (m, 1H), 2.40 (t, J = 6.9 Hz, 2H), 2.37 - 2.29 (m, 2H), 2.14 (s, 3H), 2.02 - 1.84 (m, 5H), 1.24 (s, 1H), 0.92 (s, 9H).	385.2	C	
I-1734		(400 MHz, DMSO-d6) 8.13 - 7.98 (m, 1H), 7.68 - 7.49 (m, 1H), 7.34 - 7.25 (m, 2H), 7.25 - 7.17 (m, 3H), 7.15 (s, 1H), 5.09 (d, J = 8.8 Hz, 1H), 4.17 (s, 1H), 4.09 - 3.98 (m, 1H), 3.85 (s, 1H), 3.77 - 3.61 (m, 1H), 3.39 (s, 1H), 3.36 (s, 1H), 3.20 - 2.99 (m, 1H), 2.28 (d, J = 10.8 Hz, 1H), 2.22 (t, J = 9.4 Hz, 2H), 2.11 (s, 1H), 0.92 (s, 9H).	475.25	B	
I-1735		(400 MHz, DMSO-d6) 8.03 (t, J = 8.2 Hz, 1H), 7.57 (tdd, J = 7.7, 5.3, 1.8 Hz, 1H), 7.14 (s, 1H), 5.10 (d, J = 8.7 Hz, 1H), 3.43 (s, 1H), 3.30 - 3.17 (m, 3H), 3.13 (d, J = 2.1 Hz, 1H), 2.16 - 1.73 (m, 9H), 0.93 (s, 9H).	413.1	D	
I-1736		(400 MHz, DMSO-d6) 7.95 (d, J = 9.0 Hz, 1H), 7.56 (td, J − 8.7, 5.5 Hz, 1H), 7.14 (s, 1H), 5.08 (d, J = 8.8 Hz, 1H), 3.11 (t, J = 8.6 Hz, 1H), 2.49 (s, 1H), 2.34 (t, J = 7.2 Hz, 2H), 2.21 (s, 3H), 2.05 (dd, J = 8.5, 2.5 Hz, 2H), 1.96 (d, J = 7.9 Hz, 2H), 1.70 - 1.64 (m, 2H), 1.24 (s, 1H), 0.92 (s, 9H).	385.15	C	

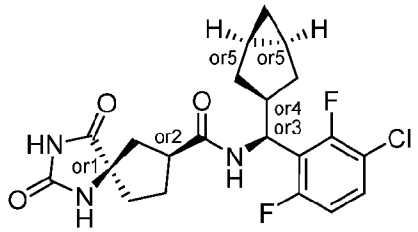
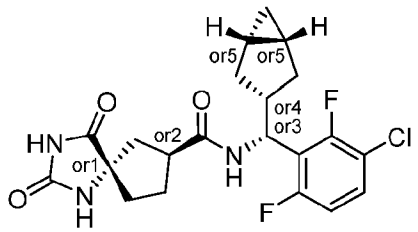
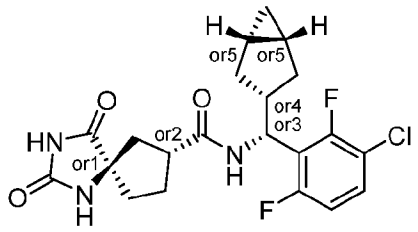
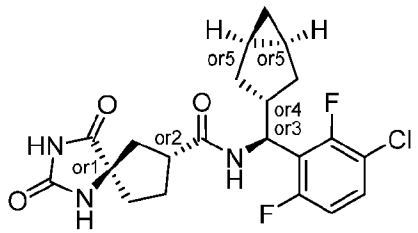
I-1737		(400 MHz, DMSO-d6) 10.03 (s, 1H), 8.44 (d, J = 7.4 Hz, 1H), 8.08-8.03 (m, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 4.83 (dd, J = 11.2, 7.5 Hz, 1H), 3.03 (tt, J = 10.2, 5.5 Hz, 1H), 2.58 (s, 2H), 2.51 (p, J = 1.8 Hz, 1H), 2.44-2.35 (m, 1H), 2.32 (m, 1H), 2.26 (s, 1H), 2.17 (m, 1H), 1.93-1.85 (m, 1H), 1.53 (ddt, J = 31.4, 16.4, 7.9 Hz, 3H), 1.50 (dd, J = 14.8, 8.1 Hz, 1H), 1.38-1.20 (m, 2H), 1.01 (dd, J = 17.1, 9.8 Hz, 1H).	426.2	A	B
I-1738		(400 MHz, DMSO-d6) 10.32 (s, 1H), 8.61 (s, 1H), 8.19 (d, J = 8.8 Hz, 1H), 7.37 (q, J = 3.8, 2.9 Hz, 1H), 7.33 (d, J = 7.7 Hz, 1H), 7.26 (tt, J = 7.7, 1.5 Hz, 2H), 4.73 (t, J = 8.7 Hz, 1H), 4.38 (d, J = 4.3 Hz, 1H), 3.64 - 3.57 (m, 1H), 3.16 (p, J = 9.1 Hz, 1H), 2.66 (td, J = 11.9, 9.1 Hz, 2H), 2.24 (td, J = 8.6, 8.1, 4.4 Hz, 1H), 2.14 (dtd, J = 19.6, 8.5, 8.1, 4.2 Hz, 2H), 1.76 - 1.61 (m, 3H), 1.59 -1.47 (m, 1H), 1.42 (ddd, J = 12.4, 8.1, 4.5 Hz, 1H), 1.37 - 1.31 (m, 1H), 1.24 (s, 1H).	392.05	E	
I-1739		(400 MHz, DMSO-d6) 10.48 (s, 1H), 8.60 (s, 1H), 8.30 (d, J = 8.8 Hz, 1H), 7.41 (s, 1H), 7.37 - 7.29 (m, 2H), 7.26 (dd, J = 6.2, 2.7 Hz, 1H), 4.95 - 4.86 (m, 1H), 4.38 (d, J = 4.0 Hz, 1H), 3.44 (d, J = 3.7 Hz, 1H), 3.08 (q, J = 9.1 Hz, 1H), 2.71 - 2.58 (m, 2H), 2.21 (t, J = 11.3 Hz, 1H), 2.18 - 2.08 (m, 1H), 1.94 (s, 1H), 1.76 (s, 2H), 1.52 (dd, J = 24.1, 9.8 Hz, 4H).	392.05	E	
I-1740		(400 MHz, DMSO-d6) 10.50 (s, 1H), 8.62 (s, 1H), 8.27 (d, J = 8.4 Hz, 1H), 7.38 (t, J = 1.8 Hz, 1H), 7.36 - 7.30 (m, 1H), 7.26 (ddt, J = 7.5, 4.0, 1.5 Hz, 2H), 4.64 - 4.55 (m, 2H), 3.83 (dq, J = 7.8, 4.2 Hz, 1H), 3.13 (q, J = 9.1 Hz, 1H), 2.66 (ddd, J = 29.7, 12.0, 9.1 Hz, 2H), 2.18 (dddd, J = 30.5, 12.9, 8.8, 4.4 Hz, 2H), 2.03 (dt, J = 11.9, 5.9 Hz, 1H), 1.73 (s,	392.05	E	

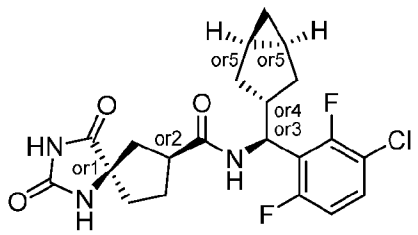
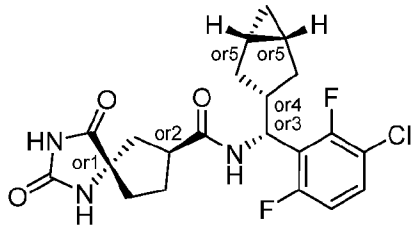
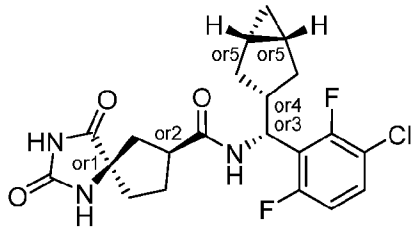
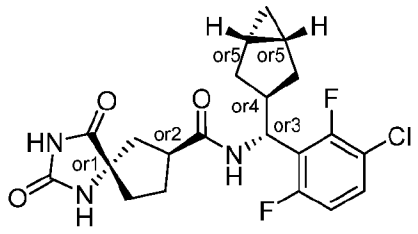
		1H), 1.63 -1.41 (m, 4H), 1.16 (t, J = 7.3 Hz, 1H), 0.98 (td, J = 7.9, 5.1 Hz, 1H).			
I-1741		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.27 (d, J = 8.3 Hz, 1H), 7.37 (d, J = 1.8 Hz, 1H), 7.36 - 7.30 (m, 1H), 7.27 (ddd, J = 7.2, 4.1, 1.9 Hz, 2H), 4.64 - 4.55 (m, 2H), 3.83 (dt, J = 6.5, 3.8 Hz, 1H), 3.14 (t, J = 9.1 Hz, 1H), 2.66 (ddd, J = 29.5, 12.0, 9.1 Hz, 2H), 2.28 - 2.09 (m, 2H), 2.08 -2.00 (m, 1H), 1.73 (dt, J = 12.0, 6.1 Hz, 1H), 1.63 - 1.51 (m, 1H), 1.51 - 1.39 (m, 3H), 1.17 (t, J = 7.2 Hz, 1H), 1.05 - 0.91 (m, 1H).	392.05	E	
I-1742		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.61 (s, 1H), 8.35 (d, J = 7.9 Hz, 1H), 7.39- 7.35 (m, 1H), 7.32 (d, J = 7.5 Hz, 1H), 7.30 - 7.22 (m, 2H), 4.79 -4.70 (m, 1H), 4.46 (d, J = 3.7 Hz, 1H), 4.04 (d, J = 3.7 Hz, 1H), 3.14 (t, J = 9.1 Hz, 1H), 2.76 - 2.66 (m, 1H), 2.66 - 2.57 (m, 1H), 2.28 -2.10 (m, 2H), 1.98 (d, J = 10.7 Hz, 1H), 1.75 - 1.55 (m, 3H), 1.45 (s, 1H), 1.34 (q, J = 10.8, 10.2 Hz, 1H), 1.17 (t, J = 6.9 Hz, 1H), 1.08 - 0.83 (m, 1H).	392.05	D	
I-1743		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.61 (s, 1H), 8.35 (d, J = 8.0 Hz, 1H), 7.36 (s, 1H), 7.32 (d, J = 7.6 Hz, 1H), 7.30 - 7.22 (m, 2H), 4.79 - 4.70 (m, 1H), 4.46 (d, J = 3.7 Hz, 1H), 4.04 (s, 1H), 3.13 (q, J = 9.0 Hz, 1H), 2.76 - 2.66 (m, 1H), 2.66- 2.57 (m, 1H), 2.18 (dq, J = 20.9, 7.2, 4.3 Hz, 2H), 1.98 (d, J = 10.3 Hz, 1H), 1.78 - 1.54 (m, 3H), 1.46 (d, J = 10.3 Hz, 1H), 1.33 (t, J = 9.4 Hz, 1H), 1.16 (t, J = 7.3 Hz, 1H), 1.02 (d, J = 10.1 Hz, 1H).	392.05	E	

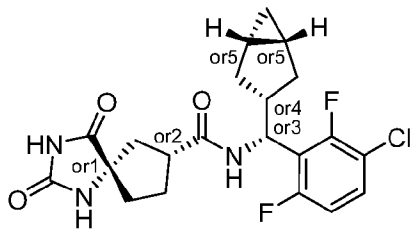
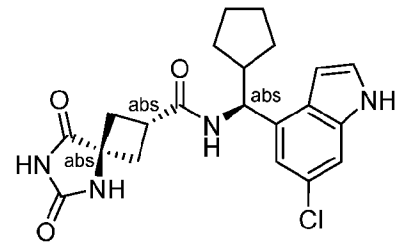
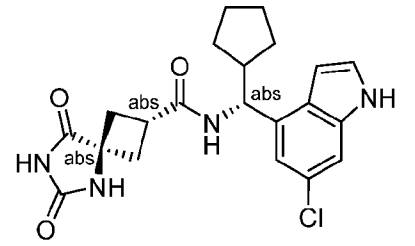
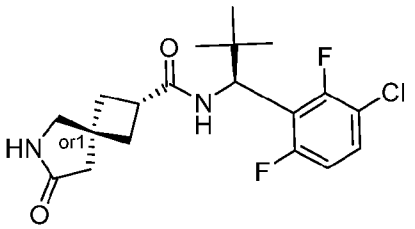
I-1744		(400 MHz, DMSO-d6) 10.45 (s, 1H), 8.60 (s, 1H), 8.30 (d, J = 8.9 Hz, 1H), 7.41 (s, 1H), 7.37 - 7.29 (m, 2H), 7.29 - 7.22 (m, 1H), 4.90 (dd, J = 11.2, 8.9 Hz, 1H), 4.38 (d, J = 3.9 Hz, 1H), 3.44 (d, J = 3.9 Hz, 1H), 3.09 (p, J = 9.1 Hz, 1H), 2.65 (td, J = 12.7, 9.2 Hz, 2H), 2.22 (s, 1H), 2.14 (td, J = 13.2, 6.6 Hz, 1H), 1.94 (d, J = 10.1 Hz, 1H), 1.76 (s, 2H), 1.65 - 1.41 (m, 4H).	392.05	E	
I-1745		(400 MHz, DMSO-d6) 8.14 (d, J = 8.5 Hz, 1H), 8.07 (s, 1H), 7.61 - 7.51 (m, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.21 (d, J = 8.6 Hz, 1H), 4.34 (s, 2H), 2.91 (q, J = 8.8 Hz, 1H), 2.37 (t, J = 10.5 Hz, 1H), 2.32 - 2.20 (m, 3H), 2.03 (dq, J = 29.0, 9.5 Hz, 1H), 1.89 (q, J = 9.2, 8.6 Hz, 1H), 1.68 (d, J = 10.4 Hz, 1H), 1.57 (s, 1H), 1.48 (s, 1H), 1.24 (s, 1H), 1.12 (s, 3H).	399	B	C
I-1746		(400 MHz, DMSO-d6) 8.27 - 7.91 (m, 2H), 7.55 (s, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.21 (d, J = 8.5 Hz, 1H), 4.34 (s, 2H), 2.95 - 2.86 (m, 1H), 2.42 - 2.32 (m, 1H), 2.29 - 2.19 (m, 3H), 2.04 (dq, J = 29.0, 9.6, 9.1 Hz, 1H), 1.89 (q, J = 9.0 Hz, 1H), 1.69 (s, 1H), 1.57 (s, 1H), 1.48 (s, 1H), 1.24 (s, 1H), 1.12 (s, 3H).	399.1	D	
I-1747		(400 MHz, DMSO-d6) 10.43 (s, 1H), 8.30 (d, J = 7.5 Hz, 1H), 7.97 (s, 1H), 7.53 (td, J = 8.6, 5.2 Hz, 1H), 7.13 (t, J = 9.3 Hz, 1H), 4.83 (dd, J = 11.0, 7.6 Hz, 1H), 2.42 (q, J = 8.8 Hz, 1H), 2.28 (s, 1H), 2.10 - 1.73 (m, 5H), 1.72 - 1.15 (m, 10H), 1.02 (q, J = 11.3, 9.5 Hz, 1H).	440.1	B	C

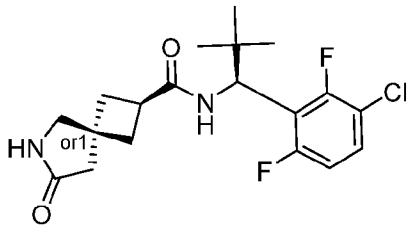
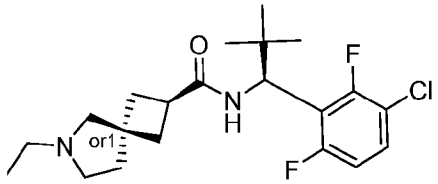
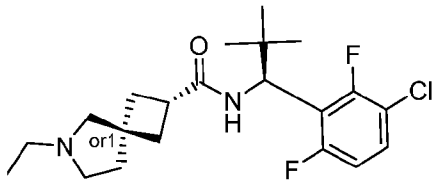
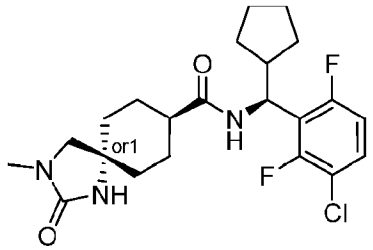
I-1748		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.39 (d, J = 1.5 Hz, 1H), 8.25 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.3, 1.7 Hz, 1H), 4.83 (dd, J = 11.1, 7.5 Hz, 1H), 2.43 (q, J = 8.4 Hz, 1H), 2.21 (d, J = 10.4 Hz, 1H), 1.93 (td, J = 12.4, 7.9 Hz, 1H), 1.80 - 1.41 (m, 12H), 1.41 - 1.21 (m, 2H), 1.02 (dq, J = 15.6, 8.0 Hz, 1H).	440.15	D	
I-1749		(400 MHz, DMSO-d6) 10.62 (s, 1H), 8.45 (d, J = 7.3 Hz, 1H), 8.30 (s, 1H), 7.53 (d, J = 7.4 Hz, 1H), 7.12 (t, J = 9.3 Hz, 1H), 4.81 (t, J = 8.8 Hz, 1H), 2.90 (d, J = 10.4 Hz, 1H), 2.23 - 2.03 (m, 3H), 1.97 - 1.86 (m, 3H), 1.63 (s, 2H), 1.28 (dd, J = 42.4, 10.4 Hz, 5H), 0.29 (d, J = 6.8 Hz, 1H), 0.14 (s, 1H).	438.15	A	B
I-1750		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.51 (d, J = 7.4 Hz, 1H), 7.95 (s, 1H), 7.53 (td, J = 8.6, 5.3 Hz, 1H), 7.12 (t, J = 9.3 Hz, 1H), 4.83 (dd, J = 10.3, 7.4 Hz, 1H), 2.94 (p, J = 8.1 Hz, 1H), 2.26 - 2.05 (m, 2H), 2.05 -1.86 (m, 3H), 1.85 - 1.69 (m, 3H), 1.44 (t, J = 9.9 Hz, 1H), 1.34 (d, J = 8.3 Hz, 2H), 1.30 - 1.15 (m, 2H), 0.29 (td, J = 7.8, 4.7 Hz, 1H), 0.14 (q, J = 4.1 Hz, 1H).	438.15	E	
I-1751		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.49 (d, J = 7.6 Hz, 1H), 7.98 (s, 1H), 7.53 (s, 1H), 7.13 (t, J = 9.4 Hz, 1H), 4.73 (dd, J = 12.0, 7.6 Hz, 1H), 2.94 (t, J = 8.4 Hz, 1H), 2.83 (s, 1H), 2.22 (s, 1H), 2.12 (dd, J = 13.4, 8.2 Hz, 1H), 1.97 - 1.68 (m, 5H), 1.67 - 1.56 (m, 1H), 1.44 -1.26 (m, 3H), 1.24 (s, 1H), 0.96 (dd, J = 13.3, 5.2 Hz, 1H), 0.65 (d, J = 6.7 Hz, 1H), 0.06 (d, J = 4.4 Hz, 1H).	438.15	E	

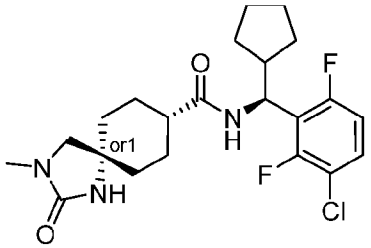
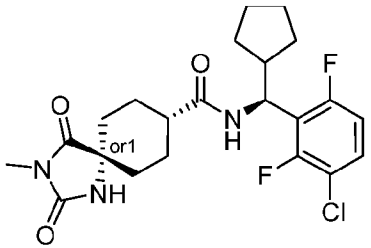
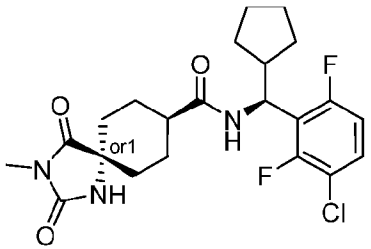
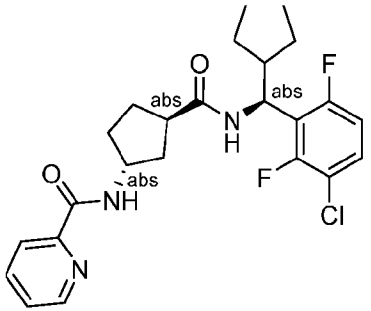
I-1752		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.51 (d, J = 7.3 Hz, 1H), 7.98 (s, 1H), 7.77 - 7.43 (m, 1H), 7.12 (t, J = 9.3 Hz, 1H), 4.82 (t, J = 8.9 Hz, 1H), 3.10 - 2.84 (m, 1H), 2.11 (dq, J = 14.8, 9.0, 6.7 Hz, 3H), 1.89 (td, J = 9.7, 9.2, 4.5 Hz, 3H), 1.73 (t, J = 8.9 Hz, 1H), 1.62 (q, J = 7.4, 6.1 Hz, 1H), 1.45 (d, J = 10.2 Hz, 1H), 1.34 (d, J = 8.2 Hz, 2H), 1.29 - 1.16 (m, 2H), 0.30 (d, J = 11.9 Hz, 1H), 0.14 (d, J = 4.3 Hz, 1H).	438.15	E	
I-1753		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.48 (d, J = 7.6 Hz, 1H), 7.96 (s, 1H), 7.54 (d, J = 7.4 Hz, 1H), 7.12 (t, J = 9.3 Hz, 1H), 4.74 (dd, J = 12.0, 7.6 Hz, 1H), 2.98 - 2.89 (m, 1H), 2.84 (s, 1H), 2.27 - 2.16 (m, 1H), 1.99 (dd, J = 13.7, 7.5 Hz, 2H), 1.93 (d, J = 4.6 Hz, 1H), 1.78 (d, J = 10.1 Hz, 4H), 1.47 - 1.25 (m, 3H), 0.96 (dd, J = 13.5, 5.2 Hz, 1H), 0.66 (s, 1H), 0.06 (d, J = 4.3 Hz, 1H).	438.2	E	
I-1754		(400 MHz, DMSO-d6) 10.62 (s, 1H), 8.45 (d, J = 7.3 Hz, 1H), 8.30 (s, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.28 - 7.03 (m, 1H), 4.81 (dd, J = 10.4, 7.3 Hz, 1H), 2.90 (dq, J = 16.7, 7.9 Hz, 1H), 2.23 - 2.05 (m, 3H), 2.04 - 1.83 (m, 3H), 1.80 (s, 1H), 1.72 - 1.56 (m, 2H), 1.52 -1.39 (m, 1H), 1.38 - 1.30 (m, 2H), 1.30 - 1.17 (m, 2H), 0.38 - 0.24 (m, 1H), 0.14 (q, J = 4.1 Hz, 1H).	438.2	D	
I-1755		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.43 (d, J = 7.6 Hz, 1H), 8.29 (s, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.12 (t, J = 9.3 Hz, 1H), 4.74 (dd, J = 12.1, 7.5 Hz, 1H), 2.99 - 2.79 (m, 2H), 2.29 - 2.17 (m, 1H), 1.99 (dd, J = 13.0, 10.2 Hz, 3H), 1.87 - 1.72 (m, 3H), 1.69 - 1.62 (m, 1H), 1.47 - 1.28 (m, 3H), 1.24 (s, 1H), 0.96 (dd, J = 13.6, 5.4 Hz, 1H), 0.67 (t, J = 6.5 Hz, 1H), 0.07 (q, J = 4.1 Hz, 1H).	438.15	D	

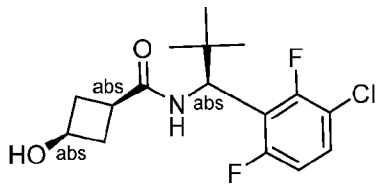
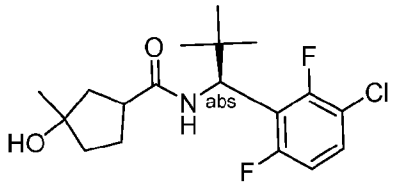
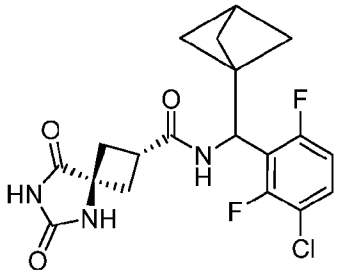
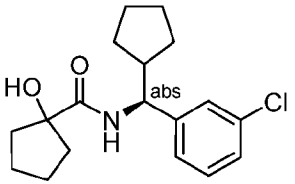
I-1756		(400 MHz, DMSO-d6) 10.63 (s, 1H), 8.43 (d, J = 7.5 Hz, 1H), 8.30 (s, 1H), 7.55 (t, J = 7.2 Hz, 1H), 7.13 (t, J = 9.4 Hz, 1H), 4.72 (dd, J = 12.1, 7.5 Hz, 1H), 2.94 - 2.85 (m, 2H), 2.23 (d, J = 12.6 Hz, 1H), 2.15- 2.05 (m, 1H), 2.03- 1.74 (m, 4H), 1.64 (dd, J = 11.0, 5.5 Hz, 2H), 1.50 - 1.19 (m, 3H), 1.00- 0.92 (m, 1H), 0.66 (s, 1H), 0.06 (d, J = 4.2 Hz, 1H).	438.15	D	
I-1757		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.50 (d, J = 7.4 Hz, 1H), 7.98 (s, 1H), 7.52 (s, 1H), 7.12 (t, J = 9.5 Hz, 1H), 4.82 (t, J = 8.9 Hz, 1H), 2.99 - 2.90 (m, 1H), 2.18- 2.05 (m, 3H), 1.89 (s, 3H), 1.73 (t, J = 8.9 Hz, 1H), 1.65 - 1.59 (m, 1H), 1.44 (s, 1H), 1.34 (d, J = 8.3 Hz, 2H), 1.29 - 1.19 (m, 2H), 0.28 (d, J = 4.9 Hz, 1H), 0.14 (d, J = 4.4 Hz, 1H).	438.15	B	B
I-1758		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.49 (d, J = 7.5 Hz, 1H), 7.99 (s, 1H), 7.54 (td, J = 8.6, 5.4 Hz, 1H), 7.13 (t, J = 9.6 Hz, 1H), 4.73 (dd, J = 12.1, 7.5 Hz, 1H), 2.94 (p, J = 8.4 Hz, 1H), 2.83 (s, 1H), 2.27 - 2.16 (m, 1H), 2.12 (dd, J = 13.3, 8.2 Hz, 1H), 2.02 - 1.84 (m, 3H), 1.83 - 1.68 (m, 2H), 1.67 -1.55 (m, 1H), 1.38 (dd, J = 13.8, 5.1 Hz, 1H), 1.32 (s, 1H), 1.25 (d, J = 8.3 Hz, 1H), 0.96 (dd, J = 13.6, 5.3 Hz, 1H), 0.70 -0.60 (m, 1H), 0.10- 0.03 (m, 1H).	438.1	B	C
I-1759		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.51 (d, J = 7.4 Hz, 1H), 7.95 (s, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.12 (t, J = 9.4 Hz, 1H), 4.88 - 4.79 (m, 1H), 2.94 (p, J = 8.4 Hz, 1H), 2.24 - 2.06 (m, 2H), 2.05 - 1.85 (m, 3H), 1.84 - 1.70 (m, 3H), 1.50- 1.39 (m, 1H), 1.37 - 1.31 (m, 2H), 1.29- 1.19 (m, 2H), 0.29 (q, J = 7.8 Hz, 1H), 0.14 (q, J = 4.1 Hz, 1H).	438.2	B	

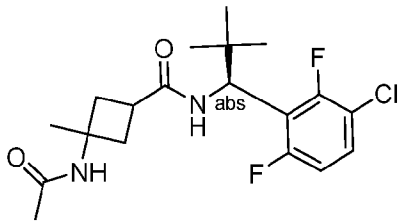
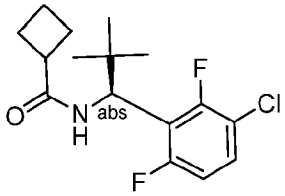
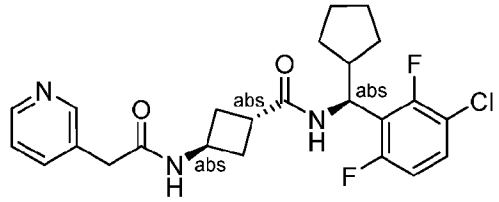
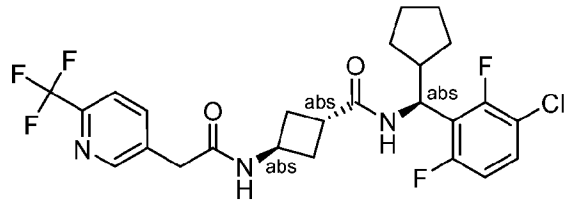
I-1760		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.45 (d, J = 7.4 Hz, 1H), 8.30 (s, 1H), 7.52 (td, J = 8.6, 5.4 Hz, 1H), 7.11 (t, J = 9.1 Hz, 1H), 4.82 (dd, J = 10.4, 7.3 Hz, 1H), 2.89 (t, J = 9.0 Hz, 1H), 2.22 - 2.06 (m, 2H), 1.99 (qd, J = 9.8, 9.4, 4.7 Hz, 3H), 1.78 (dd, J = 13.4, 7.5 Hz, 2H), 1.66 (dd, J = 10.7, 5.1 Hz, 1H), 1.44 (t, J = 10.8 Hz, 1H), 1.33 (d, J = 8.4 Hz, 1H), 1.30 - 1.19 (m, 3H), 0.29 (td, J = 7.8, 4.8 Hz, 1H), 0.15 (q, J = 4.1 Hz, 1H).	438.15	A	B
I-1761		(400 MHz, DMSO-d6) 10.63 (s, 1H), 8.43 (d, J = 7.4 Hz, 1H), 8.30 (s, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 4.72 (dd, J = 12.1, 7.4 Hz, 1H), 3.01- 2.73 (m, 2H), 2.21 (t, J = 5.0 Hz, 1H), 2.10 (dd, J = 13.1, 10.2 Hz, 1H), 2.05 - 1.73 (m, 4H), 1.64 (dt, J = 9.5, 4.4 Hz, 2H), 1.48-1.19 (m, 3H), 0.96 (dd, J = 13.6, 5.5 Hz, 1H), 0.70 - 0.60 (m, 1H), 0.10- 0.03 (m, 1H).	438.15	B	B
I-1762		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.43 (d, J = 7.5 Hz, 1H), 8.30 (s, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.17 - 7.08 (m, 1H), 4.74 (dd, J = 12.1, 7.5 Hz, 1H), 2.88 (s, 2H), 2.23 (dq, J = 14.5, 7.8, 6.9 Hz, 1H), 2.06 - 1.94 (m, 3H), 1.87 - 1.72 (m, 3H), 1.69 - 1.61 (m, 1H), 1.43 - 1.30 (m, 2H), 1.26 (s, 1H), 1.24 (s, 1H), 0.96 (dd, J = 13.7, 5.4 Hz, 1H), 0.71 - 0.61 (m, 1H), 0.07 (q, J = 4.1 Hz, 1H).	438.1	A	B
I-1763		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.45 (d, J = 7.4 Hz, 1H), 8.30 (s, 1H), 7.52 (td, J = 8.7, 5.5 Hz, 1H), 7.11 (t, J = 9.3 Hz, 1H), 4.97 - 4.72 (m, 1H), 2.89 (t, J = 8.9 Hz, 1H), 2.25 -2.08 (m, 2H), 1.99 (p, J = 9.3 Hz, 3H), 1.78 (dd, J = 12.8, 7.2 Hz, 2H), 1.71 - 1.58 (m, 1H), 1.46 (d, J = 10.4 Hz, 1H), 1.38 - 1.30 (m, 2H), 1.30 - 1.13 (m, 2H), 0.29 (q, J = 7.4 Hz, 1H), 0.15 (d, J = 4.3 Hz, 1H).	438.2	E	

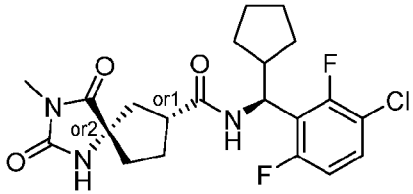
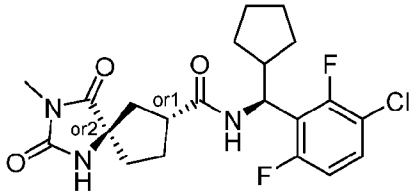
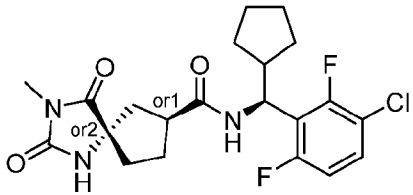
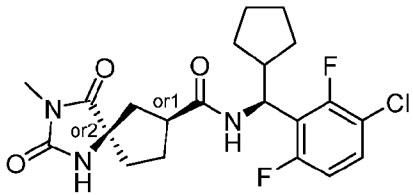
I-1764		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.48 (d, J = 7.5 Hz, 1H), 7.96 (s, 1H), 7.59 - 7.49 (m, 1H), 7.12 (t, J = 9.3 Hz, 1H), 4.75 (dd, J = 12.1, 7.5 Hz, 1H), 2.94 (p, J = 8.2 Hz, 1H), 2.84 (s, 1H), 2.22 (dt, J = 14.2, 8.3 Hz, 1H), 2.06 - 1.87 (m, 3H), 1.87 - 1.71 (m, 4H), 1.39 (dd, J = 13.7, 5.1 Hz, 1H), 1.32 (s, 1H), 1.24 (s, 1H), 0.96 (dd, J = 13.6, 5.4 Hz, 1H), 0.66 (q, J = 7.9 Hz, 1H), 0.10 - 0.03 (m, 1H).	438.1	C	
I-1765		(400 MHz, DMSO-d6) 11.19 (d, J = 2.4 Hz, 1H), 10.55 (s, 1H), 8.60 (s, 1H), 8.29 (d, J = 8.7 Hz, 1H), 7.38 - 7.26 (m, 2H), 6.99 (d, J = 1.8 Hz, 1H), 6.63 (d, J = 2.7 Hz, 1H), 4.97 (t, J = 9.3 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.65 (ddd, J = 24.7, 12.0, 9.3 Hz, 2H), 2.40 (h, J = 8.3 Hz, 1H), 2.22 (ddd, J = 12.4, 8.9, 4.5 Hz, 1H), 2.10 (ddd, J = 12.8, 8.9, 4.4 Hz, 1H), 1.74 (dd, J = 13.3, 6.4 Hz, 1H), 1.52 (m, 3H), 1.48 - 1.32 (m, 2H), 1.27 (dd, J = 13.4, 6.0 Hz, 1H), 1.20 - 1.04 (m, 1H).	415.1	B	D
I-1766		(400 MHz, DMSO-d6) 11.19 (s, 1H), 10.55 (s, 1H), 8.60 (s, 1H), 8.29 (d, J = 8.6 Hz, 1H), 7.39 - 7.24 (m, 2H), 6.99 (d, J = 1.8 Hz, 1H), 6.62 (s, 1H), 4.97 (t, J = 9.3 Hz, 1H), 3.13 (p, J = 9.3 Hz, 1H), 2.73 - 2.57 (m, 2H), 2.40 (q, J = 8.3 Hz, 1H), 2.23 (d, J = 9.1 Hz, 1H), 2.15 - 2.05 (m, 1H), 1.78 - 1.69 (m, 1H), 1.65 - 1.34 (m, 5H), 1.30 - 1.22 (m, 1H), 1.08 (m, 1H).	415.1	E	
I-1767		(400 MHz, DMSO-d6) 8.04 (d, J = 8.9 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.45 (s, 1H), 7.14 (s, 1H), 5.09 (d, J = 8.9 Hz, 1H), 3.18 (t, J = 8.4 Hz, 1H), 3.11 (d, J = 1.9 Hz, 2H), 2.28 (s, 2H), 2.10 (d, J = 8.4 Hz, 2H), 2.02 (q, J = 9.8, 8.5 Hz, 2H), 0.92 (s, 9H).	385.1	B	

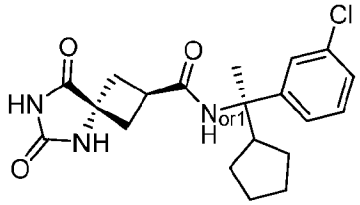
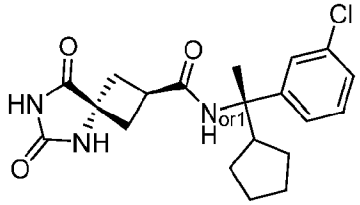
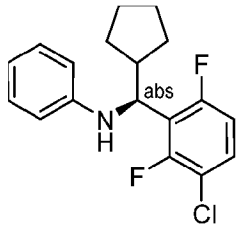
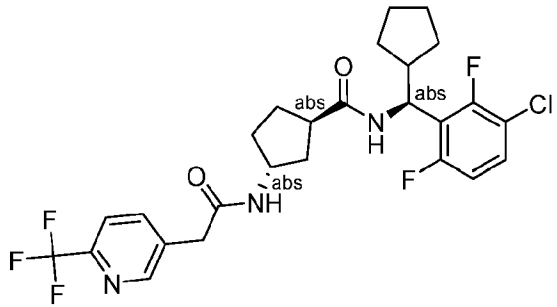
I-1768		(400 MHz, DMSO-d6) 8.01 (d, J = 8.9 Hz, 1H), 7.61 - 7.49 (m, 2H), 7.15 (s, 1H), 5.09 (d, J = 8.9 Hz, 1H),3.30 - 3.26 (m, 2H),3.19 (t, J = 8.5 Hz, 1H), 2.10 (d, J = 9.0 Hz, 4H), 1.98 (d, J = 15.9 Hz, 2H), 0.92 (s, 9H).	385.15	B	
I-1769		(400 MHz, DMSO-d6) 7.97 (d, J = 9.0 Hz, 1H), 7.56 (td, J = 8.6, 5.4 Hz, 1H), 7.14 (s, 1H), 5.09 (d, J = 8.9 Hz, 1H), 3.16 (t, J = 8.4 Hz, 1H), 2.44 (t, J = 6.9 Hz, 2H), 2.37 (d, J = 2.1 Hz, 2H), 2.31 (q, J = 7.2 Hz, 2H), 2.10 (dd, J = 10.7, 8.4 Hz, 1H), 2.03 - 1.89 (m, 3H), 1.85 (t, J = 6.9 Hz, 2H), 0.96 (d, J = 7.2 Hz, 3H), 0.93 (d, J = 5.7 Hz, 9H).	399.15	D	
I-1770		(400 MHz, DMSO-d6) 7.94 (d, J = 9.1 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.14 (s, 1H), 5.09 (d, J = 8.9 Hz, 1H), 3.31 - 3.18 (m, 2H), 3.12 (p, J = 8.5 Hz, 1H), 2.37 (tt, J = 7.2, 3.6 Hz, 4H), 2.00 (ddd, J = 36.5, 8.6, 2.6 Hz, 4H), 1.69 - 1.61 (m, 2H), 1.00 (t, J = 7.2 Hz, 3H), 0.92 (s, 9H).	399.15	C	
I-1771		(400 MHz, DMSO-d6) 8.33 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.6, 5.5 Hz, 1H), 7.17 -7.05 (m, 1H), 6.40 (s, 1H), 4.81 (dd, J = 11.1, 7.6 Hz, 1H), 3.07 (s, 2H), 2.58 (s, 3H), 2.46 -2.35 (m, 1H), 2.16 (s, 1H), 1.91 (q, J = 5.7, 5.2 Hz, 1H), 1.79 -1.42 (m, 8H), 1.45 - 1.31 (m, 4H), 1.31 -1.20 (m, 2H), 1.00 (t, J = 10.1 Hz, 1H).	440.15	C	

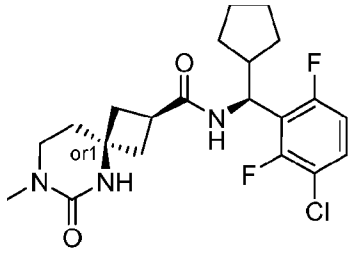
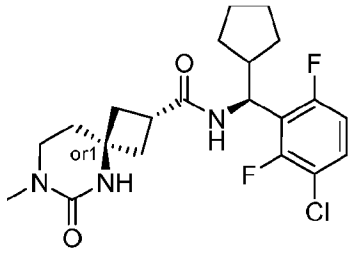
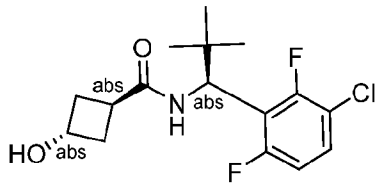
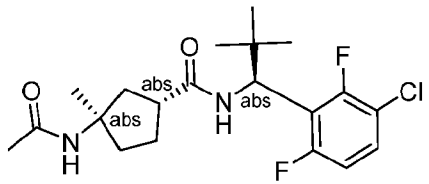
I-1772		(400 MHz, DMSO-d6) 8.11 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 6.95 (s, 1H), 4.82 (dd, J = 11.2, 7.4 Hz, 1H), 3.01 (s, 2H), 2.59 (s, 3H), 2.42 (p, J = 8.2 Hz, 1H), 2.13 (dq, J = 10.7, 6.6, 5.3 Hz, 1H), 2.00- 1.85 (m, 1H), 1.81- 1.43 (m, 10H), 1.43 - 1.21 (m, 4H), 1.02 (dq, J = 14.7, 7.8 Hz, 1H).	440.2	D	
I-1773		(400 MHz, DMSO-d6) 8.37 - 8.19 (m, 2H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (t, J = 9.3 Hz, 1H), 4.83 (dd, J = 11.2, 7.5 Hz, 1H), 2.78 (s, 3H), 2.46 - 2.35 (m, 1H), 2.31 (s, 1H), 1.90 (ddd, J = 35.1, 19.1, 11.2 Hz, 5H), 1.67 (s, 1H), 1.55 (d, J = 22.3 Hz, 4H), 1.50 - 1.09 (m, 5H), 1.03 (d, J = 8.3 Hz, 1H).	454.2	B	C
I-1774		(400 MHz, DMSO-d6) 8.66 (s, 1H), 8.26 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 4.83 (dd, J = 11.2, 7.5 Hz, 1H), 2.81 (s, 3H), 2.42 (p, J = 8.1 Hz, 1H), 2.23 (d, J = 11.3 Hz, 1H), 1.93 (td, J = 12.2, 7.3 Hz, 1H), 1.82 - 1.42 (m, 12H), 1.40 -1.22 (m, 2H), 1.02 (dq, J = 15.7, 8.0 Hz, 1H).	453.2	D	
I-1775		NMR (400 MHz, d6-DMSO) - 8.66 – 8.61 (m, 1H), 8.52 (d, J = 7.8 Hz, 1H), 8.39 (d, J = 7.5 Hz, 1H), 8.06 – 7.94 (m, 2H), 7.62 – 7.57 (m, 1H), 7.53 (app td, J = 8.7, 5.6 Hz, 1H), 7.12 (app td, J = 9.6, 1.4 Hz, 1H), 4.82 (app dt, J = 25.3, 12.7 Hz, 1H), 4.31 (app sxt, J = 6.8 Hz, 1H), 3.00 – 2.84 (m, 1H), 2.48 – 2.34 (m, 1H), 2.01 – 1.78 (m, 5H), 1.69 – 1.42 (m, 6H), 1.40 – 1.21 (m, 2H), 1.07 – 0.94 (m, 1H).	462.4	C	

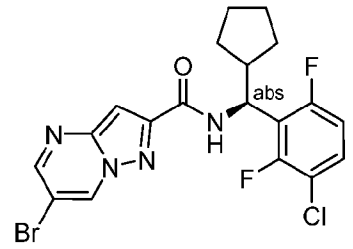
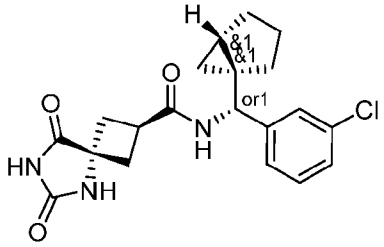
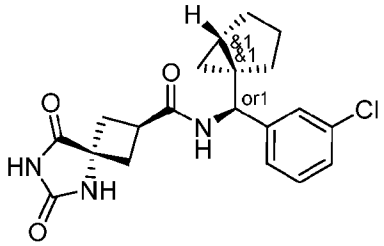
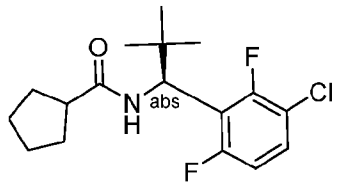
I-1776		NMR (400 MHz, DMSO-d6) - 7.93 (d, J = 9.0 Hz, 1H), 7.52 (td, J = 8.6, 5.6 Hz, 1H), 7.10 (app. br. t, J = 8.7 Hz, 1H), 5.05 (d, J = 8.9 Hz, 1H), 5.01 (overlapping br. s, 1H), 3.92 – 3.81 (m, 1H), 2.65 – 2.54 (m, 1H), 2.27 – 2.11 (m, 2H), 1.86 (dd, J = 18.7, 9.7 Hz, 1H), 1.76 (app. q, J = 9.5 Hz, 1H), 0.87 (s, 9H). Single stereoisomer.	332.2	D	
I-1777		NMR (400 MHz, d6-DMSO) - 8.33 (d, J = 8.8 Hz, 0.5 H), 8.29 (d, J = 8.7 Hz, 0.5 H), 7.57 (app td, J = 8.6, 5.6 Hz, 1H), 7.15 (app t, J = 9.5 Hz, 1H), 5.06 (d, J = 8.8 Hz, 1H), 4.89 (submerged br s, 0.5H), 4.88 (overlapping s, 1H), 2.94 – 2.82 (m, 1H), 1.91 – 1.57 (m, 5H), 1.52 – 1.40 (m, 1H), 1.23 (s, 1.5H), 1.22 (s, 1.5H), 0.93 (s, 9H). Mixture of stereoisomers.	360.4	D	
I-1778		(400 MHz, DMSO-d6) - 10.39 (br. s, 1H), 8.63 (s, 1H), 8.34 (d, J = 7.6 Hz, 1H), 7.54 (td, J = 8.6, 5.6 Hz, 1H), 7.14 (td, J = 9.4, 1.0 Hz, 1H), 5.18 (d, J = 7.6 Hz, 1H), 3.24 (app. p, J = 9.1 Hz, 1H), 2.73 – 2.64 (m, 1H), 2.61 – 2.54 (m, 1H), 2.48 (s, 1H), 2.23 (dd, J = 9.8, 4.7 Hz, 1H), 2.17 (dd, J = 10.1, 4.8 Hz, 1H), 1.72 – 1.64 (m, 6H).	410.3	A	B
I-1779		(400 MHz, DMSO-d6) - 8.09 (d, J = 8.6 Hz, 1H), 7.49 – 7.46 (m, 1H), 7.33 – 7.29 (m, 2H), 7.28 – 7.24 (m, 1H), 5.26 (d, J = 1.7 Hz, 1H), 4.58 – 4.51 (m, 1H), 2.43 – 2.32 (m, 1H), 1.93 – 1.79 (m, 2H), 1.78 – 1.66 (m, 3H), 1.66 – 1.38 (m, 8H), 1.31 – 1.19 (m, 2H), 1.12 – 1.01 (m, 1H).	322.3	E	

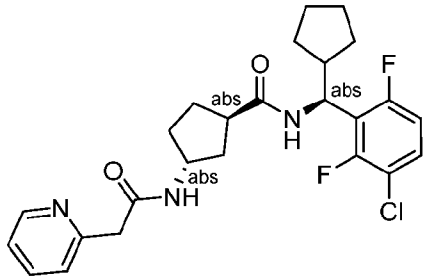
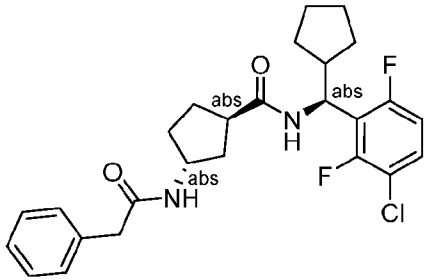
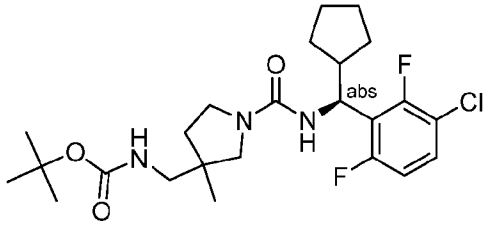
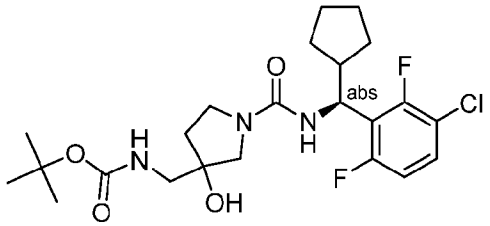
I-1780		NMR (400 MHz, DMSO_d6) - 8.12 (d, J = 9.0 Hz, 1H), 7.93 (s, 1H), 7.56 (td, J = 8.9, 5.6 Hz, 1H), 7.14 (app. br. t, J = 9.8 Hz, 1H), 5.07 (d, J = 8.0 Hz, 1H), 3.02 (p, J = 8.8 Hz, 1H), 2.32 – 2.25 (overlapping m, 1H), 2.19 (app. t, J = 9.6 Hz, 1H), 2.07 – 2.03 (submerged m, 1H), 2.02 – 1.94 (overlapping m, J = 15.0, 7.6 Hz, 1H), 1.72 (s, 3H), 1.36 (s, 3H), 0.92 (s, 9H). 2:1 mixture of 2 diastereomers. Major one described.	387.3	D	
I-1781		NMR (400 MHz, DMSO-d6) - 7.86 (d, J = 8.9 Hz, 1H), 7.51 (app. td, J = 8.7, 5.5 Hz, 1H), 7.09 (app. br. t, J = 8.5 Hz, 1H), 5.06 (d, J = 8.9 Hz, 1H), 3.20 (p, J = 8.2 Hz, 1H), 2.10 – 1.87 (m, 4H), 1.87 – 1.75 (m, 1H), 1.74 – 1.63 (m, 1H), 0.87 (s, 9H).	316.1	D	
I-1782		(400 MHz, DMSO-d6) 8.46-8.30 (m, 4H), 7.64 (dt, J = 7.9, 2.0 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.32 (ddd, J = 7.8, 4.8, 0.9 Hz, 1H), 7.12 (td, J = 9.3, 1.6 Hz, 1H), 4.85 (dd, J = 11.1, 7.5 Hz, 1H), 4.22 (h, J = 7.8 Hz, 1H), 3.40 (s, 2H), 2.95 (td, J = 9.0, 4.4 Hz, 1H), 2.40 (q, J = 8.7 Hz, 1H), 2.29 (ddt, J = 11.8, 7.9, 3.7 Hz, 1H), 2.20-2.07 (m, 2H), 2.02 (dd, J = 19.0, 9.8 Hz, 1H), 1.93-1.83 (m, 1H), 1.66-1.43 (m, 4H), 1.40-1.20 (m, 2H), 1.07 (m, 1H).	462.1	B	B
I-1783		(400 MHz, DMSO-d6) 8.61 (d, J = 2.0 Hz, 1H), 8.45 (d, J = 7.5 Hz, 1H), 8.34 (d, J = 7.5 Hz, 1H), 7.93 (dd, J = 8.2, 2.1 Hz, 1H), 7.84 (d, J = 8.1 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.12 (td, J = 9.3, 1.6 Hz, 1H), 4.85 (dd, J = 11.1, 7.5 Hz, 1H), 4.24 (h, J = 7.8 Hz, 1H), 3.56 (s, 2H), 2.95 (td, J = 9.1, 4.5 Hz, 1H), 2.40 (q, J = 8.7 Hz, 1H), 2.29 (tt, J = 7.9, 3.8 Hz, 1H), 2.14 (dtd, J = 16.9, 9.0, 8.5, 3.0 Hz, 2H), 2.04 (dd, J = 19.1, 9.7 Hz, 1H), 1.89 (q, J = 5.4	530.1	B	C

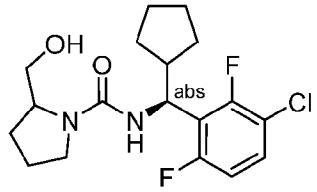
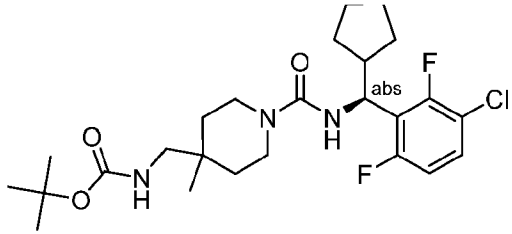
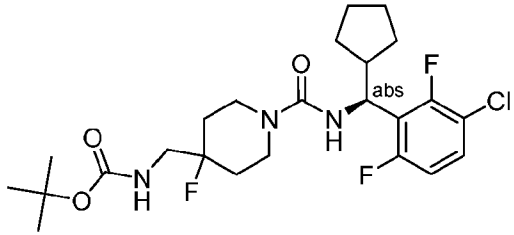
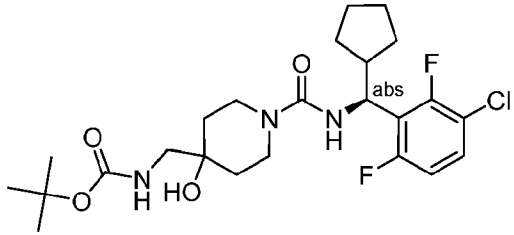
		Hz, 1H), 1.64-1.43 (m, 4H), 1.40-1.20 (m, 2H), 1.00 (dd, J = 12.6, 7.7 Hz, 1H).			
I-1784		(400 MHz, DMSO-d6) 8.58 (s, 1H), 8.52 (d, J = 7.4 Hz, 1H), 7.54 (td, J = 8.7, 5.4 Hz, 1H), 7.13 (t, J = 9.2 Hz, 1H), 4.82 (dd, J = 11.2, 7.4 Hz, 1H), 2.94 (t, J = 8.5 Hz, 1H), 2.83 (s, 3H), 2.43 (q, J = 8.6 Hz, 1H), 2.14 (dd, J = 13.2, 10.3 Hz, 1H), 1.94 (ddd, J = 29.3, 12.4, 8.0 Hz, 4H), 1.77 - 1.41 (m, 6H), 1.41 - 1.11 (m, 2H), 1.07 - 0.94 (m, 1H).	440.15	B	B
I-1785		(400 MHz, DMSO-d6) 8.68 - 8.39 (m, 2H), 7.52 (td, J = 8.7, 5.5 Hz, 1H), 7.17 - 7.07 (m, 1H), 4.83 (dd, J = 11.2, 7.4 Hz, 1H), 2.98 - 2.89 (m, 1H), 2.81 (s, 3H), 2.43 (q, J = 8.7 Hz, 1H), 2.07 - 1.90 (m, 4H), 1.87 - 1.71 (m, 2H), 1.69 - 1.39 (m, 5H), 1.41 - 1.17 (m, 2H), 1.07 - 0.95 (m, 1H).	440.1	B	
I-1786		(400 MHz, DMSO-d6) 8.57 (d, J = 7.5 Hz, 1H), 8.24 (s, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.12 (td, J = 9.3, 1.6 Hz, 1H), 4.84 (dd, J = 11.1, 7.5 Hz, 1H), 3.00 (p, J = 8.2 Hz, 1H), 2.80 (s, 3H), 2.41 (p, J = 8.3 Hz, 1H), 2.02 (dd, J = 13.4, 8.0 Hz, 2H), 1.96 - 1.86 (m, 2H), 1.86 - 1.69 (m, 3H), 1.64 - 1.43 (m, 4H), 1.40 - 1.22 (m, 2H), 1.00 (dq, J = 15.1, 7.9 Hz, 1H).	440.15	D	
I-1787		(400 MHz, DMSO-d6) 8.57 (d, J = 7.4 Hz, 1H), 8.27 (s, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.7 Hz, 1H), 4.82 (dd, J = 11.1, 7.4 Hz, 1H), 3.00 (p, J = 8.5 Hz, 1H), 2.81 (s, 3H), 2.41 (q, J = 8.7 Hz, 1H), 2.17 - 2.06 (m, 1H), 1.91 (tt, J = 13.0, 5.1 Hz, 4H), 1.81 - 1.70 (m, 1H), 1.70 - 1.40 (m, 5H), 1.40 - 1.20 (m, 2H), 1.07 - 0.96 (m, 1H).	440.15	C	

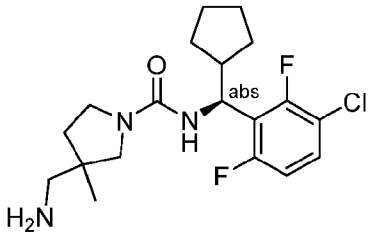
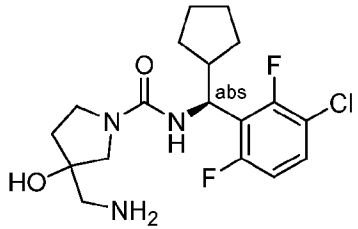
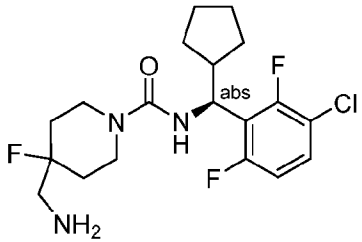
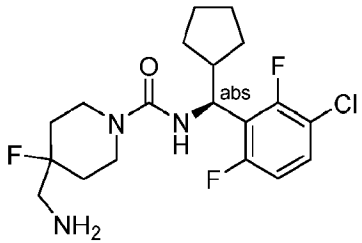
I-1788		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.63 (s, 1H), 7.83 (s, 1H), 7.32 - 7.26 (m, 1H), 7.25 -7.18 (m, 3H), 3.23 (p, J = 9.1 Hz, 1H), 2.63 (ddd, J = 24.9, 12.0, 9.2 Hz, 2H), 2.19 (dddd, J = 17.0, 15.1, 9.0, 4.4 Hz, 3H), 1.64 (s, 3H), 1.61 - 1.36 (m, 5H), 1.35 - 1.23 (m, 2H), 1.22 - 1.09 (m, 1H).	390.05	D	
I-1789		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.63 (s, 1H), 7.83 (s, 1H), 7.30 (td, J = 7.6, 1.1 Hz, 1H), 7.30 - 7.17 (m, 3H), 3.23 (p, J = 9.1 Hz, 1H), 2.63 (ddd, J = 24.9, 11.9, 9.2 Hz, 2H), 2.27- 2.11 (m, 3H), 1.64 (s, 3H), 1.56 (s, 1H), 1.45 (ddd, J = 24.3, 11.0, 6.9 Hz, 4H), 1.35 -1.23 (m, 2H), 1.23 -1.09 (m, 1H).	390.05	E	
I-1790		(400 MHz, DMSO-d6) 7.53 - 7.46 (m, 1H), 7.12 (t, J = 9.4 Hz, 1H), 7.01 (t, J = 7.7 Hz, 2H), 6.54 (d, J = 8.1 Hz, 2H), 6.47 (t, J = 7.3 Hz, 1H), 6.12 (d, J = 8.8 Hz, 1H), 4.42 (t, J = 9.6 Hz, 1H), 2.04 (td, J = 11.8, 7.1 Hz, 1H), 1.82 - 1.31 (m, 7H), 1.08 (p, J = 8.3 Hz, 1H).	322.1	E	
I-1791		(400 MHz, DMSO-d6) 8.63 (d, J = 2.1 Hz, 1H), 8.37 (d, J = 7.5 Hz, 1H), 8.19 (d, J = 6.9 Hz, 1H), 7.94 (dd, J = 8.0, 2.1 Hz, 1H), 7.85 (dd, J = 8.1, 0.8 Hz, 1H), 7.52 (td, J = 8.7, 5.5 Hz, 1H), 7.12 (td, J = 9.4, 1.6 Hz, 1H), 4.81 (dd, J = 11.2, 7.4 Hz, 1H), 4.02 (h, J = 6.4 Hz, 1H), 3.57 (s, 2H), 2.85 (p, J = 7.6 Hz, 1H), 2.42 (q, J = 8.7 Hz, 1H), 1.90 (dt, J = 12.9, 7.2 Hz, 2H), 1.81 (qd, J = 9.2, 7.8, 4.3 Hz, 2H), 1.68 - 1.20 (m, 9H), 1.00 (dd, J = 12.6, 7.8 Hz, 1H).	544.2	B	D

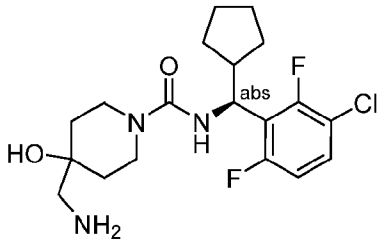
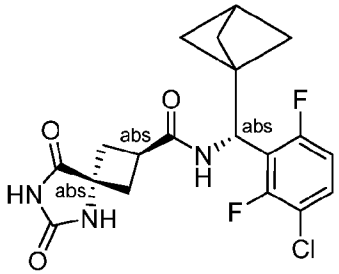
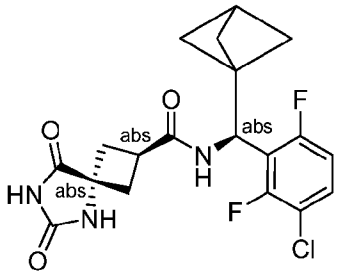
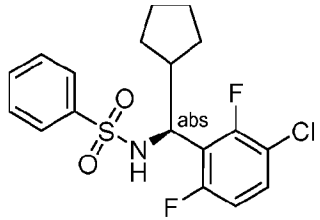
I-1792		(400 MHz, DMSO-d6)8.27 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.12 (t, J = 9.3 Hz, 1H), 6.54 (s, 1H), 4.83 (dd, J = 11.2, 7.5 Hz, 1H), 3.14 (t, J = 5.9 Hz, 2H), 2.72 (s, 3H), 2.41 (d, J = 9.0 Hz, 1H), 2.26 (t, J = 11.0 Hz, 1H), 2.16 (t, J = 10.1 Hz, 1H), 2.11-2.01 (m, 2H), 2.00 (s, 1H), 1.94-1.85 (m, 1H), 1.80 (t, J = 5.9 Hz, 2H), 1.64-1.51 (m, 4H), 1.49 (dd, J = 15.5, 7.5 Hz, 1H), 1.38-1.30 (m, 1H), 1.00 (s, 1H).	426.15	C	
I-1793		(400 MHz, DMSO-d6)8.37 (d, J = 7.4 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.12 (t, J = 9.6 Hz, 1H), 6.70 (s, 1H), 4.82 (dd, J = 11.1, 7.4 Hz, 1H), 3.04 (t, J = 6.0 Hz, 2H), 2.94 (dq, J = 10.0, 4.9 Hz, 1H), 2.71 (s, 3H), 2.41 (d, J = 9.1 Hz, 1H), 2.25 (t, J = 11.0 Hz, 1H), 2.15 (q, J = 14.3, 12.8 Hz, 2H), 2.03 (d, J = 12.6 Hz, 1H), 1.90 (d, J = 8.2 Hz, 1H), 1.74 (dd, J = 7.4, 4.7 Hz, 2H), 1.59 (s, 3H), 1.51 (dt, J = 16.6, 9.3 Hz, 1H), 1.38-1.30 (m, 1H), 1.24 (s, 1H), 1.00 (s, 1H).	426.15	B	B
I-1794		NMR (400 MHz, d6-DMSO) - 8.02 (d, J = 8.8 Hz, 1H), 7.56 (app td, J = 8.7, 5.5 Hz, 1H), 7.19 – 7.08 (m, 1H), 5.09 (d, J = 8.5 Hz, 1H), 4.98 (d, J = 6.3 Hz, 1H), 4.18 (app sext, J = 6.8 Hz, 1H), 3.04 (tt, J = 9.8, 3.6 Hz, 1H), 2.24 (ddt, J = 11.4, 7.4, 3.7 Hz, 1H), 2.10 (ddt, J = 11.1, 7.3, 3.6 Hz, 1H), 2.04 – 1.87 (m, 2H), 0.92 (s, 9H).	332.1	D	
I-1795		NMR (400 MHz, d6-DMSO) - 8.07 (d, J = 8.8 Hz, 1H), 7.68 (br s, J = 8.7 Hz, 1H), 7.56 (app td, J = 8.8, 5.5 Hz, 1H), 7.14 (app t, J = 9.2 Hz, 1H), 5.09 (d, J = 8.8 Hz, 1H), 2.93 (app p, J = 8.8 Hz, 1H), 1.99 – 1.81 (m, 3H), 1.77 – 1.49 (overlapping m, 3H), 1.71 (burried s, 3H), 1.28 (s, 3H), 0.93 (s, 9H).	401.5	D	

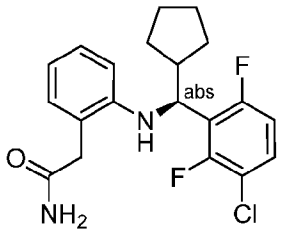
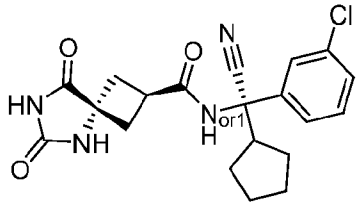
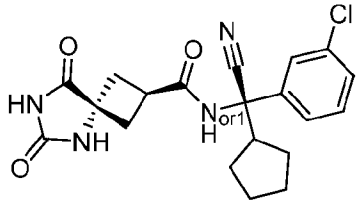
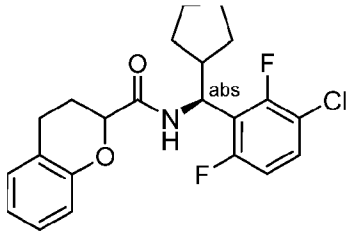
I-1796		NMR (400 MHz, DMSO-d6) - 9.61 (dd, J = 2.2, 0.9 Hz, 1H), 8.72 (d, J = 2.2 Hz, 1H), 8.69 (d, J = 8.1 Hz, 1H), 7.58 (td, J = 8.8, 5.6 Hz, 1H), 7.19 (overlapping d, J = 0.8 Hz, 1H), 7.18 (overlapping td, J = 9.5, 1.5 Hz, 1H), 5.13 (dd, J = 11.1, 8.2 Hz, 1H), 2.73 – 2.57 (m, 1H), 2.04 – 1.91 (m, 1H), 1.71 – 1.47 (m, 5H), 1.46 – 1.23 (m, 2H). Partial formate salt. Some aliphatic impurities.	469.3	E	
I-1797		NMR (400 MHz, d6-DMSO) - 8.64 (s, 1H), 8.34 (d, J = 8.6 Hz, 0.4H, epimer A), 8.22 (d, J = 8.8 Hz, 0.6H, epimer B), 7.38 – 7.31 (m, 2H), 7.30 – 7.23 (m, 2H), 4.91 (d, J = 8.7 Hz, 0.6H, epimer B), 4.83 (d, J = 8.6 Hz, 0.4H, epimer A), 3.30 – 3.13 (m, 1H, overlapping with residual water), 2.76 – 2.61 (m, 2H), 2.31 – 2.12 (m, 2H), 1.77 – 1.27 (m, 6H), 0.55 – 0.46 (m, 1H), 0.43 – 0.35 (m, 1H).	388.3	E	
I-1798		NMR (400 MHz, d6-DMSO) - 8.64 (s, 1H), 8.34 (d, J = 8.7 Hz, 0.4H, epimer A), 8.22 (d, J = 8.8 Hz, 0.6H, epimer B), 7.37 – 7.31 (m, 2H), 7.30 – 7.24 (m, 2H), 4.91 (d, J = 8.7 Hz, 0.6H, epimer B), 4.83 (d, J = 8.6 Hz, 0.4H, epimer A), 3.26 – 3.13 (m, 1H, overlapping with residual water), 2.76 – 2.62 (m, 2H), 2.29 – 2.14 (m, 2H), 1.77 – 1.27 (m, 6H), 0.55 – 0.46 (m, 1H), 0.43 – 0.35 (m, 1H).	388.3	C	
I-1799		(400 MHz, DMSO-d6) - 8.02 (d, J = 8.9 Hz, 1H), 7.55 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (app. br. t, J = 9.4 Hz, 1H), 5.09 (d, J = 8.7 Hz, 1H), 2.81 (app. p, J = 7.8 Hz, 1H), 1.80 – 1.72 (m, 1H), 1.71 – 1.38 (m, 7H), 0.93 (s, 9H).	330.3	D	

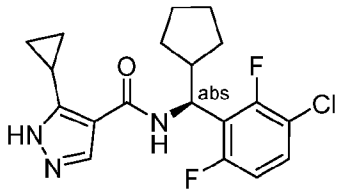
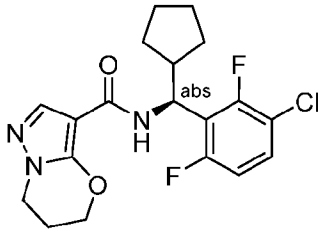
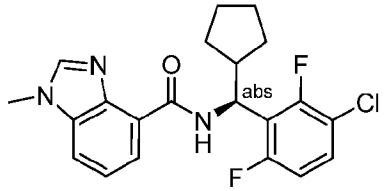
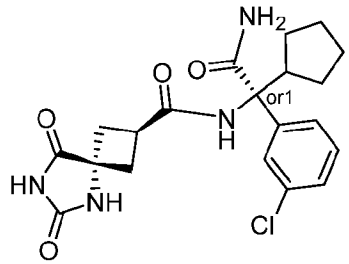
I-1800		NMR (400 MHz, d6-DMSO) - 8.46 (app br d, J = 4.6 Hz, 1H), 8.37 (d, J = 7.5 Hz, 1H), 8.09 (d, J = 6.9 Hz, 1H), 7.71 (app td, J = 8.9, 1.3 Hz, 1H), 7.52 (app td, J = 8.7, 5.6 Hz, 1H), 7.31 (d, J = 7.8 Hz, 1H), 7.26 – 7.19 (m, 1H), 7.16 – 7.07 (m, 1H), 4.81 (dd, J = 11.0, 7.6 Hz, 1H), 4.09 – 3.96 (m, 1H), 3.58 (d, J = 14.7 Hz, 1H), 3.55 (d, J = 14.5 Hz, 1H), 2.91 – 2.77 (m, 1H), 2.46 – 2.35 (m, 1H), 1.97 – 1.72 (m, 4H), 1.70 – 1.20 (m, 9H), 1.06 – 0.92 (m, 1H).	476.4	B	C
I-1801		(400 MHz, DMSO-d6) - 8.36 (d, J = 7.5 Hz, 1H), 8.02 (d, J = 7.0 Hz, 1H), 7.52 (td, J = 8.7, 5.6 Hz, 1H), 7.31 – 7.18 (m, 5H), 7.11 (td, J = 9.6, 1.5 Hz, 1H), 4.81 (dd, J = 11.1, 7.5 Hz, 1H), 4.04 – 3.95 (m, 1H), 3.36 (s, 2H), 2.88 – 2.79 (m, 1H), 2.47 – 2.35 (m, 1H), 1.95 – 1.75 (m, 4H), 1.65 – 1.21 (m, 9H), 1.04 – 0.94 (m, 1H). Contains minor impurities.	475.5	B	C
I-1802			430.35	D	
I-1803			432.15	E	

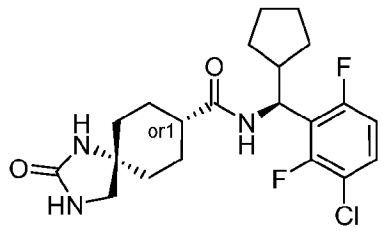
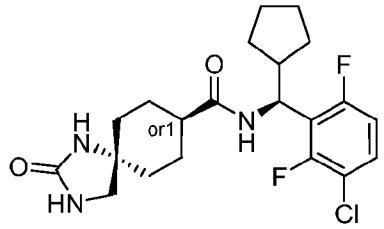
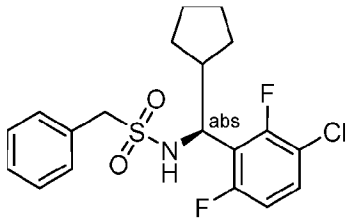
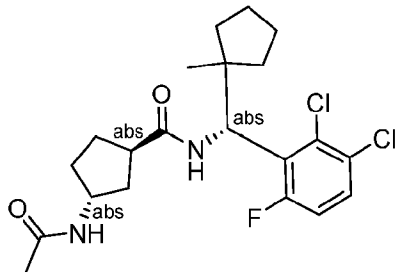
I-1804			373.28	E	
I-1805				D	
I-1806				D	
I-1807				E	

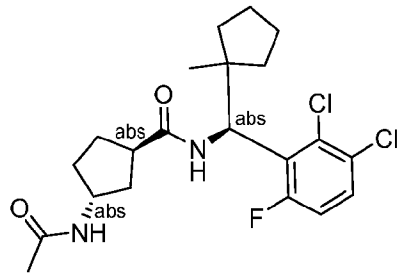
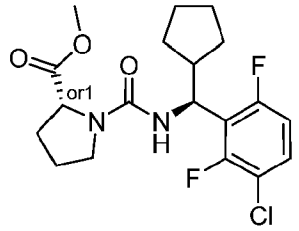
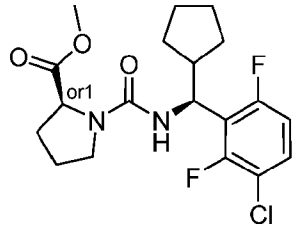
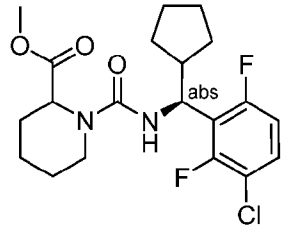
I-1808				E	
I-1809				E	
I-1810				D	
I-1812				C	

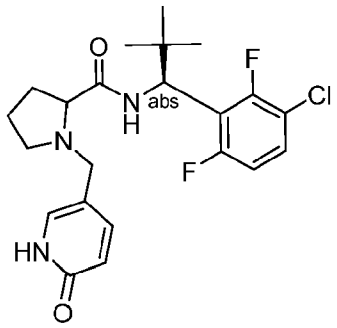
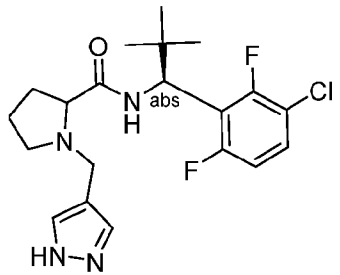
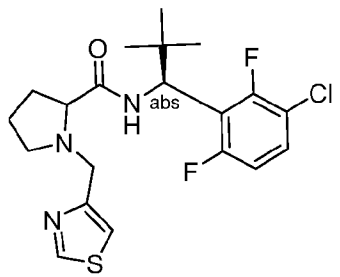
I-1813				D	
I-1814				E	
I-1815				A	B
I-1816		(400 MHz, DMSO-d6) 8.49 (d, J = 7.0 Hz, 1H), 7.61 - 7.54 (m, 2H), 7.49 (t, J = 7.4 Hz, 1H), 7.44 - 7.33 (m, 3H), 6.95 (t, J = 8.9 Hz, 1H), 4.26 (dd, J = 10.9, 7.0 Hz, 1H), 2.37 (h, J = 8.0 Hz, 1H), 1.84 (dq, J = 12.6, 6.3 Hz, 1H), 1.56- 1.33 (m, 4H), 1.23 (dtd, J = 11.9, 7.4, 3.8 Hz, 1H), 1.16- 1.03 (m, 1H), 0.85 (p, J = 7.9 Hz, 1H).	384.05	E	

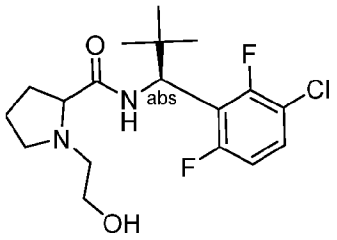
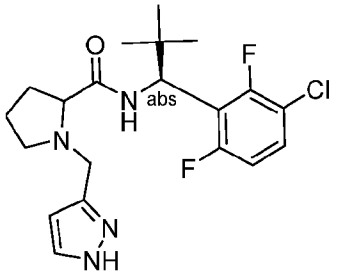
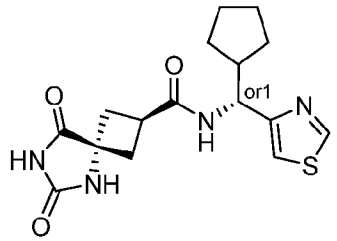
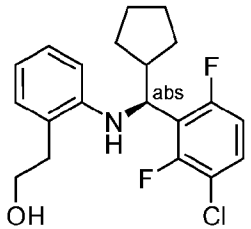
I-1817		(400 MHz, DMSO-d6) 7.69 - 7.63 (m, 1H), 7.52 (td, J = 8.7, 5.6 Hz, 1H), 7.14 (td, J = 9.5, 1.6 Hz, 1H), 7.08 - 7.02 (m, 2H), 6.98 (td, J = 7.7, 1.6 Hz, 1H), 6.54 (td, J = 7.4, 1.1 Hz, 1H), 6.41 (d, J = 8.0 Hz, 1H), 6.29 (d, J = 7.9 Hz, 1H), 4.47 (dd, J = 10.1, 7.9 Hz, 1H), 3.31 (d, J = 3.5 Hz, 2H), 2.62 - 2.53 (m, 1H), 2.13 - 2.04 (m, 1H), 1.69 - 1.48 (m, 4H), 1.40 (tq, J = 13.4, 6.6, 5.4 Hz, 2H), 1.13 (dd, J = 12.4, 8.1 Hz, 1H).	379.15	E	
I-1818		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.99 (s, 1H), 8.64 (s, 1H), 7.50 - 7.38 (m, 2H), 7.35 (dt, J = 4.6, 1.9 Hz, 2H), 3.34 (s, 1H), 2.68 (t, J = 10.9 Hz, 1H), 2.44 (t, J = 8.6 Hz, 1H), 2.22 (dd, J = 12.8, 9.0 Hz, 2H), 2.05 (dd, J = 13.4, 8.0 Hz, 1H), 1.62 - 1.48 (m, 4H), 1.43 - 1.13 (m, 4H).	401.1	E	
I-1819		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.98 (s, 1H), 8.64 (s, 1H), 7.50 - 7.38 (m, 2H), 7.35 (dt, J = 4.3, 1.9 Hz, 2H), 3.24 (t, J = 9.1 Hz, 1H), 2.68 (t, J = 10.9 Hz, 1H), 2.55 (s, 1H), 2.43 (q, J = 8.3 Hz, 1H), 2.27 - 2.17 (m, 2H), 2.15 - 1.98 (m, 1H), 1.71 - 1.38 (m, 5H), 1.30 - 1.13 (m, 2H).	401.1	D	
I-1820		NMR (400 MHz, DMSO-d6) - 8.38 (d, J = 7.9 Hz, 0.5H), 8.21 (d, J = 8.0 Hz, 0.5H), 7.61-7.52 (m, 1H), 7.21 – 7.13 (m, 1H), 7.13 – 7.06 (m, 1H), 7.06 – 7.00 (m, 1H), 6.84 (d, J = 7.5 Hz, 1H), 6.82 – 6.77 (m, 1H), 4.91 (dt, J = 10.2, 8.3 Hz, 1H), 4.64 (dd, J = 5.0, 3.1 Hz, 0.5H), 4.62 (dd, J = 5.5, 3.2 Hz, 0.5H), 2.81 – 2.69 (m, 1H), 2.66 – 2.51 (m, 1H), 2.48 – 2.35 (m, 1H), 2.15 – 2.00 (m, 1H), 2.00 – 1.84 (m, 1.5H), 1.83 – 1.73 (m, 0.5H), 1.70 – 1.42 (m, 4H), 1.41 – 1.27 (m, 1.5H), 1.27 – 1.15 (m, 0.5H), 1.10 – 0.93 (m, 1H). 1:1 ratio of diastereomers.	406.4	E	

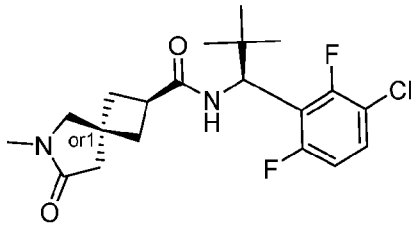
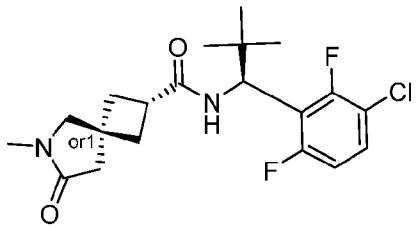
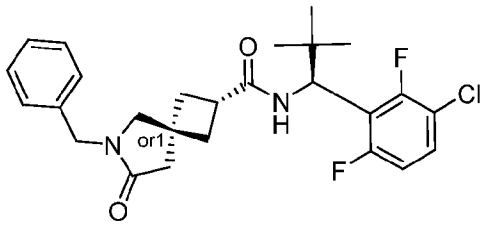
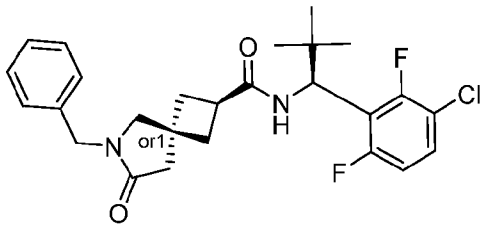
I-1821		NMR (400 MHz, DMSO-d6) - 8.18 (d, J = 7.4 Hz, 1H), 8.14 (br s, 1H), 7.53 (td, J = 8.7, 5.6 Hz, 1H), 7.13 (td, J = 9.6, 1.4 Hz, 1H), 4.99 (dd, J = 11.2, 7.4 Hz, 1H), 2.63 – 2.52 (m, 2H), 2.06 – 1.97 (m, 1H), 1.71 – 1.44 (m, 4H), 1.43 – 1.24 (m, 2H), 1.05 (submerged m, 2H), 1.02 (overlapping dd, J = 6.5, 2.1 Hz, 2H), 0.76 (d, J = 6.0 Hz, 2H). Partial formate salt. Some aliphatic impurities.	378.4	E	
I-1822		NMR (400 MHz, DMSO-d6) - 7.65 (s, 1H), 7.55 (td, J = 8.7, 5.7 Hz, 1H), 7.24 (d, J = 8.4 Hz, 1H), 7.20 – 7.10 (m, 1H), 5.09 (dd, J = 10.4, 8.9 Hz, 1H), 4.51 – 4.41 (m, 2H), 4.07 (t, J = 6.0 Hz, 2H), 2.43 (dd, J = 17.5, 8.0 Hz, 1H), 2.26 – 2.16 (m, 2H), 1.96 – 1.82 (m, 1H), 1.69 – 1.46 (m, 4H), 1.44 – 1.23 (m, 2H), 1.09 - 1.04 (submerged m, 1H). Partial formate salt. Some aliphatic impurities.	396.4	E	
I-1823		NMR (400 MHz, DMSO-d6) - 10.58 (d, J = 8.2 Hz, 1H), 8.52 (s, 1H), 7.84 (t, J = 8.0 Hz, 2H), 7.62 – 7.52 (m, 1H), 7.46 – 7.35 (m, 1H), 7.18 (t, J = 9.3 Hz, 1H), 5.36 – 5.27 (m, 1H), 3.92 (s, 3H), 2.67 – 2.52 (m, 1H), 2.00 – 1.85 (m, 1H), 1.72 – 1.37 (m, 8H). Aliphatic impurities present. ~85% pure.	404.3	E	
I-1824		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.58 (s, 1H), 7.95 (s, 1H), 7.54 (s, 1H), 7.37 (d, J = 7.5 Hz, 1H), 7.27 (t, J = 10.0 Hz, 2H), 7.19 (s, 1H), 7.10 (s, 1H), 2.73 (s, 2H), 2.62 (s, 1H), 2.29 (d, J = 11.1 Hz, 2H), 1.59 (s, 1H), 1.42 (s, 8H).	419.15	E	

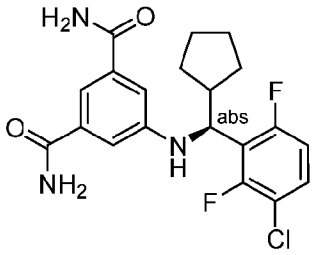
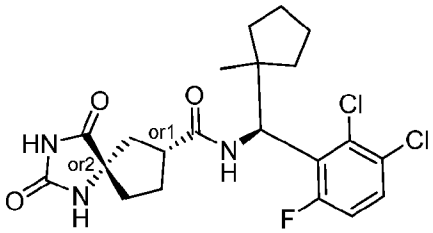
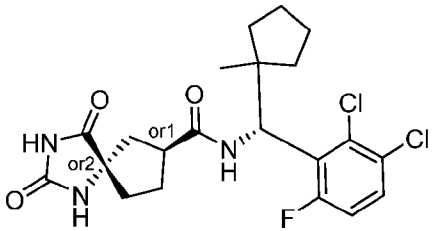
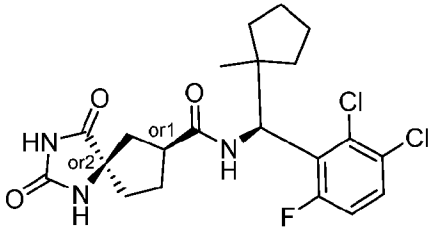
I-1825		(400 MHz, DMSO-d6) 8.11 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 6.80 (s, 1H), 6.07 (s, 1H), 4.82 (dd, J = 11.2, 7.5 Hz, 1H), 2.99 (d, J = 1.2 Hz, 2H), 2.41 (dd, J = 17.4, 8.8 Hz, 1H), 2.11 (td, J = 10.9, 4.3 Hz, 1H), 1.98- 1.85 (m, 1H), 1.76 - 1.41 (m, 10H), 1.39 - 1.19 (m, 4H), 1.02 (dq, J = 15.7, 7.9 Hz, 1H).	426.15	D	
I-1826		(400 MHz, DMSO-d6) 8.33 (d, J = 7.5 Hz, 1H), 7.52 (td, J = 8.8, 5.5 Hz, 1H), 7.12 (t, J = 9.4 Hz, 1H), 6.25 (s, 1H), 6.03 (s, 1H), 4.80 (dd, J = 11.1, 7.5 Hz, 1H), 3.04 (s, 2H), 2.40 (s, 1H), 2.14 (s, 1H), 1.96- 1.85 (m, 1H), 1.65 (d, J = 13.1 Hz, 3H), 1.63 - 1.41 (m, 5H), 1.36 (dd, J = 16.4, 10.5 Hz, 4H), 1.25 (d, J = 11.4 Hz, 2H), 1.01 (d, J = 9.4 Hz, 1H).	424.05	D	
I-1827		(400 MHz, DMSO-d6) 7.91 (d, J = 7.8 Hz, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.30- 7.21 (m, 3H), 7.19 - 7.10 (m, 3H), 4.42 (dd, J = 10.7, 7.7 Hz, 1H), 4.26 - 4.07 (m, 2H), 2.39 (p, J = 8.6 Hz, 1H), 1.92 (dp, J = 12.3, 6.8, 5.8 Hz, 1H), 1.69 -1.34 (m, 5H), 1.32 - 1.19 (m, 1H), 0.92 (dq, J = 12.2, 8.0 Hz, 1H).	422	E	
I-1828		(400 MHz, DMSO-d6) 8.05 (d, J = 8.7 Hz, 1H), 7.75 (d, J = 6.9 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.48 (d, J = 8.6 Hz, 1H), 3.97 (p, J = 6.5 Hz, 1H), 2.96 (p, J = 7.9 Hz, 1H), 1.94 - 1.75 (m, 2H), 1.76 (s, 3H), 1.69 (dt, J = 14.4, 7.5 Hz, 1H), 1.60 (s, 8H), 1.37 (q, J = 7.5, 6.7 Hz, 2H), 1.25 (d, J = 10.8 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	429.05	B	C

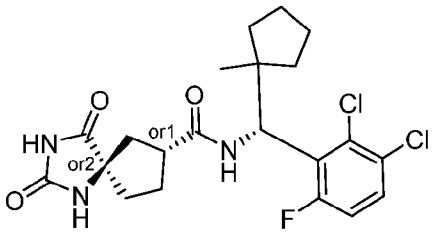
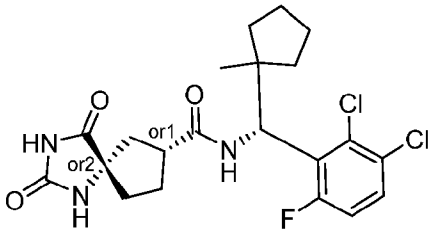
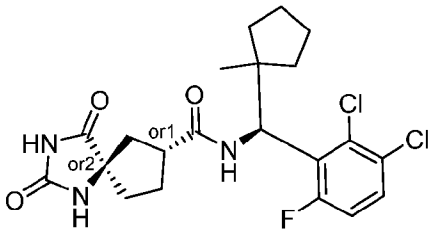
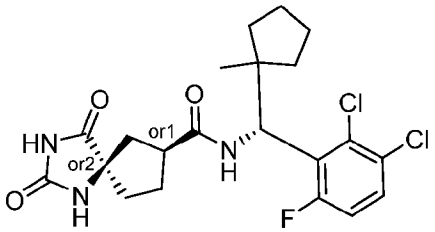
I-1829		(400 MHz, DMSO-d6) 8.04 (d, J = 8.6 Hz, 1H), 7.76 (d, J = 6.9 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.49 (d, J = 8.6 Hz, 1H), 4.00 (h, J = 6.6 Hz, 1H), 2.97 (p, J = 7.7 Hz, 1H), 2.01 - 1.71 (m, 6H), 1.60 (s, 7H), 1.40 (ddd, J = 28.5, 12.1, 6.6 Hz, 3H), 1.25 (d, J = 9.3 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	429.05	A	A
I-1830			401.29	E	
I-1831			401.29	E	
I-1832			415.24	E	

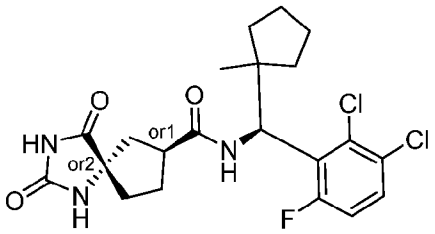
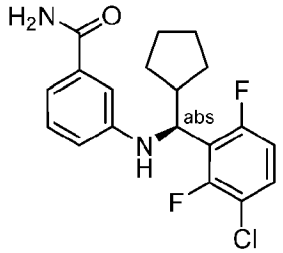
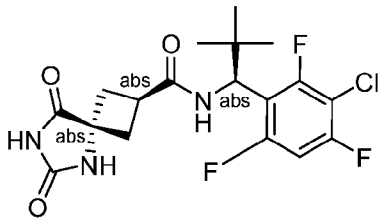
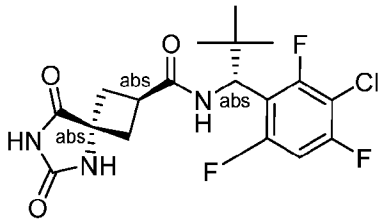
I-1833		NMR (400 MHz, d6-DMSO) - 11.39 (br. s, 2H), 8.29 (br. d, J = 10.3 Hz, 1H), 8.22 (d, J = 10.3 Hz, 1H), 7.68 – 7.57 (m, 2H), 7.42 (dd, J = 9.4, 2.6 Hz, 1H), 7.30 – 7.28 (overlapping m, 1H), 7.28 (overlapping dd, J = 9.2, 2.4 Hz, 1H), 7.26 – 7.16 (m, 3H), 6.34 (d, J = 9.4 Hz, 1H), 6.10 (dd, J = 23.6, 9.3 Hz, 1H), 5.15 (d, J = 10.2 Hz, 1H), 5.10 (d, J = 10.3 Hz, 1H), 3.56 (d, J = 13.1 Hz, 1H), 3.45 – 3.26 (overlapping m, 3H), 3.23 (overlapping dd, J = 9.7, 4.2 Hz, 1H), 3.13 (dd, J = 9.9, 3.9 Hz, 1H), 3.04 – 2.88 (m, 2H), 2.45 – 2.32 (m, 2H), 2.19 – 2.07 (m, 1H), 2.07 – 1.94 (m, 4H), 1.83 – 1.61 (m, 1H), 1.60 – 1.51 (m, 1H), 1.51 – 1.37 (m, 1H), 0.89 (s, 9H), 0.86 (s, 9H).	438.4	E	
I-1834		NMR (400 MHz, d6-DMSO) - 8.49 - 8.41 (m, 2H), 7.66 – 7.58 (m, 2H), 7.54 (s, 2H), 7.45 (s, 2H), 7.26 - 7.17 (m, 2H), 5.15 (d, J = 10.4 Hz, 1H), 5.10 (d, J = 10.4 Hz, 1H), 3.74 (d, J = 13.5 Hz, 1H), 3.60 (dd, J = 13.0, 1.9 Hz, 1H), 3.52 (br. d, J = 13.4 Hz, 1H), 3.40 (d, J = 13.2 Hz, 1H), 3.18 (dd, J = 9.9, 4.3 Hz, 1H), 3.09 (dd, J = 10.2, 4.0 Hz, 1H), 3.04 – 2.93 (m, 2H), 2.43 – 2.31 (m, 2H), 2.14 – 1.92 (m, 2H), 1.81 – 1.59 (m, 4H), 1.58 – 1.38 (m, 2H), 0.90 (s, 9H), 0.87 (s, 9H).	411.3	E	
I-1835		(400 MHz, d6-DMSO) - 9.10 (br s, 1H), 8.90 (d, J = 18.4 Hz, 1H), 8.62 (d, J = 10.2 Hz, 1H), 8.40 (br s, 1H), 7.64 – 7.56 (m, 3H), 7.48 (d, J = 1.9 Hz, 1H), 7.21 (overlapping app t, J = 8.0 Hz, 1H), 7.23 – 7.10 (m, 1H), 5.10 (s, 1H), 5.08 (s, 1H), 3.98 (d, J = 13.6 Hz, 1H), 3.90 – 3.74 (m, 2H), 3.79 (overlapping d, J = 12.1 Hz, 1H), 3.16 – 3.03 (m, 1H), 3.01 – 2.91 (m, 1H), 2.12 – 1.96 (m, 2H), 1.81 – 1.63 (m, 4H), 1.59 – 1.40 (m, 2H), 0.89 (s, 18H).	428.4	E	

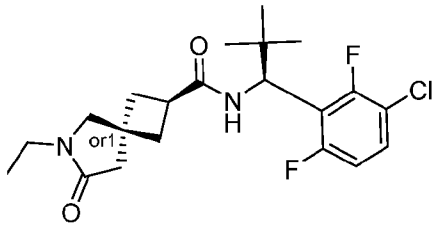
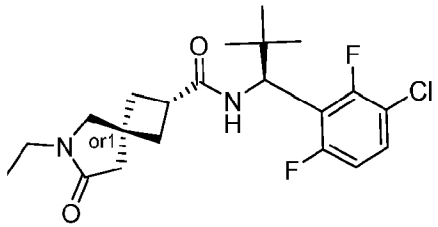
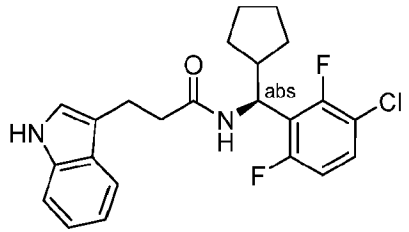
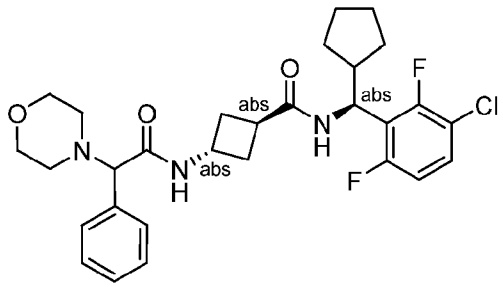
I-1836		NMR (400 MHz, d6-DMSO) - 8.53 (d, J = 9.6 Hz, 1H), 8.40 (d, J = 9.8 Hz, 1H), 7.65 – 7.55 (m, 2H), 7.23 – 7.14 (m, 2H), 5.14 – 5.07 (m, 2H), 3.58 – 3.35 (m, 4H), 3.21 (s, 2H), 3.09 – 3.04 (m, 2H), 2.79 – 2.69 (m, 1H), 2.64 – 2.45 (overlapping m, 5H), 2.43 – 2.27 (m, 2H), 2.13 – 1.89 (m, 2H), 1.83 – 1.56 (m, 4H), 1.54 – 1.39 (m, 2H), 0.93 (s, 9H), 0.90 (s, 9H).	377.3	E	
I-1837		(400 MHz, d6-DMSO) - 8.49 (d, J = 9.8 Hz, 1H), 8.41 (d, J = 10.3 Hz, 1H), 7.67 – 7.56 (m, 3H), 7.47 (d, J = 13.4 Hz, 1H), 7.26 – 7.13 (m, 2H), 6.20 (d, J = 2.1 Hz, 1H), 6.11 (d, J = 1.7 Hz, 1H), 5.13 (d, J = 10.2 Hz, 1H), 5.10 (d, J = 10.4 Hz, 1H), 3.84 (d, J = 13.6 Hz, 1H), 3.72 (dd, J = 13.6, 4.3 Hz, 1H), 3.63 (d, J = 13.5 Hz, 1H), 3.56 (dd, J = 13.6, 6.0 Hz, 1H), 3.27 (d, J = 4.1 Hz, 1H), 3.24 (d, J = 4.4 Hz, 1H), 3.20 (d, J = 9.7 Hz, 1H), 3.05 – 2.94 (m, 2H), 2.48 – 2.37 (m, 2H), 2.13 – 1.91 (m, 2H), 1.80 – 1.58 (m, 4H), 1.58 – 1.38 (m, 2H), 0.91 (s, 9H), 0.88 (s, 9H).	411.5	E	
I-1838		(400 MHz, DMSO-d6) 10.56 (s, 1H), 9.02 (d, J = 2.0 Hz, 1H), 8.61 (d, J = 1.7 Hz, 1H), 8.24 (d, J = 9.0 Hz, 1H), 7.44 (d, J = 2.0 Hz, 1H), 4.92 (t, J = 9.0 Hz, 1H), 3.17 (p, J = 9.1 Hz, 1H), 2.68 (ddd, J = 11.8, 9.1, 2.6 Hz, 2H), 2.40 (h, J = 8.2 Hz, 1H), 2.19 (dddd, J = 33.7, 12.9, 9.1, 4.3 Hz, 2H), 1.70 - 1.59 (m, 1H), 1.59 - 1.24 (m, 6H), 1.16 (h, J = 7.9 Hz, 1H).	349.1	E	
I-1839		(400 MIIz, DMSO-d6) 7.52 (td, J = 8.8, 5.6 IIz, 1H), 7.14 (td, J = 9.5, 1.6 Hz, 1H), 6.97 - 6.91 (m, 2H), 6.50 (td, J = 7.4, 1.1 Hz, 1H), 6.41 (d, J = 7.9 Hz, 1H), 5.34 (d, J = 8.7 Hz, 1H), 4.85 (t, J = 5.0 Hz, 1H), 4.49 (t, J = 9.5 Hz, 1H), 3.59 (dt, J = 7.1, 5.6 Hz, 2H), 2.70 - 2.55 (m, 3H), 2.13 - 2.03 (m, 1H),	366.1	E	

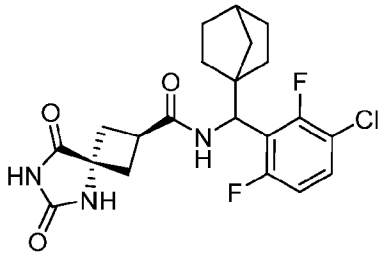
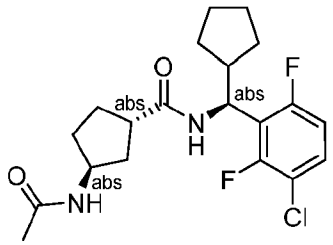
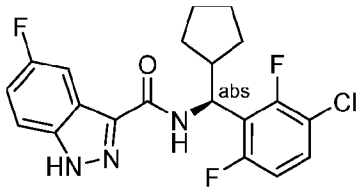
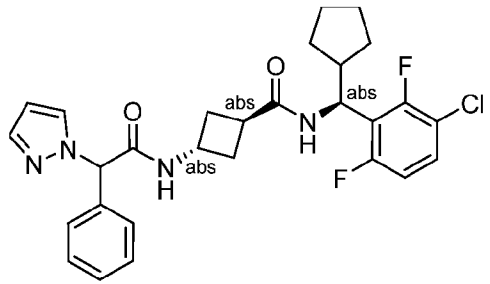
		1.71 - 1.34 (m, 6H), 1.11 (dq, J = 16.2, 8.2, 6.8 Hz, 1H).			
I-1840		(400 MHz, DMSO-d6) 8.05 (d, J = 8.9 Hz, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.14 (s, 1H), 5.09 (d, J = 8.9 Hz, 1H), 3.27 - 3.14 (m, 3H), 2.65 (s, 3H), 2.39 (s, 2H), 2.14 - 2.08 (m, 2H), 2.02 (d, J = 8.5 Hz, 2H), 0.93 (s, 9H).	399.15	C	
I-1841		(400 MHz, DMSO-d6) 8.02 (d, J = 8.9 Hz, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.14 (s, 1H), 5.10 (d, J = 8.8 Hz, 1H), 3.40 (s, 2H),3.21 (p, J = 8.5 Hz, 1H), 2.71 (s, 3H), 2.20 (s, 2H), 2.12 (d, J = 8.5 Hz, 2H), 2.04 (q, J = 9.5, 7.9 Hz, 2H), 0.93 (s, 9H).	399.15	C	
I-1842		(400 MHz, DMSO-d6) 8.04 (d, J = 8.9 Hz, 1H), 7.55 (td, J = 8.6, 5.4 Hz, 1H), 7.37 - 7.29 (m, 2H), 7.29 - 7.23 (m, 1H), 7.18 - 7.06 (m, 3H), 5.06 (d, J = 8.8 Hz, 1H), 4.37 - 4.27 (m, 2H), 3.23 - 3.10 (m, 3H), 2.49 (s, 2H), 2.12 (d, J = 9.9 Hz, 1H), 2.06 (qd, J = 7.7, 3.6 Hz, 2H), 1.95 (t, J = 9.6 Hz, 1H), 0.90 (s, 9H).	475.25	D	
I-1843		(400 MHz, DMSO-d6) 7.97 (d, J = 8.9 Hz, 1H), 7.56 (td, J − 8.7, 5.4 Hz, 1H), 7.36 (dd, J − 8.0, 6.6 Hz, 2H), 7.31 - 7.26 (m, 1H), 7.21 (dd, J = 7.0, 1.7 Hz, 2H), 7.13 (s, 1H), 5.08 (d, J = 8.8 Hz, 1H), 4.36 (d, J = 2.5 Hz, 2H), 3.28 (s, 2H), 3.14 (p, J = 8.5 Hz, 1H), 2.31 (s, 2H), 2.12 (dd, J = 11.0, 8.6 Hz, 1H), 2.07 - 1.90 (m, 3H), 0.90 (s, 9H).	475.2	B	

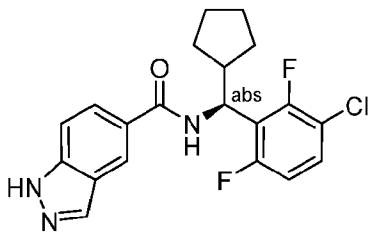
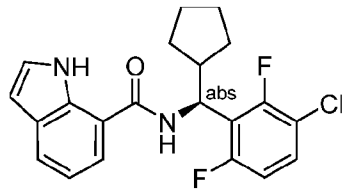
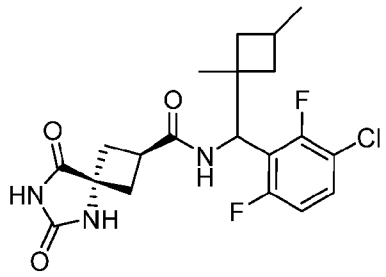
I-1844		(400 MHz, DMSO-d6) 7.69 (s, 2H), 7.50 (td, J = 8.6, 5.5 Hz, 1H), 7.43 (s, 1H), 7.24 (s, 2H), 7.18 (d, J = 1.3 Hz, 2H), 7.13 (t, J = 9.3 Hz, 1H), 6.52 (d, J = 8.8 Hz, 1H), 4.54 (t, J = 9.6 Hz, 1H), 2.56 (d, J = 8.7 Hz, 1H), 2.03 (s, 1H), 1.68 - 1.47 (m, 4H), 1.41 (td, J = 7.6, 3.6 Hz, 2H), 1.10 (dd, J = 12.5, 8.1 Hz, 1H).	408.15	D	
I-1845		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.37 - 8.07 (m, 2H), 7.61 (dd, J = 8.9, 4.9 Hz, 1H), 7.25 (t, J = 9.9 Hz, 1H), 5.49 (d, J = 8.3 Hz, 1H), 3.06 (dq, J = 16.1, 8.4 Hz, 1H), 2.00 (ddt, J = 13.7, 10.1, 5.4 Hz, 3H), 1.90- 1.73 (m, 2H), 1.60 (s, 7H), 1.39 (d, J = 8.3 Hz, 1H), 1.28 (d, J = 8.3 Hz, 1H), 1.05-0.88 (m, 3H).	456.15	A	A
I-1846		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.29 (s, 1H), 8.21 (d, J = 8.5 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.7, 9.0 Hz, 1H), 5.49 (d, J = 8.5 Hz, 1H), 3.04 (d, J = 9.4 Hz, 1H), 2.10 - 1.93 (m, 3H), 1.82 (dd, J = 13.5, 7.6 Hz, 2H), 1.71 - 1.50 (m, 7H), 1.39 (s, 1H), 1.26 (d, J = 14.6 Hz, 1H), 0.98 (d, J = 2.8 Hz, 3H).	456.1	B	D
I-1847		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.29 (d, J = 8.6 Hz, 1H), 7.96 (s, 1H), 7.61 (dd, J = 9.0, 4.9 Hz, 1H), 7.34 -7.16 (m, 1H), 5.50 (d, J = 8.4 Hz, 1H), 3.13 (p, J = 8.2 Hz, 1H), 2.09 - 1.89 (m, 3H), 1.87-1.70 (m, 3H), 1.60 (s, 6H), 1.44 - 1.21 (m, 2H), 0.97 (d, J = 3.0 Hz, 3H).	456.15	A	B

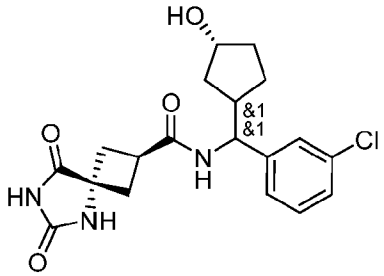
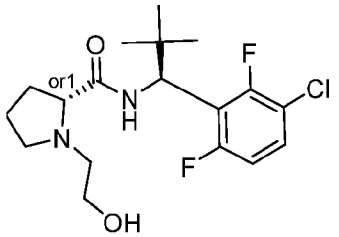
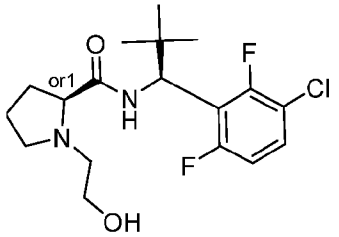
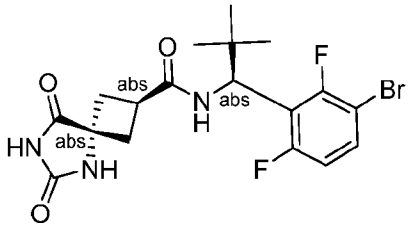
I-1848		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.30 (d, J = 8.6 Hz, 1H), 7.99 - 7.94 (m, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.7, 9.0 Hz, 1H), 5.50 (d, J = 8.4 Hz, 1H), 3.13 (t, J = 8.4 Hz, 1H), 2.09 - 1.89 (m, 3H), 1.88 - 1.70 (m, 3H), 1.60 (s, 6H), 1.37 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	456.1	C	
I-1849		(400 MHz, DMSO-d6) 10.65 - 10.60 (m, 1H), 8.28 (d, J = 1.7 Hz, 1H), 8.21 (d, J = 8.6 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.49 (d, J = 8.4 Hz, 1H), 3.10 - 3.01 (m, 1H), 2.11 (dd, J = 13.1, 10.0 Hz, 1H), 2.04 - 1.80 (m, 3H), 1.62 (d, J = 22.9 Hz, 7H), 1.38 (s, 1H), 1.26 (d, J = 12.8 Hz, 2H), 0.97 (d, J = 2.7 Hz, 3H).	456.05	E	
I-1850		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.27 (d, J = 8.5 Hz, 1H), 7.99 (s, 1H), 7.61 (dd, J = 8.9, 4.9 Hz, 1H), 7.26 (t, J = 9.8 Hz, 1H), 5.48 (d, J = 8.3 Hz, 1H), 3.14 (p, J = 8.7 Hz, 1H), 2.17 - 2.05 (m, 1H), 2.03 - 1.83 (m, 3H), 1.80 - 1.68 (m, 1H), 1.60 (q, J = 5.5, 5.0 Hz, 7H), 1.44 - 1.21 (m, 2H), 0.97 (d, J = 2.9 Hz, 3H).	456.15	A	A
I-1851		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.28 (d, J = 8.5 Hz, 1H), 8.00 (d, J = 1.8 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.48 (d, J = 8.4 Hz, 1H), 3.20 - 3.09 (m, 1H), 2.17 - 2.06 (m, 1H), 1.96 - 1.83 (m, 3H), 1.74 (dd, J = 9.9, 7.1 Hz, 1H), 1.60 (s, 7H), 1.38 (s, 1H), 1.30 - 1.22 (m, 1H), 0.97 (d, J = 2.8 Hz, 3H).	456.05	D	

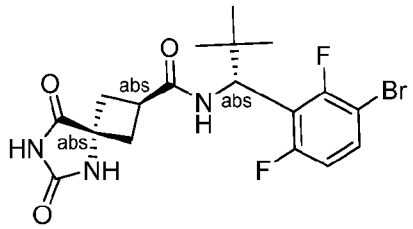
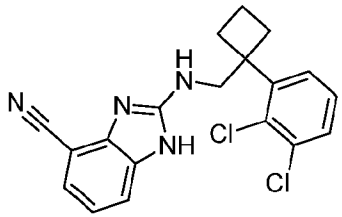
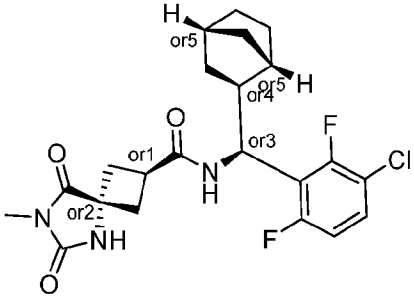
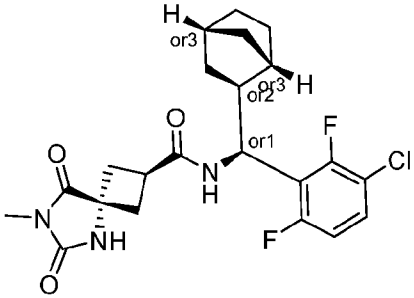
I-1852		(400 MHz, DMSO-d6) 10.62 (s, 1H), 8.34 - 8.14 (m, 2H), 7.62 (dd, J = 9.0, 4.9 Hz, 1H), 7.26 (t, J = 9.9 Hz, 1H), 5.49 (d, J = 8.4 Hz, 1H), 3.06 (p, J = 8.1 Hz, 1H), 2.11 (dd, J = 13.1, 10.0 Hz, 1H), 2.06-1.79 (m, 3H), 1.62 (d, J = 22.9 Hz, 8H), 1.46- 1.20 (m, 2H), 1.04- 0.88 (m, 3H).	456.15	A	A
I-1853		(400 MHz, DMSO-d6) 7.69 (s, 1H), 7.50 (td, J = 8.7, 5.5 Hz, 1H), 7.18 - 7.02 (m, 4H), 6.99 - 6.93 (m, 1H), 6.69 - 6.62 (m, 1H), 6.32 (d, J = 8.8 Hz, 1H), 4.48 (t, J = 9.6 Hz, 1H), 2.58 (s, J = 9.6 Hz, 1H), 2.03 (m, 1H), 1.58 - 1.47 (ddd, J = 35.1, 16.9, 9.4 Hz, 4H), 1.37 (m, 2H), 1.16 - 1.04 (m, 1H).	365.1	D	
I-1854		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.63 (d, J = 1.6 Hz, 1H), 8.27 (d, J = 8.7 Hz, 1H), 7.48 (s, 1H), 5.05 (d, J = 8.4 Hz, 1H), 3.26 (q, J = 9.0 Hz, 1H), 2.72 - 2.55 (m, 2H), 2.29 - 2.13 (m, 2H), 0.94 (s, 9H).	418	A	B
I-1855		(400 MHz, DMSO-d6) 10.60 - 10.57 (m, 1H), 8.64 (d, J = 1.7 Hz, 1H), 8.27 (d, J = 8.7 Hz, 1H), 7.48 (s, 1H), 5.05 (d, J = 8.2 Hz, 1H), 3.26 (q, J = 9.1 Hz, 1H), 2.71 - 2.56 (m, 2H), 2.28 - 2.15 (m, 2H), 0.94 (s, 9H).	418	E	

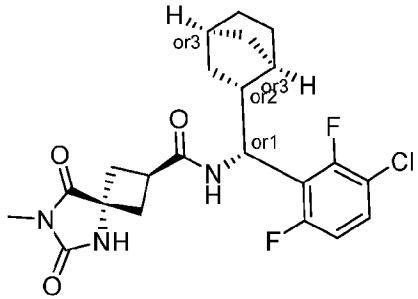
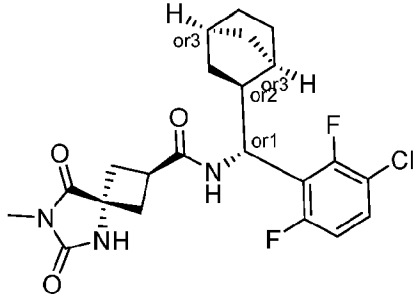
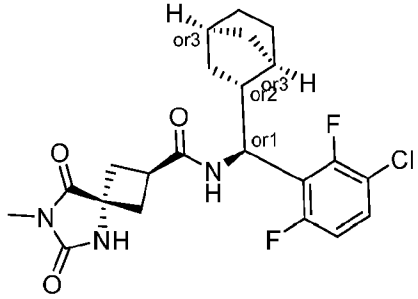
I-1856		(400 MHz, DMSO-d6) 8.04 (d, J = 8.9 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.14 (s, 1H), 5.09 (d, J = 8.8 Hz, 1H), 3.39 (s, 2H), 3.25 - 3.14 (m, 3H), 2.20 (s, 2H), 2.11 (d, J = 8.5 Hz, 2H), 2.02 (dd, J = 8.7, 4.5 Hz, 2H), 1.03 - 0.90 (m, 12H).	413.1	C	
I-1857		(400 MHz, DMSO-d6) 8.06 (d, J = 9.0 Hz, 1H), 7.59 - 7.54 (m, 1H), 7.15 (s, 1H), 5.10 (d, J = 8.7 Hz, 1H), 3.26 - 3.11 (m, 5H), 2.39 (s, 2H), 2.12 (d, J = 8.2 Hz, 2H), 2.02 (d, J = 8.2 Hz, 2H), 1.00 - 0.88 (m, 12H).	413.1	C	
I-1858		(400 MHz, DMSO-d6) - 10.72 (br. s, 1H), 8.46 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.48 (d, J = 8.0 Hz, 1H), 7.30 (dt, J = 8.3, 0.9 Hz, 1H), 7.12 (td, J = 9.6, 1.5 Hz, 1H), 7.06 – 7.01 (m, 2H), 6.93 (ddd, J = 7.9, 7.1, 1.0 Hz, 1H), 4.85 (dd, J = 11.1, 7.6 Hz, 1H), 2.92 – 2.78 (m, 2H), 2.50 (overlapping m, 3H), 1.90 – 1.80 (m, 1H), 1.64 – 1.41 (m, 4H), 1.38 – 1.28 (m, 1H), 1.26 – 1.16 (m, 1H), 1.05 – 0.93 (m, 1H).	417.4	D	
I-1859		NMR (400 MHz, DMSO-d6) - 8.35 (d, J = 8.3 Hz, 1H), 8.32 (d, J = 7.8 Hz, 1H), 7.52 (dddd, J = 8.8, 7.4, 5.6, 1.5 Hz, 1H), 7.42 – 7.36 (m, 2H), 7.35 – 7.24 (m, 3H), 7.11 (tt, J = 9.5, 1.6 Hz, 1H), 4.83 (dd, J = 11.0, 7.6 Hz, 1H), 4.19 (app. sext, J = 7.8 Hz, 1H), 3.68 (s, 1H), 3.57 (app. t, J = 4.4 Hz, 4H), 2.99 – 2.88 (m, 1H), 2.45 – 2.35 (m, 1H), 2.34 – 2.17 (m, 5H), 2.19 – 1.96 (m, 3H), 1.93 – 1.80 (m, 1H), 1.67 – 1.39 (m, 4H), 1.39 – 1.18 (m, 2H), 1.06 – 0.92 (m, 1H).	546.5	B	

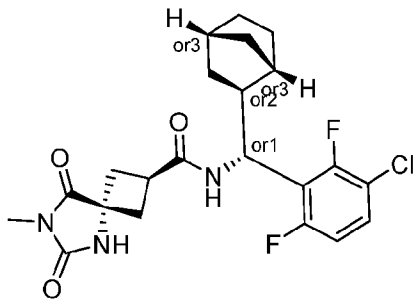
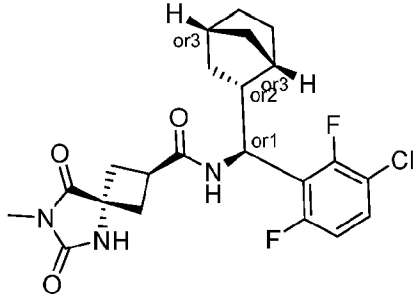
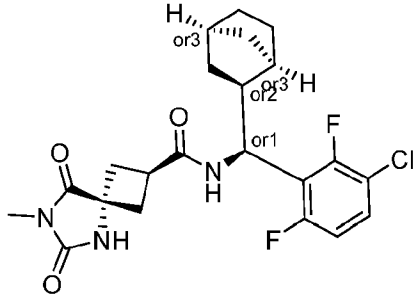
I-1860		NMR (400 MHz, DMSO-d6) - 10.58 (s, 1H), 8.69 (s, 1H), 8.31 (d, J = 8.2 Hz, 1H), 7.53 (app. td, J = 8.9, 5.5 Hz, 1H), 7.16 – 7.09 (m, 1H), 5.39 (d, J = 8.2 Hz, 1H), 3.26 (p, J = 9.0 Hz, 1H), 2.66 (dd, J = 11.7, 9.1 Hz, 1H), 2.57 (dd, J = 11.7, 9.1 Hz, 1H), 2.28 – 2.15 (m, 2H), 2.15 - 2.11 (m, 1H), 1.60 – 1.41 (m, 4H), 1.32 – 1.15 (m, 6H). Minor aliphatic impurities.	438.4	A	A
I-1861		(400 MHz, DMSO-d6) - 8.36 (d, J = 7.4 Hz, 1H), 7.76 (d, J = 6.9 Hz, 1H), 7.52 (td, J = 8.7, 5.6 Hz, 1H), 7.11 (td, J = 9.6, 1.3 Hz, 1H), 4.80 (dd, J = 11.0, 7.5 Hz, 1H), 4.01 – 3.92 (m, 1H), 2.80 (app. p, J = 7.8 Hz, 1H), 2.47 – 2.35 (m, 1H), 1.96 – 1.79 (m, 3H), 1.74 (s, 3H), 1.71 – 1.42 (m, 7H), 1.39 – 1.21 (m, 3H), 1.04 – 0.94 (m, 1H).	399.4	A	B
I-1862		NMR (400 MHz, d6-DMSO) - 13.80 (br. s, 1H), 8.50 (d, J = 8.3 Hz, 1H), 7.73 (dd, J = 9.1, 2.3 Hz, 1H), 7.68 (dd, J = 9.1, 4.2 Hz, 1H), 7.57 (app. td, J = 8.8, 5.6 Hz, 1H), 7.32 (app. td, J = 9.1, 2.5 Hz, 1H), 7.18 (app. td, J = 9.6, 1.4 Hz), 5.17 (dd, J = 11.0, 8.4 Hz, 1H), 2.75 – 2.58 (m, 1H), 2.04 – 1.89 (m, 1H), 1.71 – 1.46 (m, 4H), 1.45 – 1.31 (m, 2H), 1.15 – 1.03 (m, 1H).	408.2	E	
I-1863		NMR (400 MHz, DMSO-d6) - 9.03 (d, J = 7.1 Hz, 1H), 8.39 (d, J = 7.4 Hz, 1H), 7.67 - 7.64 (m, 1H), 7.52 (dd, J = 14.0, 8.4 Hz, 1H), 7.47 - 7.44 (m, 1H), 7.41 – 7.33 (m, 3H), 7.33 - 7.26 (m, 2H), 7.11 (t, J = 9.3 Hz, 1H), 6.26 - 6.23 (m, 1H), 6.19 (s, 1H), 4.83 (dd, J = 10.3, 8.1 Hz, 1H), 4.30 - 4.19 (m, 1H), 3.04 – 2.90 (m, 1H), 2.47 – 2.34 (m, 1H), 2.34 - 2.23 (m, 1H), 2.22 – 1.95 (m, 3H), 1.92 - 1.82 (m, 1H), 1.68 – 1.40 (m, 4H), 1.39 – 1.18 (m, 2H), 1.07 – 0.91 (m, 1H).	527.5	B	

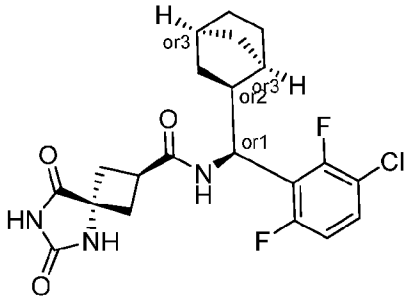
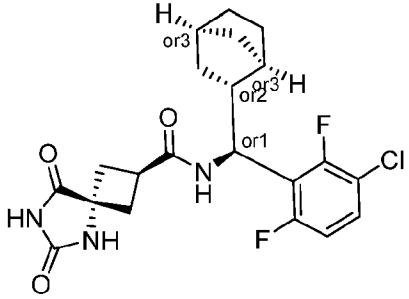
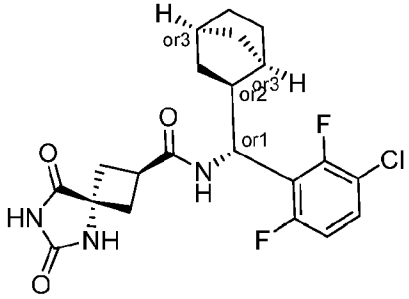
I-1864		NMR (400 MHz, d6-DMSO) - 13.26 (br. s, 1H), 8.90 (d, J = 7.1 Hz, 1H), 8.37 (s, 1H), 8.22 (s, 1H), 7.82 (dd, J = 8.8, 1.3 Hz, 1H), 7.55 (overlapping d, J = 8.7 Hz, 1H), 7.54 (overlapping ddd, J = 8.8, 8.8, 4.4 Hz, 1H), 7.14 (app. t, J = 8.7 Hz, 1H), 5.04 (dd, J = 11.3, 7.2 Hz, 1H), 2.74 – 2.60 (m, 1H), 2.14 – 2.00 (m, 1H), 1.72 – 1.45 (m, 4H), 1.45 – 1.28 (m, 2H), 1.14 – 1.00 (m, 1H).	390.5	D	
I-1865		(400 MHz, DMSO-d6) - 11.13 (br. s, 1H), 8.94 (d, J = 7.0 Hz, 1H), 7.86 (d, J = 7.3 Hz, 1H), 7.73 (d, J = 7.8 Hz, 1H), 7.53 (td, J = 8.7, 5.6 Hz, 1H), 7.28 – 7.24 (m, 1H), 7.13 (td, J = 9.6, 1.1 Hz, 1H), 7.10 – 7.05 (m, 1H), 6.46 – 6.44 (m, 1H), 5.10 (dd, J = 11.3, 7.0 Hz, 1H), 2.77 – 2.65 (m, 1H), 2.15 – 2.05 (m, 1H), 1.71 – 1.46 (m, 4H), 1.46 – 1.31 (m, 2H), 1.15 – 1.04 (m, 1H).	389.4	E	
I-1866		NMR (400 MHz, DMSO-d6) - 10.58 (s, 1H), 8.69 (s, 1H), 8.25 (d, J = 8.4 Hz, 0.5H), 8.22 (d, J = 8.6 Hz, 0.5H), 7.61 – 7.51 (m, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.38 (d, J = 8.4 Hz, 0.5H), 5.15 (d, J = 8.6 Hz, 0.5H), 3.33 – 3.25 (m, 1H), 2.70 – 2.56 (m, 2H), 2.31 – 2.13 (m, 3H), 1.80 – 1.73 (m, 0.5H), 1.71 – 1.61 (m, 1H), 1.61 – 1.47 (m, 1H), 1.28 – 1.16 (m, 1H), 1.11 (s, 1.5H), 1.10 (s, 1.5H), 1.03 (d, J = 5.6 Hz, 1.5H), 0.95 (d, J = 6.4 Hz, 1.5H), 0.83 (td, J = 7.0, 2.4Hz, 0.5H). Mix of 4 compounds but not exactly 1:1:1:1 ratio. ~ 15% mixed impurities.	426.4	B	

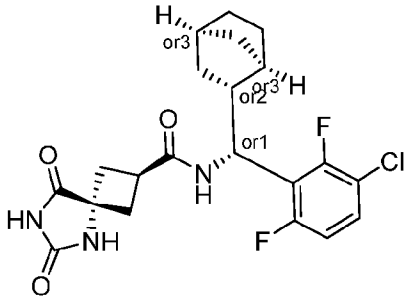
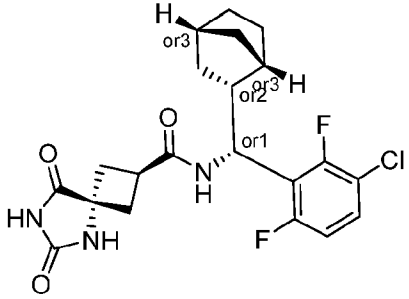
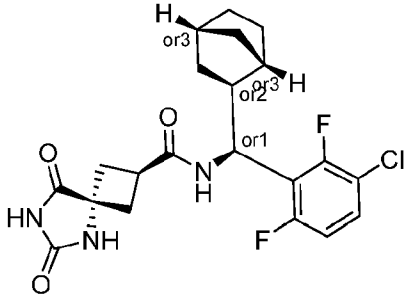
I-1867		NMR (400 MHz, DMSO-d6) - 8.62 (s, 1H), 8.30 (d, J = 8.2 Hz, 0.5H), 8.26 (d, J = 8.9 Hz, 0.5H), 7.36 – 7.30 (m, 2H), 7.28 – 7.22 (m, 2H), 4.66 – 4.58 (m, 1H), 4.08 – 4.03 (m, 1H), 4.02 – 3.97 (m, 1H), 3.19 – 3.06 (overlapping m, 1H), 2.65 (overlapping m, 2H), 2.18 (overlapping m, 3H), 1.88 (ddd, J = 13.8, 8.0, 6.1 Hz, 0.5H), 1.68 – 1.42 (m, 4.5H), 1.39 – 1.17 (m, 2H). Partial DIPEA.Formate salt. Some aliphatic impurities. ~ 1:1 dr (mix of 2 or 4 cmpds with overlapping peaks). 1H not observed.	392.4	D	
I-1868				E	
I-1869				E	
I-1870		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.63 (s, 1H), 8.24 (d, J = 8.8 Hz, 1H), 7.73 - 7.63 (m, 1H), 7.10 (s, 1H), 5.10 (d, J = 8.5 Hz, 1H), 3.27 (q, J = 9.1 Hz, 1H), 2.72 - 2.58 (m, 2H), 2.29 - 2.13 (m, 2H), 0.94 (s, 9H).	444	A	A

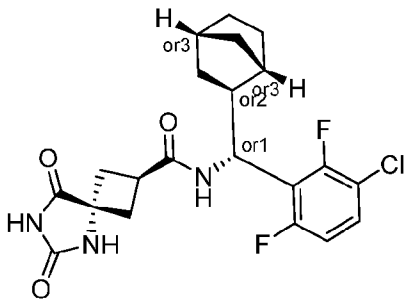
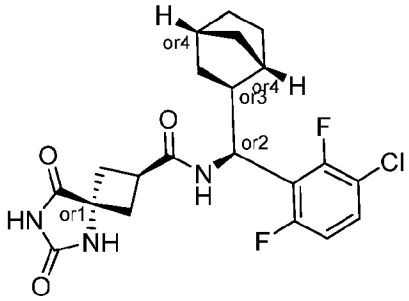
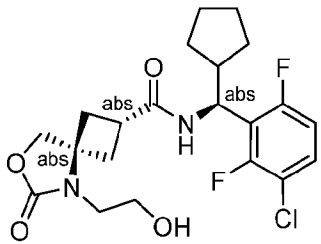
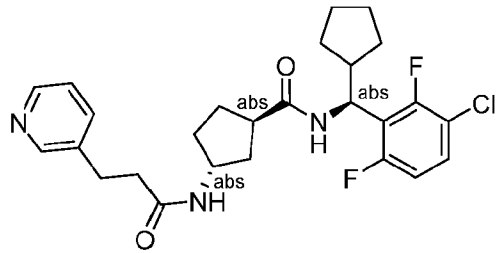
I-1871		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.63 (d, J = 1.5 Hz, 1H), 8.24 (d, J = 8.9 Hz, 1H), 7.68 (td, J = 8.5, 5.7 Hz, 1H), 7.10 (s, 1H), 5.10 (d, J = 8.6 Hz, 1H), 3.27 (q, J = 9.1 Hz, 1H), 2.67 (dd, J = 11.8, 9.3 Hz, 1H), 2.60 (s, 1H), 2.29 - 2.13 (m, 2H), 0.94 (s, 9H).	444	E	
I-1872		(400 MHz, DMSO-d6) 10.98 (s, 1H), 7.44 (d, J = 7.9 Hz, 1H), 7.34-7.17 (m, 3H), 7.12 (dd, J = 7.8, 1.6 Hz, 1H), 7.04 (q, J = 6.3 Hz, 1H), 6.89 (t, J = 7.8 Hz, 1H), 3.92 (d, J = 6.3 Hz, 2H), 2.54-2.32 (m, 4H), 2.16 (q, J = 9.5 Hz, 1H), 1.84-1.72 (m, 1H).	371.05	B	B
I-1873		(400 MHz, DMSO-d6) 8.87 (s, 1H), 8.48 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (t, J = 9.3 Hz, 1H), 4.94 (dd, J = 12.2, 7.4 Hz, 1H), 3.17 (p, J = 9.1 Hz, 1H), 2.78 (s, 3H), 2.63 (dt, J = 17.8, 10.8 Hz, 2H), 2.44 (s, 2H), 2.22 (s, 1H), 2.13 (s, 2H), 1.52 (s, 1H), 1.42 (d, J = 11.4 Hz, 1H), 1.35 (d, J = 11.3 Hz, 3H), 1.29 (d, J = 9.3 Hz, 1H), 1.11 (s, 1H), 0.48 (d, J = 12.2 Hz, 1H).	452.15	D	
I-1874		(400 MHz, DMSO-d6) 8.89 (s, 1H), 8.55 (d, J = 7.2 Hz, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.16 - 7.07 (m, 1H), 4.71 (dd, J = 11.8, 7.3 Hz, 1H), 3.19 (p, J = 8.9 Hz, 1H), 2.78 (s, 3H), 2.69 (dd, J = 12.0, 9.2 Hz, 2H), 2.26 (dd, J = 12.1, 9.2 Hz, 3H), 2.12 (s, 2H), 1.59 - 1.46 (m, 1H), 1.44 (s, 1H), 1.33 - 1.17 (m, 2H), 1.17 - 0.99 (m, 3H), 0.75 (s, 1H).	452.3	E	

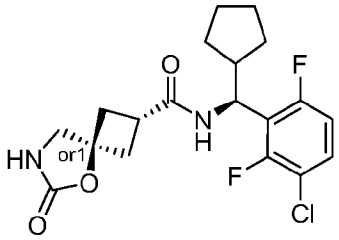
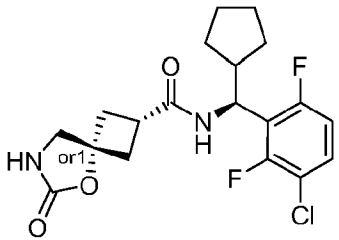
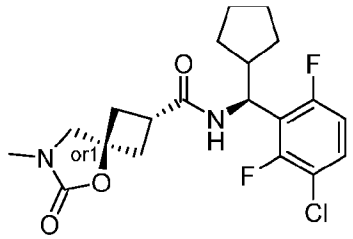
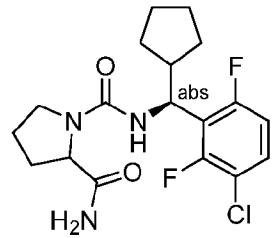
I-1875		(400 MIIz, DMSO-d6) 8.86 (s, 1II), 8.44 (d, J = 7.2 Hz, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.14 (td, J = 9.5, 9.1, 1.6 Hz, 1H), 4.92 (dd, J − 12.0, 7.2 Hz, 1H), 3.14 (p, J = 9.2 Hz, 1H), 2.78 (s, 3H), 2.63 (ddd, J = 18.5, 12.1, 9.1 Hz, 2H), 2.26 - 2.16 (m, 2H), 2.11 (ddd, J = 12.8, 8.8, 4.3 Hz, 1H), 1.87 (t, J = 12.4 Hz, 1H), 1.64 (s, 1H), 1.45 (t, J = 10.4 Hz, 2H), 1.32 (d, J = 9.5 Hz, 1H), 1.22 (t, J = 7.2 Hz, 4H), 0.75 (dd, J = 12.4, 5.2 Hz, 1H).	452.3	E	
I-1876		(400 MHz, DMSO-d6) 8.89 (s, 1H), 8.54 (d, J = 7.3 Hz, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.11 (td, J = 9.4, 1.5 Hz, 1H), 4.71 (dd, J = 11.8, 7.2 Hz, 1H), 3.19 (p, J = 9.1 Hz, 1H), 2.78 (s, 3H), 2.69 (dd, J = 12.1, 9.2 Hz, 1H), 2.65 - 2.56 (m, 1H), 2.28 - 2.21 (m, 1II), 2.19 (s, 2II), 2.17 - 2.08 (m, 1II), 1.59 - 1.53 (m, 2H), 1.46 -1.19 (d, J = 9.9 Hz, 3H), 1.17 - 1.04 (t, J − 10.5 Hz, 3H), 0.75 (s, 1H).	452.15	A	A
I-1877		(400 MHz, DMSO-d6) 8.87 (s, 1H), 8.48 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.13 (t, J = 9.3 IIz, 1II), 4.94 (dd, J = 12.2, 7.4 IIz, 1II), 3.17 (p, J = 9.1 Hz, 1H), 2.78 (s, 3H), 2.63 (ddd, J = 17.8, 12.1, 9.0 Hz, 2H), 2.44 (s, 2H), 2.22 (ddd, J − 12.3, 9.0, 4.1 Hz, 1H), 2.14 (dt, J = 11.5, 4.4 Hz, 2H), 1.51 (t, J = 7.4 Hz, 1H), 1.42 (d, J = 11.4 Hz, 1H), 1.38 - 1.21 (m, 4H), 1.10 (d, J = 10.0 Hz, 1H), 0.51 - 0.44 (m, 1H).	452.35	B	B

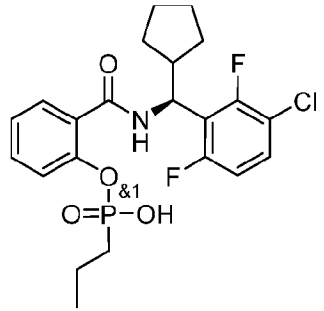
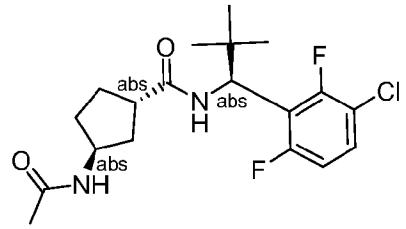
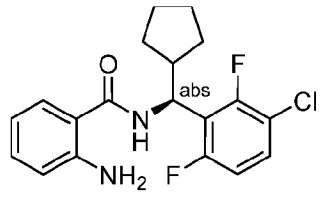
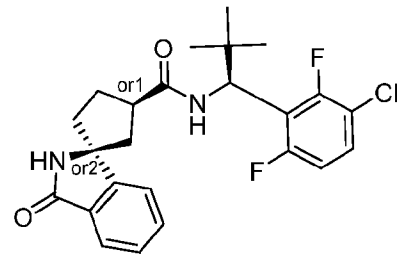
I-1878		(400 MHz, DMSO-d6) 8.86 (s, 1H), 8.36 (d, J = 7.6 Hz, 1H), 7.55 (td, J = 8.6, 5.4 Hz, 1H), 7.19 - 7.10 (m, 1H), 4.72 (dd, J = 11.9, 7.5 Hz, 1H), 3.17 (p, J = 9.1 Hz, 1H), 2.78 (s, 3H), 2.64 (ddd, J = 20.5, 12.1, 9.1 Hz, 2H), 2.24 (d, J = 17.9 Hz, 2H), 2.14 (td, J = 13.9, 12.8, 5.1 Hz, 1H), 1.98 (s, 1H), 1.55 (s, 1H), 1.48 (t, J = 10.5 Hz, 1H), 1.44 - 1.35 (m, 3H), 1.20 - 1.08 (m, 3H), 1.00 (d, J = 12.7 Hz, 1H).	452.15	D	
I-1879		(400 MHz, DMSO-d6) 8.88 (s, 1H), 8.44 (d, J = 7.2 Hz, 1H), 7.55 (td, J = 8.5, 5.3 Hz, 1H), 7.14 (t, J = 9.4 Hz, 1H), 4.92 (dd, J = 12.0, 7.1 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.78 (s, 3H), 2.70 - 2.56 (m, 2H), 2.21 (s, 2H), 2.11 (t, J = 7.7 Hz, 1H), 1.86 (d, J = 12.3 Hz, 1H), 1.64 (s, 1H), 1.50 (s, 2H), 1.40 - 1.28 (m, 2H), 1.23 (s, 3H), 0.76 (d, J = 13.8 Hz, 1H).	452.3	B	B
I-1880		(400 MHz, DMSO-d6) 8.86 (s, 1H), 8.36 (d, J = 7.5 Hz, 1H), 7.55 (q, J = 7.8, 7.0 Hz, 1H), 7.14 (t, J = 9.5 Hz, 1H), 4.72 (dd, J = 11.9, 7.5 Hz, 1H), 3.21 - 3.12 (m, 1H), 2.84 (s, 3H), 2.62 (dd, J = 20.2, 10.0 Hz, 2H), 2.23 (d, J = 16.6 Hz, 2H), 2.14 (s, 1H), 1.98 (s, 1H), 1.55 (s, 1H), 1.50 (d, J = 10.7 Hz, 1H), 1.42 (s, 3H), 1.24 (s, 1H), 1.19 - 1.07 (m, 3H).	452.3	C	

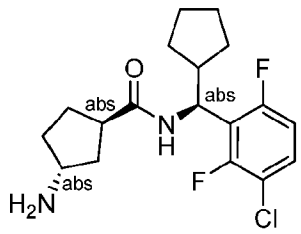
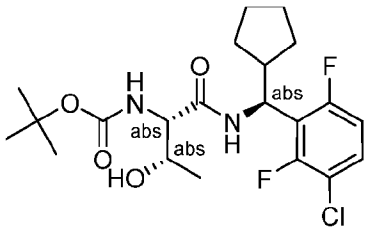
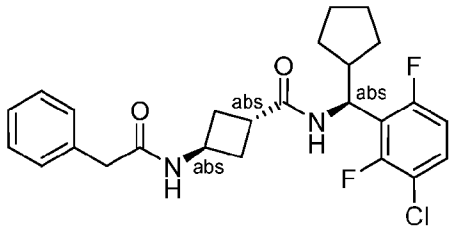
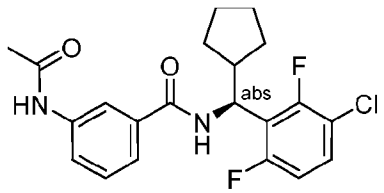
I-1881		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.61 (s, 1H), 8.53 (d, J = 7.3 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.11 (td, J = 9.3, 1.6 Hz, 1H), 4.71 (dd, J = 11.9, 7.2 Hz, 1H), 3.15 (p, J = 9.1 Hz, 1H), 2.67 (dd, J = 12.1, 9.0 Hz, 1H), 2.58 (dd, J = 12.1, 9.0 Hz, 1H), 2.27 - 2.17 (m, 3H), 2.13 (td, J = 8.6, 4.6 Hz, 1H), 2.08 (s, 1H), 1.59 - 1.44 (m, 2H), 1.33 - 0.99 (m, 5H), 0.74 (d, J = 12.0 Hz, 2H).	438.1	A	A
I-1882		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.46 (d, J = 7.5 Hz, 1H), 7.58 - 7.49 (m, 1H), 7.12 (t, J = 9.3 Hz, 1H), 4.93 (t, J = 9.9 Hz, 1H), 3.14 (q, J = 9.1 Hz, 1H), 2.64 - 2.53 (m, 2H), 2.44 (s, 2H), 2.21 (s, 1H), 2.12 (s, 2H), 1.52 (s, 1H), 1.42 (d, J = 10.6 Hz, 1H), 1.38 - 1.28 (m, 4H), 1.10 (s, 1H), 0.47 (d, J = 12.3 Hz, 1H).	438.1	E	
I-1883		(400 MHz, DMSO-d6) 10.53 (s, 1H), 8.61 (s, 1H), 8.53 (d, J = 7.3 Hz, 1H), 7.53 (q, J = 8.5 Hz, 1H), 7.11 (t, J = 9.2 Hz, 1H), 4.71 (dd, J = 11.9, 7.3 Hz, 1H), 3.15 (p, J = 9.4 Hz, 1H), 2.71 - 2.62 (m, 1H), 2.62 - 2.53 (m, 1H), 2.20 (s, 5H), 1.51 (d, J = 9.7 Hz, 2H), 1.22 (t, J = 9.2 Hz, 2H), 1.08 (dt, J = 31.3, 10.0 Hz, 3H), 0.75 (s, 1H).	438.05	D	

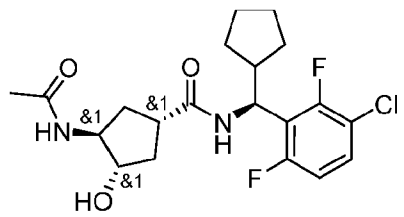
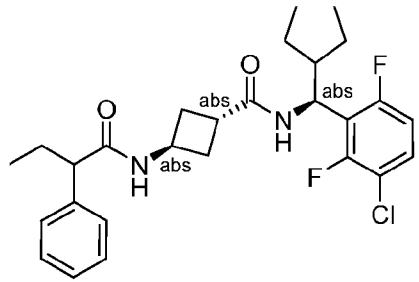
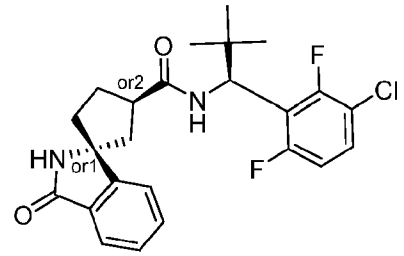
I-1884		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.59 (s, 1H), 8.42 (d, J = 7.2 Hz, 1H), 7.54 (td, J = 8.7, 5.4 Hz, 1H), 7.13 (t, J = 9.4 Hz, 1H), 4.92 (t, J = 9.7 Hz, 1H), 3.11 (p, J = 9.1 Hz, 1H), 2.60 (dt, J = 20.1, 10.4 Hz, 3H), 2.20 (s, 2H), 2.11 (s, 1H), 1.87 (s, 1H), 1.64 (s, 1H), 1.49 (s, 2H), 1.31 (d, J = 9.5 Hz, 1H), 1.21 (d, J = 10.0 Hz, 3H), 0.79 - 0.71 (m, 1H).	438.1	D	
I-1885		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.58 (s, 1H), 8.34 (d, J = 7.6 Hz, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.19 - 7.09 (m, 1H), 4.71 (dd, J = 11.9, 7.5 Hz, 1H), 3.13 (p, J = 9.0 Hz, 1H), 2.61 (ddd, J = 20.3, 12.2, 9.0 Hz, 2H), 2.25 (s, 2H), 2.21 - 2.09 (m, 1H), 2.01 (s, 1H), 1.54 (s, 1H), 1.48 (t, J = 10.6 Hz, 1H), 1.44 - 1.35 (m, 3H), 1.17 - 1.10 (q, J = 11.6 Hz, 3H), 1.00 (d, J = 12.0 Hz, 1H).	438.05	B	
I-1886		(400 MHz, DMSO-d6) 10.18 (s, 1H), 8.60 (s, 1H), 8.47 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.13 (t, J = 9.3 Hz, 1H), 4.93 (dd, J = 12.2, 7.4 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.60 (ddd, J = 18.6, 12.0, 8.9 Hz, 2H), 2.44 (s, 2H), 2.21 (ddd, J = 12.5, 9.2, 4.1 Hz, 1H), 2.19 - 2.09 (m, 2H), 1.52 - 1.22 (m, 6H), 1.12 (t, J = 7.3 Hz, 1H), 0.52 - 0.43 (m, 1H).	438.1	A	B

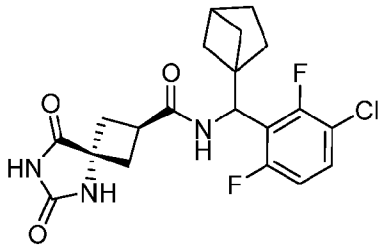
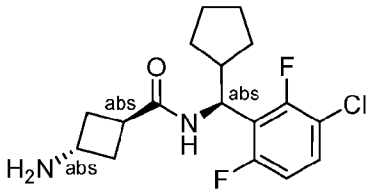
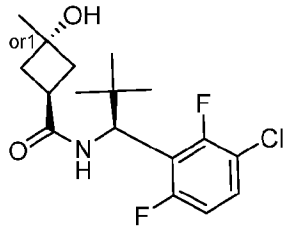
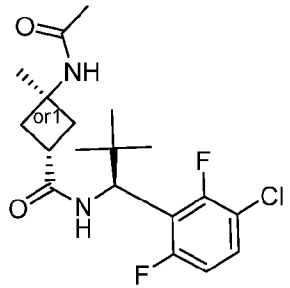
I-1887		(400 MIIz, DMSO-d6) 10.56 (s, 1II), 8.60 (s, 1II), 8.35 (d, J = 7.6 Hz, 1H), 7.54 (td, J = 8.6, 5.5 Hz, 1H), 7.14 (t, J = 8.9 Hz, 1H), 4.71 (dd, J = 11.8, 7.5 Hz, 1H), 3.14 (p, J = 9.1 Hz, 1H), 2.61 (ddd, J = 20.3, 12.1, 9.0 Hz, 2H), 2.23 (d, J = 16.5 Hz, 2H), 2.14 (td, J = 13.5, 12.5, 4.7 Hz, 1H), 1.98 (s, 1H), 1.53 (d, J = 12.9 Hz, 1H), 1.47 (d, J = 9.3 Hz, 1H), 1.44 - 1.35 (m, 3H), 1.19 - 1.06 (m, 3H), 1.01 (s, 1H).	438.05	D	
I-1888		(400 MHz, DMSO-d6) 10.15 (s, 1H), 8.59 (s, 1H), 8.42 (d, J = 7.2 Hz, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.18 - 7.08 (m, 1H), 4.92 (dd, J = 12.0, 7.2 Hz, 1H), 3.11 (p, J = 9.1 Hz, 1H), 2.61 (ddd, J = 19.1, 12.0, 8.9 Hz, 2H), 2.25 - 2.16 (m, 2H), 2.11 (ddd, J = 12.7, 8.9, 4.1 Hz, 1H), 1.87 (t, J = 12.1 Hz, 1H), 1.64 (s, 1H), 1.52 - 1.47 (m, 2H), 1.32 (d, J = 9.7 Hz, 1H), 1.23 (q, J = 9.6, 8.9 Hz, 4H), 0.80 - 0.71 (m, 1H).	438.1	A	B
I-1889		(400 MHz, DMSO-d6) 8.48 (d, J = 7.5 Hz, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 4.88 - 4.76 (m, 2H), 4.34 (s, 2H), 3.45 (q, J = 6.1 Hz, 2H), 3.19 (t, J = 6.3 Hz, 2H), 2.76 (p, J = 8.7 Hz, 1H), 2.48 - 2.32 (m, 3H), 2.17 (ddd, J = 12.0, 7.9, 5.1 Hz, 1H), 2.06 (ddd, J = 12.3, 7.8, 5.0 Hz, 1H), 1.88 (s, 1H), 1.64 - 1.42 (m, 4H), 1.38 - 1.18 (m, 2H), 0.99 (dq, J = 15.4, 7.9 Hz, 1H).	443.1	B	B
I-1890		(400 MHz, DMSO-d6) 8.44 - 8.33 (m, 3H), 7.77 (d, J = 7.0 Hz, 1H), 7.61 (dt, J = 7.9, 2.0 Hz, 1H), 7.52 (td, J = 8.7, 5.5 Hz, 1H), 7.29 (dd, J = 7.8, 4.7 Hz, 1H), 7.17 - 7.07 (m, 1H), 4.81 (dd, J = 11.1, 7.4 Hz, 1H), 4.00 (h, J = 6.5 Hz, 1H), 2.86 - 2.71 (m, 3H), 2.48 - 2.39 (m, 1H), 2.35 (t, J = 7.6 Hz, 2H), 1.96 - 1.68 (m, 4H), 1.67 - 1.20 (m, 9H), 1.00 (dd, J = 12.6, 8.0 Hz, 1H).	490.2	B	B

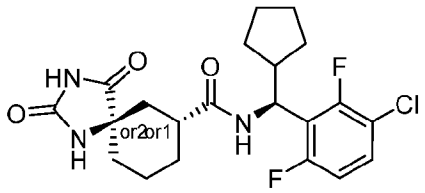
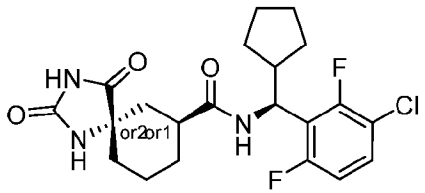
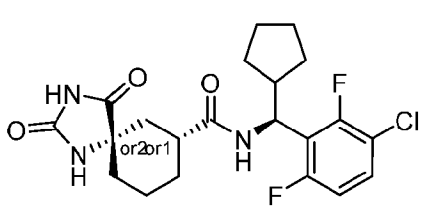
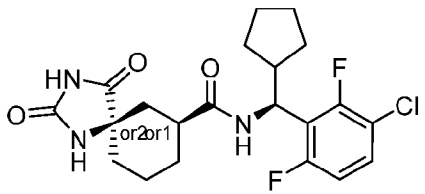
I-1891		(400 MHz, DMSO-d6) 8.49 (d, J = 7.5 Hz, 1H), 7.54 (td, J = 8.8, 5.6 Hz, 1H), 7.43 (s, 1H), 7.13 (td, J = 9.4, 1.7 Hz, 1H), 4.84 (dd, J = 11.1, 7.5 Hz, 1H), 3.48 - 3.37 (m, 2H), 3.08 (tt, J = 9.5, 5.8 Hz, 1H), 2.43 (tt, J = 13.4, 9.1 Hz, 3H), 2.37 - 2.28 (m, 1H), 2.27 - 2.17 (m, 1H), 1.89 (td, J = 12.2, 8.5 Hz, 1H), 1.71 - 1.42 (m, 4H), 1.40 - 1.14 (m, 2H), 1.07 - 0.95 (m, 1H).	399.05	B	B
I-1892		(400 MHz, DMSO-d6) 8.47 (d, J = 7.5 Hz, 1H), 7.54 (td, J = 8.5, 5.6 Hz, 2H), 7.13 (td, J = 9.4, 1.7 Hz, 1H), 4.84 (dd, J = 11.1, 7.5 Hz, 1H), 3.54 (s, 2H), 2.78 - 2.67 (m, 1H), 2.47 - 2.37 (m, 2H), 2.37 - 2.29 (m, 2H), 2.24 (ddd, J = 11.0, 7.8, 4.9 Hz, 1H), 1.88 (td, J = 12.4, 7.7 Hz, 1H), 1.69 - 1.40 (m, 4H), 1.40 - 1.19 (m, 2H), 1.07 - 0.95 (m, 1H).	399.1	B	B
I-1893		(400 MHz, DMSO-d6) 8.52 (d, J = 7.5 Hz, 1H), 7.53 (dd, J = 8.8, 5.9 Hz, 1H), 7.13 (t, J = 9.3 Hz, 1H), 4.84 (dd, J = 11.1, 7.4 Hz, 1H), 3.58 - 3.47 (m, 2H), 3.08 (tt, J = 9.7, 5.4 Hz, 1H), 2.69 (s, 3H), 2.54 (d, J = 11.0 Hz, 1H), 2.44 (t, J = 10.9 Hz, 2H), 2.38 - 2.29 (m, 1H), 2.22 (dd, J = 12.4, 5.2 Hz, 1H), 1.90 (dd, J = 11.9, 4.8 Hz, 1H), 1.54 (ddd, J = 32.5, 13.8, 6.5 Hz, 4H), 1.37 - 1.19 (m, 2H), 1.01 (q, J = 11.4, 9.5 Hz, 1H).	413.15	B	
I-1894			386.28	E	

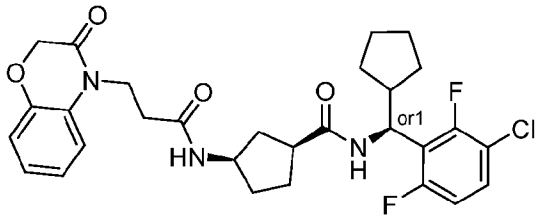
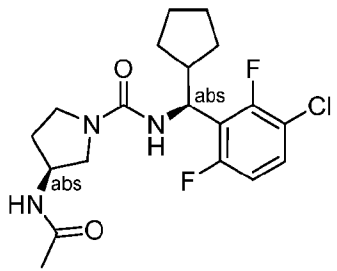
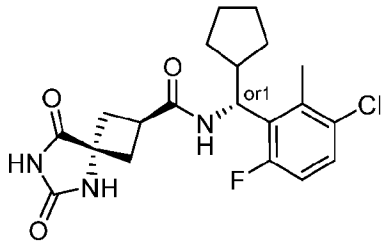
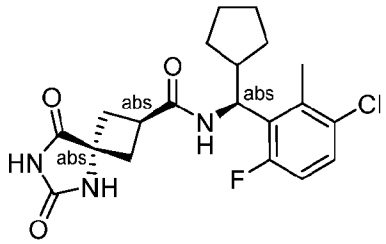
I-1895		NMR (400 MHz, d6-DMSO) - 9.66 (s, 1H), 7.61 (dd, J = 7.8, 1.5 Hz, 1H), 7.53 (app td, J = 8.7, 5.6 Hz, 1H), 7.46 (d, J = 8.3 Hz, 1H), 7.38 – 7.32 (m, 1H), 7.13 (td, J = 9.5, 1.4 Hz, 1H), 7.05 (t, J = 7.4 Hz, 1H), 5.07 (dd, J = 10.9, 7.3 Hz, 1H), 2.62 – 2.51 (m, 2H), 2.14 – 2.02 (m, 1H), 1.70 – 1.44 (m, 8H), 1.42 – 1.29 (m, 2H), 1.10 – 0.97 (m, 1H), 0.96 – 0.87 (m, 3H).	472.3	E	
I-1896		(400 MHz, DMSO-d6) - 8.07 (d, J = 8.9 Hz, 1H), 7.76 (d, J = 6.7 Hz, 1H), 7.56 (app. td, J = 8.7, 5.5 Hz, 1H), 7.14 (app. t, J = 9.6 Hz, 1H), 5.08 (d, J = 8.2 Hz, 1H), 4.01 – 3.92 (m, 1H), 3.01 – 2.92 (m, 1H), 1.95 – 1.80 (m, 2H), 1.75 (s, 3H), 1.73 – 1.64 (m, 1H), 1.63 – 1.50 (m, 2H), 1.43 – 1.32 (m, 1H), 0.93 (s, 9H). Contains aliphatic impurities.	387.4	B	C
I-1897		NMR (400 MHz, d6-DMSO) - 8.62 (d, J = 7.0 Hz, 1H), 7.58 (dd, J = 8.0, 1.4 Hz, 1H), 7.53 (app. td, J = 8.7, 5.6 Hz, 1H), 7.17 – 7.09 (m, 2H), 6.65 (dd, J = 8.2, 1.0 Hz, 1H), 6.55 – 6.48 (m, 1H), 6.26 (s, 2H), 4.97 (dd, J = 11.3, 7.1 Hz, 1H), 2.72 – 2.55 (m, 1H), 2.09 – 1.96 (m, 1H), 1.69 – 1.43 (m, 4H), 1.42 – 1.23 (m, 2H), 1.13 – 0.97 (m, 1H).	365.3	E	
I-1898		NMR (400 MHz, DMSO-d6) - 8.55 (s, 0.5H), 8.51 (br. s, 0.5H), 8.28 (d, J = 8.5 Hz, 0.5H), 8.26 (d, J = 8.5 Hz, 0.5H), 7.65 – 7.52 (m, 4H), 7.51 – 7.43 (m, 1H), 7.17 (overlapping app. br. t, J = 9.4 Hz, 0.5H), 7.12 (submerged br. s, 0.5H), 5.15 (d, J = 8.6 Hz, 1H), 3.42 (submerged m, 1H), 2.25 – 2.12 (m, 1H), 2.10 – 1.97 (m, 2H), 1.98 – 1.86 (m, 3H), 0.96 (s, 4.5H), 0.94 (s, 4.5H). 1:1 mixture of 2 diastereomers. Indicated stereochemistry is arbitrarily assigned. Contained trace DMF.	447.2	A	B

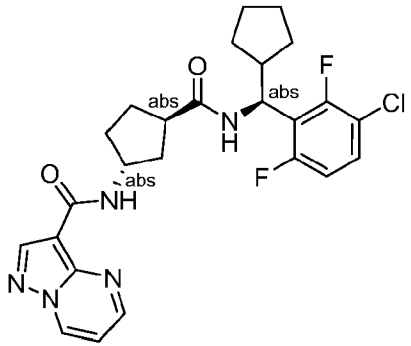
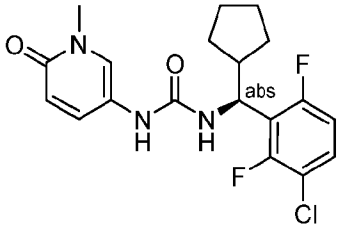
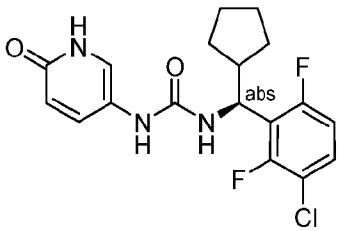
I-1899		(400 MHz, DMSO-d6) - 8.51 (d, J = 7.4 Hz, 1H), 8.20 (br. s, 3H), 7.51 (dt, J = 14.2, 7.2 Hz, 1H), 7.14 – 7.08 (m, 1H), 4.79 (dd, J = 11.0, 7.5 Hz, 1H), 3.47 (overlapping m, 1H), 3.00 – 2.90 (m, 1H), 2.48 – 2.36 (m, 1H), 2.04 (ddd, J = 13.6, 7.5, 6.3 Hz, 1H), 1.97 – 1.85 (m, 3H), 1.84 – 1.75 (m, 1H), 1.65 – 1.38 (m, 6H), 1.37 – 1.20 (m, 2H), 1.04 – 0.93 (m, 1H). Contains minor impurities.	340.3	D	
I-1900		NMR (400 MHz, DMSO-d6) - 8.07 (d, J = 8.1 Hz, 1H), 7.53 (app. td, J = 8.7, 5.6 Hz, 1H), 7.11 (app. tt, J = 9.0 Hz, 1H), 6.68 (d, J = 8.8 Hz, 1H), 4.90 (dd, J = 10.9, 8.2 Hz, 1H), 4.74 (d, J = 5.3 Hz, 1H), 3.91 (dd, J = 8.7, 5.9 Hz, 1H), 3.85 – 3.76 (m, 1H), 2.46 – 2.33 (m, 1H), 1.96 – 1.84 (m, 1H), 1.65 – 1.42 (m, 4H), 1.37 (s, 9H), 1.40 – 1.18 (m, 2H), 1.07 – 0.97 (m, 1H), 0.93 (d, J = 6.3 Hz, 3H).	447.2	E	
I-1901		(400 MHz, DMSO-d6) - 8.32 (d, J = 7.6 Hz, 1H), 8.30 (d, J = 7.6 Hz, 1H), 7.52 (app. td, J = 8.7, 5.6 Hz, 1H), 7.30 – 7.25 (m, 2H), 7.24 – 7.17 (m, 3H), 7.12 (app. td, J = 9.6, 1.5 Hz, 1H), 4.84 (dd, J = 11.0, 7.6 Hz, 1H), 4.21 (app. sext, J = 7.8 Hz, 1H), 3.34 (s, 2H), 2.98 – 2.91 (m, 1H), 2.46 – 2.34 (m, 1H), 2.28 (ddt, J = 11.6, 7.7, 3.6 Hz, 1H), 2.17 – 1.96 (m, 3H), 1.93 – 1.83 (m, 1H), 1.66 – 1.41 (m, 4H), 1.37 – 1.20 (m, 2H), 1.05 – 0.94 (m, 1H).	461.5	B	C
I-1902		NMR (400 MHz, DMSO-d6) - 10.16 (s, 1H), 8.88 (d, J = 6.9 Hz, 1H), 7.92 (s, 1H), 7.75 (br d, J = 8.1 Hz, 1H), 7.59 – 7.46 (m, 2H), 7.35 (t, J = 7.8 Hz, 1H), 7.14 (app. br. t, J = 9.3 Hz, 1H), 4.99 (dd, J = 10.9, 7.4 Hz, 1H), 2.63 (app. sext., J = 7.8 Hz, 1H), 2.07 – 1.98 (overlapping m, 1H) 2.04 (d, J = 0.7 Hz, 3H), 1.70 – 1.44 (m, 4H), 1.42 – 1.25 (m, 2H), 1.15 – 0.98 (m, 1H). Minor aliphatic impurities.	407.4	E	

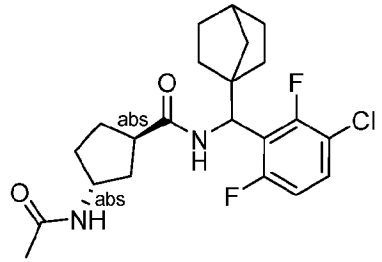
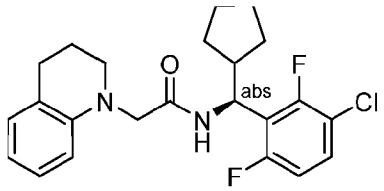
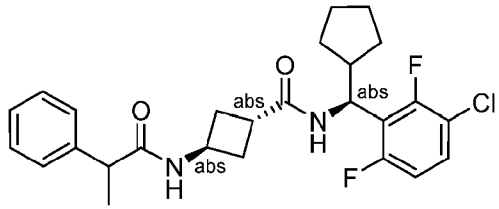
I-1903		(400 MHz, DMSO-d6) - as a ca. 1:1 mixture of diastereomers - 8.36 (d, J = 7.4 Hz, 2H), 7.76 (d, J = 5.8 Hz, 1H), 7.76 (d, J = 6.6 Hz, 1H), 7.53 (app. td, J = 8.7, 5.6 Hz, 2H), 7.12 (app. td, J = 9.7, 1.3 Hz, 2H), 5.00 (d, J = 4.8 Hz, 1H), 4.97 (d, J = 4.5 Hz, 1H), 4.82 (dd, J = 10.5, 7.9 Hz, 2H), 3.81 – 3.68 (m, 4H), 2.83 – 2.74 (m, 2H), 2.46 – 2.34 (m, 2H), 2.09 – 1.80 (m, 6H), 1.78 (s, 3H), 1.77 (s, 3H), 1.66 – 1.39 (m, 12H), 1.38 – 1.21 (m, 4H), 1.05 – 0.95 (m, 2H). Indicated stereochemistry of the cyclopentanol ring is arbitrarily assigned.	415.4	B	B
I-1904		(400 MHz, DMSO-d6) - as a 1:1 mixture of diastereomers, - 8.30 (d, J = 7.6 Hz, 2H), 8.24 (d, J = 7.3 Hz, 2H), 7.56 – 7.48 (m, 2H), 7.30 – 7.24 (m, 8H), 7.23 – 7.16 (m, 2H), 7.15 – 7.08 (m, 2H), 4.83 (dd, J = 11.0, 7.6 Hz, 2H), 4.22 – 4.11 (m, 2H), 3.23 (mz, 2H), 2.97 – 2.88 (m, 2H), 2.45 – 2.34 (m, 2H), 2.34 – 2.26 (m, 1H), 2.25 – 2.11 (m, 2H), 2.10 – 1.96 (m, 4H), 1.95 – 1.82 (m, 5H), 1.65 – 1.41 (m, 10H), 1.37 – 1.19 (m, 4H), 1.04 – 0.94 (m, 2H), 0.78 (t, J = 7.3 Hz, 3H), 0.77 (t, J = 7.3 Hz, 3H).	489.5	B	
I-1905		NMR (400 MHz, DMSO-d6) - 8.98 (s, 0.5H), 8.97 (s, 0.5H), 8.28 (br. d, J = 8.7 Hz, 1H), 7.61 – 7.50 (m, 4H), 7.47 – 7.40 (m, 1H), 7.17 (overlapping app. br. t, J = 9.4 Hz, 0.5H), 7.11 (submerged br. s, 0.5H), 5.13 (app br. t, J = 7.1 Hz, 1H), 3.27 (submerged m, 1H), 2.27 (dd, J = 12.9, 9.1 Hz, 0.5H), 2.20 – 1.98 (m, 3.5H), 1.97 – 1.84 (m, 1H), 1.76 – 1.63 (m, 1H), 0.96 (s, 4.5H), 0.93 (s, 4.5H). 1:1 mixture of 2 diastereomers. Indicated stereochemistry is arbitrarily assigned.	447.2	A	B

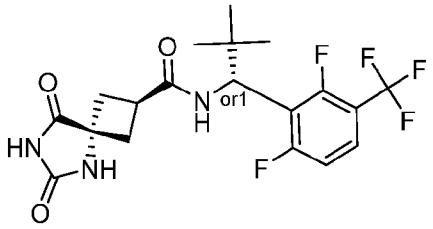
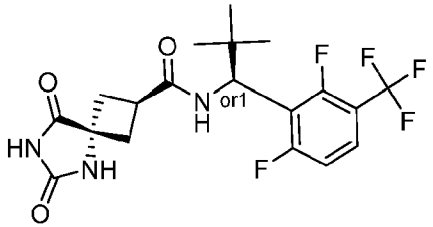
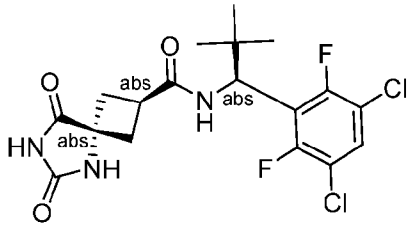
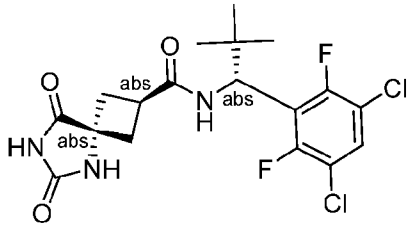
I-1906		NMR (400 MHz, DMSO-d6) - 10.55 (br s, 1H), 8.63 (s, 1H), 8.32 (d, J = 8.0 Hz, 1H), 7.54 (app. td, J = 8.7, 5.6 Hz, 1H), 7.13 (app. td, J = 9.6, 1.4 Hz, 1H), 5.35 (d, J = 8.0 Hz, 1H), 3.25 (app. p, J = 9.1 Hz, 1H), 2.74 – 2.63 (m, 2H), 2.37 – 2.33 (m, 1H), 2.25 – 2.17 (m, 2H), 1.63 – 1.52 (m, 4H), 1.52 – 1.31 (m, 4H). Contains ~30% of a single impurity.	424.4	A	B
I-1907		NMR (400 MHz, DMSO-d6) - 8.49 (d, J = 7.4 Hz, 1H), 8.27 (br s, 3H), 7.53 (td, J = 8.7, 5.6 Hz, 1H), 7.13 (app td, J = 9.6, 1.3 Hz 1H), 4.83 (dd, J = 11.0, 7.5 Hz, 1H), 3.73 – 3.62 (m, 1H), 3.15 - 3.06 (m, 1H), 2.47 – 2.21 (overlapping ms, 4H), 2.19 – 2.07 (m, 1H), 1.96 – 1.83 (m, 1H), 1.67 – 1.40 (m, 4H), 1.39 – 1.18 (two overlapping m, 2H), 1.06 – 0.91 (m, 1H). Residual DMF + Dioxane present(ca. 6% w/w each)	343.5	C	
I-1908		NMR (400 MHz, DMSO-d6) - 7.98 (d, J = 8.9 Hz, 1H), 7.55 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (t, J = 8.9 Hz, 1H), 5.09 (d, J = 8.8 Hz, 1H), 4.81 (s), 3.15 (tt, J = 9.3, 6.7 Hz, 1H), 2.16 – 1.99 (m, 3H), 1.95 (app. dd, J = 11.1, 6.3 Hz, 1H), 1.12 (s, 3H), 0.92 (s, 9H).	346.2	D	
I-1909		NMR (400 MHz, DMSO-d6) - 8.03 (d, J = 8.8 Hz, 1H), 7.89 (s, 1H), 7.55 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (app. br. t, J = 10.2 Hz, 1H), 5.07 (d, J = 8.7 Hz, 1H), 3.25 – 3.16 (m, 1H), 2.42 – 2.35 (m, J = 10.4 Hz, 1H), 2.32 (ddd, J = 12.0, 7.8, 3.1 Hz, 1H), 1.99 (dd, J = 11.6, 7.6 Hz, 1H), 1.92 – 1.83 (m, 1H), 1.78 (s, 3H), 1.21 (s, 3H), 0.91 (s, 9H). 95:5 mixture of 2 diastereomers	387.3	D	

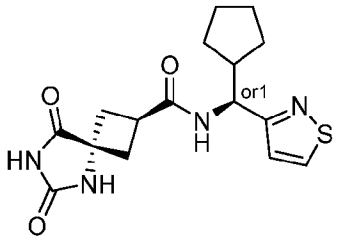
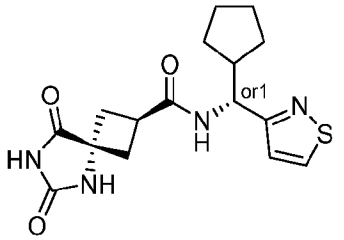
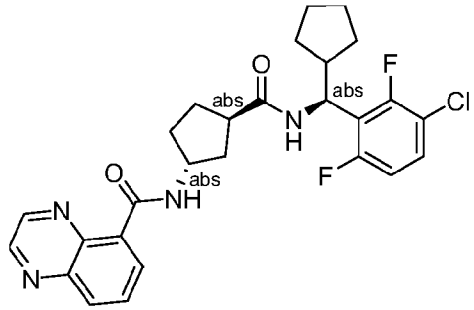
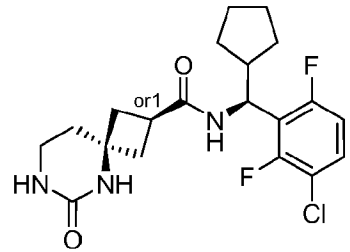
I-1910		(400 MHz, DMSO-d6) 10.70 - 10.58 (m, 1H), 8.48 - 8.31 (m, 2H), 7.59 - 7.45 (td, J = 8.7, 5.5 Hz, 1H), 7.17 - 7.05 (td, J = 9.3, 1.6 Hz, 1H), 4.89 - 4.72 (dd, J = 11.2, 7.3 Hz, 1H), 2.48 - 2.27 (m, 2H), 2.05 - 1.84 (h, J = 7.9, 7.1 Hz, 1H), 1.81 - 1.36 (m, 11H), 1.35 - 1.14 (m, 3H), 1.08 - 0.78 (dq, J = 16.2, 8.0 Hz, 1H).	440.15	D	
I-1911		(400 MHz, DMSO-d6) 10.51 - 10.41 (m, 1H), 8.63 - 8.55 (d, J = 7.3 Hz, 1H), 7.85 - 7.76 (d, J = 1.8 Hz, 1H), 7.57 - 7.47 (td, J = 8.7, 5.5 Hz, 1H), 7.17 - 7.06 (td, J = 9.3, 1.6 Hz, 1H), 4.90 - 4.70 (dd, J = 11.1, 7.3 Hz, 1H), 3.04 - 2.78 (m, 1H), 2.48 - 2.28 (p, J = 8.3 Hz, 1H), 1.99 - 1.83 (td, J = 12.6, 11.7, 4.4 Hz, 2H), 1.82- 1.71 (d, J = 12.0 Hz, 2H), 1.68 - 1.38 (m, 8H), 1.36 - 1.23 (m, 2H), 1.22 - 1.11 (dd, J = 12.6, 3.5 Hz, 1H), 1.06 - 0.92 (dq, J = 16.2, 8.0 Hz, 1H).	440.05	D	
I-1912		(400 MHz, DMSO-d6) 10.57 - 10.42 (m, 1H), 8.65 - 8.50 (d, J = 7.3 Hz, 1H), 7.91 - 7.79 (d, J = 1.7 Hz, 1H), 7.58 - 7.44 (td, J = 8.7, 5.5 Hz, 1H), 7.18 -7.06 (td, J = 9.3, 1.6 Hz, 1H), 4.82 - 4.72 (dd, J = 11.1, 7.3 Hz, 1H), 3.02 - 2.84 (m, 1H), 2.47 - 2.30 (q, J = 8.7 Hz, 1H), 1.96 - 1.83 (m, 2H), 1.83 - 1.72 (m, 2H), 1.67 - 1.40 (m, 7H), 1.39 - 1.17 (m, 3H), 1.10 - 0.91 (ddd, J = 21.3, 12.6, 8.5 Hz, 2H).	440.15	D	
I-1913		(400 MHz, DMSO-d6) 10.69 - 10.52 (s, 1H), 8.51 - 8.33 (m, 2H), 7.62 - 7.46 (td, J = 8.7, 5.5 Hz, 1H), 7.22 - 7.00 (td, J = 9.4, 1.7 Hz, 1H), 4.85 - 4.69 (dd, J = 11.2, 7.2 Hz, 1H), 2.48 - 2.36 (m, 2H), 2.02 - 1.88 (td, J = 12.2, 7.3 Hz, 1H), 1.83 - 1.72 (d, J = 12.6 Hz, 1H), 1.70 - 1.40 (m, 10H), 1.38 - 1.18 (m, 3H), 1.08 - 0.90 (dq, J = 17.7, 7.8 Hz, 1H).	440.15	D	

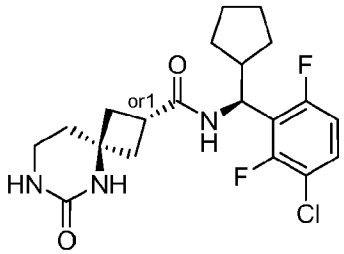
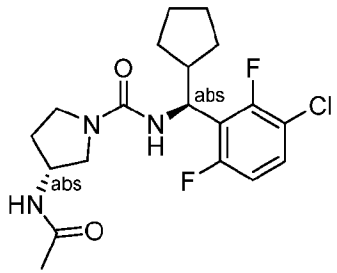
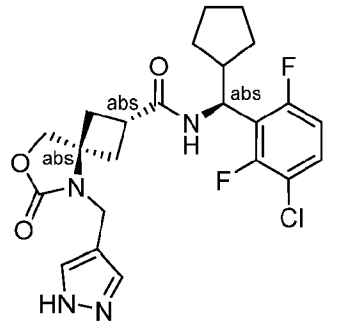
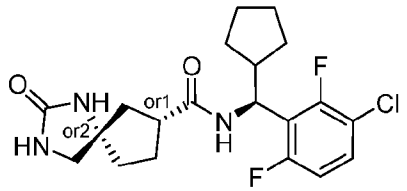
I-1914		(400 MHz, DMSO-d6) 8.37 (d, J = 7.5 Hz, 1H), 7.96 (d, J = 6.9 Hz, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.23 (d, J = 7.9 Hz, 1H), 7.18 - 6.98 (m, 4H), 4.82 (dd, J = 11.1, 7.5 Hz, 1H), 4.63 (s, 2H), 4.08 (t, J = 7.5 Hz, 2H), 4.00 (q, J = 6.6 Hz, 1H), 2.79 (q, J = 7.9 Hz, 1H), 2.40 (dt, J = 14.9, 8.3 Hz, 3H), 1.96 - 1.73 (m, 4H), 1.63 - 1.37 (m, 6H), 1.34 (t, J = 6.5 Hz, 1H), 1.29 (s, 2H), 1.02 (q, J = 11.2, 9.4 Hz, 1H).	560.25	B	C
I-1915		(400 MHz, DMSO-d6) 8.11 - 7.98 (d, J = 6.8 Hz, 1H), 7.55 - 7.46 (td, J = 8.7, 5.5 Hz, 1H), 7.15 - 7.00 (td, J = 9.4, 1.6 Hz, 1H), 6.42 - 6.31 (d, J = 7.7 Hz, 1H), 4.85 - 4.72 (dd, J = 11.3, 7.6 Hz, 1H), 4.21 - 4.11 (h, J = 6.0 Hz, 1H), 3.47 - 3.38 (dd, J = 10.6, 6.4 Hz, 1H), 3.31 - 3.22 (m, 2H), 3.10 - 2.96 (dd, J = 10.6, 4.4 Hz, 1H), 2.50 - 2.43 (s, 1H), 2.05 - 1.87 (dq, J = 13.0, 7.1 Hz, 2H), 1.82 - 1.77 (s, 3H), 1.74 - 1.64 (dq, J = 12.3, 6.1 Hz, 1H), 1.64 - 1.42 (m, 4H), 1.35 - 1.24 (m, 2H), 1.06 - 0.93 (dq, J = 15.6, 8.1 Hz, 1H).	400	E	
I-1916		(400 MHz, Methanol-d4) 7.30 (dd, J = 8.8, 5.0 Hz, 1H), 6.93 (dd, J = 10.9, 8.8 Hz, 1H), 5.02 (dd, J = 11.2, 1.6 Hz, 1H), 3.29-3.15 (m, 1H), 2.93-2.79 (m, 2H), 2.77- 2.60 (m, 1H), 2.59 (s, 3H), 2.52-2.33 (m, 2H), 2.08-1.93 (m, 1H), 1.79-1.50 (m, 4H), 1.47-1.28 (m, 2H), 1.09 (dq, J = 12.8, 8.1 Hz, 1H).	408.25	D	
I-1917		(400 MHz, Methanol-d4) 7.30 (dd, J = 8.8, 5.1 Hz, 1H), 6.93 (dd, J = 10.9, 8.8 Hz, 1H), 5.02 (dd, J = 11.2, 1.6 Hz, 1H), 3.22 (tt, J = 9.6, 8.4 Hz, 1H), 2.93-2.85 (m, 1H), 2.88-2.80 (m, 1H), 2.77-2.60 (m, 1H), 2.59 (s, 3H), 2.51-2.33 (m, 2H), 2.08-1.93 (m, 1H), 1.80-1.50 (m, 4H), 1.49-1.35 (m, 2H), 1.16-1.03 (m, 1H).	408.1	A	B

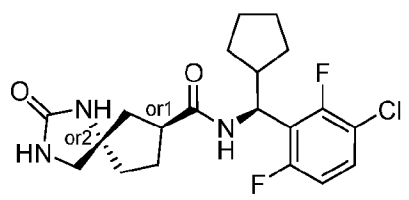
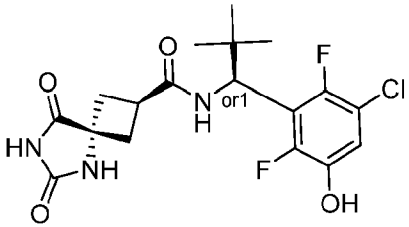
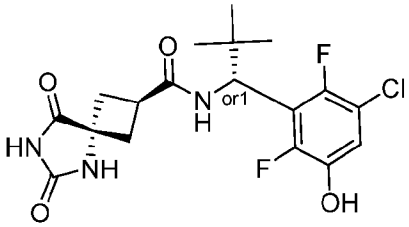
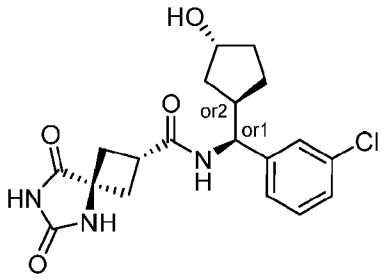
I-1918		(400 MHz, DMSO-d6) 9.33 (s, 1H), 8.83 (s, 1H), 8.58 (s, 1H), 8.44 (d, J = 7.3 Hz, 1H), 7.87 (s, 1H), 7.57 - 7.51 (m, 1H), 7.28 (s, 1H), 7.14 (s, 1H), 4.85 (d, J = 10.8 Hz, 1H), 4.36 (s, 1H), 2.94 (s, 1H), 2.42 (s, 1H), 2.02 (s, 2H), 1.89 (s, 3H), 1.56 (s, 6H), 1.32 (s, 2H), 1.01 (s, 1H).	502.2	B	B
I-1919		NMR (400 MHz, DMSO-d6) 8.05 (s, 1H), 7.81 (d, J = 2.8 Hz, 1H), 7.56 (app. td, J = 8.7, 5.6 Hz, 1H), 7.22 (dd, J = 9.6, 2.9 Hz, 1H), 7.16 (app. td, J = 9.7, 1.4 Hz, 1H), 6.78 (d, J = 8.6 Hz, 1H), 6.31 (d, J= 9.6 Hz, 1H), 4.86 (dd, J = 10.3, 9.0 Hz, 1H), 3.34 (overlapping br. s, 3H), 2.42-2.27 (m, 1H), 1.91-1.78 (m, 1H), 1.69-1.44 (m, 4H), 1.43-1.31 (m, 2H), 1.10-0.98 (m, 1H). ~6-7% dimeric impurity	396.4	C	
I-1920		NMR (400 MHz, DMSO-d6) 11.26 (br s, 1H), 8.17 (s, 1H), 7.56 (app. td, J = 8.8, 5.6 Hz, 1H), 7.52 (d, J = 2.7 Hz, 1H), 7.25 (dd, J = 9.6, 2.9 Hz, 1H), 7.16 (app. td, J = 9.7, 1.4 Hz, 1H), 6.79 (d, J = 8.7 Hz, 1H), 6.27 (d, J = 9.6 Hz, 1H), 4.86 (dd, J = 10.1, 9.2 Hz, 1H), 2.41-2.28 (m, 1H), 1.91-1.78 (m, 1H), 1.70-1.45 (m, 4H), 1.44-1.30 (m, 2H), 1.12-0.95 (m, 1H). Partial formate salt, minor impurities. May have tautomerized to the hydroxypyridine.	382.3	B	

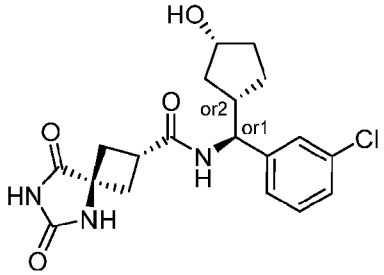
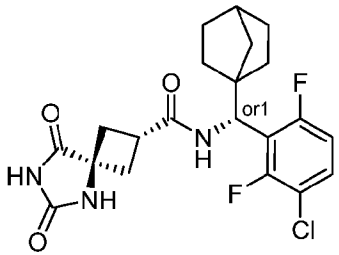
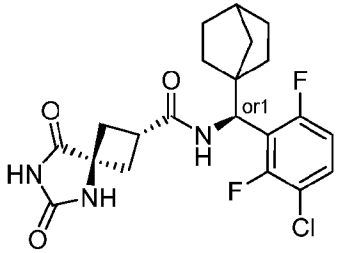
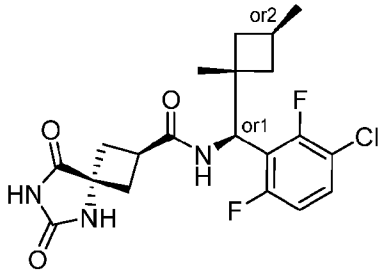
I-1921		(400 MHz, DMSO-d6) - as a 1:1 mixture of diastereomers, - 8.15-8.08 (m, 2H), 7.76 (d, J = 6.4 Hz, 2H), 7.53 (app. td, J = 8.7, 5.5 Hz, 2H), 7.15-7.08 (m, 2H), 5.39 (dd, J = 8.3, 2.2 Hz, 2H), 4.03-3.92 (m, 2H), 2.94 (app. p, J = 7.9 Hz, 2H), 2.16-2.12 (m, 2H), 1.92-1.78 (overlapping m, 4H), 1.76 (s, 3H), 1.75 (s, 3H), 1.73-1.42 (m, 14H), 1.42-1.31 (m, 2H), 1.29-1.16 (overlapping m, 12H). Contains 7-10% of an unknown impurity, plus other minor aliphatic impurities.	425.5	A	B
I-1922		NMR (400 MHz, DMSO-d6) - 8.46 (d, J = 7.8 Hz, 1H), 7.52 (td, J = 8.7, 5.6 Hz, 1H), 7.12 (td, J = 9.6, 1.4 Hz, 1H), 6.87 - 6.79 (m, 2H), 6.45 (td, J = 7.3, 0.6 Hz, 1H), 6.30 (d, J = 8.0 Hz, 1H), 4.85 (dd, J = 10.9, 7.9 Hz, 1H), 3.89 (dA of AB, JAB = 17.0 Hz, 1H), 3.83 (dB of AB, JAB = 17.0 Hz, 1H), 3.32 (submerged t, J = 6.3 Hz, 2H), 2.66 (t, J = 6.3 Hz, 2H), 2.47 - 2.35 (m, 1H), 1.95 - 1.80 (m, 3H), 1.65 - -1.42 (m, 4H), 1.39 - 1.22 (m, 2H), 1.07 - 0.96 (m, 1H).	419.2	E	
I-1923		(400 MHz, DMSO-d6) - as a 1:1 mixture of diastereomers, - 8.31 (d, J = 7.4 Hz, 2H), 8.19 (d, J = 7.5 Hz, 2H), 7.56 - 7.48 (m, 2H), 7.29 - 7.26 (m, 8H), 7.23 - 7.17 (m, 2H), 7.15 - 7.08 (m, 2H), 4.83 (dd, J = 11.0, 7.6 Hz, 2H), 4.24 - 4.13 (m, 2H), 3.50 (q, J = 7.0 Hz, 2H), 2.96 - 2.88 (m, 2H), 2.44 - 2.33 (m, 2H), 2.33 - 1.82 (m, 10H), 1.66 - 1.41 (m, 8H), 1.28 (d, J = 7.0 Hz, 3H), 1.37 - 1.19 (m, 4H), 1.28 (d, J = 7.1 Hz, 3H), 1.04 - 0.93 (m, 2H).	475.5	B	C

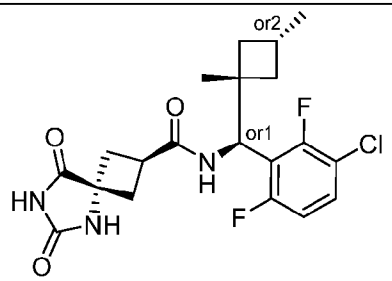
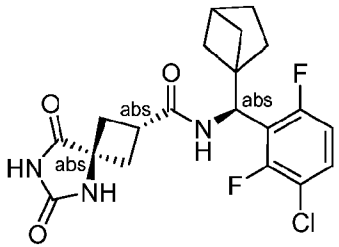
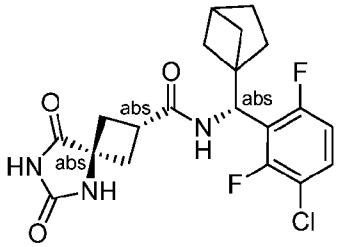
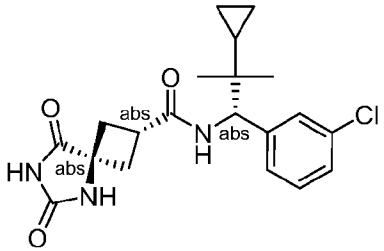
I-1924		(400 MHz, DMSO-d6) 10.60 - 10.55 (m, 1H), 8.63 (d, J = 1.6 Hz, 1H), 8.31 (d, J = 8.6 Hz, 1H), 7.79 (td, J = 8.4, 5.5 Hz, 1H), 7.28 (d, J = 23.4 Hz, 1H), 5.12 (d, J = 8.7 Hz, 1H), 3.28 (q, J = 9.1 Hz, 1H), 2.68 (dd, J = 12.0, 9.0 Hz, 1H), 2.59 (dd, J = 12.1, 9.0 Hz, 1H), 2.21 (dddd, J = 24.9, 12.8, 9.1, 4.2 Hz, 2H), 0.95 (s, 9H).	434.05	E	
I-1925		(400 MHz, DMSO-d6) 10.60 - 10.56 (m, 1H), 8.63 (d, J = 1.7 Hz, 1H), 8.31 (d, J = 8.6 Hz, 1H), 7.79 (td, J = 8.4, 5.5 Hz, 1H), 7.31 (s, 1H), 5.12 (d, J = 8.7 Hz, 1H), 3.29 (t, J = 9.1 Hz, 1H), 2.63 (ddd, J = 35.4, 12.0, 8.9 Hz, 2H), 2.21 (dddd, J = 24.9, 12.8, 9.1, 4.1 Hz, 2H), 0.95 (s, 9H).	434.05	A	B
I-1926		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.62 (s, 1H), 8.34 (d, J = 8.4 Hz, 1H), 7.94 (t, J = 7.2 Hz, 1H), 5.08 (d, J = 8.3 Hz, 1H), 3.28 (dd, J = 18.6, 9.4 Hz, 1H), 2.68 (d, J = 10.3 Hz, 1H), 2.65 - 2.55 (m, 1H), 2.31 - 2.14 (m, 2H), 0.95 (s, 9H).	434.1	C	
I-1927		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.62 (s, 1H), 8.34 (d, J = 8.5 Hz, 1H), 7.96 (t, J = 7.4 Hz, 1H), 5.08 (d, J = 8.4 Hz, 1H), 3.26 (q, J = 9.1 Hz, 1H), 2.64 (dt, J = 26.0, 10.6 Hz, 2H), 2.26 (t, J = 12.5 Hz, 1H), 2.18 (d, J = 10.7 Hz, 1H), 0.95 (s, 9H).	434.1	E	

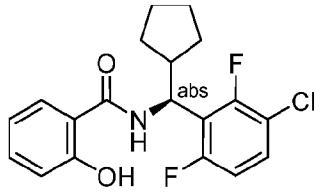
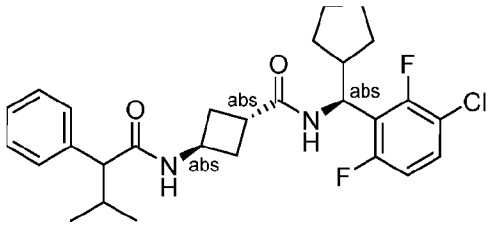
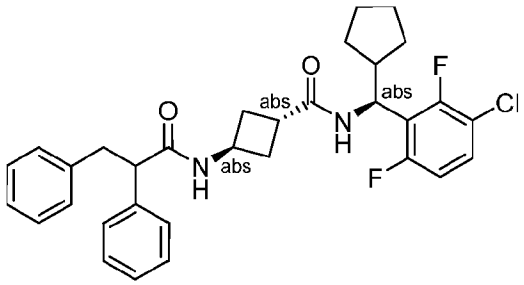
I-1928		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.98 (d, J = 4.7 Hz, 1H), 8.61 (s, 1H), 8.34 (d, J = 8.9 Hz, 1H), 7.31 (d, J = 4.6 Hz, 1H), 4.93 (t, J = 9.1 Hz, 1H), 3.16 (p, J = 9.1 Hz, 1H), 2.68 (dt, J = 11.9, 8.4 Hz, 2H), 2.35 (h, J = 8.0 Hz, 1H), 2.27- 2.13 (m, 2H), 1.67 (h, J = 6.4 Hz, 1H), 1.59- 1.28 (m, 6H), 1.21 - 1.10 (m, 1H).	349.3	E	
I-1929		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.98 (d, J = 4.6 Hz, 1H), 8.61 (s, 1H), 8.34 (d, J = 8.9 Hz, 1H), 7.31 (d, J = 4.7 Hz, 1H), 4.93 (t, J = 9.1 Hz, 1H), 3.16 (p, J = 9.1 Hz, 1H), 2.68 (dt, J = 12.0, 8.4 Hz, 2H), 2.35 (h, J = 8.1 Hz, 1H), 2.20 (dddd, J = 29.7, 12.9, 9.1, 4.3 Hz, 2H), 1.71- 1.62 (m, 1H), 1.54 (ddt, J = 11.8, 8.7, 4.2 Hz, 2H), 1.49 -1.28 (m, 4H), 1.21 - 1.11 (m, 1H).	349.3	E	
I-1930		(400 MHz, DMSO-d6) 9.87 (d, J = 7.0 Hz, 1H), 9.08 (q, J = 1.9 Hz, 2H), 8.48 - 8.40 (m, 2H), 8.27 (dd, J = 8.3, 1.6 Hz, 1H), 7.98 (dd, J = 8.4, 7.3 Hz, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.14 (td, J = 9.4, 1.6 Hz, 1H), 4.85 (dd, J = 11.1, 7.5 Hz, 1H), 4.40 (q, J = 6.3 Hz, 1H), 2.95 (p, J = 7.8 Hz, 1H), 2.43 (q, J = 8.6 Hz, 1H), 2.12 - 1.98 (m, 2H), 1.89 (dtd, J = 13.5, 8.7, 4.5 Hz, 3H), 1.68 - 1.43 (m, 6H), 1.40 - 1.21 (m, 2H), 1.01 (dd, J = 11.9, 7.3 Hz, 1H).	513.2	C	
I-1931		(400 MHz, Methanol-d4) 7.41 (td, J = 8.5, 5.5 Hz, 1H), 6.99 (td, J = 9.3, 1.8 Hz, 1H), 5.00 (d, J = 11.3 Hz, 1H), 3.25 (t, J = 5.9 Hz, 2H), 2.85 (p, J = 8.7 Hz, 1H), 2.53 (q, J = 8.6 Hz, 1H), 2.40 - 2.17 (m, 4H), 1.94 (dt, J = 28.2, 5.5 Hz, 2H), 1.89 (s, 1H), 1.70 (s, 1H), 1.66 (ddt, J = 30.5, 22.5, 8.2 Hz, 1H),1.59 (s, 2H), 1.35 (s, 1H), 1.34-1.29 (m, 1H), 1.15 (dt, J = 13.0, 8.1 Hz, 1H).	412.15	B	C

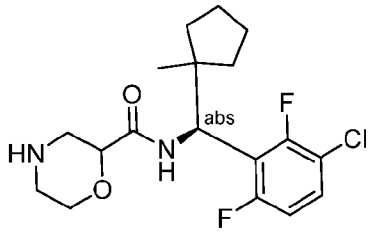
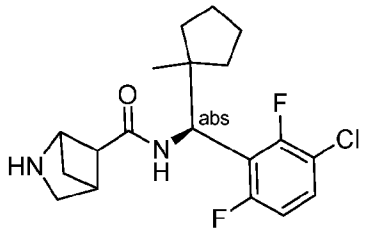
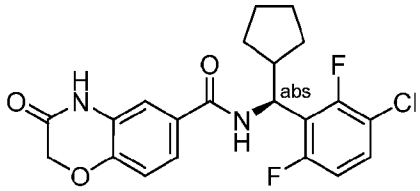
I-1932		(400 MHz, DMSO-d6) 8.37 (d, J = 7.5 Hz, 1H), 7.58-7.47 (m, 1H), 7.12 (t, J = 9.1 Hz, 1H), 6.61 (s, 1H), 6.07 (s, 1H), 4.86-4.77 (m, 1H), 2.95 (s, 3H), 2.50-2.41 (s, 1H).2.31-2.15 (m, 3H), 2.11-1.80 (d, J = 55.6 Hz, 2H), 1.64 (d, J = 5.5 Hz, 1H),1.62 (s, 2H),1.60-1.40 (m, 2H), 1.35 (d, J = 2.6 Hz, 1H), 1.24 (s, 2H), 1.00 (s, 1H).	412.15	B	B
I-1933		(400 MHz, DMSO-d6) 8.15 - 7.98 (d, J = 6.8 Hz, 1H), 7.56 - 7.44 (td, J = 8.7, 5.5 Hz, 1H), 7.16 - 7.04 (td, J = 9.3, 1.6 Hz, 1H), 6.44 - 6.31 (d, J = 7.6 Hz, 1H), 4.83 - 4.69 (dd, J = 11.3, 7.6 Hz, 1H), 4.23 - 4.14 (q, J = 5.9 Hz, 1H), 3.52 - 3.39 (dd, J = 10.5, 6.4 Hz, 1H), 3.32 - 3.17 (m, 2H), 3.04 - 2.95 (dd, J = 10.5, 4.6 Hz, 1H), 2.50 - 2.36 (s, 1H), 2.04 - 1.89 (m, 2H), 1.82 - 1.76 (s, 3H), 1.73 - 1.41 (m, 5H), 1.35 - 1.24 (dt, J = 12.3, 7.5 Hz, 2H), 1.06 - 0.92 (dq, J = 15.1, 8.2 Hz, 1H).	400.05	E	
I-1934		(400 MHz, DMSO-d6) 12.67 (s, 1H), 8.46 (d, J = 7.5 Hz, 1H), 7.69 - 7.28 (m, 3H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 4.85 (dd, J = 11.1, 7.5 Hz, 1H), 4.42 - 4.22 (m, 4H), 2.77 (p, J = 8.7 Hz, 1H), 2.57 - 2.52 (m, 1H), 2.50 - 2.45 (m, 1H), 2.39 (dt, J = 17.8, 8.8 Hz, 1H), 2.15 (ddd, J = 12.1, 8.0, 4.9 Hz, 1H), 2.05 (ddd, J = 12.4, 7.7, 4.8 Hz, 1H), 1.91 - 1.83 (m, 1H), 1.71 - 1.41 (m, 4H), 1.41 - 1.11 (m, 2H), 1.00 (dd, J = 12.5, 7.9 Hz, 1H).	479.1	A	B
I-1935		(400 MHz, DMSO-d6) 8.39 (d, J = 7.6 Hz, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.7 Hz, 1H), 6.33 (s, 1H), 6.13 (s, 1H), 4.84 (dd, J = 11.1, 7.6 Hz, 1H), 3.18 - 3.08 (m, 2H), 2.75 (t, J = 8.4 Hz, 1H), 2.40 (t, J = 9.0 Hz, 1H), 1.89 (dt, J = 12.2, 7.4 Hz, 2H), 1.76 - 1.43 (m, 9H), 1.40 - 1.19 (m, 2H), 1.05 - 0.98 (m, 1H).	412.05	B	B

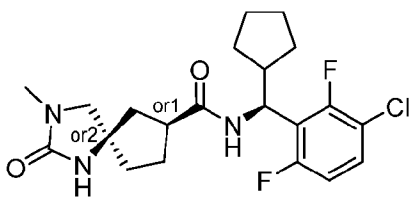
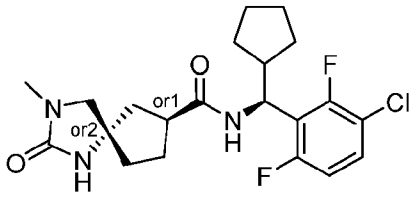
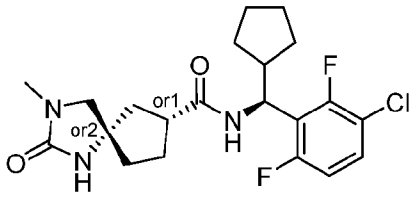
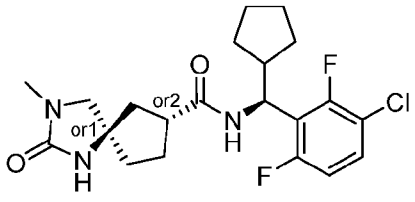
I-1936		(400 MHz, DMSO-d6) 8.41 (d, J = 7.5 Hz, 1H), 7.54 (t, J = 7.8 Hz, 1H), 7.12 (t, J = 9.3 Hz, 1H), 6.53 (s, 1H), 6.06 (s, 1H), 4.80 (t, J = 9.4 Hz, 1H), 3.28 - 3.07 (m, 2H), 2.86 (t, J = 8.2 Hz, 1H), 2.42 (d, J = 9.4 Hz, 1H), 1.91 (s, 2H), 1.81 - 1.72 (m, 2H), 1.71 - 1.42 (m, 7H), 1.33 (s, 1H), 1.21 - 1.07 (m, 1H), 1.04 - 0.98 (m, 1H).	412.05	B	
I-1937		(400 MHz, DMSO-d6) 10.40 (d, J = 142.8 Hz, 2H), 8.62 (s, 1H), 8.18 (s, 1H), 7.01 (dd, J = 8.6, 7.2 Hz, 1H), 5.09 (s, 1H), 3.26 (q, J = 9.1 Hz, 1H), 2.64 (ddd, J = 22.2, 12.0, 9.1 Hz, 2H), 2.22 (dddd, J = 26.0, 12.7, 9.1, 4.1 Hz, 2H), 0.93 (s, 9H).	416	A	B
I-1938		(400 MHz, DMSO-d6) 10.40 (d, J = 143.4 Hz, 2H), 8.62 (s, 1H), 8.18 (s, 1H), 7.01 (dd, J = 8.6, 7.3 Hz, 1H), 5.09 (s, 1H), 3.26 (q, J = 9.1 Hz, 1H), 2.77 - 2.57 (m, 2H), 2.31 - 2.13 (m, 2H), 0.93 (s, 9H).	416	D	
I-1939				E	

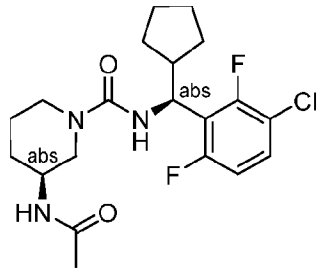
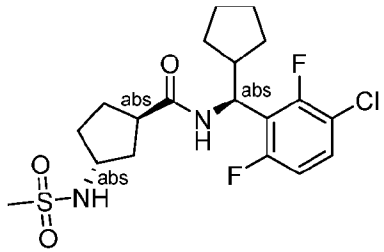
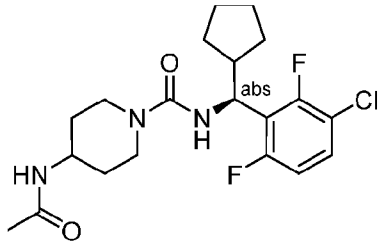
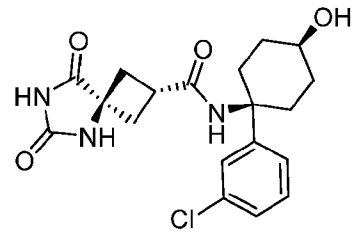
I-1940				D	
I-1941				D	
I-1942				A	A
I-1943				E	

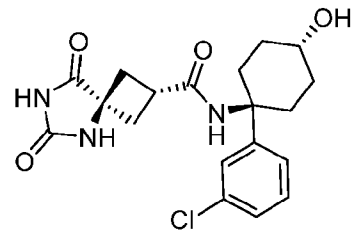
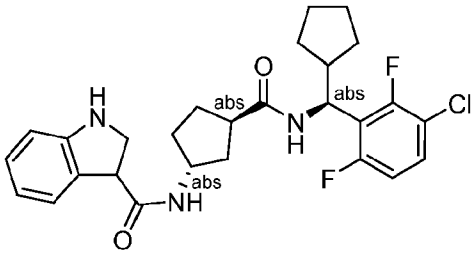
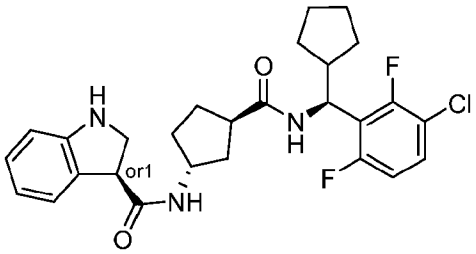
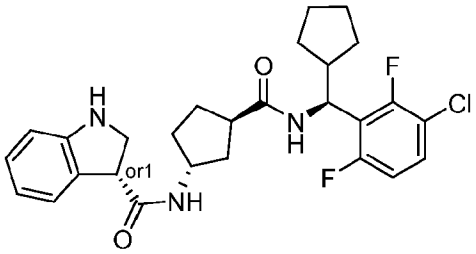
I-1944				A	B
I-1945				A	A
I-1946				E	
I-1947		(400 MHz, DMSO-d6) 10.58 (s, 1H), 8.63 (s, 1H), 8.20 (d, J = 9.8 Hz, 1H), 7.45 (d, J = 1.9 Hz, 1H), 7.29 (qd, J = 5.6, 4.8, 2.9 Hz, 3H), 4.87 (d, J = 9.8 Hz, 1H), 3.25 (p, J = 9.1 Hz, 1H), 2.69 (ddd, J = 12.0, 9.0, 5.3 Hz, 2H), 2.28 (ddd, J = 12.5, 9.1, 4.3 Hz, 1H), 2.16 (ddd, J = 12.8, 9.0, 4.3 Hz, 1H), 0.79 - 0.66 (m, 4H), 0.62 (s, 3H), 0.27 - 0.14 (m, 2H), 0.13 - 0.01 (m, 2H).	390.2	B	C

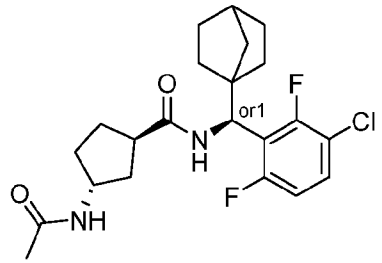
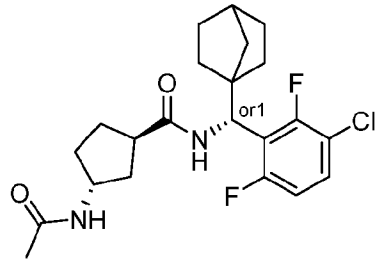
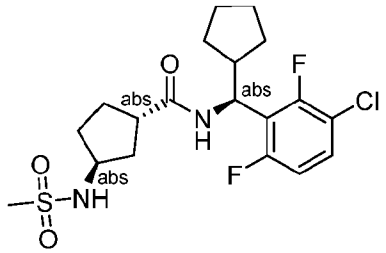
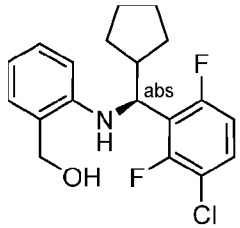
I-1948		NMR (400 MHz, d6-DMSO) - 11.88 (br s, 1H), 9.21 (d, J = 6.6 Hz, 1H), 7.95 (dd, J = 8.3, 1.7 Hz, 1H), 7.58 (app td, J = 8.8, 5.6 Hz, 1H), 7.44 - 7.33 (m, 1H), 7.18 (app td, J = 9.6, 1.6 Hz, 1H), 6.91 (overlapping d, J = 7.9 Hz, 1H), 7.92 - 6.88 (overlapping m, 1H), 5.15 (dd, J = 10.9, 7.9 Hz, 1H), 2.63 -2.52 (m, 1H), 2.00 - 1.89 (m, 1H), 1.70 - 1.47 (m, 4H), 1.46 - 1.31 (m, 2H), 1.16 - 1.03 (m, 1H).	364.2	E	
I-1949		NMR (400 MHz, d6-DMSO) 8.30 (d, J = 7.5 Hz, 1H), 8.25 (d, J = 7.3 Hz, 1H), 7.51 (dddd, J = 8.7, 8.7 5.7, 5.7 Hz, 1H), 7.32 - 7.23 (m, 4H), 7.22 - 7.16 (m, 1H), 7.16 - 7.07 (m, 1H), 4.83 (dd, J = 11.0, 7.6 Hz, 1H), 4.20 - 4.05 (m, 1H), 2.99 - 2.85 (overlapping m, 1H), 2.90 (overlapping d, J = 10.7 Hz, 1H), 2.45 - 2.25 (m, 2H), 2.25 - 2.11 (m, 2H), 2.11 - 2.01 (m, 1H), 2.01 - 1.94 (m, 1H), 1.94 - 1.80 (m, 1H), 1.66 - 1.40 (m, 4H), 1.38 - 1.17 (m, 2H), 1.05 - 0.94 (m, 1H), 0.91 (dd, J = 6.4, 3.8 Hz, 3H), 0.59 (d, J = 6.6 Hz, 3H).	503.4	B	
I-1950		NMR (400 MHz, d6-DMSO) 8.28 (d, J = 7.5 Hz, 1H), 8.18 (d, J = 7.4 Hz, 1H), 7.52 (dddd, J = 8.7, 8.7 6.0, 6.0 Hz, 1H), 7.35 - 7.30 (m, 2H), 7.27 (app td, J = 7.4, 1.7 Hz, 2H), 7.24 - 7.17 (m, 3H), 7.17 - 7.07 (m, 4H), 4.82 (dd, J = 11.0, 7.7 Hz, 1H), 4.18 - 4.02 (m, 1H), 3.66 (dd, J = 9.0, 6.2 Hz, 1H), 3.25 (dd, J = 12.9, 9.6 Hz, 1H), 2.90 - 2.80 (m, 2H), 2.45 - 2.31 (m, 1H), 2.26 - 2.12 (m, 1H), 2.11 - 1.98 (m, 1H), 1.97 - 1.75 (m, 3H), 1.66 - 1.40 (m, 4H), 1.37 - 1.17 (m, 2H), 1.06 - 0.92 (m, 1H).	551.7	B	D

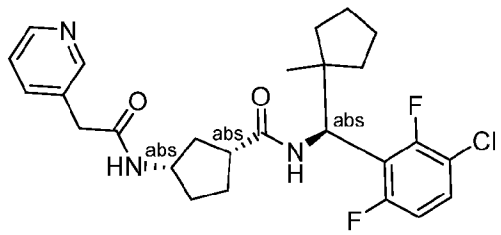
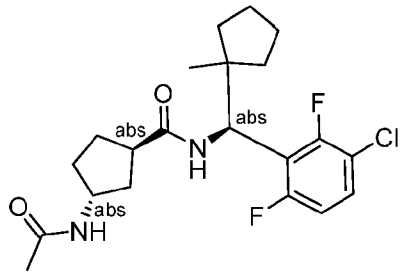
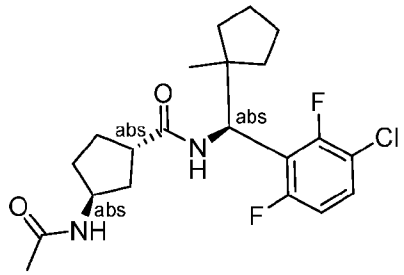
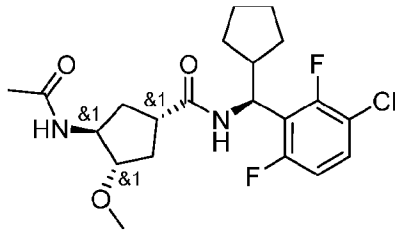
I-1951		NMR (400 MHz, DMSO-d6) 9.69 - 9.29 (m, 2H), 8.09 (d, J = 9.4 Hz, 0.5H), 8.05 (d, J = 9.4 Hz, 0.5H), 7.65 - 7.58 (m, 1H), 7.24 - 7.17 (m, 1H), 5.28 (d, J = 4.8 Hz, 0.5H), 5.26 (d, J = 4.8 Hz, 0.5H), 4.50 - 4.43 (m, 0.5H), 4.42 - 4.36 (m, 0.5H), 4.12 - 3.98 (m, 1H), 3.93 - 3.80 (m, 1H), 3.32 - 3.28 (submerged m, 1H), 3.21 - 3.11 (m, 1H), 3.11 - 2.91 (m, 2H), 1.69 - 1.58 (m, 3H), 1.58 - 1.43 (m, 2H), 1.41 - 1.33 (m, 1H), 1.32 - 1.25 (m, 1H), 1.25 - 1.16 (m, 1H), 0.94 (s, 3H). 1:1 ratio of diastereomers; some aliphatic impurities. HCl salt.	373.4	E	
I-1952		NMR (400 MHz, DMSO-d6) 9.97 - 9.47 (m, 1H), 8.74 (t, J = 7.2 Hz, 0.5H), 8.70 (t, J = 6.1 Hz, 0.5H), 8.18 (br s, 1H), 7.57 (td, J = 8.6, 5.7 Hz, 1H), 7.19-7.11 (m, 1H), 5.15 (d, J = 8.6 Hz, 0.5H), 5.09 (d, J = 8.0 Hz, 0.5H), 4.25 (d, J = 5.4 Hz, 0.5H), 4.19 (app d, J = 3.2 Hz, 0.5H), 3.27 - 3.10 (m, 2H), 3.06 - 3.00 (m, 0.5H), 2.86 - 2.75 (m, 0.5H), 1.89 - 1.80 (m, 1H), 1.67 - 1.55 (m, 5H), 1.55 - 1.43 (overlapping m, 1H), 1.42 - 1.26 (m, 2H), 1.25 - 1.16 (m, 1H), 0.96 (s, 3H).1:1 ratio of diastereomers. About 5-7% impurities, some aliphatic impurities.	369.4	D	
I-1953		NMR (400 MHz, DMSO-d6) 10.84 (s, 1H), 8.80 (d,J= 7.1 Hz, 1H), 7.54 (overlapping appt td, J = 8.6, 5.3 Hz 1H), 7.50 (overlapping dd, J = 8.4, 2.1 Hz, 1H), 7.34 (d, J= 2.0 Hz, 1H), 7.13 (td, J= 9.6, 1.3 Hz, 1H), 6.99 (d, J= 8.4 Hz, 1H), 4.98 (dd, J= 11.3, 7.1 Hz, 1H), 4.62 (s, 2H), 2.69 - 2.55 (m, 1H), 2.10 - 1.97 (m, 1H), 1.70 -1.45 (m, 4H), 1.43 - 1.25 (m, 2H), 1.10 - 0.97 (m, 1H). Some aliphatic impurities.	421.4	D	

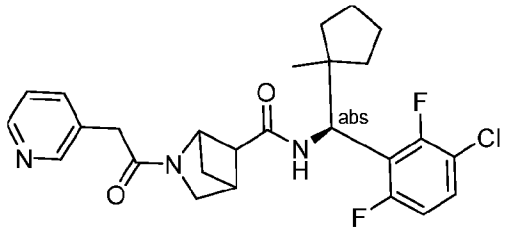
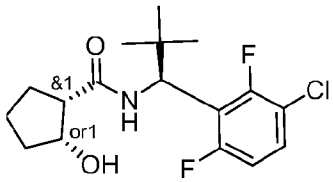
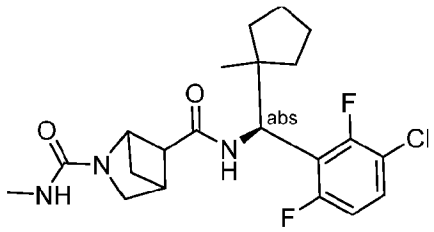
I-1954		(400 MHz, DMSO-d6) 8.40 (d, J = 7.6 Hz, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 6.48 (s, 1H), 4.84 (dd, J = 11.2, 7.6 Hz, 1H), 3.15 (q, J = 8.6 Hz, 2H), 2.78 (t, J = 8.1 Hz, 1H), 2.60 (s, 3H), 2.40 (p, J = 8.3 Hz, 1H), 1.89 (dt, J = 12.3, 5.2 Hz, 2H), 1.82 - 1.44 (m, 9H), 1.40 - 1.19 (m, 2H), 1.07 - 0.96 (m, 1H).	426.05	B	B
I-1955		(400 MHz, DMSO-d6) 8.42 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.12 (t, J = 9.6 Hz, 1H), 6.68 (s, 1H), 4.81 (dd, J = 11.1, 7.4 Hz, 1H), 3.21 (d, J = 8.8 Hz, 1H), 3.12 (d, J = 8.8 Hz, 1H), 2.88 (q, J = 8.0 Hz, 1H), 2.58 (s, 3H), 2.42 (q, J = 8.7 Hz, 1H), 1.96 - 1.73 (m, 4H), 1.71 - 1.43 (m, 7H), 1.40 - 1.21 (m, 2H), 1.00 (s, 1H).	426.1	B	B
I-1956		(400 MHz, DMSO-d6) 8.42 (d, J = 7.4 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.3, 1.6 Hz, 1H), 6.65 (s, 1H), 4.81 (dd, J = 11.2, 7.4 Hz, 1H), 3.10 (d, J = 1.8 Hz, 2H), 2.86 (p, J = 7.6 Hz, 1H), 2.55 (s, 3H), 2.43 (q, J = 8.5 Hz, 1H), 1.90 (td, J = 10.9, 9.3, 4.0 Hz, 2H), 1.75 (dd, J = 13.2, 9.2 Hz, 1H), 1.72 - 1.42 (m, 8H), 1.40 - 1.19 (m, 2H), 1.00 (dd, J = 12.8, 7.4 Hz, 1H).	426.05	B	B
I-1957		(400 MHz, DMSO-d6) 8.39 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 6.45 (s, 1H), 4.82 (dd, J = 11.1, 7.5 Hz, 1H), 3.18 - 3.08 (m, 2H), 2.78 (p, J = 8.3 Hz, 1H), 2.59 (s, 3H), 2.40 (p, J = 8.6 Hz, 1H), 1.97 - 1.87 (m, 1H), 1.84 - 1.67 (m, 3H), 1.70 - 1.44 (m, 7H), 1.40 - 1.21 (m, 2H), 1.08 - 0.96 (m, 1H).	426.05	C	

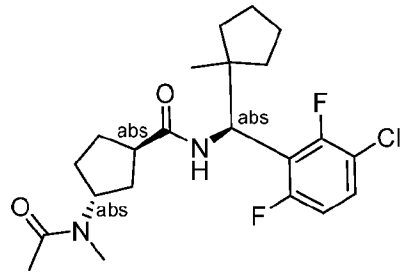
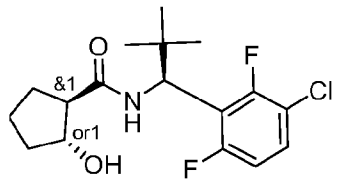
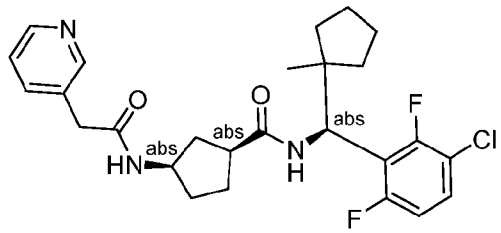
I-1958		(400 MHz, DMSO-d6) 7.79 - 7.71 (d, J = 7.7 Hz, 1H), 7.54 - 7.45 (td, J = 8.7, 5.5 Hz, 1H), 7.14 - 7.05 (td, J = 9.4, 1.7 Hz, 1H), 6.74 - 6.68 (d, J = 7.3 Hz, 1H), 4.80 - 4.68 (dd, J = 11.3, 7.2 Hz, 1H), 3.84 - 3.75 (dd, J = 12.8, 4.1 Hz, 1H), 3.73 - 3.63 (d, J = 13.1 Hz, 1H), 3.58 - 3.44 (q, J = 4.3 Hz, 1H), 2.81 - 2.66 (ddd, J = 13.2, 10.2, 3.0 Hz, 1H), 2.61- 2.53 (m, 1H), 2.49 - 2.40 (d, J = 8.5 Hz, 1H), 2.01 - 1.89 (tt, J = 13.2, 6.6 Hz, 1H), 1.83 - 1.71 (s, 4H), 1.68 - 1.41 (m, 5H), 1.37 - 1.20 (ddt, J = 14.0, 8.2, 4.6 Hz, 4H), 1.06 - 0.92 (dq, J = 16.5, 8.1 Hz, 1H).	414.05	E	
I-1959		(400 MHz, DMSO-d6) 8.39 (d, J = 7.4 Hz, 1H), 7.52 (td, J = 8.6, 5.5 Hz, 1H), 7.12 (td, J = 9.3, 1.6 Hz, 1H), 7.02 (d, J = 6.8 Hz, 1H), 4.81 (dd, J = 11.1, 7.4 Hz, 1H), 3.67 (q, J = 6.6 Hz, 1H), 2.88 (s, 4H), 2.42 (q, J = 8.5 Hz, 1H), 2.00 - 1.63 (m, 4H), 1.62 - 1.20 (m, 9H), 1.00 (dd, J = 12.7, 7.6 Hz, 1H).	435.15	B	
I-1960		(400 MHz, DMSO-d6) 7.76 (d, J = 7.7 Hz, 1H), 7.50 (td, J = 8.7, 5.5 Hz, 1H), 7.10 (td, J = 9.4, 1.6 Hz, 1H), 6.78 (d, J = 7.3 Hz, 1H), 4.73 (dd, J = 11.3, 7.3 Hz, 1H), 3.87 (d, J = 13.5 Hz, 2H), 3.75 - 3.60 (m, 1H), 2.74 (tdd, J = 13.9, 10.0, 2.7 Hz, 2H), 2.47 (d, J = 8.5 Hz, 1H), 1.97 (td, J = 12.2, 7.4 Hz, 1H), 1.77 (s, 3H), 1.69 - 1.41 (m, 6H), 1.36 - 1.21 (m, 2H), 1.15 (q, J = 11.6 Hz, 2H), 0.99 (dq, J = 15.6, 8.2 Hz, 1H).	414.05	D	
I-1961		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.61 (s, 1H), 7.86 (s, 1H), 7.38 - 7.27 (m, 3H), 7.24 (dt, J = 7.4, 1.9 Hz, 1H), 4.42 (d, J = 3.6 Hz, 1H), 3.80 (d, J = 3.4 Hz, 1H), 3.27 - 3.14 (m, 1H), 2.70 - 2.59 (m, 2H), 2.25 - 2.15 (m, 2H), 2.04 (s, 4H), 1.68 (d, J = 11.0 Hz, 2H), 1.49 (d, J = 13.4 Hz, 2H).	392.1	E	

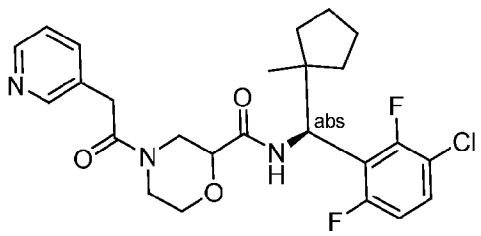
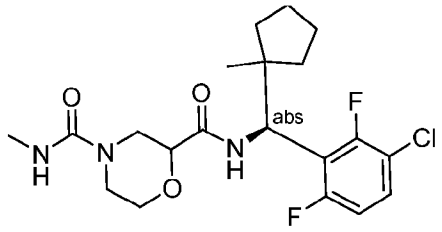
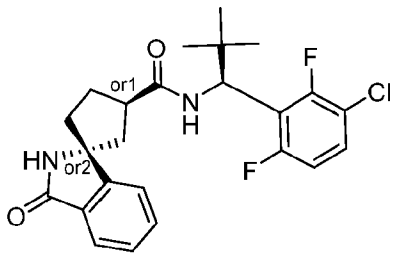
I-1962		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.65 (s, 1H), 7.86 (s, 1H), 7.34 - 7.25 (m, 3H), 7.23 (dt, J = 6.9, 1.8 Hz, 1H), 4.67 - 4.53 (m, 1H), 3.68 (d, J = 8.6 Hz, 0H), 3.48 (qt, J = 9.3, 4.2 Hz, 1H), 3.48 (s, 1H), 3.26 (t, J = 9.1 Hz, 1H), 2.67 (td, J = 9.5, 2.8 Hz, 2H), 2.36 - 2.28 (m, 2H), 2.22 (dd, J = 12.9, 9.5 Hz, 2H), 1.72 - 1.58 (m, 4H), 1.50 - 1.38 (m, 2H).	392.15	E	
I-1963		(400 MHz, DMSO-d6) 8.39 (s, 1H), 8.11 (s, 1H), 7.53 (d, J = 7.8 Hz, 1H), 7.13 (t, J = 9.4 Hz, 1H), 6.99 (t, J = 8.9 Hz, 1H), 6.93 (s, 1H), 6.51 (dd, J = 16.6, 7.7 Hz, 2H), 5.50 (s, 1H), 4.83 (t, J = 8.9 Hz, 1H), 4.11 - 4.05 (m, 1H), 3.92 (t, J = 9.5 Hz, 1H), 3.68 (s, 1H), 3.48 (t, J = 9.6 Hz, 1H), 2.89 (s, 1H), 2.43 (d, J = 9.3 Hz, 1H), 1.98 - 1.90 (m, 2H), 1.85 (s, 2H), 1.60 (s, 3H), 1.50 - 1.44 (m, 4H), 1.33 (s, 1H), 1.28 (s, 1H), 1.01 (s, 1H).	502.25	B	
I-1964		(400 MHz, DMSO-d6) 8.40 (d, J = 7.5 Hz, 1H), 8.14 (d, J = 7.0 Hz, 1H), 7.52 (q, J = 7.8 Hz, 1H), 7.12 (t, J = 9.3 Hz, 1H), 6.99 (d, J = 7.4 Hz, 1H), 6.94 (t, J = 7.7 Hz, 1H), 6.58 - 6.47 (m, 2H), 5.68 (s, 1H), 4.83 (t, J = 9.3 Hz, 1H), 4.10 (q, J = 6.5 Hz, 1H), 3.94 (t, J = 9.4 Hz, 1H), 3.70 (t, J = 9.0 Hz, 1H), 3.50 (t, J = 9.4 Hz, 1H), 2.91 (q, J = 7.9, 7.4 Hz, 1H), 2.44 (q, J = 8.6 Hz, 1H), 1.90 (dp, J = 28.4, 9.5, 8.4 Hz, 4H), 1.70 - 1.43 (m, 7H), 1.37 - 1.21 (m, 2H), 1.01 (t, J = 9.9 Hz, 1H).	502.25	B	B
I-1965		(400 MHz, DMSO-d6) 8.38 (d, J = 7.4 Hz, 1H), 8.11 (d, J = 7.1 Hz, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.18 - 7.08 (m, 1H), 7.01 (d, J = 7.4 Hz, 1H), 6.94 (t, J = 7.6 Hz, 1H), 6.54 (t, J = 7.3 Hz, 1H), 6.49 (d, J = 7.8 Hz, 1H), 5.57 (s, 1H), 4.82 (dd, J = 11.0, 7.4 Hz, 1H), 4.08 (q, J = 6.7 Hz, 1H), 3.92 (t, J = 9.4 Hz, 1H), 3.67 (t, J = 9.0 Hz, 1H), 3.49 (t, J = 9.4 Hz, 1H), 2.93 - 2.85 (m, 1H), 2.43 (d, J = 8.8 Hz,	502.25	B	

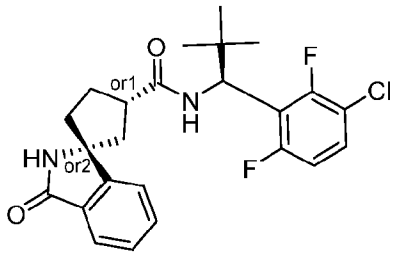
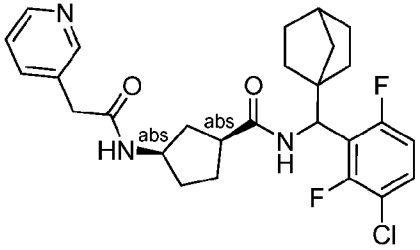
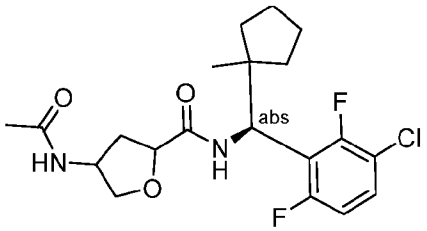
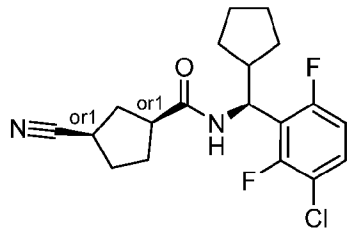
		1H), 1.95 (dq, J = 14.0, 7.2 Hz, 2H), 1.91 - 1.81 (m, 2H), 1.73 - 1.41 (m, 7H), 1.33 (dt, J = 12.4, 6.0 Hz, 2H), 1.02 (d, J = 9.7 Hz, 1H).			
I-1966				E	
I-1967				A	A
I-1968		(400 MHz, DMSO-d6) 8.39 (d, J = 7.5 Hz, 1H), 7.56 - 7.49 (m, 1H), 7.12 (td, J = 9.4, 1.6 Hz, 1H), 7.00 (d, J = 6.8 Hz, 1H), 4.81 (dd, J = 11.1, 7.4 Hz, 1H), 3.65 (h, J = 6.6 Hz, 1H), 2.85 (s, 3H), 2.83 (d, J = 8.0 Hz, 1H), 2.42 (h, J = 8.0 Hz, 1H), 1.90 (tt, J = 11.6, 5.1 Hz, 3H), 1.80 (dt, J = 13.5, 6.9 Hz, 1H), 1.66 - 1.41 (m, 7H), 1.38 - 1.21 (m, 2H), 1.00 (dq, J = 15.8, 8.1 Hz, 1H).	435.05	B	B
I-1969		(400 MHz, DMSO-d6) 7.53 (td, J = 8.7, 5.6 Hz, 1H), 7.21-7.11 (m, 1H), 7.07- 6.97 (m, 2H), 6.52 (td, J = 7.3, 1.0 Hz, 1H), 6.45 (d, J = 8.0 Hz, 1H), 5.81 (d, J = 9.2 Hz, 1H), 5.29 (dd, J = 5.8, 4.9 Hz, 1H), 4.57-4.38 (m, 3H), 2.55 (s, 1H), 2.01 (td, J = 11.8, 7.1 Hz, 1H), 1.63 (ddd, J = 18.4, 9.4, 5.9 Hz, 2H), 1.59-1.33 (m, 4H) ,1.13 (dd, J = 12.5, 7.6 Hz, 1H).	352.1	E	

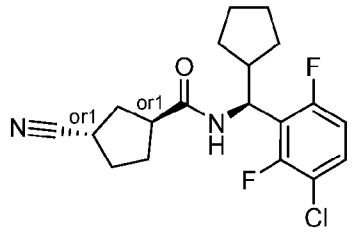
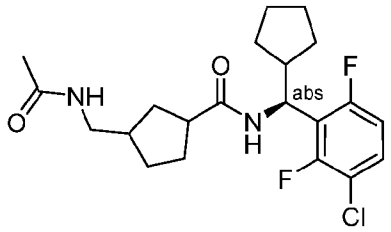
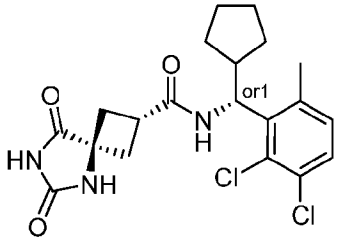
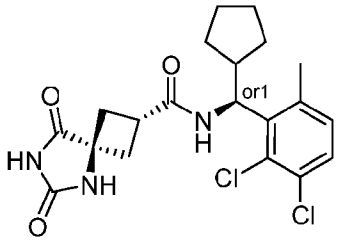
I-1970		(400 MHz, d6-DMSO) - 8.44 – 8.39 (m, 2H), 8.11 (dd, J = 10.5, 7.9 Hz, 2H), 7.63 (app. dt, J = 7.8, 1.8 Hz, 1H), 7.55 (app. td, J = 8.7, 5.5 Hz, 1H), 7.32 (ddd, J = 7.3, 4.8, 0.4 Hz, 1H), 7.13 (app. t, J = 8.8 Hz, 1H), 5.19 (d, J = 8.7 Hz, 1H), 4.03 – 3.94 (m, 1H), 3.42 (d, J = 14.8 Hz, 1H), 3.38 (d, J = 14.7 Hz, 1H), 2.99 (app. p, J = 7.6 Hz, 1H), 1.98 – 1.82 (m, 2H), 1.75 (app dt, J = 13.1, 7.5 Hz, 1H), 1.68 – 1.32 (m, 10H), 1.25 – 1.16 (m, 1H), 0.95 (s, 3H).	490.3	A	B
I-1971		(400 MHz, DMSO-d6) - 8.11 (d, J = 8.7 Hz, 1H), 7.76 (d, J = 6.8 Hz, 1H), 7.55 (app. td, J = 8.7, 5.5 Hz, 1H), 7.16 – 7.10 (m, 1H), 5.19 (d, J = 8.7 Hz, 1H), 4.04 – 3.95 (m, 1H), 2.96 (app. p, J = 7.8 Hz, 1H), 1.88 – 1.75 (m, 3H), 1.76 (s, 3H), 1.66 – 1.54 (m, 6H), 1.52 – 1.42 (m, 2H), 1.41 – 1.30 (m, 2H), 1.24 – 1.16 (m, 1H), 0.95 (s, 3H).	413.4	A	B
I-1972		(400 MHz, d6-DMSO) - 8.11 (d, J = 8.7 Hz, 1H), 7.75 (d, J = 6.8 Hz, 1H), 7.55 (app. td, J = 8.7, 5.5 Hz, 1H), 7.13 (app. t, J = 9.5 Hz, 1H), 5.19 (d, J = 8.8 Hz, 1H), 4.03 – 3.90 (m, 1H), 2.96 (app p, J = 7.9 Hz, 1H), 1.95 – 1.79 (m, 2H), 1.75 (s, 3H), 1.70 (app. dt, J = 13.3, 7.4 Hz, 1H), 1.65 – 1.44 (m, 8H), 1.40 – 1.32 (m, 2H), 1.24 – 1.16 (m, 1H), 0.95 (s, 3H).	413.7	A	B
I-1973		(400 MHz, DMSO-d6) - as a ca. 1:1 mixture of diastereomers, - 8.32 (d, J = 7.4 Hz, 1H), 8.31 (d, J = 7.4 Hz, 1H), 7.85 (d, J = 7.3 Hz, 1H), 7.84 (d, J = 7.3 Hz, 1H), 7.52 (app. td, J = 8.7, 5.6 Hz, 2H), 7.12 (app. td, J = 9.5, 1.1 Hz, 2H), 4.81 (dd, J = 10.9, 7.6 Hz, 1H), 4.80 (dd, J = 10.9, 7.7 Hz, 1H), 3.93 – 3.84 (m, 2H), 3.57 – 3.50 (m, 2H), 3.21 (s, 3H), 3.16 (s, 3H), 2.79 (app. p, J = 8.5 Hz, 2H), 2.47 – 2.34 (m, 2H), 2.18 (ddd, J = 13.5, 8.3, 7.0 Hz, 1H), 2.08 (ddd,	429.5	B	B

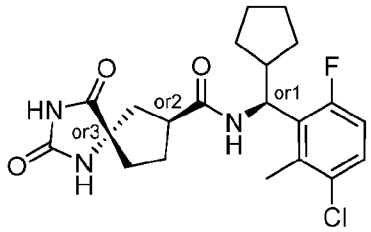
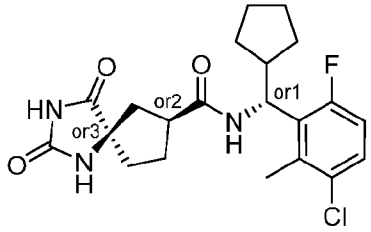
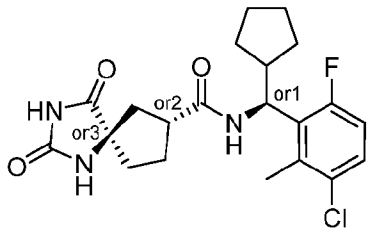
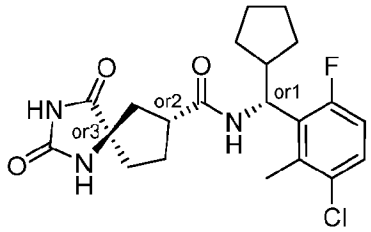
		J = 13.2, 8.5, 7.0 Hz, 1H), 1.95 – 1.85 (m, 3H), 1.83 – 1.75 (overlapping m, 1H), 1.78 (s, 3H), 1.77 (s, 3H), 1.66 – 1.41 (m, 12H), 1.38 – 1.20 (m, 4H), 1.05 – 0.94 (m, 2H).			
I-1974		NMR (400 MHz, DMSO-d6) - 8.44 – 8.28 (m, 2H), 8.08 (dd, J = 16.7, 8.8 Hz, 0.5H), 7.97 (dd, J = 8.7, 4.8 Hz, 0.5H), 7.59 – 7.45 (m, 2H), 7.34 – 7.20 (m, 1H), 7.13 (t, J = 9.4 Hz, 1H), 5.22 – 5.04 (m, 1H), 4.88 (t, J = 6.6 Hz, 0.5H), 4.73 (t, J = 6.3 Hz, 0.5H), 3.81 – 3.68 (m, 1H), 3.64 – 3.49 (m, 1H), 3.48 – 3.30 (m, 2H), 3.26 (dd, J = 18.1, 9.8 Hz, 1H), 3.16 – 3.05 (m, 1H), 3.03 – 2.97 (m, 0.5H), 2.94 – 2.90 (m, 0.5H), 1.68 – 1.56 (m, 4H), 1.55 – 1.31 (m, 4H), 1.25 – 1.14 (m, 1H), 0.99 – 0.83 (m, 3H). ~ 1:1:0.5:0.5 ratio of diastereomers. ~ 10% mixed impurities	488.5	D	
I-1975		NMR (400 MHz, DMSO-d6) - 8.04 (d, J = 9.1 Hz, 0.5H), 7.96 (d, J = 9.1 Hz, 0.5H), 7.60 – 7.51 (m, 1H), 7.15 (app. t, J = 9.1 Hz, 1H), 5.20 – 5.07 (m, 1H), 4.93 (br. s, 0.5H), 4.77 (s, 0.5H), 4.06 (app. dt, J = 11.9, 6.2 Hz, 0.5H), 4.00 (br. s, 0.5H), 2.65 (app. td, J = 14.2, 7.6 Hz, 1H), 1.94 – 1.84 (m, 0.5H), 1.80 – 1.65 (m, 1H), 1.65 – 1.36 (m, 4H), 0.94 (s, 4.5H), 0.91 (s, 4.5H). 1:1 mixture of diastereomers. Stereochemistry arbitrarily assigned. 5% of a impurity.	346.3	E	
I-1976		NMR (400 MHz, DMSO-d6) - 7.75 (d, J = 9.2 Hz, 0.5H), 7.61 (d, J = 9.3 Hz, 0.5H), 7.58 – 7.48 (m, 1H), 7.19 – 7.05 (m, 1H), 6.20 (q, J = 4.3 Hz, 0.5H), 6.01 (q, J = 4.3 Hz, 0.5H), 5.18 (d, J = 9.2 Hz, 1H), 4.60 (d, J = 6.8 Hz, 0.5H), 4.48 (d, J = 6.7 Hz, 0.5H), 3.27 (overlapping dd, J = 10.8, 8.0 Hz, 1H), 3.08 (d, J = 7.7 Hz, 0.5H), 3.00 (d, J = 7.8 Hz, 0.5H), 2.97 (submerged m, 0.5H), 2.95 – 2.90 (m, 0.5H), 2.77 – 2.73 (m, 0.5H), 2.73 – 2.68 (m, 0.5H),	426.5	D	

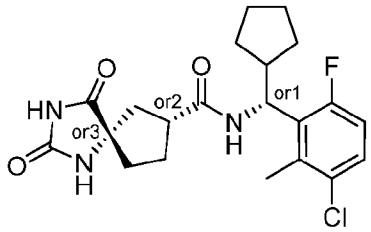
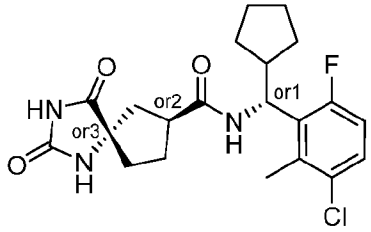
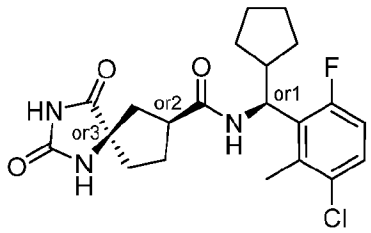
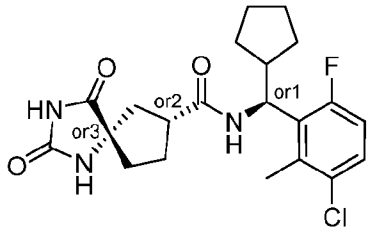
		2.55 (overlapping d, 1.5H), 2.41 (d, J = 4.5 Hz, 1.5H), 1.71 – 1.62 (m, 1H), 1.63 – 1.55 (m, 4H), 1.56 – 1.40 (m, 2H), 1.37 – 1.25 (m, 1H), 1.24 – 1.09 (m, 1H), 1.08 – 0.97 (m, 1H), 0.91 (overlapping s, 1.5H), 0.90 (overlapping s, 1.5H). 1:1 ratio of diastereomers. Partial formate salt. Residual DMSO present. Minor impurities.			
I-1977		(400 MHz, DMSO-d6) - as a ca. 1:1 mixture of rotamers, - 8.16 (d, J = 8.9 Hz, 0.5H), 8.12 (d, J = 8.6 Hz, 0.5H), 7.59 – 7.52 (m, 1H), 7.17 – 7.11 (m, 1H), 5.20 (d, J = 8.4 Hz, 0.5H), 5.20 (d, J = 8.5 Hz, 0.5H), 4.91 – 4.82 (m, 0.5H), 4.29 (app. p, J = 8.1 Hz, 0.5H), 3.06 – 2.95 (m, 1H), 2.80 (s, 1.5H), 2.66 (s, 1.5H), 1.99 (s, 1.5H), 1.95 (s, 1.5H), 1.93 – 1.33 (m, 13H), 1.25 – 1.15 (m, 1H), 0.95 (s, 3H). Contains ca. 5–9% of an unidentified impurity.	427.5	A	B
I-1978		NMR (400 MHz, DMSO-d6) - 8.35 (2 overlapping br. d, J = 8.9 Hz, 1H), 7.61 – 7.53 (m, 1H), 7.20 – 7.10 (m, 1H), 5.18 (overlapping d, J = 4.4 Hz, 0.5H), 5.16 (d, J = 4.2 Hz, 0.5H), 5.04 (d, J = 3.4 Hz, 0.5H), 4.99 (d, J = 5.5 Hz, 0.5H), 4.27 - 4.23 (overlapping m, 0.5H), 4.23 - 4.19 (overlapping m, 0.5H), 2.55 (submerged td, J = 13.2, 4.8 Hz, 1H), 1.84 – 1.45 (m, 6H), 0.92 (s, 9H). 1:1 mixture of 2 diastereomers, stereochemistry arbitrarily assigned.	346.3	D	
I-1979		(400 MHz, DMSO-d6) - 8.44 – 8.41 (m, 2H), 8.14 – 8.09 (m, 2H), 7.65 (dt, J = 7.8, 1.9 Hz, 1H), 7.55 (app. td, J = 8.7, 5.5 Hz, 1H), 7.32 (ddd, J = 7.8, 4.8, 0.6 Hz, 1H), 7.17 – 7.10 (m, 1H), 5.18 (d, J = 8.7 Hz, 1H), 4.05 – 3.96 (m, 1H), 3.43 (d, A of AB, JAB = 15.1 Hz, 1H), 3.39 (d, B of AB, JAB = 15.1 Hz, 1H), 3.04 – 2.94 (m, 1H), 1.94 – 1.77 (m, 3H), 1.67 – 1.53 (m, 6H), 1.52 – 1.32 (m, 4H), 1.23 – 1.15 (m, 1H), 0.95 (s, 3H).	490.5	A	B

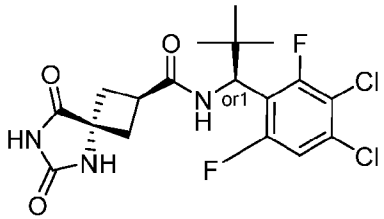
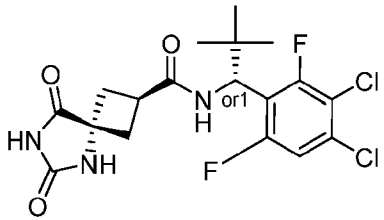
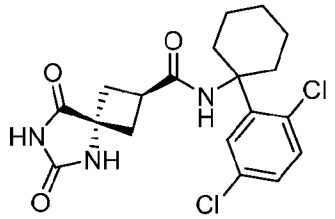
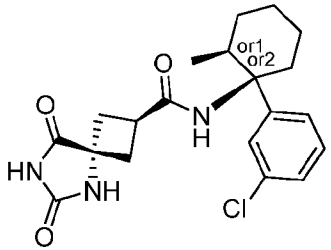
I-1980		NMR (400 MHz, DMSO-d6) - 8.48 – 8.33 (m, 2H), 8.05 - 7.80 (m, 1H), 7.67 – 7.54 (m, 2H), 7.39 – 7.29 (m, 1H), 7.21 (app. t, J = 9.5 Hz, 1H), 5.31 (d, J = 8.9 Hz, 0.5H), 5.27 (d, J = 8.9 Hz, 0.5H), 4.37 (app. t, J = 14.2 Hz, 0.5H), 4.15 (ddd, J = 11.6, 9.2, 1.9 Hz, 0.5H), 4.08 – 3.94 (m, 2H), 3.95 – 3.84 (m, 1H), 3.83 – 3.68 (m, 2H), 3.59 – 3.46 (m, 1H), 3.31 – 3.07 (m, 1H), 3.04 – 2.78 (m, 0.5H), 2.68 – 2.54 (m, 0.5H), 1.72 – 1.55 (m, 4H), 1.56 – 1.43 (m, 2H), 1.43 – 1.29 (m, 1H), 1.28 – 1.13 (m, 1H), 0.94 (s, 1.5H), 0.92 (s, 1.5H). 1:1 ratio of diastereomers. Residual DMF solvent	492.5	E	
I-1981		NMR (400 MHz, DMSO-d6) - 7.77 (d, J = 9.5 Hz, 0.5H), 7.71 (d, J = 10.0 Hz, 0.5H), 7.68 – 7.57 (m, 1H), 7.28 – 7.16 (m, 1H), 6.64 – 6.51 (m, 1H), 5.33 (d, J = 9.9 Hz, 0.5H), 5.29 (d, J = 9.6 Hz, 0.5H), 4.10 – 3.86 (m, 3H), 3.77 – 3.63 (m, 1H), 3.56 – 3.43 (m, 1H), 2.94 – 2.72 (m, 1H), 2.61 (submerged m, 1H), 2.55 (overlapping m, 3H), 1.70 – 1.57 (m, 4H), 1.57 – 1.40 (m, 2H), 1.41 – 1.28 (m, 1H), 1.28 – 1.12 (m, 1H), 0.92 (s, 3H). 1:1 ratio of diastereomers. Residual DMSO. Minor impurities	430.5	E	
I-1982				B	C

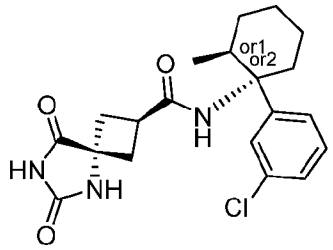
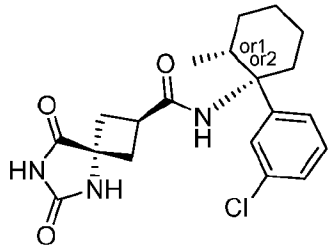
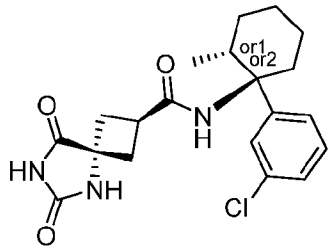
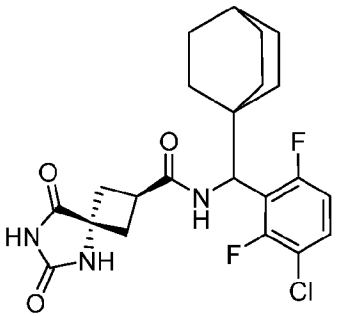
I-1983				A	B
I-1984		(400 MHz, DMSO-d6) - as a ca. 1:1 mixture of diastereomers, - 8.44 – 8.41 (m, 4H), 8.14 (d, J = 8.7 Hz, 2H), 8.11 (dd, J = 6.9, 1.9 Hz, 2H), 7.66 – 7.62 (m, 2H), 7.53 (app. td, J = 8.6, 5.5 Hz, 2H), 7.34 – 7.30 (m, 2H), 7.15 – 7.09 (m, 2H), 5.39 (d, J = 8.2 Hz, 2H), 4.05 – 3.93 (m, 2H), 3.45 – 3.36 (m, 4H), 3.02 – 2.92 (m, 2H), 2.15 – 2.12 (m, 2H), 1.95 – 1.70 (m, 6H), 1.65 – 1.34 (m, 14H), 1.29 – 1.16 (m, 12H).	502.5	A	B
I-1985		NMR (400 MHz, d6-DMSO) - 8.14 (d, J = 6.5, 0.1H), 8.11 (d, J = 6.6, 0.1H), 8.03 (d, J = 5.9 Hz, 0.4H), 7.94 (d, J = 9.7 Hz, 0.4H), 7.91 – 7.80 (m, 1H), 7.65 – 7.57 (m, 1H), 7.24 – 7.16 (m, 1H), 5.32 – 5.21 (m, 1H), 4.55 – 4.32 (m, 1H), 4.29 – 4.13 (m, 1H), 4.04 – 3.86 (m, 1H), 3.69 – 3.54 (m, 1H), 2.47 – 2.36 (m, 1H), 1.81 – 1.69 (m, 3H), 1.68 (s, 1H), 1.66 – 1.57 (m, 4H), 1.57 – 1.43 (m, 2H), 1.41 – 1.29 (m,1H), 1.25 – 1.15 (m, 1H), 0.97 – 0.90 (m, 3H).	415.1	C	
I-1986		NMR (400 MHz, DMSO-d6) 8.51 (d, J = 7.4 Hz, 1H), 7.57 – 7.47 (m, 1H), 7.16 – 7.08 (m, 1H), 4.82 (dd, J = 10.6, 7.8 Hz, 0.5H), 4.79 (dd, J = 10.8, 7.9 Hz, 0.5H), 3.09 – 2.97 (m, 1H), 2.97 – 2.85 (m, 1H), 2.47 – 2.33 (m, 1H), 2.08 – 1.80 (m, 4.5H), 1.79 – 1.40 (m, 6.5H), 1.39 – 1.20 (m, 2H), 1.05 – 0.93 (m, 1H). 1:1 mixture of 2 diastereomers. 8% of a main side product. Stereochemistry arbitrarily assigned.	367.3	C	

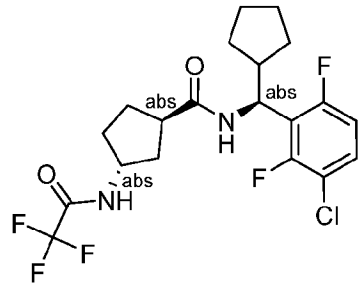
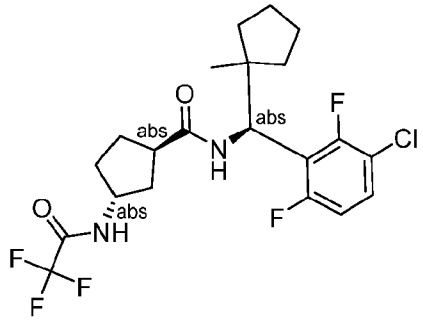
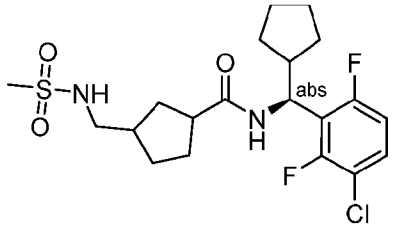
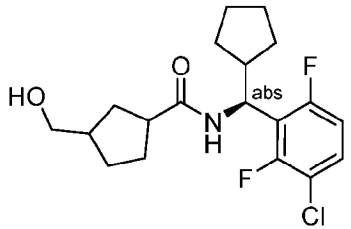
I-1987		NMR (400 MHz, DMSO-d6) 8.47 (d, J = 7.2 Hz, 1H), 7.56 – 7.49 (m, 1H), 7.16 – 7.09 (m, 1H), 4.86 – 4.80 (m, 0.4H), 4.81 (dd, J = 10.9, 7.9 Hz, 0.6H), 3.00 – 2.90 (m, 1H), 2.80 – 2.70 (m, 1H), 2.47 – 2.35 (m, 1H), 2.23 (dt, J = 12.7, 8.1 Hz, 0.6H), 2.13 (dt, J = 12.7, 8.1 Hz, 0.4H), 2.01 – 1.67 (m, 5.4H), 1.66 – 1.42 (m, 4.6H), 1.39 – 1.21 (m, 2H), 1.06 – 0.93 (m, 1H). 9:1 ratio of two pairs of diastereomers. Major pair described, as a 3:2 mixture of two diastereomers. Stereochemistry arbitrarily assigned	367.3	C	
I-1988		NMR (400 MHz, DMSO-d6) - 8.28 (d, J = 7.5 Hz, 1H), 7.82 – 7.72 (m, 1H), 7.48 (app. td, J = 8.7, 5.6 Hz, 1H), 7.08 (app. td, J = 9.5, 1.1 Hz, 1H), 4.82 – 4.72 (m, 1H), 2.98 – 2.83 (m, 2H), 2.72 – 2.58 (m, 1H), 2.43 – 2.31 (m, 1H), 2.03 – 1.77 (m, 2H), 1.74 (s, 0.5H), 1.73 (s, 1H), 1.72 (s, 0.5H), 1.71 (s, 1H), 1.70 – 1.34 (m, 8H), 1.34 – 1.15 (m, 3H), 1.15 – 1.02 (m, 1H), 1.01 – 0.88 (m, 1H). 2:2:1:1 mixture of 4 diastereomers	413.3	C	
I-1989		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.59 (s, 1H), 8.36 (d, J = 7.4 Hz, 1H), 7.39 (d, J = 8.2 Hz, 1H), 7.20 - 7.03 (m, 1H), 5.40 - 4.76 (m, 1H), 3.17 (p, J = 9.1 Hz, 1H), 2.84 (s, 1H), 2.62 (dt, J = 28.4, 10.4 Hz, 3H), 2.39 (d, J = 6.5 Hz, 1H), 2.28- 2.09 (m, 2H), 2.03- 1.92 (m, 1H), 1.70 - 1.35 (m, 4H), 1.35 - 0.79 (m, 4H).	424.05	D	
I-1990		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.59 (s, 1H), 8.35 (s, 1H), 7.48 - 7.33 (m, 1H), 7.26 - 6.96 (m, 1H), 5.05 (d, J = 169.9 Hz, 1H), 3.17 (p, J = 9.1 Hz, 1H), 2.84 (s, 1H), 2.62 (dt, J = 28.5, 10.8 Hz, 3H), 2.38 (s, 1H), 2.26- 2.09 (m, 2H), 1.97 (dt, J = 12.1, 6.0 Hz, 1H), 1.68 - 1.38 (m, 4H), 1.35-0.63 (m, 4H).	424.05	B	

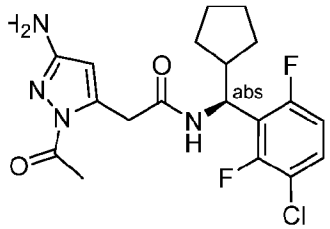
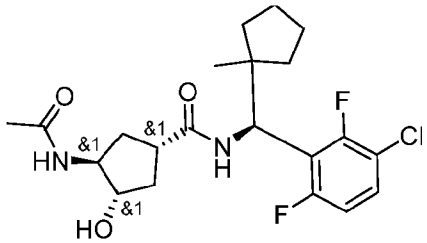
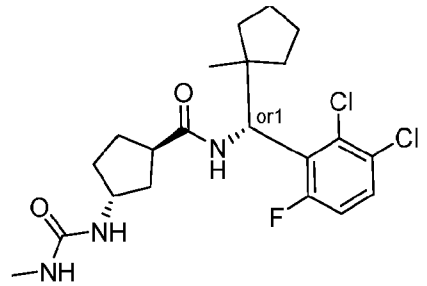
I-1991		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.48 (d, J = 7.3 Hz, 1H), 7.98 (s, 1H), 7.35 (dd, J = 8.8, 4.9 Hz, 1H), 7.05 (dd, J = 10.7, 8.7 Hz, 1H), 4.80 (dd, J = 11.1, 7.3 Hz, 1H), 2.97 (p, J = 8.4 Hz, 1H), 2.49 (s, 4H), 2.11 (dd, J = 13.3, 8.2 Hz, 1H), 1.97-1.80 (m, 4H), 1.78-1.67 (m, 1H), 1.66-1.41 (m, 5H), 1.31-1.14 (m, 2H), 0.96 (dd, J = 12.6, 7.9 Hz, 1H).	422.15	A	B
I-1992		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.42 (d, J = 7.2 Hz, 1H), 8.30 (s, 1H), 7.34 (dd, J = 9.0, 4.8 Hz, 1H), 7.03 (t, J = 9.7 Hz, 1H), 4.81 (t, J = 9.2 Hz, 1H), 2.95-2.86 (m, 1H), 2.49 (s, 4H), 2.05-1.91 (m, 4H), 1.78 (p, J = 8.2, 7.4 Hz, 2H), 1.72-1.40 (m, 5H), 1.25 (q, J = 9.8, 7.1 Hz, 2H), 0.96 (s, 1H).	422.15	D	
I-1993		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.42 (d, J = 7.3 Hz, 1H), 8.30 (s, 1H), 7.34 (dd, J = 9.1, 4.9 Hz, 1H), 7.04 (dd, J = 10.7, 8.8 Hz, 1H), 4.81 (dd, J = 11.1, 7.3 Hz, 1H), 2.95-2.87 (m, 1H), 2.49 (s, 4H), 2.05-1.98 (m, 2H), 2.02-1.88 (m, 2H), 1.84-1.72 (m, 2H), 1.69-1.41 (m, 5H), 1.31-1.20 (m, 2H), 0.96 (dq, J = 15.7, 8.0 Hz, 1H).	422.25	A	B
I-1994		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.47 (d, J = 7.3 Hz, 1H), 7.98 (s, 1H), 7.35 (dd, J = 8.8, 5.0 Hz, 1H), 7.05 (dd, J = 10.7, 8.8 Hz, 1H), 4.80 (dd, J = 11.2, 7.3 Hz, 1H), 2.97 (p, J = 8.5 Hz, 1H), 2.49 (s, 4H), 2.11 (dd, J = 13.3, 8.2 Hz, 1H), 1.99-1.80 (m, 4H), 1.78-1.60 (m, 4H), 1.59 (s, 2H), 1.33-1.14 (m, 2H), 1.03-0.90 (m, 1H).	422.15	E	

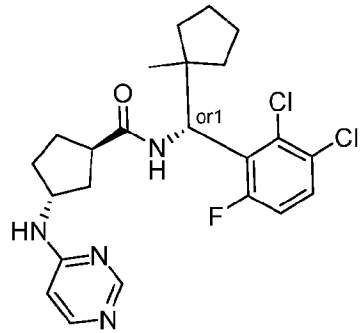
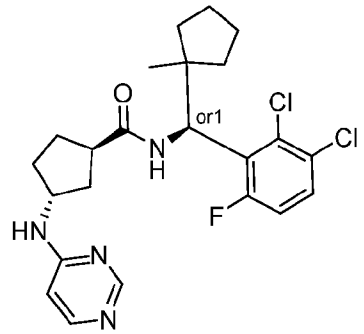
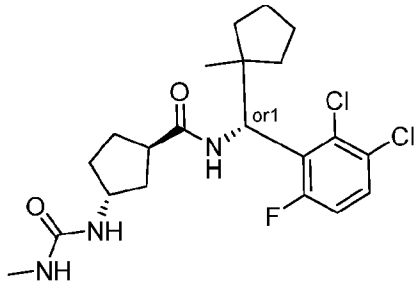
I-1995		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.47 (d, J = 7.3 Hz, 1H), 7.95 (s, 1H), 7.35 (dd, J = 8.9, 5.0 Hz, 1H), 7.04 (dd, J = 10.7, 8.8 Hz, 1H), 4.86-4.77 (m, 1H), 2.95 (q, J = 8.2 Hz, 1H), 2.49 (s, 4H), 2.06-1.88 (m, 4H), 1.88-1.71 (m, 3H), 1.65-1.41 (m, 4H), 1.33-1.14 (m, 2H), 0.96 (dq, J = 16.1, 8.1 Hz, 1H).	422.15	E	
I-1996		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.42 (d, J = 7.3 Hz, 1H), 8.30 (s, 1H), 7.35 (dd, J = 8.8, 4.9 Hz, 1H), 7.05 (dd, J = 10.7, 8.8 Hz, 1H), 4.84-4.75 (m, 1H), 2.92 (q, J = 8.4 Hz, 1H), 2.50 (s, 4H),2.11 (dd, J = 13.1, 10.2 Hz, 1H), 2.03-1.91 (m, 2H), 1.93-1.81 (m, 2H), 1.71-1.58 (m, 5H), 1.58-1.41 (m, 1H), 1.31-1.18 (m, 2H), 0.96 (s, 1H).	422.15	D	
I-1997		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.47 (d, J = 7.3 Hz, 1H), 7.96 (s, 1H), 7.34 (dd, J = 8.9, 4.9 Hz, 1H), 7.04 (dd, J = 10.7, 8.8 Hz, 1H), 4.82 (dd, J = 11.1, 7.2 Hz, 1H), 2.96 (p, J = 8.2 Hz, 1H), 2.49 (s, 3H), 2.06-1.88 (m, 4H), 1.88-1.71 (m, 3H), 1.63-1.41 (m, 4H), 1.31-1.22 (m, 3H), 0.96 (dq, J = 16.0, 8.0 Hz, 1H).	422.25	C	
I-1998		(400 MHz, DMSO-d6) 10.62 (s, 1H), 8.42 (d, J = 7.3 Hz, 1H), 8.31 (s, 1H), 7.35 (dd, J = 8.5, 4.6 Hz, 1H), 7.05 (t, J = 9.7 Hz, 1H), 4.80 (dd, J = 11.1, 7.2 Hz, 1H), 2.96-2.87 (m, 1H), 2.49 (s, 4H), 2.11 (dd, J = 13.1, 10.2 Hz, 1H), 2.03-1.82 (m, 4H), 1.66-1.43 (m, 6H), 1.24 (s, 2H), 0.96 (s, 1H).	422.2	A	A

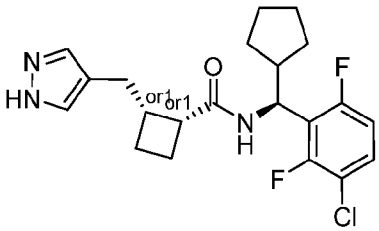
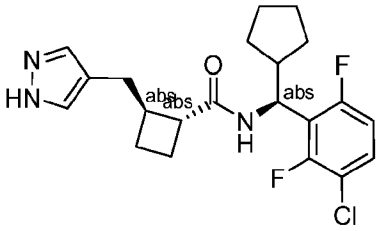
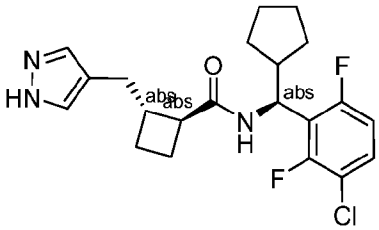
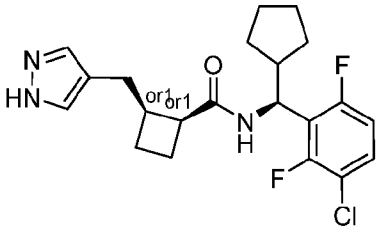
I-1999		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.28 (d, J = 8.6 Hz, 1H), 7.62 (s, 1H), 5.04 (d, J = 8.5 IIz, 1II), 3.26 (q, J = 9.1 IIz, 1II), 2.72 - 2.55 (m, 2H), 2.22 (dddd, J = 21.7, 12.9, 9.2, 3.9 Hz, 2H), 0.94 (s, 9H).	434	A	B
I-2000		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.28 (d, J = 8.6 Hz, 1H), 7.62 (s, 1H), 5.04 (d, J = 8.5 Hz, 1H), 3.26 (q, J = 9.1 Hz, 1H), 2.71 - 2.54 (m, 2H), 2.22 (dddd, J = 21.9, 13.1, 9.7, 4.0 Hz, 2H), 0.94 (s, 9H).	434	E	
I-2001		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.61 (s, 1H), 7.98 (s, 1H), 7.46 (d, J = 2.5 Hz, 1H), 7.35 (d, J = 8.5 Hz, 1H), 7.29 (dd, J = 8.5, 2.4 Hz, 1H), 3.27 (d, J = 9.2 Hz, 1H), 2.67 - 2.55 (m, 4H), 2.17 (td, J = 9.5, 2.9 Hz, 2H), 2.08 (s, 1H), 1.59 (d, J = 33.3 Hz, 7H), 1.24 (s, 1H).	410.1	D	
I-2002		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 7.28 (dd, J = 15.0, 9.8 Hz, 2H), 7.08 (d, J = 8.2 Hz, 3H), 3.83 (d, J = 13.1 Hz, 1H), 3.15 - 2.94 (m, 1H), 2.92 - 2.62 (m, 3H), 2.27-2.00 (m, 2H), 1.93 (d, J = 13.1 Hz, 1H), 1.75 (d, J = 12.5 Hz, 1H), 1.60 (s, 2H), 1.44 (t, J = 17.3 Hz, 2H), 1.39-1.21 (m, 1H), 0.97 (s, 3H).	390.15	E	

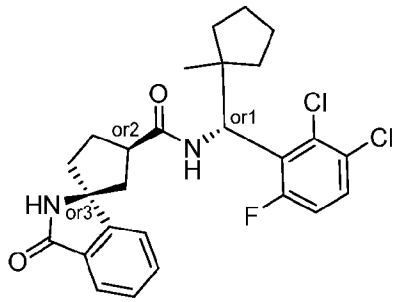
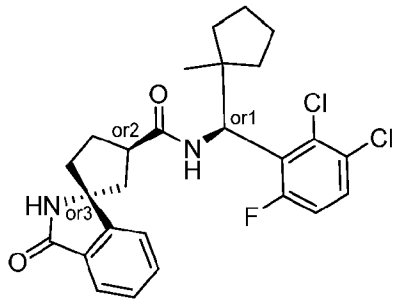
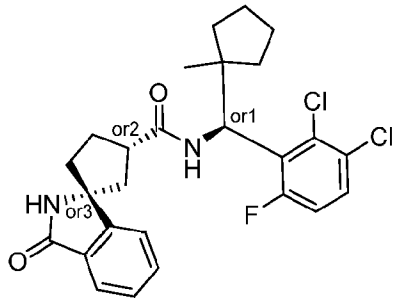
I-2003		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.63 (d, J = 16.3 Hz, 1H), 7.35-7.16 (m, 3H), 7.15-7.05 (m, 2H), 3.83 (dd, J = 13.3, 3.4 Hz, 1H),3.01 (p, J = 9.0 Hz, 1H), 2.80-2.62 (m, 3H), 2.30 (s, 1H), 2.08 (dd, J = 8.3, 4.6 Hz, 2H), 1.93 (q, J = 13.1 Hz, 1H), 1.75 (d, J = 12.6 Hz, 1H), 1.66-1.55 (m, 2H), 1.45 (dd, J = 22.6, 12.8 Hz, 2H), 1.32 (t, J = 12.7 Hz, 1H), 0.97 (s, 2H).	390.1	E	
I-2004		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.59 (s, 1H), 7.49 (d, J = 1.9 Hz, 1H), 7.36-7.23 (m, 3H), 6.57 (s, 1H), 3.25 (p, J = 9.2 Hz, 1H), 2.69-2.58 (m, 2H), 2.48 (d, J = 5.3 Hz, 1H), 2.28 (d, J = 12.5 Hz, 1H), 2.24-2.13 (m, 3H), 1.73 (d, J = 11.4 Hz, 1H), 1.49 (d, J = 10.7 Hz, 2H), 1.36 (q, J = 14.1, 13.6 Hz, 2H), 1.24 (s, 3H), 1.20 (s, 1H)	390.2	E	
I-2005		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.60 (d, J = 1.6 Hz, 1H), 7.49 (s, 1H), 7.36-7.23 (m, 3H), 6.57 (s, 1H), 3.24 (q, J = 9.1 Hz, 1H), 2.69-2.58 (m, 2H), 2.47 (s, 1H), 2.28 (d, J = 10.7 Hz, 1H), 2.24-2.14 (m, 3H), 1.78-1.69 (m, 1H), 1.49 (d, J = 10.6 Hz, 2H), 1.36 (q, J = 13.7 Hz, 2H), 1.24 (s, 3H), 1.20 (s, 1H).	390.15	E	
I-2006		(500 MHz, d6-DMSO) 10.55 (s, 1H), 8.61 (s, 1H), 8.13 (d, J − 8.6 Hz, 1H), 7.54 (app td, J − 8.8, 5.6 Hz, 1H), 7.16 – 7.06 (m, 1H), 4.96 (br s, 1H), 3.24 (app p, J = 9.0 Hz, 1H), 2.65 (dd, J = 11.6, 9.0 Hz, 1H), 2.60 – 2.53 (m, 1H), 2.26 – 2.20 (m, 1H), 2.16 (ddd, J = 16.1, 9.2, 4.2 Hz, 1H), 1.55 – 1.34 (m, 13H).	452	A	A

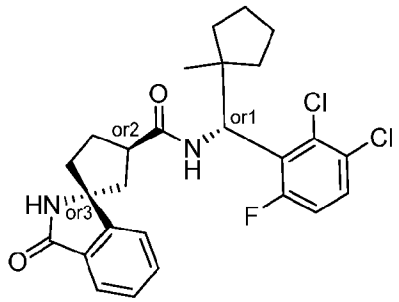
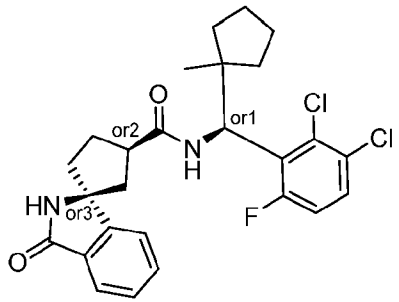
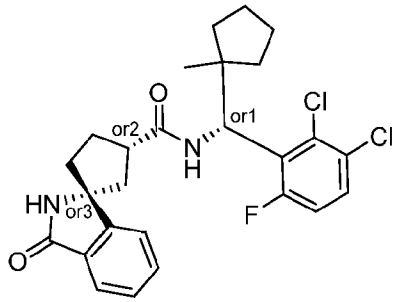
I-2007		(400 MHz, DMSO-d6) 9.30 (d, J = 7.0 Hz, 1H), 8.38 (d, J = 7.5 Hz, 1H), 7.52 (app. td, J = 8.7, 5.6 Hz, 1H), 7.12 (app. td, J = 9.5, 1.5 Hz, 1H), 4.81 (dd, J = 11.1, 7.5 Hz, 1H), 4.16 – 4.06 (m, 1H), 2.91 – 2.83 (m, 1H), 2.47 – 2.36 (m, 1H), 2.00 – 1.79 (m, 4H), 1.73 (ddd, J = 13.1, 8.9, 6.1 Hz, 1H), 1.66 – 1.40 (m, 6H), 1.38 – 1.21 (m, 2H), 1.05 – 0.95 (m, 1H).	453.4	A	B
I-2008		(400 MHz, DMSO-d6) 9.30 (d, J = 7.0 Hz, 1H), 8.14 (d, J = 8.7 Hz, 1H), 7.55 (app. td, J = 8.7, 5.5 Hz, 1H), 7.16 – 7.11 (m, 1H), 5.19 (d, J = 8.7 Hz, 1H), 4.16 – 4.07 (m, 1H), 3.07 – 2.98 (m, 1H), 2.00 – 1.92 (m, 1H), 1.92 – 1.82 (m, 2H), 1.75 (ddd, J = 13.2, 8.9, 6.3 Hz, 1H), 1.64 – 1.41 (m, 8H), 1.40 – 1.33 (m, 1H), 1.24 – 1.16 (m, 1H), 0.95 (s, 3H). Partial formate salt (<5%).	467.4	A	B
I-2009		NMR (400 MHz, DMSO-d6) 8.28 (d, J = 7.5 Hz, 1H), 7.82 – 7.72 (m, 1H), 7.48 (app. td, J = 8.7, 5.6 Hz, 1H), 7.08 (app. td, J = 9.5, 1.1 Hz, 1H), 4.82 – 4.72 (m, 1H), 2.98 – 2.83 (m, 2H), 2.72 – 2.58 (m, 1H), 2.43 – 2.31 (m, 1H), 2.03 – 1.77 (m, 2H), 1.74 (s, 0.5H), 1.73 (s, 1H), 1.72 (s, 0.5H), 1.71 (s, 1H), 1.70 – 1.34 (m, 8H), 1.34 – 1.15 (m, 3H), 1.15 – 1.02 (m, 1H), 1.01 – 0.88 (m, 1H). 2:2:1:1 mixture of 4 diastereomers	449.3	B	
I-2010		(500 MHz, DMSOd6) 8.29 (d, J = 7.6 Hz, 1H), 7.52 (app. td, J = 8.7, 5.6 Hz, 1H), 7.11 (app. t, J = 9.3 Hz, 1H), 4.85 – 4.78 (m, 1H), 4.42 (br. s, 1H), 3.21 (overlapping m, 2H), 2.74 – 2.60 (m, 1H), 2.47 – 2.34 (m, 1H), 2.07 – 1.84 (m, 2H), 1.81 – 1.38 (m, 8H), 1.37 – 1.21 (m, 3H), 1.20 – 1.08 (m,	372.2	C	

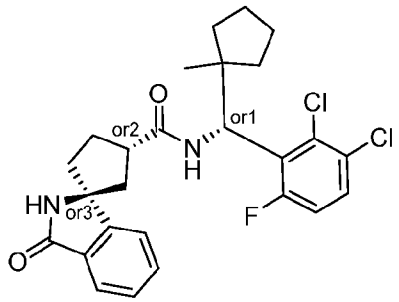
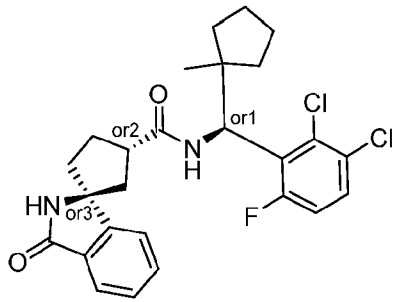
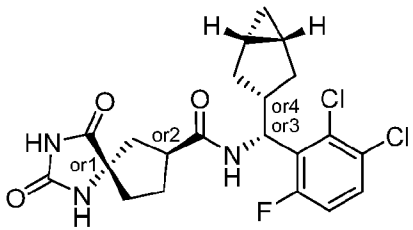
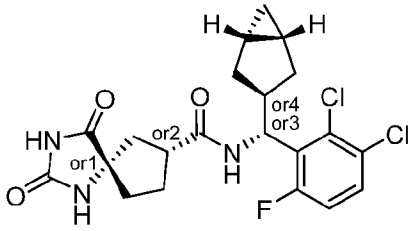
		1H), 1.04 – 0.94 (m, 1H). Appeared to be a mixture of 2 diastereomers in a 5:4 ratio.			
I-2012		(500 MHz, DMSOd6) 8.66 (d, J = 7.6 Hz, 1H), 7.53 (app. td, J = 8.7, 5.6 Hz, 1H), 7.12 (app td, J = 9.6, 1.3 Hz, 1H), 6.52 (br. s, 2H), 5.19 (s, 1H), 4.85 (dd, J = 11.0, 7.8 Hz, 1H), 3.33 (overlapping dA of AB, JAB = 14.7 Hz, 1H), 3.28 (dB of AB, JAB = 14.8 Hz, 1H), 2.46 (s, 3H), 2.43 (overlapping m, 1H), 1.96 – 1.87 (m, 1H), 1.66 – 1.43 (m, 4H), 1.38 – 1.26 (m, 2H), 1.05 – 0.96 (m, 1H). Major regioisomer described (4:1 ratio)	411.2	D	
I-2013		(500 MHz, DMSO-d6) as a ca. 1:1 mixture of diastereomers and a ca. 9:1 mixture of rotamers, 8.19 – 8.12 (m, 2H), 7.76 (d, J = 6.8 Hz, 2H), 7.55 (app. td, J = 8.7, 5.5 Hz, 2H), 7.17 – 7.12 (m, 2H), 5.20 – 5.15 (m, 3H), 5.13 (d, J = 4.7 Hz, 1H), 3.85 – 3.74 (m, 4H), 2.95 – 2.87 (m, 2H), 2.06 (ddd, J = 13.2, 9.0, 6.0 Hz, 1H), 2.03 – 1.96 (m, 2H), 1.93 – 1.87 (m, 1H), 1.81 – 1.77 (m, J = 3.4 Hz, 6H), 1.64 – 1.43 (m, 16H), 1.38 – 1.32 (m, 2H), 1.22 – 1.16 (m, 2H), 0.95 – 0.92 (m, 6H).	429.4	A	B
I-2014		(400 MHz, DMSO-d6) 8.04 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.79 (d, J = 6.9 Hz, 1H), 5.54 (d, J = 4.9 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 3.84 (q, J = 6.5 Hz, 1H), 2.95 (p, J = 7.8 Hz, 1H), 1.84 (dh, J = 12.1, 5.5 Hz, 2H), 1.65 (dd, J = 12.8, 7.1 Hz, 1H), 1.60 (s, 9H), 1.51 (ddd, J = 13.3, 8.9, 5.3 Hz, 1H), 1.36 (d, J = 6.5 Hz, 1H), 1.34 - 1.24 (m, 1H), 0.97 (d, J = 2.7 Hz, 3H).	444.15	D	

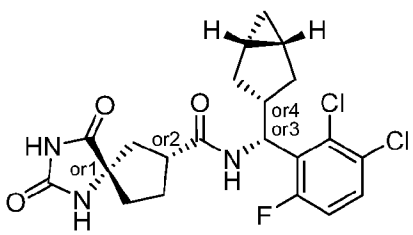
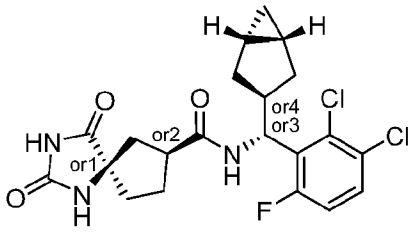
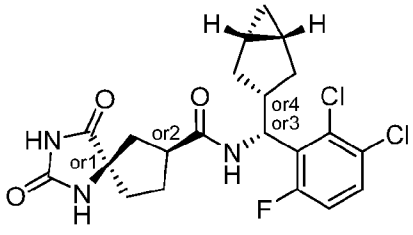
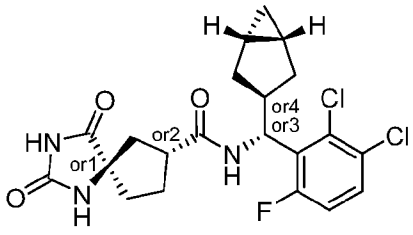
I-2015		(400 MHz, DMSO-d6) 8.38 (s, 1H), 8.08 (d, J = 8.6 Hz, 1H), 8.00 (s, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.34 (d, J = 6.7 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 6.42 (dd, J = 6.1, 1.3 Hz, 1H), 5.50 (d, J = 8.6 Hz, 1H), 4.22 (s, 1H), 3.01 (q, J = 7.9 Hz, 1H), 1.96 (tt, J = 13.4, 7.1 Hz, 3H), 1.73 (ddd, J = 13.4, 8.8, 5.3 Hz, 1H), 1.60 (s, 6H), 1.54-1.46 (m, 2H),1.37 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	465.15	A	A
I-2016		(400 MHz, DMSO-d6) 8.37 (s, 1H), 8.10 (d, J = 8.6 Hz, 1H), 8.00 (s, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.34 (d, J = 6.6 Hz, 1H), 7.3-7.21 (m, 1H), 6.40 (d, J = 6.1 Hz, 1H), 5.50 (d, J = 8.4 Hz, 1H), 4.19 (s, 1H), 1.97 (s, 3H), 1.81 (dt, J = 13.8, 7.2 Hz, 1H), 1.60 (s, 9H), 1.49 (s, 1H), 1.38 (s, 1H), 1.27 (s, 2H), 0.97 (d, J = 2.8 Hz, 3H).	465.15	B	
I-2017		(400 MHz, DMSO-d6) 8.05 (d, J = 8.7 Hz, 1H), 7.60 (d, J = 9.6 Hz, 1H), 7.25 (t, J = 9.8 Hz, 1H), 5.81 (d, J = 7.1 Hz, 1H), 5.56 (s, 1H), 5.49 (d, J = 8.6 Hz, 1H), 3.88 (q, J = 6.5 Hz, 1H), 2.99-2.91 (m, 1H), 2.53 (s, 3H), 1.88-1.70 (m, 3H), 1.68-1.57 (m, 7H), 1.44 (dd, J = 12.6, 7.5 Hz, 1H), 1.37 (s, 1H), 1.35-1.24 (m, 2H), 0.96 (d, J = 2.8 Hz, 3H).	444.15	A	B

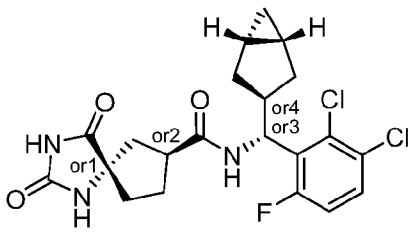
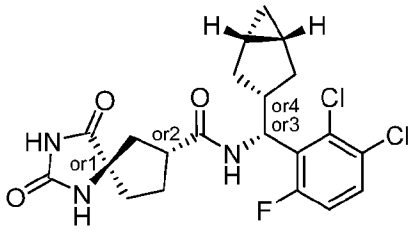
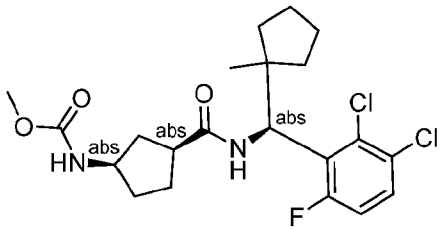
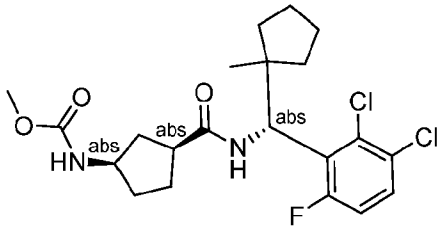
I-2018		(400 MHz, DMSO-d6) 12.62 (s, 1H), 8.43 (d, J = 7.6 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 2H), 7.13 (td, J = 9.3, 1.7 Hz, 1H), 6.22 (dd, J = 46.3, 11.6 Hz, 3H), 4.84 (dd, J = 11.1, 7.5 Hz, 1H), 2.47- 2.35 (m, 1H), 2.24 - 1.99 (m, 4H), 1.98 - 1.86 (m, 1H), 1.71 - 1.41 (m, 6H), 1.39 - 1.21 (m, 2H), 1.00 (dq, J = 16.2, 8.0 Hz, 1H).	408.2	D	
I-2019		(400 MHz, DMSO-d6) 12.49 (s, 1H), 8.16 (d, J = 7.5 Hz, 1H), 7.52 (td, J = 8.7, 5.5 Hz, 1H), 7.36 (s, 2H), 7.12 (td, J = 9.3, 1.7 Hz, 1H), 4.79 (dd, J = 11.2, 7.5 Hz, 1H), 2.77 (q, J = 8.1 Hz, 1H), 2.55 (dd, J = 9.8, 6.3 Hz, 2H), 2.48 - 2.29 (m, 2H), 1.91 - 1.71 (m, 4H), 1.68-1.39 (m, 5H), 1.32 (dtd, J = 11.6, 7.4, 3.9 Hz, 1H), 1.19 (dq, J = 15.9, 7.7 Hz, 1H), 0.98 (dq, J = 15.7, 7.9 Hz, 1H).	408.15	C	D
I-2020		(400 MHz, DMSO-d6) 12.43 (s, 1H), 8.17 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.28 (s, 2H), 7.16- 7.05 (m, 1H), 4.81 (dd, J = 11.1, 7.5 Hz, 1H), 2.76 (q, J = 8.2 Hz, 1H), 2.50 - 2.32 (m, 4H), 1.96 - 1.74 (m, 4H), 1.70 - 1.41 (m, 5H), 1.40 - 1.18 (m, 2H), 1.00 (dd, J = 12.2, 8.2 Hz, 1H).	408.2	D	
I-2021		(400 MHz, DMSO-d6) 12.66 (d, J = 65.9 Hz, 1H), 8.43 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 2H), 7.13 (td, J = 9.4, 1.7 Hz, 1H), 6.41 -6.05 (m, 3H), 4.84 (dd, J = 11.1, 7.5 Hz, 1H), 2.40 (p, J = 8.3 Hz, 1H), 2.12 (dddd, J = 31.3, 16.8, 14.1, 7.3 Hz, 4H), 1.99 - 1.84 (m, 1H), 1.76 -1.40 (m, 6H), 1.40-1.20 (m, 2H), 1.00 (p, J = 8.0 Hz, 1H).	408.15	C	

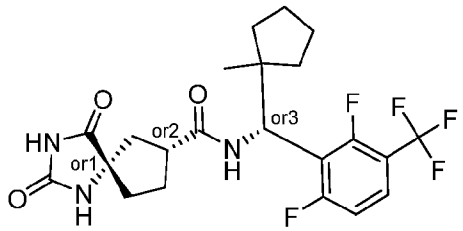
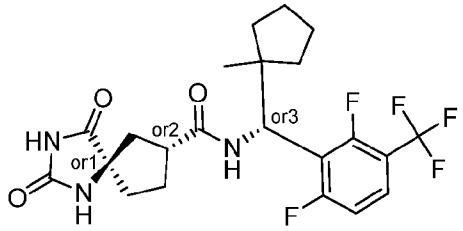
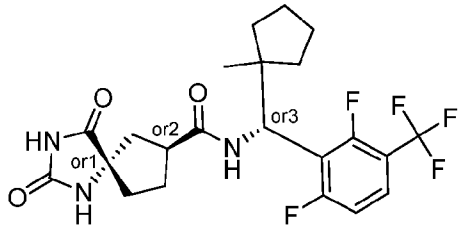
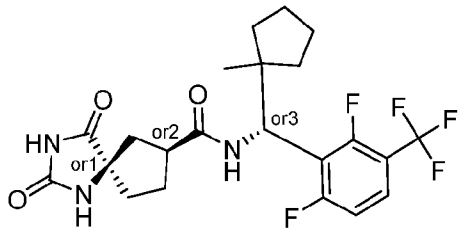
I-2022		(400 MHz, DMSO-d6) 8.51 (s, 1H), 8.25 (d, J = 8.7 Hz, 1H), 7.67 - 7.57 (m, 4H), 7.47 (ddd, J = 8.0, 5.5, 2.6 Hz, 1H), 7.24 (dd, J = 10.8, 9.0 Hz, 1H), 5.56 (d, J = 8.6 Hz, 1H), 3.42 (q, J = 8.2 Hz, 1H), 2.26 - 2.13 (m, 1H), 2.12 - 1.87 (m, 5H), 1.63 (s, 6H), 1.40 (s, 1H), 1.29 (s, 1H), 1.00 (d, J = 2.7 Hz, 3H).	489.05	A	A
I-2023		(400 MHz, DMSO-d6) 8.97 (s, 1H), 8.25 (d, J = 8.5 Hz, 1H), 7.70- 7.54 (m, 4H), 7.51 - 7.41 (m, 1H), 7.29 (dd, J = 10.8, 8.9 Hz, 1H), 5.53 (d, J = 8.4 Hz, 1H), 3.28 (dd, J = 13.2, 5.1 Hz, 1H), 2.39 - 2.22 (m, 1H), 2.20 - 1.98 (m, 3H), 1.97 - 1.86 (m, 1H), 1.77 - 1.65 (m, 1H), 1.58 (s, 6H), 1.36 (s, 1H), 1.26 (d, J = 13.2 Hz, 1H), 0.97 (d, J = 2.7 Hz, 3H).	489.05	D	
I-2024		(400 MHz, DMSO-d6) 8.96 (s, 1H), 8.26 (d, J = 8.6 Hz, 1H), 7.64 -7.49 (m, 4H), 7.43 (td, J = 7.0, 1.6 Hz, 1H), 7.22 (dd, J = 10.7, 8.9 Hz, 1H), 5.55 (d, J = 8.5 Hz, 1H), 3.31-3.20 (m, 1H), 2.26 - 2.00 (m, 4H), 1.96 - 1.85 (m, 1H), 1.79-1.67 (m, 1H), 1.62 (s, 6H), 1.41 (s, 1H), 1.30 (s, 1H), 1.00 (d, J = 2.8 Hz, 3H).	489.05	C	

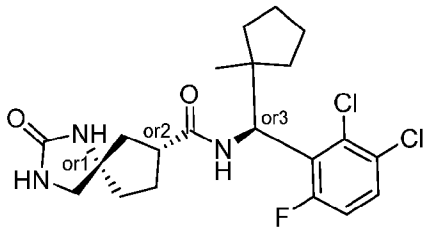
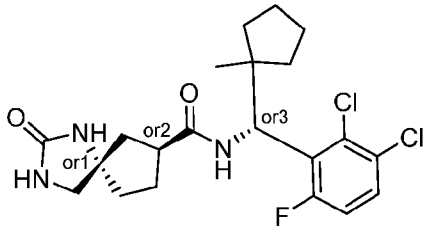
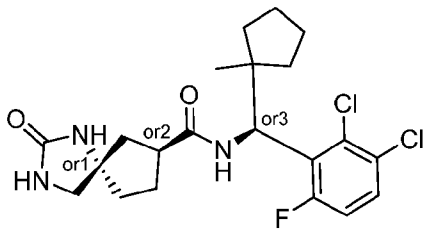
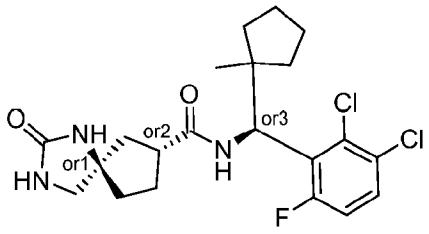
I-2025		(400 MHz, DMSO-d6) 8.95 (s, 1H), 8.25 (d, J = 8.6 Hz, 1H), 7.59 (dd, J = 9.8, 6.2 Hz, 2H), 7.56 - 7.49 (m, 2H), 7.43 (td, J = 7.0, 1.6 Hz, 1H), 7.21 (ddd, J = 10.7, 8.9, 1.7 Hz, 1H), 5.55 (d, J = 8.4 Hz, 1H), 3.29 (dd, J = 8.5, 5.9 Hz, 1H), 2.28 - 2.00 (m, 4H), 1.90 (dd, J = 13.3, 8.1 Hz, 1H), 1.79 - 1.68 (m, 1H), 1.62 (s, 6H), 1.40 (s, 1H), 1.29 (s, 1H), 0.99 (d, J = 2.8 Hz, 3H).	489.05	A	B
I-2026		(400 MHz, DMSO-d6) 8.55 (s, 1H), 8.28 (d, J = 8.7 Hz, 1H), 7.68 - 7.56 (m, 4H), 7.47 (ddd, J = 8.0, 4.6, 3.5 Hz, 1H), 7.30 (dd, J = 10.8, 8.9 Hz, 1H), 5.56 (d, J = 8.6 Hz, 1H), 3.42 (d, J = 7.9 Hz, 1H), 2.23 -2.01 (m, 3H), 1.92 (ddt, J = 17.8, 14.3, 5.5 Hz, 3H), 1.59 (s, 6H), 1.32 (d, J = 39.9 Hz, 2H), 0.97 (d, J = 2.7 Hz, 3H).	489.05	D	
I-2027		(400 MHz, DMSO-d6) 8.97 (s, 1H), 8.24 (d, J = 8.5 Hz, 1H), 7.74- 7.52 (m, 4H), 7.45 (dt, J = 6.7, 4.2 Hz, 1H), 7.28 (dd, J = 10.7, 8.9 Hz, 1H), 5.53 (d, J = 8.4 Hz, 1H), 3.28 (t, J = 7.5 Hz, 1H), 2.28 (dd, J = 13.1, 9.0 Hz, 1H), 2.19- 1.98 (m, 3H), 1.97 -1.84 (m, 1H), 1.68 (t, J = 8.8 Hz, 1H), 1.58 (s, 6H), 1.32 (d, J = 37.4 Hz, 2H), 0.97 (d, J = 2.7 Hz, 3H).	489.05	A	A

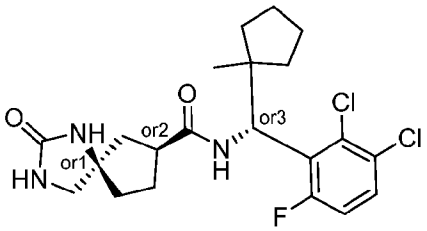
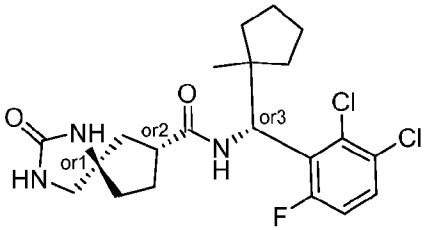
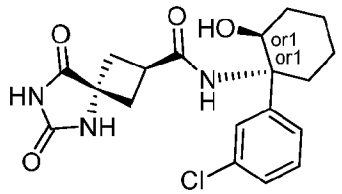
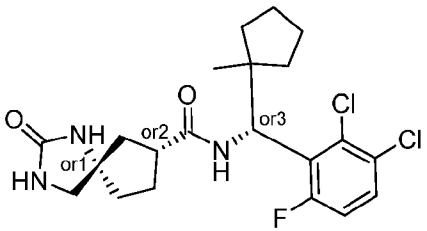
I-2028		(400 MHz, DMSO-d6) 8.55 (s, 1H), 8.27 (d, J = 8.7 Hz, 1H), 7.68 - 7.58 (m, 4H), 7.53 -7.43 (m, 1H), 7.30 (dd, J = 10.8, 8.7 Hz, 1H), 5.56 (d, J = 8.6 Hz, 1H), 3.42 (q, J = 8.0, 7.6 Hz, 1H), 2.22-2.01 (m, 3H), 2.01 -1.81 (m, 3H), 1.59 (s, 6H), 1.37 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	489.05	A	A
I-2029		(400 MHz, DMSO-d6) 8.51 (s, 1H), 8.25 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 8.9, 5.5 Hz, 4H), 7.47 (ddd, J = 7.9, 5.6, 2.6 Hz, 1H), 7.24 (dd, J = 10.8, 8.9 Hz, 1H), 5.56 (d, J = 8.6 Hz, 1H), 3.42 (q, J = 8.2 Hz, 1H), 2.20 (dq, J = 14.7, 6.9 Hz, 1H), 2.10 - 1.99 (m, 2H), 1.98 - 1.85 (m, 3H), 1.63 (s, 6H), 1.40 (s, 1H), 1.29 (s, 1H), 1.00 (d, J = 2.7 Hz, 3H).	489.05	D	
I-2030		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.47 (d, J = 7.1 Hz, 1H), 7.98 (s, 1H), 7.59 (dd, J = 9.0, 5.2 Hz, 1H), 7.25 (dd, J = 10.3, 8.9 Hz, 1H), 5.09-5.01 (m, 1H), 2.95 (t, J = 8.5 Hz, 1H), 2.24 (s, 1H), 2.10 (dt, J = 13.6, 6.7 Hz, 2H), 1.88 (p, J = 8.5 Hz, 3H), 1.78 - 1.67 (m, 1H), 1.66- 1.54 (m, 1H), 1.45 (q, J = 6.8, 4.0 Hz, 2H), 1.34- 1.10 (m, 3H), 0.28 (td, J = 7.9, 4.8 Hz, 1H), 0.13 (q, J = 4.1 Hz, 1H).	454	E	
I-2031		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.47 (d, J = 7.1 Hz, 1H), 7.98 (s, 1H), 7.58 (ddd, J = 9.0, 5.3, 2.1 Hz, 1H), 7.30 - 7.20 (m, 1H), 5.05 (s, 1H), 2.95 (s, 1H), 2.24 (s, 1H), 2.10 (dt, J = 13.7, 6.6 Hz, 2H), 1.88 (td, J = 12.2, 9.5, 5.5 Hz, 3H), 1.73 (dd, J = 16.6, 8.8 Hz, 1H), 1.59 (s, 1H), 1.45 (d, J = 11.4 Hz, 2H), 1.38 - 1.08 (m, 3H), 0.28 (d, J = 8.2 Hz, 1H), 0.13 (d, J = 4.6 Hz, 1H).	454	A	B

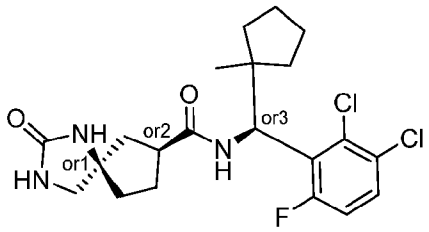
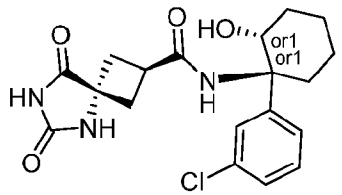
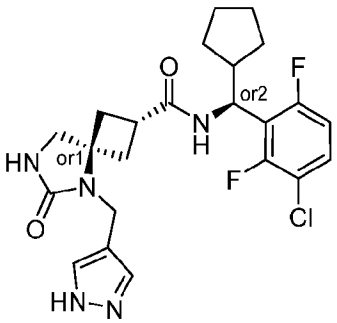
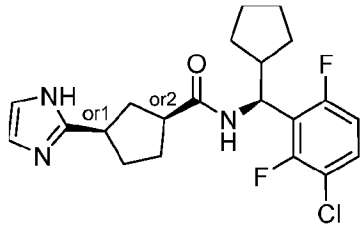
I-2032		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.48 (d, J = 7.2 Hz, 1H), 7.95 (s, 1H), 7.58 (dd, J = 9.0, 5.2 Hz, 1H), 7.24 (dd, J = 10.3, 8.9 Hz, 1H), 5.07 (s, 1H), 2.93 (q, J = 8.3 Hz, 1H), 2.24 (s, 1H), 2.11 (dd, J = 12.2, 6.9 Hz, 1H), 2.06 - 1.87 (m, 3H), 1.86 -1.66 (m, 3H), 1.46 (s, 2H), 1.33 - 1.19 (m, 3H), 1.17 (d, J = 6.5 Hz, 1H), 0.28 (td, J = 7.9, 4.9 Hz, 1H), 0.13 (q, J = 4.1 Hz, 1H).	454	D	
I-2033		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.42 (d, J = 7.1 Hz, 1H), 8.29 (s, 1H), 7.62- 7.54 (m, 1H), 7.24 (dd, J = 10.3, 8.9 Hz, 1H), 5.05 (t, J = 9.1 Hz, 1H), 2.90 (p, J = 8.0 Hz, 1H), 2.25 (s, 1H), 2.13 (dd, J = 12.1, 7.1 Hz, 1H), 1.96 (ddd, J = 16.8, 11.6, 8.9 Hz, 3H), 1.83 - 1.74 (m, 2H), 1.65 (dd, J = 10.8, 5.6 Hz, 1H), 1.45 (q, J = 7.1, 3.9 Hz, 2H), 1.36 - 1.11 (m, 3H), 0.29 (s, 1H), 0.17 - 0.11 (m, 1H).	454	A	B
I-2034		(400 MHz, DMSO-d6) 10.62 (s, 1H), 8.42 (d, J = 7.2 Hz, 1H), 8.30 (s, 1H), 7.59 (dd, J = 9.0, 5.2 Hz, 1H), 7.25 (dd, J = 10.3, 8.9 Hz, 1H), 5.04 (s, 1H), 2.90 (s, 1H), 2.25 (s, 1H), 2.19 - 2.05 (m, 2H), 2.02 - 1.81 (m, 3H), 1.62 (d, J = 4.4 Hz, 2H), 1.44 (s, 2H), 1.37 -1.14 (m, 3H), 0.28 (d, J = 4.9 Hz, 1H), 0.13 (d, J = 4.4 Hz, 1H).	454	D	
I-2035		(400 MHz, DMSO-d6) 10.62 (s, 1H), 8.42 (d, J = 7.1 Hz, 1H), 8.29 (d, J = 1.6 Hz, 1H), 7.59 (dd, J = 8.9, 5.2 Hz, 1H), 7.25 (dd, J = 10.3, 8.9 Hz, 1H), 5.05 (s, 1H), 2.90 (t, J = 9.0 Hz, 1H), 2.25 (s, 1H), 2.19 - 2.03 (m, 2H), 1.91 (ddd, J = 21.6, 13.6, 9.0 Hz, 3H), 1.71 - 1.55 (m, 2H), 1.45 (d, J = 11.3 Hz, 2H), 1.37 - 1.13 (m, 3H), 0.33 - 0.23 (m, 1H), 0.13 (d, J = 4.4 Hz, 1H).	454	A	B

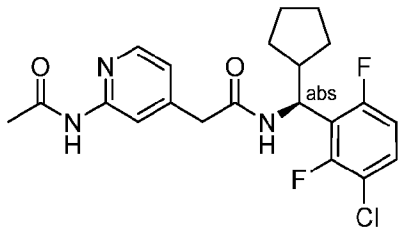
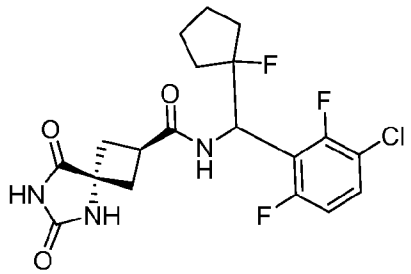
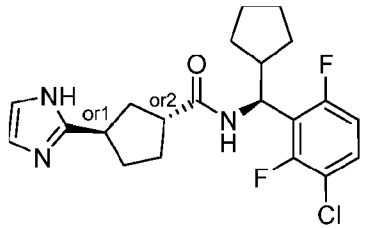
I-2036		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.47 (d, J = 7.1 Hz, 1H), 7.95 (s, 1H), 7.58 (dd, J = 8.9, 5.1 Hz, 1H), 7.24 (dd, J = 10.3, 8.9 Hz, 1H), 5.07 (t, J = 8.6 Hz, 1H), 2.94 (q, J = 8.4 Hz, 1H), 2.24 (s, 1H), 2.12 (dd, J = 12.3, 7.0 Hz, 1H), 2.05 - 1.94 (m, 2H), 1.94 - 1.87 (m, 1H), 1.77 (dddd, J = 22.7, 19.2, 14.4, 9.2 Hz, 3H), 1.46 (s, 2H), 1.37 - 1.15 (m, 3H), 0.28 (td, J = 7.9, 4.9 Hz, 1H), 0.13 (q, J = 4.1 Hz, 1H).	454	B	
I-2037		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.42 (d, J = 7.1 Hz, 1H), 8.29 (s, 1H), 7.62 - 7.54 (m, 1H), 7.24 (t, J = 9.6 Hz, 1H), 5.05 (t, J = 8.8 Hz, 1H), 2.96 - 2.84 (m, 1H), 2.25 (s, 1H), 2.13 (dd, J = 12.2, 6.9 Hz, 1H), 1.97 (ddd, J = 17.1, 13.6, 8.7 Hz, 3H), 1.79 (dd, J = 13.1, 8.6 Hz, 2H), 1.65 (dd, J = 10.9, 5.5 Hz, 1H), 1.51 - 1.41 (m, 2H), 1.36 - 1.09 (m, 3H), 0.29 (td, J = 7.9, 4.8 Hz, 1H), 0.18 - 0.11 (m, 1H).	454	C	
I-2038		(400 MHz, DMSO-d6) 8.07 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 7.10 (d, J = 6.8 Hz, 1H), 5.47 (d, J = 8.5 Hz, 1H), 3.79 (q, J = 6.6 Hz, 4H), 3.50 (s, 3H), 2.96 (p, J = 7.8 Hz, 1H), 1.85 (ddt, J = 16.2, 11.9, 5.1 Hz, 2H), 1.73-1.54 (m, 8H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	445.1	D	
I-2039		(400 MHz, DMSO-d6) 8.05 (d, J = 8.5 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 7.10 (d, J = 6.8 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 3.87-3.78 (m, 1H), 3.51 (s, 3H), 2.95 (q, J = 7.7 Hz, 1H), 1.90-1.70 (m, 3H),1.60 (s, 7H), 1.39 (s, 3H), 1.25 (d, J = 7.9 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	445.15	A	B

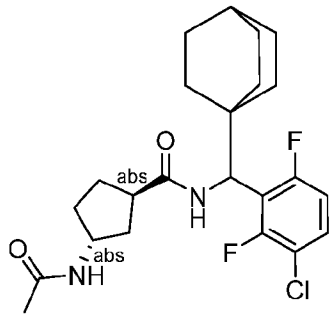
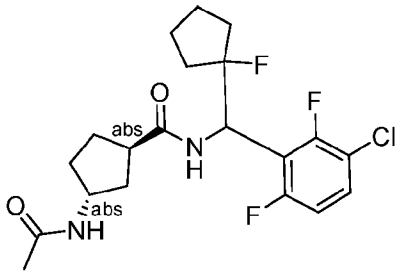
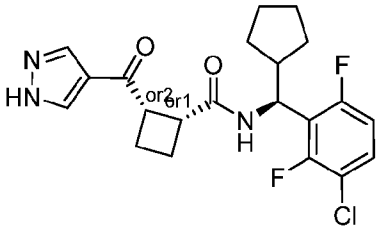
I-2040		(400 MHz, DMSO-d6) 10.63 (s, 1H), 8.37 - 8.29 (m, 2H), 7.78 (td, J = 8.4, 5.5 Hz, 1H), 7.31 (t, J = 9.3 Hz, 1H), 5.21 (d, J = 8.4 Hz, 1H), 3.11 - 3.03 (m, 1H), 2.12 (dd, J = 13.1, 10.1 Hz, 1H), 2.01 - 1.88 (m, 3H), 1.69 - 1.45 (m, 8H), 1.42 - 1.34 (m, 1H), 1.22 (dd, J = 11.4, 5.2 Hz, 1H), 0.97 (s, 3H).	474.1	C	
I-2041		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.41 (d, J = 8.4 Hz, 1H), 8.00 (s, 1H), 7.78 (td, J = 8.4, 5.5 Hz, 1H), 7.30 (t, J = 9.3 Hz, 1H), 5.20 (d, J = 8.4 Hz, 1H), 3.21 - 3.08 (m, 1H), 2.12 (dd, J = 13.2, 8.1 Hz, 1H), 1.91 (td, J = 9.6, 3.5 Hz, 3H), 1.82 - 1.69 (m, 1H), 1.61 (dp, J = 10.3, 5.1, 4.7 Hz, 6H), 1.53 - 1.43 (m, 1H), 1.39 (t, J = 6.4 Hz, 1H), 1.22 (dd, J = 11.3, 5.2 Hz, 1H), 0.96 (s, 3H).	474.1	D	
I-2042		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.38 - 8.28 (m, 2H), 7.77 (td, J = 8.4, 5.5 Hz, 1H), 7.29 (t, J = 9.3 Hz, 1H), 5.25 - 5.18 (m, 1H), 3.06 (dtd, J = 10.1, 7.9, 4.3 Hz, 1H), 2.07 - 1.97 (m, 2H), 2.01 - 1.87 (m, 1H), 1.87 - 1.73 (m, 2H), 1.73 - 1.55 (m, 6H), 1.49 (d, J = 11.4 Hz, 1H), 1.39 (dd, J = 9.1, 4.5 Hz, 1H), 1.26 - 1.17 (m, 1H), 0.97 (s, 3H).	474.1	B	
I-2043		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.42 (d, J = 8.5 Hz, 1H), 7.96 (s, 1H), 7.76 (t, J = 7.1 Hz, 1H), 7.30 (t, J = 9.2 Hz, 1H), 5.23 (d, J = 8.5 Hz, 1H), 3.20 - 3.08 (m, 1H), 2.03 (dt, J = 21.0, 8.2 Hz, 2H), 1.97 - 1.87 (m, 1H), 1.90 - 1.72 (m, 3H), 1.61 (dt, J = 12.1, 6.1 Hz, 5H), 1.49 (s, 1H), 1.38 (s, 1H), 1.22 (dd, J = 11.3, 5.4 Hz, 1H), 0.96 (s, 3H).	474.1	D	

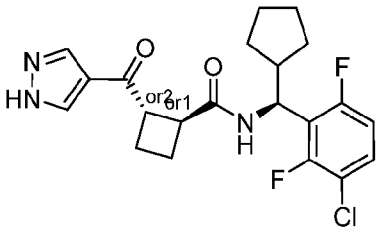
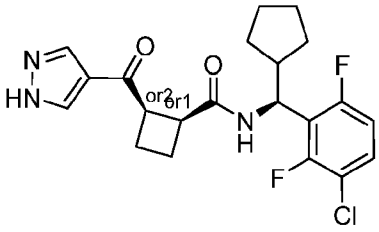
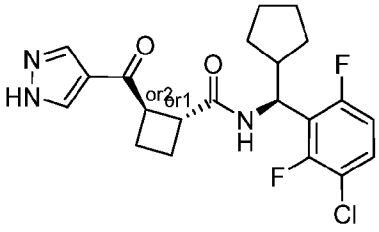
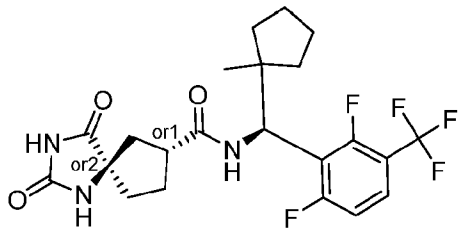
I-2044		(400 MHz, DMSO-d6) 8.08 (d, J = 8.8 Hz, 1H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 6.33 (s, 1H), 6.12 (s, 1H), 5.52 (d, J = 8.6 Hz, 1H), 3.21 - 3.09 (m, 2H), 2.96 - 2.87 (m, 1H), 1.90 (dd, J = 12.4, 7.8 Hz, 1H), 1.76 - 1.50 (m, 11H), 1.41 - 1.33 (m, 1H), 1.26 (t, J = 7.9 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	442.1	E	
I-2045		(400 MHz, DMSO-d6) 8.08 (d, J = 8.7 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 6.33 (s, 1H), 6.12 (s, 1H), 5.52 (d, J = 8.6 Hz, 1H), 3.21 - 3.08 (m, 2H), 2.91 (t, J = 8.4 Hz, 1H), 1.90 (dd, J = 12.3, 7.8 Hz, 1H), 1.78 - 1.50 (m, 11H), 1.31 (dt, J = 45.9, 7.2 Hz, 2H), 0.96 (d, J = 2.8 Hz, 3H).	442.1	A	A
I-2046		(400 MHz, DMSO-d6) 8.06 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.27 (dd, J = 10.8, 8.9 Hz, 1H), 6.28 (s, 1H), 6.11 (s, 1H), 5.49 (d, J = 8.6 Hz, 1H), 3.18 - 3.07 (m, 2H), 2.98 - 2.85 (m, 1H), 1.77 (p, J = 7.5 Hz, 3H), 1.70 - 1.49 (m, 9H), 1.37 (s, 1H), 1.26 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	442.1	D	
I-2047		(400 MHz, DMSO-d6) 8.10 (d, J = 8.5 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 6.49 (s, 1H), 6.06 (s, 1H), 5.48 (d, J = 8.5 Hz, 1H), 3.21 (dd, J = 8.8, 1.3 Hz, 1H), 3.10 (dd, J = 8.8, 1.1 Hz, 1H), 3.01 (p, J = 8.0 Hz, 1H), 1.90 (dd, J = 13.1, 9.4 Hz, 1H), 1.76 (dd, J = 12.8, 7.4 Hz, 2H), 1.70 - 1.45 (m, 9H), 1.39 (s, 1H), 1.25 (d, J = 10.3 Hz, 1H), 0.99 - 0.82 (m, 3H)	442.1	B	

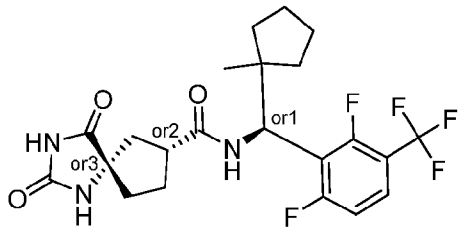
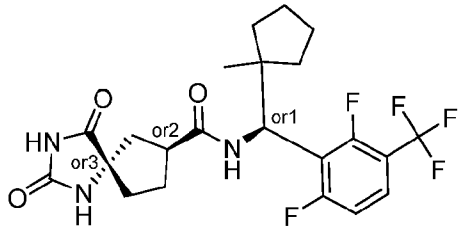
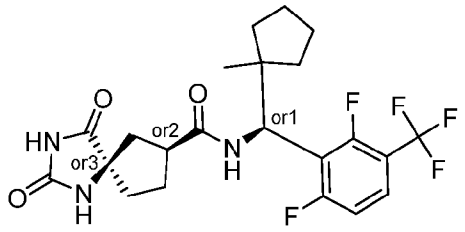
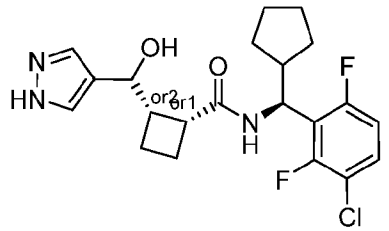
I-2048		(400 MHz, DMSO-d6) 8.10 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 6.49 (s, 1H), 6.06 (s, 1H), 5.48 (d, J = 8.5 Hz, 1H), 3.25 - 3.06 (m, 2H), 3.01 (p, J = 8.1 Hz, 1H), 1.90 (dd, J = 13.1, 9.4 Hz, 1H), 1.76 (dd, J = 12.9, 7.5 Hz, 2H), 1.70 - 1.45 (m, 9H), 1.39 (s, 1H), 1.25 (d, J = 10.1 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	442.1	A	A
I-2049		(400 MHz, DMSO-d6) 8.10 (d, J = 8.5 Hz, 1H), 7.65 - 7.57 (m, 1H), 7.26 (dd, J = 10.7, 9.0 Hz, 1H), 6.48 (s, 1H), 6.03 (s, 1H), 5.48 (d, J = 8.5 Hz, 1H), 3.19 - 3.07 (m, 2H), 3.01 (p, J = 7.7 Hz, 1H), 1.90 (s, 1H), 1.78 (dd, J = 13.2, 9.4 Hz, 1H), 1.64 (dd, J = 31.1, 7.7 Hz, 10H), 1.37 (s, 1H), 1.25 (d, J = 10.4 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	442.1	A	A
I-2050		(400 MHz, DMSO-d6) ¡Ä 10.71 - 10.35 (s, 1H), 8.71 - 8.39 (s, 1H), 7.67 - 6.92 (m, 5H), 5.36 - 5.15 (d, J = 6.9 Hz, 1H), 3.68 - 3.58 (q, J = 7.8, 5.4 Hz, 1H), 3.50 - 3.37 (m, 1H), 2.79 - 2.66 (dt, J = 12.9, 9.6 Hz, 2H), 2.64 - 2.54 (d, J = 13.3 Hz, 1H), 2.42 - 2.21 (dd, J = 10.5, 6.3 Hz, 2H), 1.87 - 1.53 (dq, J = 24.8, 12.4 Hz, 4H), 1.50 - 1.28 (m, 3H).	392.1	E	
I-2051		(400 MHz, DMSO-d6) 8.06 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.27 (dd, J = 10.8, 8.9 Hz, 1H), 6.28 (s, 1H), 6.11 (s, 1H), 5.49 (d, J = 8.6 Hz, 1H), 3.18 - 3.08 (m, 2H), 2.98 - 2.85 (m, 1H), 1.83 - 1.73 (m, 3H), 1.72 - 1.47 (m, 9H), 1.32 (d, J − 42.9 Hz, 2H), 0.97 (d, J − 2.8 Hz, 3H).	442.1	A	B

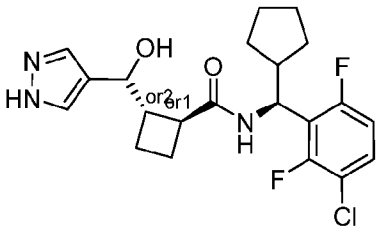
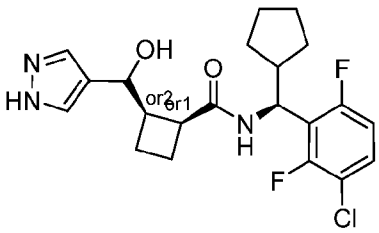
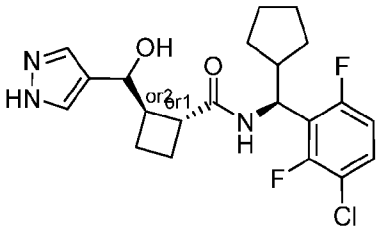
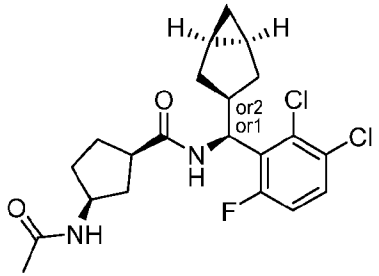
I-2052		(400 MHz, DMSO-d6) 8.10 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.7, 9.0 Hz, 1H), 6.47 (s, 1H), 6.03 (s, 1H), 5.48 (d, J = 8.5 Hz, 1H), 3.18 - 3.06 (m, 2H), 3.05 - 2.96 (m, 1H), 1.91 (d, J = 9.3 Hz, 1H), 1.78 (dd, J = 13.1, 9.4 Hz, 1H), 1.73 - 1.57 (m, 10H), 1.38 (s, 1H), 1.25 (d, J = 10.2 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	442.1	C	
I-2053		(400 MHz, DMSO-d6) ¦Ä 10.68 - 10.51 (s, 1H), 8.72 - 8.55 (s, 1H), 7.49 - 7.10 (m, 5H), 5.36 - 5.17 (d, J = 6.8 Hz, 1H), 3.72 - 3.56 (d, J = 7.3 Hz, 1H), 3.51 - 3.38 (t, J = 9.1 Hz, 1H), 2.80 - 2.65 (dt, J = 13.0, 9.7 Hz, 2H), 2.63 - 2.55 (d, J = 13.3 Hz, 1H), 2.40 - 2.22 (dd, J = 10.4, 6.2 Hz, 2H), 1.91 - 1.53 (dq, J = 24.3, 12.5 Hz, 4H), 1.51 - 1.26 (m, 3H).	392.1	E	
I-2054		(400 MHz, DMSO-d6) 12.65 - 12.86 (m, 1H), 8.54 - 8.28 (m, 2H), 7.53 (q, J = 8.3 Hz, 3H), 7.12 (t, J = 9.3 Hz, 1H), 6.23 (s, 1H), 4.91 - 4.75 (m, 1H), 4.24 (s, 2H), 3.25 - 3.08 (m, 3H), 2.92 (d, J = 10.2 Hz, 2H), 2.07 (d, J = 13.1 Hz, 1H), 1.98 (m, 1H), 1.86 (m, 1H),1.66 - 1.40 (m, 5H), 1.33 (s, 1H), 1.24 (s, 2H), 1.98 (d, J = 13.1 Hz, 1H).	478.1	D	
I-2055		NMR (400 MHz, DMSO-d6) 8.87 (overlapping d, J = 6.3 Hz, 1H), 8.86 (overlapping d, J = 6.7 Hz, 1H),8.28 (br. ss, 1H), 7.56 – 7.47 (m, 1H), 7.16 – 7.08 (m, 1H), 6.85 (overlaping br. s, 1H), 6.83 (overlapping br. s, 1H), 4.84 (br. dd, J = 10.9, 7.6 Hz, 1H), 3.14 (overlapping m, 1H), 2.83 – 2.72 (m, 1H), 2.44 (overlapping m, 1H), 2.24 – 2.13 (m, 0.5H), 2.13 – 2.03 (m, 0.5H), 1.99 – 1.67 (m, 6H), 1.65 – 1.41 (m, 4H), 1.39 – 1.20 (m, 2H), 1.07 – 0.95 (m, 1H). 4:1 mixture of the 2 pairs of	408.3	A	C

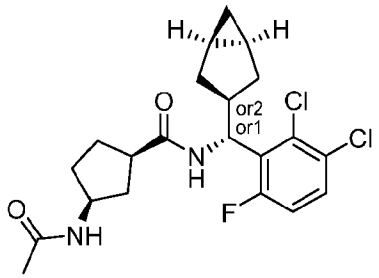
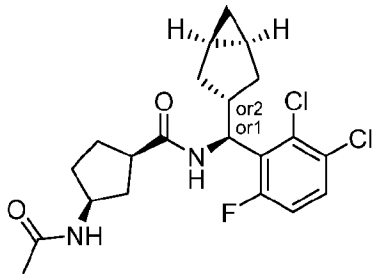
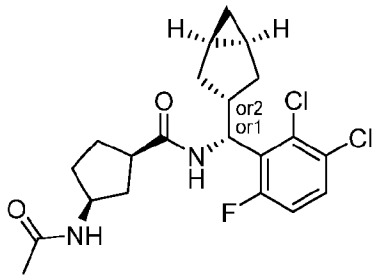
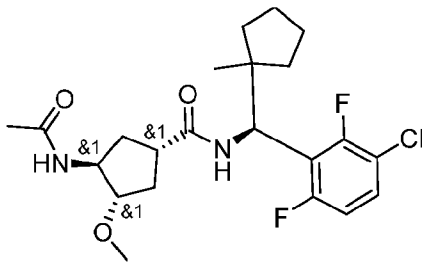
		diastereomers (cis/trans). Stereochemistry arbitrarily assigned.			
I-2056		NMR (400 MHz, DMSO-d6) 10.38 (s, 1H), 8.81 (d, J = 7.5 Hz, 1H), 8.15 (d, J = 5.1 Hz, 1H), 7.95 (br. s, 1H), 7.52 (app. td, J = 8.7, 5.6 Hz, 1H), 7.11 (app. td, J = 9.6, 1.5 Hz, 1H), 6.90 (dd, J = 5.1, 1.4 Hz, 1H), 4.81 (dd, J = 11.0, 7.6 Hz, 1H), 3.51 (dA of AB, JAB = 13.9 Hz, 1H), 3.43 (dB of AB, JAB = 13.9 Hz, 1H), 2.93 (s, 3H), 2.49 – 2.38 (m, 1H), 1.98 – 1.86 (m, 1H), 1.66 – 1.41 (m, 4H), 1.39 – 1.21 (m, 2H), 1.05 – 0.94 (m, 1H). 5% of a minor impurity	422.2	D	
I-2057		NMR (400 MHz, d6-DMSO) 8.67 (d, J = 8.4 Hz, 1H), 8.60 (s, 1H), 7.60 (app td, J = 8.7, 5.6 Hz), 7.17 (app td, J = 9.4, 1.2 Hz), 5.42 (dd, J = 26.3, 8.4 Hz, 1H), 3.30 (overlapping m, 1H) 2.68 (dd, J = 12.0, 8.9 Hz, 1H), 2.60 (dd, J = 11.9, 8.9 Hz, 1H), 2.30 – 2.15 (m, 2H), 2.05 – 1.62 (m, 7H), 1.61 – 1.48 (m, 1H). One NH in the hydantoin was not observed.	410.3	A	B
I-2058		NMR (400 MHz, DMSO-d6) 8.37 (d, J = 7.4 Hz, 1H), 8.18 (s, 1H), 7.48 (app. td, J = 8.5, 4.3 Hz, 1H), 7.08 (app. t, J = 9.3 Hz, 1H), 6.80 (s, 1H), 6.79 (s, 1H), 4.78 (dd, J = 10.8, 7.7 Hz, 1H), 3.18 – 3.05 (m, 1H), 2.89 – 2.79 (m, 1H), 2.42 – 2.34 (m, 1H), 2.03 – 1.62 (m, 6H), 1.62 – 1.36 (m, 5H), 1.35 – 1.16 (m, 2H), 1.01 – 0.87 (m, 1H). 95:5 mixture of the two pairs of diastereomers (trans/cis). Stereochemistry arbitrarily assigned.	408.3	A	B

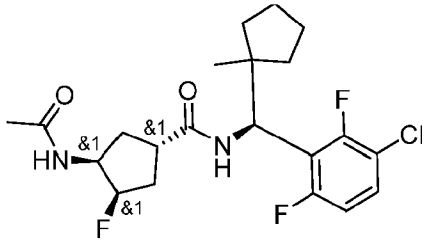
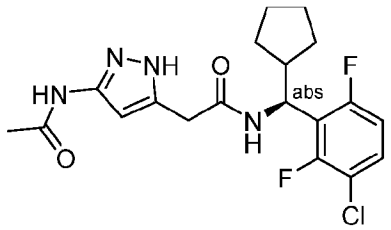
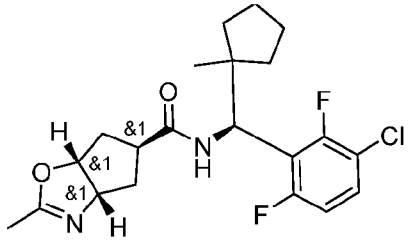
I-2059		NMR (400 MHz, DMSO-d6) 8.00 (overlapping br s, 0.6H), 7.98 (overlapping br s, 0.4H), 7.80 – 7.72 (m, 1H), 7.60 – 7.49 (m, 1H), 7.19 – 7.05 (m, 1H), 5.01 – 4.88 (m, 1H), 4.06 – 3.89 (m, 1H), 2.99 – 2.87 (m, 1H), 1.92 – 1.70 (overlapping m, 2H), 1.78 – 1.74 (overlapping m, 3H), 1.68 – 1.55 (m, 1H), 1.56 – 1.44 (m, 7H), 1.45 – 1.34 (m, 8H). Approx 3:2 dr	439.3	A	A
I-2060		NMR (400 MHz, d6-DMSO) 8.54 (d, J = 8.6 Hz, 1H), 7.77 (d, J = 5.6 Hz, 1H), 7.60 (app td, J = 8.7, 5.6 Hz, 1H), 7.17 (app td, J = 9.7, 1.4 Hz, 1H), 5.41 (ddd, J = 26.6, 8.5, 3.6 Hz, 1H), 4.04 - 3.93 (m, 1H), 2.99 (app p, J = 8.0 Hz, 1H), 2.05 – 1.76 (m, 5H, overlapping), 1.76 (s, 1.5H), 1.75 (s, 1.5H), 1.74 – 1.28 (m, 9H, overlapping).	397.6	B	D
I-2061		(400 MHz, DMSO-d6) 13.39 (s, 1H), 8.51 - 8.15 (m, 2H), 7.89 (s, 1H), 7.54 (td, J = 8.7, 5.4 Hz, 1H), 7.24 - 6.87 (m, 1H), 4.84 (dd, J = 11.1, 7.4 Hz, 1H), 3.93 (q, J = 8.9 Hz, 1H), 3.29 (d, J = 8.6 Hz, 1H), 2.35 (q, J = 8.1 Hz, 1H), 2.17 - 1.98 (m, 2H), 1.97 - 1.79 (m, 2H), 1.78 - 1.67 (m, 1H), 1.58 (td, J = 12.1, 11.5, 7.1 Hz, 2H), 1.47 (d, J = 7.2 Hz, 2H), 1.33 (dd, J = 12.5, 7.0 Hz, 1H), 1.13 (dq, J = 15.0, 7.9, 7.4 Hz, 1H), 0.99 (dt, J = 13.0, 7.7 Hz, 1H).	422.15	E	

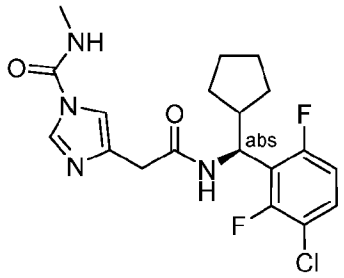
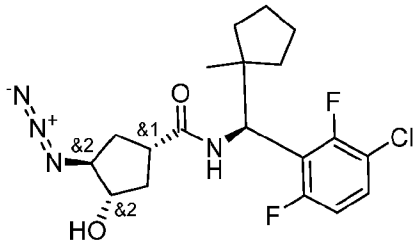
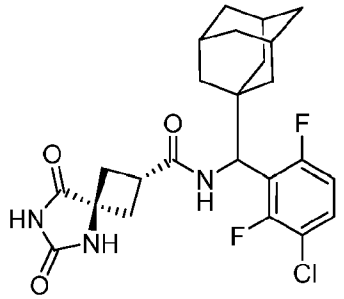
I-2062		(400 MHz, DMSO-d6) 13.31 (s, 1H), 8.41- 8.14 (m, 2H), 7.77 (s, 1H), 7.52 (td, J = 8.7, 5.6 Hz, 1H), 7.09 (td, J = 9.4, 1.7 Hz, 1H), 4.86 (dd, J = 11.1, 7.6 Hz, 1H), 3.87 (q, J = 8.7 Hz, 1H), 2.39 (t, J = 8.8 Hz, 1H), 2.25 - 1.94 (m, 4H), 1.93- 1.81 (m, 1H), 1.71- 1.39 (m, 4H), 1.38-1.18 (m, 2H), 1.00 (q, J = 11.1, 9.4 Hz, 1H).	422.15	D	
I-2063		(400 MHz, DMSO-d6) 13.06 (s, 1H), 8.09 (d, J = 7.9 Hz, 1H), 7.96 (s, 1H), 7.57 (s, 1H), 7.41 (td, J = 8.7, 5.5 Hz, 1H), 6.91 (t, J = 9.1 Hz, 1H), 4.71 (dd, J = 11.2, 7.8 Hz, 1H), 3.82 (q, J = 8.4 Hz, 1H), 3.56 (d, J = 12.7 Hz, 1H), 2.43 (q, J = 9.4, 8.9 Hz, 1H), 2.11 (q, J = 9.7 Hz, 1H), 2.03- 1.88 (m, 2H), 1.83 (dd, J = 12.0, 5.8 Hz, 1H), 1.72 - 1.30 (m, 4H), 1.23 (d, J = 9.8 Hz, 2H), 0.89 (d, J = 11.6 Hz, 1H).	422.15	E	
I-2064		(400 MHz, DMSO-d6) 13.30 (s, 1H), 8.19 (d, J = 7.5 Hz, 2H), 7.83 (s, 1H), 7.50 (td, J = 8.7, 5.5 Hz, 1H), 7.09 (td, J = 9.4, 1.6 Hz, 1H), 4.54 (dd, J = 11.0, 7.4 Hz, 1H), 3.87 (q, J = 8.8 Hz, 1H), 3.65 - 3.54 (m, 1H), 2.21 (q, J = 8.6 Hz, 1H), 2.12 - 2.00 (m, 1H), 1.90 (dt, J = 13.7, 10.1 Hz, 1H), 1.74 (dq, J = 10.5, 5.6, 5.0 Hz, 1H), 1.65 -1.30 (m, 5H), 1.20 (dt, J = 31.5, 6.5 Hz, 2H), 0.86 (d, J = 9.0 Hz, 1H), 0.72 (dd, J = 12.8, 7.4 Hz, 1H).	422.15	D	
I-2065		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.40 (d, J = 8.4 Hz, 1H), 7.99 (s, 1H), 7.77 (q, J = 7.5 Hz, 1H), 7.30 (t, J = 9.4 Hz, 1H), 5.20 (d, J = 8.4 Hz, 1H), 3.14 (p, J = 8.7, 8.1 Hz, 1H), 2.12 (dd, J = 13.2, 8.0 Hz, 1H), 1.91 (pd, J = 8.0, 4.2, 3.8 Hz, 3H), 1.75 (q, J = 9.8, 9.4 Hz, 1H), 1.65 - 1.58 (m, 6H), 1.52 - 1.45 (m, 1H), 1.39 (d, J = 8.7 Hz, 1H), 1.21 (d, J = 12.8 Hz, 1H), 0.96 (s, 3H).	474.15	B	

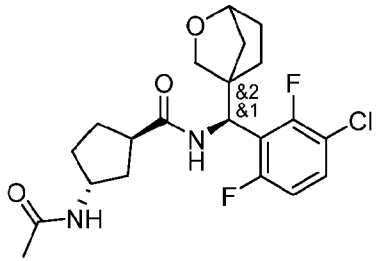
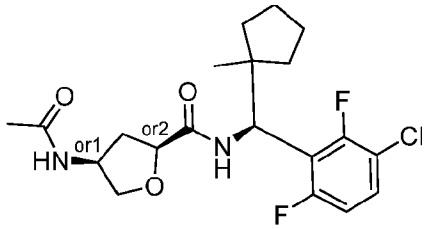
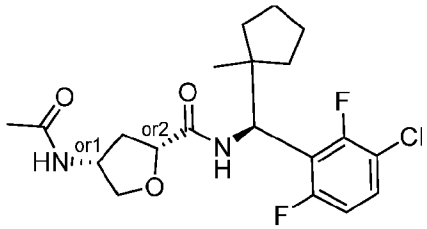
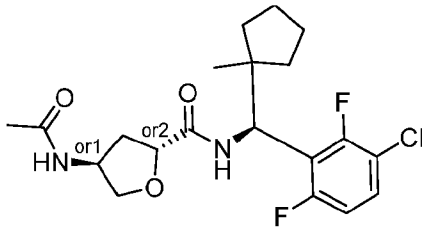
I-2066		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.37 - 8.28 (m, 2H), 7.77 (s, 1H), 7.29 (t, J = 9.2 Hz, 1H), 5.22 (d, J = 8.3 Hz, 1H), 3.07 (s, 1H), 2.00 (s, 3H), 1.87 - 1.77 (m, 2H), 1.62 (s, 6H), 1.49 (s, 1H), 1.39 (s, 1H), 1.22 (s, 1H), 0.97 (s, 3H).	474.2	A	B
I-2067		(400 MHz, DMSO-d6) 10.62 (s, 1H), 8.34 (d, J = 8.5 Hz, 1H), 8.29 (s, 1H), 7.78 (q, J = 7.5 Hz, 1H), 7.30 (t, J = 9.4 Hz, 1H), 5.21 (d, J = 8.4 Hz, 1H), 3.08 (q, J = 8.5 Hz, 1H), 2.17 - 2.07 (m, 1H), 1.95 (dp, J = 16.6, 9.6, 8.6 Hz, 3H), 1.71 - 1.56 (m, 7H), 1.48 (s, 1H), 1.39 (d, J = 8.1 Hz, 1H), 1.21 (d, J = 11.9 Hz, 1H), 0.97 (s, 3H).	474.2	A	B
I-2068		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.42 (d, J = 8.5 Hz, 1H), 7.95 (s, 1H), 7.77 (td, J = 8.4, 5.5 Hz, 1H), 7.29 (t, J = 9.3 Hz, 1H), 5.23 (d, J = 8.5 Hz, 1H), 3.14 (p, J = 8.1 Hz, 1H), 2.02 (dt, J = 15.4, 7.8 Hz, 2H), 1.93 (dt, J = 11.1, 3.7 Hz, 1H), 1.90 - 1.72 (m, 3H), 1.63 (tt, J = 11.7, 8.2, 6.9 Hz, 5H), 1.59 - 1.45 (m, 1H), 1.38 (dd, J = 9.2, 4.5 Hz, 1H), 1.21 (dt, J = 12.0, 4.8 Hz, 1H), 0.96 (s, 3H).	474.2	C	
I-2069		(400 MHz, DMSO-d6) 12.60 (s, 1H), 8.21 (dd, J = 102.6, 7.8 Hz, 1H), 7.65 -7.32 (m, 3H), 7.13 (tdd, J = 9.3, 5.2, 1.6 Hz, 1H), 5.56 (d, J = 3.9 Hz, 1H), 4.85 (ddd, J = 45.7, 10.9, 7.8 Hz, 1H), 4.51 (d, J = 9.1 Hz, 1H), 2.93 (p, J = 9.7, 9.3 Hz, 1H), 2.70 - 2.54 (m, 1H), 2.43- 2.25 (m, 1H), 1.94 -1.70 (m, 3H), 1.68 - 1.41 (m, 6H), 1.39-1.14 (m, 2H), 1.03 (dt, J = 20.3, 8.4 Hz, 1H).	446.15	D	

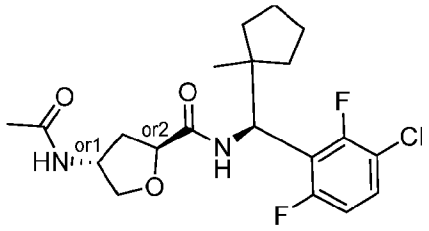
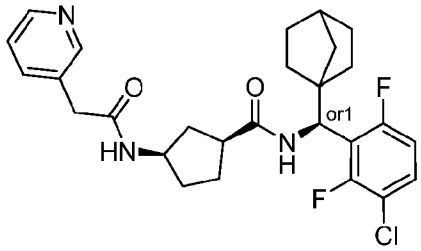
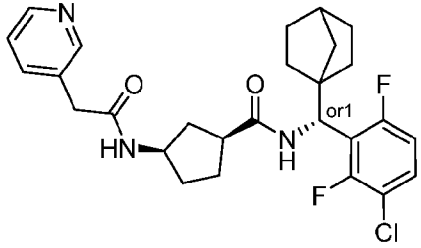
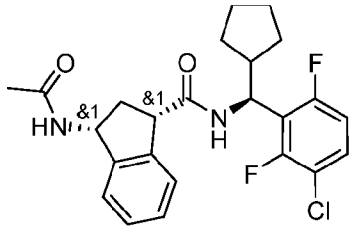
I-2070		(400 MHz, DMSO-d6) 12.56 (s, 1H), 8.22 (dd, J = 97.4, 7.8 Hz, 1H), 7.53 (tt, J = 8.7, 5.8 Hz, 1H), 7.39 (d, J = 27.9 Hz, 2H), 7.14 (tdd, J = 9.0, 7.2, 1.6 Hz, 1H), 5.51 (d, J = 3.8 Hz, 1H), 4.87 (ddd, J = 29.1, 10.9, 7.8 Hz, 1H), 4.46 (t, J = 9.3 Hz, 1H), 2.97 (q, J = 8.8 Hz, 1H), 2.48- 2.29 (m, 2H), 2.10 - 1.72 (m, 3H), 1.71 - 1.41 (m, 6H), 1.32 (dddd, J = 28.5, 16.2, 12.4, 7.9 Hz, 2H), 1.02 (dp, J = 18.8, 10.2, 9.1 Hz, 1H).	446.15	E	
I-2071		(400 MHz, DMSO-d6) 12.50 (s, 1H), 8.31 (dd, J = 8.0, 2.9 Hz, 1H), 7.52 (tdd, J = 8.9, 5.5, 3.7 Hz, 1H), 7.32 (s, 1H), 7.17 - 7.01 (m, 2H), 4.96 -4.70 (m, 1H), 4.48 (dt, J = 17.0, 10.0 Hz, 2H), 3.16 (dt, J = 22.2, 7.6 Hz, 1H), 2.75 - 2.57 (m, 1H), 2.41 (dt, J = 16.7, 8.6 Hz, 1H), 2.19 - 1.77 (m, 4H), 1.73 - 1.40 (m, 5H), 1.30 (ddt, J = 21.6, 16.2, 7.7 Hz, 2H), 1.07 - 0.90 (m, 1H).	446.15	D	
I-2072		(400 MHz, DMSO-d6) 12.55 (s, 1H), 8.30 (dd, J = 54.2, 7.3 Hz, 1H), 7.69 -7.26 (m, 3H), 7.19 -7.02 (m, 1H), 5.00- 4.57 (m, 3H), 3.15 (td, J = 8.5, 5.1 Hz, 1H), 2.75 (p, J = 9.0 Hz, 1H), 2.35 (dq, J = 52.6, 8.8 Hz, 1H), 2.08 - 1.76 (m, 3H), 1.72 - 1.10 (m, 8H), 0.98 (ddt, J = 27.2, 19.6, 9.5 Hz, 1H).	446.15	D	
I-2073		(400 MHz, DMSO-d6) 8.26 (d, J = 7.4 Hz, 1H), 7.84 (d, J = 7.4 Hz, 1H), 7.59 (dd, J = 9.0, 5.2 Hz, 1H), 7.25 (dd, J = 10.3, 8.9 Hz, 1H), 5.00 - 4.91 (m, 1H), 3.94 (p, J = 7.6 Hz, 1H), 2.94 (s, 1H), 2.68 (p, J = 8.3 Hz, 1H), 2.23 (ddd, J = 14.5, 9.3, 5.8 Hz, 1H), 2.06 (dt, J = 12.4, 7.4 Hz, 1H), 1.75 (s, 5H), 1.59 (dddd, J = 15.7, 13.4, 10.0, 6.8 Hz, 2H), 1.51 -1.17 (m, 5H), 1.02 (dd, J = 13.5, 5.4 Hz, 1H), 0.66 (td, J = 8.2, 4.5 Hz, 1H), 0.15 (q, J = 4.2 Hz, 1H).	427.05	B	

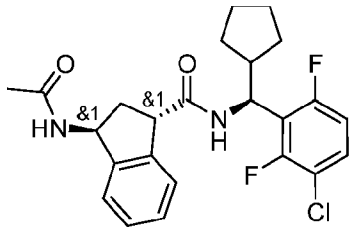
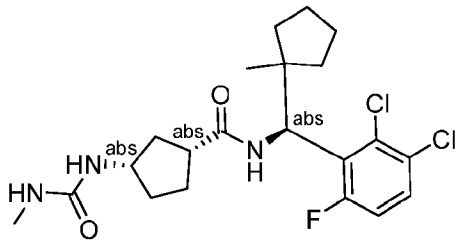
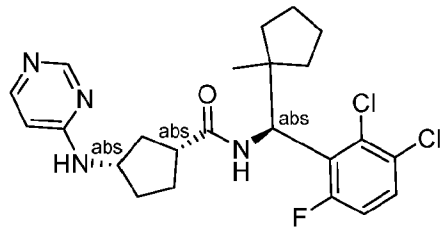
I-2074		(400 MHz, DMSO-d6) 8.29 (d, J = 7.3 Hz, 1H), 7.83 (d, J = 7.5 Hz, 1H), 7.58 (dd, J = 9.0, 5.2 Hz, 1H), 7.25 (dd, J = 10.3, 8.9 Hz, 1H), 5.07 (t, J = 8.7 Hz, 1H), 3.95 (q, J = 7.6 Hz, 1H), 2.69 (q, J = 8.3 Hz, 1H), 2.24 (s, 1H), 2.17- 1.96 (m, 2H), 1.75 (s, 4H), 1.67 -1.52 (m, 2H), 1.45 (qd, J = 8.9, 3.9 Hz, 3H), 1.39 - 1.13 (m, 4H), 0.29 (td, J = 7.9, 4.8 Hz, 1H), 0.14 (q, J = 4.1 Hz, 1H).	427.05	B	
I-2075		(400 MHz, Methanol-d4) 7.48 (dd, J = 8.9, 5.2 Hz, 1H), 7.10 (dd, J = 10.3, 8.9 Hz, 1H), 5.14 (d, J = 12.1 Hz, 1H), 4.17 - 4.10 (m, 1H), 3.08 (s, 1H), 2.82 (s, 1H), 2.33 (ddd, J = 14.6, 9.4, 6.1 Hz, 1H), 2.10 (dt, J = 13.0, 7.7 Hz, 1H), 1.99 - 1.76 (m, 7H), 1.61 (s, 1H), 1.49 (dd, J = 14.2, 5.5 Hz, 2H), 1.43 (m, 1H), 1.31 (d, J = 4.7 Hz, 1H), 1.17 (dd, J = 13.5, 5.5 Hz, 1H), 0.73 (s, 1H), 0.23 (t, J = 4.3 Hz, 1H).	427	D	
I-2076		(400 MHz, Methanol-d4) 7.48 (dd, J = 8.9, 5.2 Hz, 1H), 7.10 (dd, J = 10.3, 8.9 Hz, 1H), 5.26 (d, J = 10.8 Hz, 1H), 4.14 (s, 1H), 2.83 (q, J = 8.0 Hz, 1H), 2.40 - 2.33 (m, 1H), 2.21- 2.05 (m, 2H), 1.99 - 1.80 (m, 6H), 1.69 - 1.51 (m, 3H), 1.45 (dt, J = 14.2, 7.7 Hz, 1H), 1.41 -1.30 (m, 2H), 1.27 (dp, J = 8.2, 4.1 Hz, 1H), 0.33 (td, J = 7.9, 5.0 Hz, 1H), 0.22 (q, J = 4.1 Hz, 1H).	427	E	
I-2077		(400 MHz, DMSO-d6) as a ca. 1.2:1 mixture of diastereomers, 8.09 (d, J = 8.8 Hz, 2H), 7.88 (d, J = 7.0 Hz, 2H), 7.56 (app. td, J = 8.7, 5.6 Hz, 2H), 7.14 (br. app. t, J = 9.3 Hz, 2H), 5.18 (d, J = 8.7 Hz, 2H), 3.96 – 3.87 (m, 2H), 3.60 – 3.53 (m, 2H), 3.23 (s, 3H), 3.19 (s, 3H), 2.94 (app. p, J = 8.6 Hz, 2H), 2.24 – 2.16 (m, 1H), 2.11 (ddd, J = 13.4, 8.4, 6.7 Hz, 1H), 1.96 – 1.76 (overlapping m, 2H), 1.79 (s, 3H), 1.78 (s, 3H), 1.65 – 1.44 (m, 16H), 1.39 –	443.4	A	B

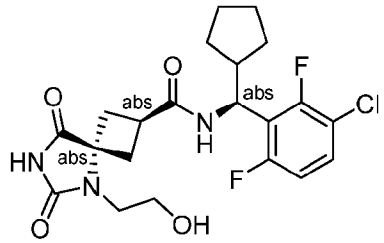
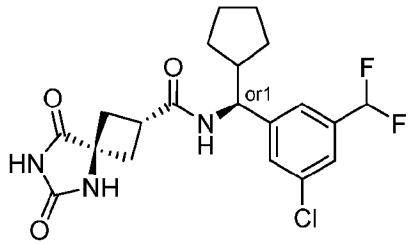
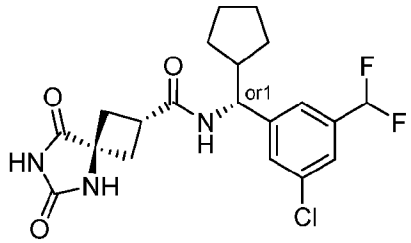
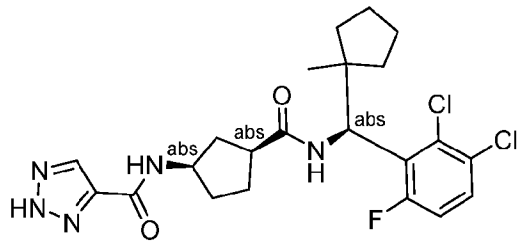
		1.32 (m, 2H), 1.24 – 1.16 (m, 2H), 0.96 – 0.93 (m, 6H). Contains up to 10% of unknown impurities. Possible partial formate salt.			
I-2078		(400 MHz, DMSO-d6) as a ca. 1:1 mixture of diastereomers, 8.18 (d, J = 8.3 Hz, 1H), 8.16 (d, J = 8.1 Hz, 1H), 7.92 (d, J = 6.8 Hz, 1H), 7.91 (d, J = 6.6 Hz, 1H), 7.59 – 7.52 (m, 2H), 7.18 – 7.11 (m, 2H), 5.19 (d, J = 8.6 Hz, 2H), 4.94 – 4.87 (m, 1H), 4.81 – 4.73 (m, 1H), 4.12 – 3.98 (m, 2H), 3.08 – 2.99 (m, 2H), 2.39 – 2.14 (m, 2H), 2.04 – 1.95 (m, 2H), 1.80 (s, 3H), 1.92 – 1.76 (m, 2H), 1.79 (s, 3H), 1.75 – 1.67 (m, 1H), 1.66 – 1.44 (m, 13H), 1.39 – 1.33 (m, 2H), 1.27 – 1.16 (m, 2H), 0.95 (s, 6H). Contains impurities derived from hydrocarbon grease and other unknown material.	429.4	A	A
I-2079		NMR (400 MHz, DMSOd6) 12.00 (br. s, 1H), 10.23 (s, 1H), 8.68 (d, J = 7.6 Hz, 1H), 7.53 (app. td, J = 8.7, 5.6 Hz, 1H), 7.12 (app. td, J = 9.5, 1.5 Hz, 1H), 6.25 (br. s, 1H), 4.83 (dd, J = 11.0, 7.6 Hz, 1H), 3.48 (dA of AB, JAB = 15.3 Hz, 1H), 3.40 (overlapping dB of AB, JAB = 15.3 Hz, 1H), 2.48 – 2.37 (m, 1H), 1.95 (s, 3H), 1.94 – 1.86 (m, 1H), 1.66 – 1.43 (m, 4H), 1.37 – 1.22 (m, 2H), 1.04 – 0.93 (m, 1H).	411.2	D	
I-2080		(400 MHz, DMSO-d6) as a ca. 1:1 mixture of diastereomers, 8.35 (d, J = 8.7 Hz, 1H), 8.35 (d, J = 8.5 Hz, 1H), 7.55 (app. td, J = 8.6, 5.5 Hz, 2H), 7.16 – 7.10 (m, 2H), 5.21 – 5.16 (m, 2H), 4.92 – 4.87 (m, 2H), 4.45 – 4.38 (m, 2H), 2.87 – 2.77 (m, 2H), 1.92 (ddd, J = 13.5, 6.0, 1.1 Hz, 1H), 1.89 – 1.66 (m, 11H), 1.61 (s, 14H), 1.38 – 1.32 (m, 2H), 1.22 – 1.17 (m, 2H), 0.95 (s, 6H).	411.4	B	D

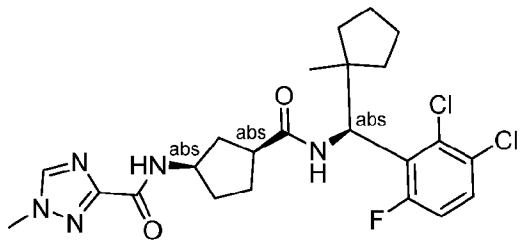
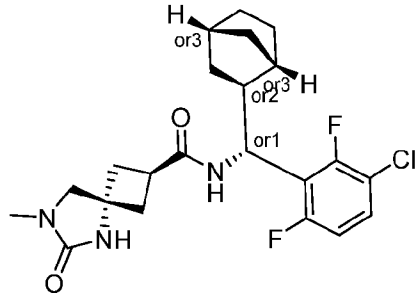
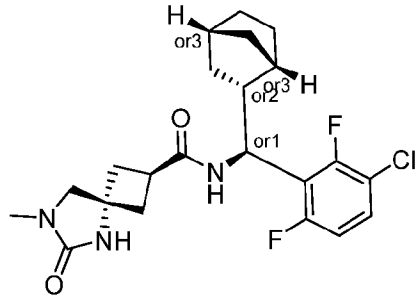
I-2081		NMR (400 MHz,) 8.60 (d, J = 7.7 Hz, 1H), 8.39 (br. q, J = 4.1 Hz, 1H), 8.10 (d, J = 1.3 Hz, 1H), 7.53 (app. td, J = 8.7, 5.6 Hz, 1H), 7.40 (d, J = 1.0 Hz, 1H), 7.13 (app. td, J = 9.5, 1.5 Hz, 1H), 4.87 (dd, J = 11.0, 7.7 Hz, 1H), 3.43 (dA of AB, JAB = 16.0 Hz, 1H), 3.36 (overlapping dB of AB, JAB= 16.2 Hz, 1H), 2.77 (d, J = 4.4 Hz, 3H), 2.47 – 2.36 (m, 1H), 1.94 – 1.84 (m, 1H), 1.65 – 1.41 (m, 4H), 1.39 – 1.23 (m, 2H), 1.05 – 0.93 (m, 1H). Partial formate salt at 8.22 ppm.	411.3	D	
I-2082		(400 MHz, DMSO-d6) as a ca. 1.2:1 mixture of diastereomers, 8.21 (d, J = 8.7 Hz, 2H), 7.56 (app. td, J = 8.7, 5.6 Hz, 2H), 7.14 (app. t, J = 9.4 Hz, 2H), 5.32 (d, J = 5.3 Hz, 1H), 5.29 (d, J = 5.4 Hz, 1H), 5.18 (d, J = 8.7 Hz, 1H), 5.17 (d, J = 8.7 Hz, 1H), 3.90 – 3.81 (m, 2H), 3.71 (m, 2H), 3.00 – 2.90 (m, 2H), 2.13 (ddd, J = 13.1, 8.7, 6.6 Hz, 1H), 2.09 – 1.99 (m, 2H), 1.95 – 1.87 (m, 1H), 1.74 – 1.39 (m, 16H), 1.39 – 1.31 (m, 2H), 1.23 – 1.16 (m, 2H), 0.94 (s, 6H).	413.4	C	
I-2083		(400 MHz, DMSO-d6) as a ca. 1:1 mixture of diastereomers, 9.55 (br. s, 2H), 8.63 (s, 2H), 8.19 (d, J = 9.0 Hz, 1H), 8.18 (d, J = 8.8 Hz, 2H), 7.56 (app. td, J = 8.6, 5.5 Hz, 2H), 7.18 – 7.08 (m, 2H), 4.96 (d, J = 9.4 Hz, 1H), 4.93 (d, J = 9.2 Hz, 1H), 3.27 (app. p, J = 9.3 Hz, 1H), 3.26 (app. p, J = 9.0 Hz, 1H), 2.70 – 2.63 (m, 2H), 2.58 (app. t, J = 11.7 Hz, 1H), 2.56 (app. t, J = 11.7 Hz, 1H), 2.28 – 2.14 (m, 4H), 1.93 (br. s, 6H), 1.68 – 1.48 (m, 24H).	478.5	D	

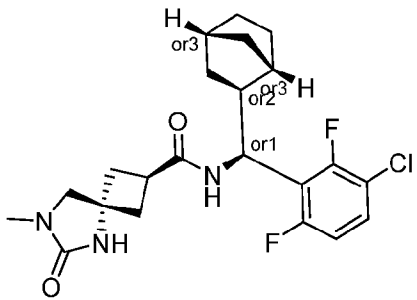
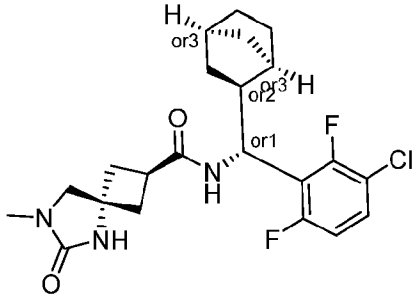
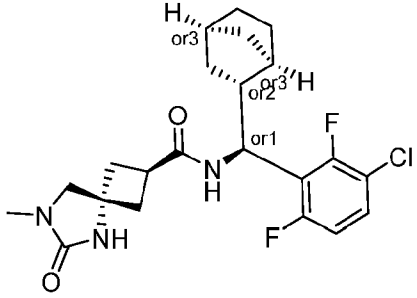
I-2084		NMR (400 MHz, DMSO-d6) 8.31 (2 overlapping d, J = 8.2 Hz, 1H), 7.78 (d, J = 6.9 Hz, 1H), 7.57 (app. td, J = 8.7, 5.5 Hz, 1H), 7.16 (app. td, J = 9.6, 1.4 Hz, 1H), 5.51 (d, J = 8.0 Hz, 0.5H), 5.49 (d, J = 8.2 Hz, 0.5H), 4.21 (br s, 1H), 4.05 – 3.94 (m, 1H), 3.55 (d, J = 6.8 Hz, 0.5H), 3.49 (d, J = 6.8 Hz, 0.5H), 3.46 -3.42 (m, 1H), 2.92 (app. p, J = 7.7 Hz, 1H), 1.92 – 1.77 (m, 2H), 1.76 (s, 3H), 1.72 – 1.51 (m, 6H), 1.50 – 1.29 (m, 4H). Minor aliphatic impurities. ~ 4 epimers in a 9:9:1:1 ratio.	427.3	D	
I-2085				D	
I-2086				B	C
I-2087				C	

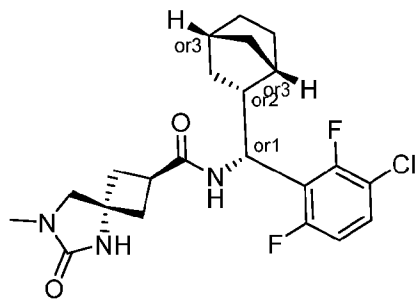
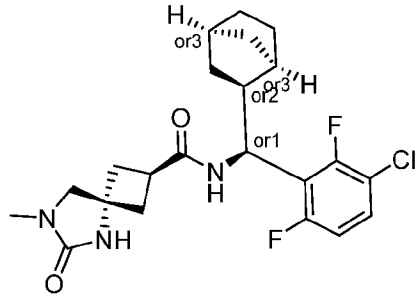
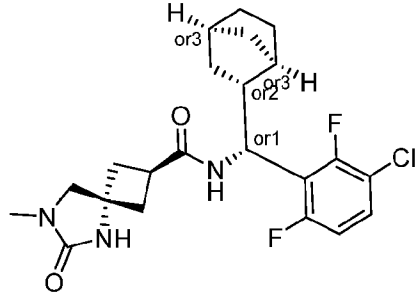
I-2088				D	
I-2089				D	
I-2090				A	A
I-2091		NMR (400 MHz, DMSO-d6) 9.00 (d, J = 7.2 Hz, 0.5H), 8.96 (d, J = 7.5 Hz, 0.5H), 8.20 (d, J = 8.4 Hz, 0.5H), 8.19 (d, J = 8.3 Hz, 0.5H), 7.59 – 7.50 (m, 1H), 7.29 – 7.21 (m, 1.5H), 7.20 – 7.07 (m, 3H), 6.93 (app. d, J = 7.5 Hz, 0.5H), 5.29 – 5.20 (m, 1H), 4.91 (dd, J = 11.5, 7.5 Hz, 0.5H), 4.88 (dd, J = 11.7, 7.3 Hz, 0.5H), 3.94 (app. dt, J = 11.1, 8.1 Hz, 1H), 2.55 (overlapping m, 1H), 2.42 (overlapping m, 1H), 2.15 – 1.89 (m, 2H), 1.87 (s, 1.5H), 1.86 (s, 1.5H), 1.72 – 1.45 (m, 4H), 1.45 – 1.29 (m, 2H), 1.10 – 0.96 (m, 1H). 80:20 mixture of the cis and trans pairs of diastereomers.	447.2	D	

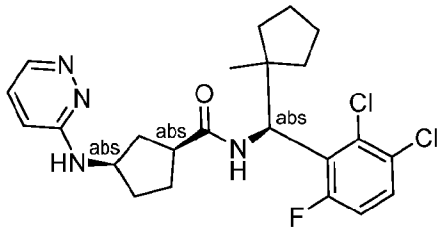
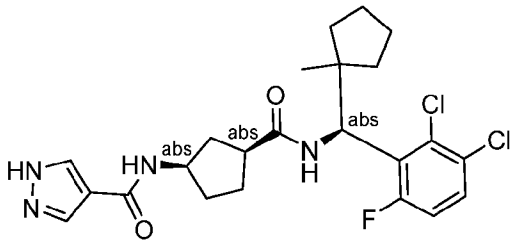
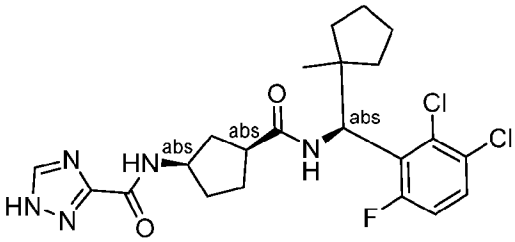
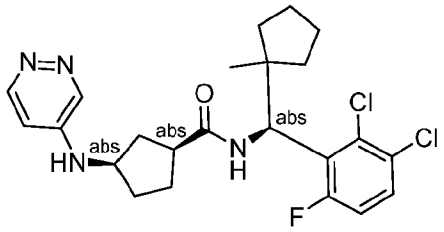
		1:1:0.4:0.1 mixture of 4 diastereomers. Stereochemistry arbitrarily assigned.			
I-2092		NMR (400 MHz, DMSO-d6) 8.89 (d, J = 7.3 Hz, 0.6H), 8.85 (d, J = 7.5 Hz, 0.4H), 8.16 (d, J = 8.2 Hz, 0.4H), 8.15 (d, J = 8.1 Hz, 0.6H), 7.55 (app. td, J = 8.7, 5.6 Hz, 0.4H), 7.46 (app. td, J = 8.7, 5.6 Hz, 0.6H), 7.42 – 7.38 (m, 0.4H), 7.29 – 7.21 (m, 0.8H), 7.20 – 7.12 (m, 3.2H), 7.07 (app. td, J = 9.1, 1.1 Hz, 0.6H), 5.50 – 5.38 (m, 1H), 4.78 overlapping (dd, J = 10.9, 7.2 Hz, 0.6H), 4.74 (overlapping dd, J = 10.5, 6.9 Hz, 0.4H), 4.11 (dd, J = 8.5, 2.8 Hz, 1H), 4.07 (dd, J = 8.4, 2.6 Hz, 1H), 3.30 (submerged m, 1H), 2.54 (overlapping m, 0.6H), 2.39 (ddd, J = 12.6, 7.9, 2.8 Hz, 0.4H), 2.00 (m, 1H), 1.87 (submerged m, 1H), 1i.84 (overlapping s, 3H), 1.70 – 1.42 (m, 4H), 1.40 – 1.29 (m, 1.6H), 1.27 – 1.17 (m, 0.4H), 1.07 – 0.93 (m, 1H). 3:2 mixture of 2 diastereomers, trans stereochemistry arbitrarily assigned.	447.2	B	C
I-2093		(400 MHz, DMSO-d6) 8.06 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.1, 4.9 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.80 (d, J = 7.0 Hz, 1H), 5.55 (s, 1H), 5.47 (d, J = 8.5 Hz, 1H), 3.84 (q, J = 6.5 Hz, 1H), 2.95 (p, J = 8.0 Hz, 1H), 1.83 (tt, J = 11.9, 5.7 Hz, 2H), 1.70-1.57 (m, 8H), 1.51 (ddt, J = 13.4, 8.8, 5.3 Hz, 1H), 1.40-1.24 (m, 1H), 0.97 (d, J = 2.7 Hz, 3H).	444.15	A	A
I-2094		(400 MHz, DMSO-d6) 8.36 (s, 1H), 8.11 (d, J = 8.6 Hz, 1H), 7.99 (s, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.35 (d, J = 6.6 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 6.40 (d, J = 6.1 Hz, 1H), 5.49 (d, J = 8.5 Hz, 1H), 4.20 (s, 1H), 3.03 (q, J = 7.5 Hz, 1H), 1.96 (s, 2H), 1.81 (dt, J = 13.9, 7.3 Hz, 1H), 1.65 (s, 3H), 1.60 (s, 7H), 1.38 (s, 1H), 1.26 (d, J = 12.9 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	465.15	A	A

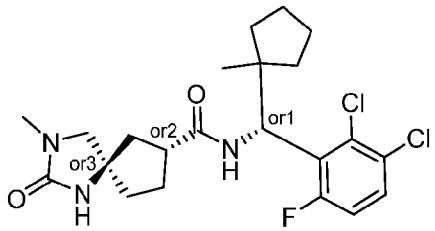
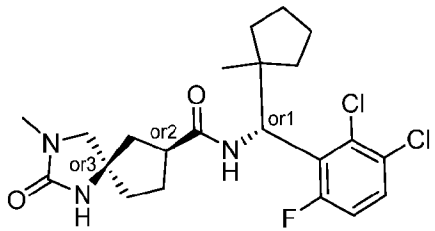
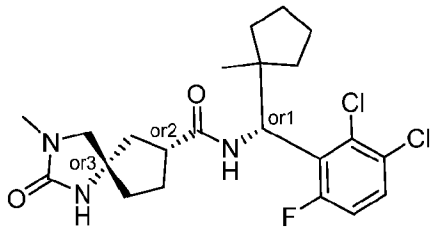
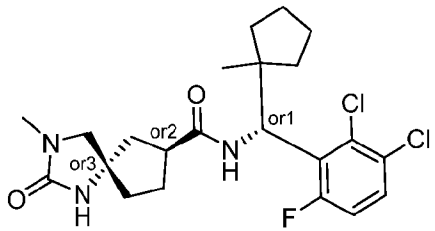
I-2095		(400 MHz, DMSO-d6) 10.62 (s, 1H), 8.38 (d, J = 7.4 Hz, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.21 - 7.03 (m, 1H), 4.97 -4.72 (m, 2H), 3.61 (q, J = 5.9 Hz, 2H), 3.42 (t, J = 6.1 Hz, 2H), 3.19 (q, J = 9.3 Hz, 1H), 2.62 (ddd, J = 21.6, 12.6, 8.7 Hz, 3H), 2.47 -2.33 (m, 2H), 1.88 (dt, J = 12.4, 5.1 Hz, 1H), 1.69 -1.42 (m, 4H), 1.32 (ddd, J = 26.8, 12.2, 6.2 Hz, 2H), 1.02 (d, J = 9.8 Hz, 1H).	456.1	D	
I-2096		(400 MHz, DMSO-d6) 10.39 (s, 1H), 8.61 (s, 1H), 8.38 (d, J = 8.6 Hz, 1H), 7.57 (d, J = 2.1 Hz, 1H), 7.49 (d, J = 5.1 Hz, 2H), 6.96 (d, J = 55.6 Hz, 1H), 4.63 (t, J = 9.2 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.65 (ddd, J = 14.0, 12.1, 9.0 Hz, 2H), 2.28 - 2.10 (m, 3H), 1.78 - 1.69 (m, 1H), 1.58 (dh, J = 9.2, 5.1, 4.5 Hz, 2H), 1.46 (dtd, J = 15.5, 9.0, 7.6, 2.8 Hz, 2H), 1.32 - 1.21 (m, 2H), 1.11 (dt, J = 12.3, 7.8 Hz, 1H).	426.1	B	
I-2097		(400 MHz, DMSO-d6) 10.52 (s, 1H), 8.61 (s, 1H), 8.38 (d, J = 8.5 Hz, 1H), 7.58 - 7.47 (m, 3H), 7.03 (t, J = 55.6 Hz, 1H), 4.66 - 4.60 (m, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.65 (ddd, J = 14.1, 12.1, 9.0 Hz, 2H), 2.27 - 2.12 (m, 3H), 1.74 (dtd, J = 15.6, 7.4, 6.6, 3.7 Hz, 1H), 1.57 (dtq, J = 10.0, 6.2, 2.9 Hz, 2H), 1.45 (dtd, J = 20.3, 9.1, 7.9, 3.8 Hz, 2H), 1.33 - 1.22 (m, 2H), 1.15 - 1.05 (m, 1H).	426.1	E	
I-2098		(400 MHz, DMSO-d6) 8.31 (s, 1H), 8.25 (d, J = 7.4 Hz, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.61 (ddt, J = 8.3, 4.6, 2.1 Hz, 1H), 7.26 (dd, J = 11.0, 8.8 Hz, 1H), 5.51 (d, J = 8.6 Hz, 1H), 4.28 (h, J = 7.0 Hz, 1H), 3.05 (p, J = 7.9 Hz, 1H), 1.98 - 1.79 (m, 4H), 1.65 - 1.45 (m, 8H), 1.38 (d, J = 8.4 Hz, 1H), 1.28 (d, J = 8.2 Hz, 1H), 0.97 (d, J = 2.9 Hz, 3H).	482.05	A	B

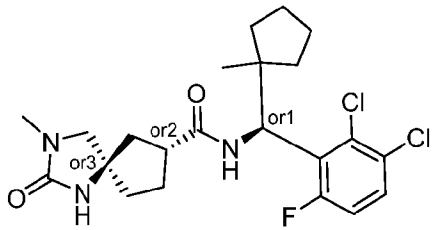
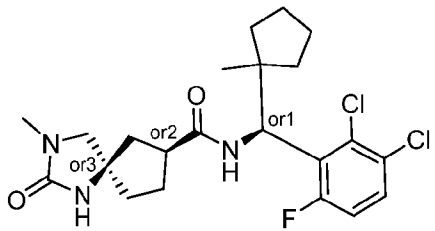
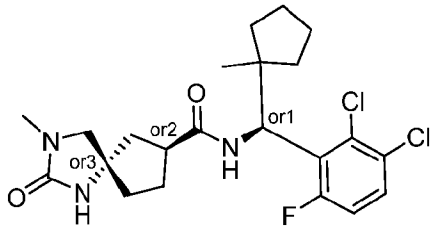
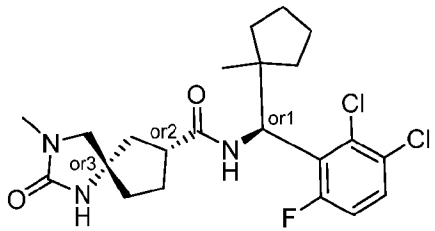
I-2099		(400 MHz, DMSO-d6) 8.57 (s, 1H), 8.18 (d, J = 7.6 Hz, 1H), 8.06 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.51 (d, J = 8.6 Hz, 1H), 4.25 (h, J = 7.0 Hz, 1H), 3.92 (s, 3H), 3.04 (p, J = 7.9 Hz, 1H), 1.96 - 1.78 (m, 4H), 1.63 - 1.55 (m, 7H), 1.51 - 1.44 (m, 1H), 1.38 (d, J = 7.7 Hz, 1H), 1.27 (t, J = 5.6 Hz, 1H), 0.97 (d, J = 2.9 Hz, 3H).	496.1	A	A
I-2100		(400 MHz, DMSO-d6) 8.47 (d, J = 7.3 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.12 (td, J = 9.3, 1.6 Hz, 1H), 6.95 (s, 1H), 4.71 (dd, J = 11.8, 7.3 Hz, 1H), 3.28 - 3.18 (m, 2H), 2.91 (tt, J = 9.8, 5.1 Hz, 1H), 2.54 (s, 3H), 2.34 (t, J = 11.0 Hz, 1H), 2.29 - 2.19 (m, 2H), 2.20 (d, J = 11.0 Hz, 2H), 2.16 - 2.08 (s, 2H), 1.60 - 1.39 (m, 2H), 1.32 - 1.24 (m, 1H), 1.22 - 0.99 (m, 4H), 0.73 (d, J = 12.3 Hz, 1H).	438.15	A	A
I-2101		(400 MHz, DMSO-d6) 8.35 (d, J = 7.3 Hz, 1H), 7.55 (td, J = 8.6, 5.4 Hz, 1H), 7.18 - 7.09 (m, 1H), 6.93 (s, 1H), 4.93 (dd, J = 11.9, 7.3 Hz, 1H), 3.27 (d, J = 9.4 Hz, 1H), 3.22 (d, J = 9.5 Hz, 1H), 2.86 (tt, J = 9.7, 5.1 Hz, 1H), 2.54 (s, 3H), 2.51 (t, J = 10.7 Hz, 1H), 2.32 (t, J = 10.7 Hz, 1H), 2.21 (q, J = 6.2, 4.7 Hz, 3H), 2.20 - 2.07 (m, 1H), 1.87 (t, J = 12.3 Hz, 1H), 1.65 (d, J = 4.5 Hz, 1H), 1.49 (d, J = 6.6 Hz, 2H), 1.32 (d, J = 9.5 Hz, 1H), 1.21 (d, J = 9.2 Hz, 3H), 0.74 (dq, J = 12.2, 2.2 Hz, 1H).	438.2	A	B

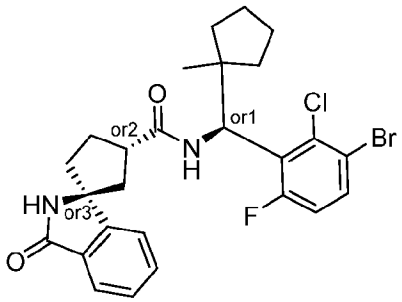
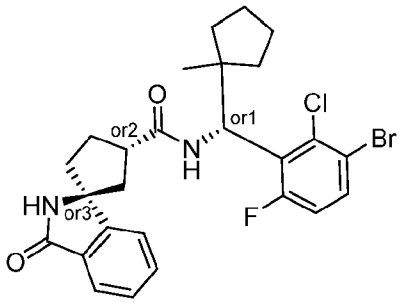
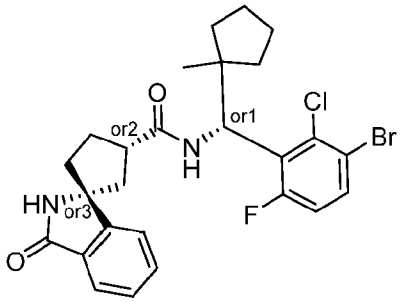
I-2102		(400 MHz, DMSO-d6) 8.48 (d, J = 7.4 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.17 - 7.07 (m, 1H), 6.95 (s, 1H), 4.71 (dd, J = 11.8, 7.3 Hz, 1H), 3.28 - 3.18 (m, 2H), 2.91 (tt, J = 9.7, 5.2 Hz, 1H), 2.54 (s, 2H), 2.34 (t, J = 10.8 Hz, 1H), 2.29 - 2.16 (m, 3H), 2.09 (s, 2H), 1.59 - 1.46 (m, 1H), 1.44 (s, 1H), 1.30 (q, J = 17.8, 13.9 Hz, 2H), 1.25 (q, J = 17.8, 13.9 Hz, 1H), 1.15 - 0.99 (m, 4H), 0.73 (d, J = 12.2 Hz, 1H).	438.15	D	
I-2103		(400 MHz, DMSO-d6) 8.28 (d, J = 7.7 Hz, 1H), 7.55 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (td, J = 9.3, 1.6 Hz, 1H), 6.93 (s, 1H), 4.72 (dd, J = 11.9, 7.6 Hz, 1H), 3.24 (q, J = 9.5 Hz, 2H), 2.89 (tt, J = 9.7, 5.0 Hz, 1H), 2.54 (s, 3H), 2.33 (dd, J = 12.3, 9.3 Hz, 1H), 2.22 (dd, J = 19.6, 10.0 Hz, 3H), 2.20 - 2.08 (m, 1H), 1.97 (s, 1H), 1.57 - 1.48 (m, 1H), 1.42 (s, 4H), 1.10 (d, J = 9.2 Hz, 3H), 1.01 (t, J = 8.6 Hz, 1H).	438.15	D	
I-2104		(400 MHz, DMSO-d6) 8.36 (d, J = 7.3 Hz, 1H), 7.54 (td, J = 8.7, 5.4 Hz, 1H), 7.18 - 7.09 (m, 1H), 6.93 (s, 1H), 4.93 (dd, J = 11.9, 7.3 Hz, 1H), 3.24 (q, J = 9.4 Hz, 2H), 2.86 (tt, J = 9.7, 5.0 Hz, 1H), 2.54 (s, 3H), 2.32 (t, J = 10.8 Hz, 1H), 2.21 (h, J = 7.9, 7.3 Hz, 3H), 2.11 (dd, J = 11.6, 4.5 Hz, 1H), 1.87 (t, J = 12.3 Hz, 1H), 1.64 (s, 1H), 1.50 (s, 2H), 1.32 (d, J = 9.6 Hz, 1H), 1.21 (q, J = 13.5, 9.8 Hz, 4H), 0.74 (dd, J = 12.2, 5.2 Hz, 1H).	438.15	E	

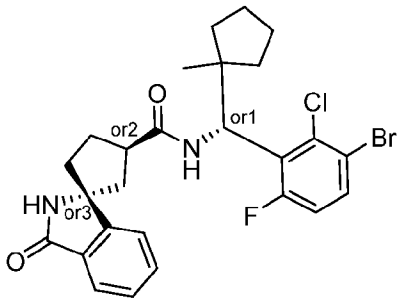
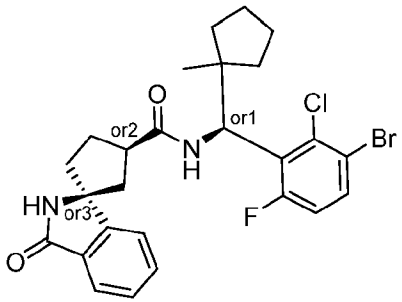
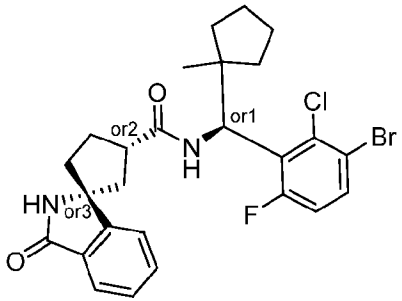
I-2105		(400 MHz, DMSO-d6) 8.28 (d, J = 7.7 Hz, 1H), 7.55 (td, J = 8.7, 5.4 Hz, 1H), 7.15 (td, J = 9.3, 1.6 Hz, 1H), 6.93 (s, 1H), 4.72 (dd, J = 11.9, 7.6 Hz, 1H), 3.24 (q, J = 9.5 Hz, 2H), 2.89 (tt, J = 9.7, 5.0 Hz, 1H), 2.54 (s, 2H), 2.33 (t, J = 10.8 Hz, 1H), 2.25 (d, J = 10.7 Hz, 2H), 2.25 - 2.16 (m, 1H), 2.12 (dt, J = 12.0, 4.1 Hz, 1H), 1.97 (s, 1H), 1.57 - 1.44 (m, 2H), 1.40 (dd, J = 16.4, 6.8 Hz, 3H), 1.26 (d, J = 13.4 Hz, 1H), 1.13 (q, J = 9.4, 8.8 Hz, 3H), 1.01 (t, J = 8.6 Hz, 1H).	438.15	B	
I-2106		(400 MHz, DMSO-d6) 8.41 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (t, J = 9.6 Hz, 1H), 6.93 (s, 1H), 4.94 (dd, J = 12.2, 7.4 Hz, 1H), 3.24 (s, 2H), 2.88 (tt, J = 9.6, 4.8 Hz, 1H), 2.51 (p, J = 1.9 Hz, 3H), 2.43 (s, 2H), 2.34 (t, J = 10.9 Hz, 1H), 2.28 - 2.12 (d, J = 4.2 Hz, 4H), 1.55 - 1.47 (m, 1H), 1.42 - 1.26 (m, 5H), 1.11 (s, 1H), 0.48 (d, J = 11.6 Hz, 1H).	438.2	A	B
I-2107		(400 MHz, DMSO-d6) 8.41 (d, J = 7.5 Hz, 1H), 7.58 - 7.44 (m, 1H), 7.23 - 7.08 (m, 1H), 6.95 (d, J = 16.5 Hz, 1H), 4.94 (dd, J = 12.3, 7.5 Hz, 1H), 3.24 (s, 2H), 2.88 (tt, J = 9.7, 4.8 Hz, 1H), 2.54 (d, J = 3.4 Hz, 3H), 2.34 (s, 3H), 2.30 - 2.17 (m, 1H), 2.15 (s, 2H), 2.12 (d, J = 4.4 Hz, 1H), 1.52 (s, 1H), 1.41 (d, J = 9.2 Hz, 1H), 1.39 - 1.22 (m, 4H), 1.10 (s, 1H), 0.48 (d, J = 10.2 Hz, 1H).	438.15	B	

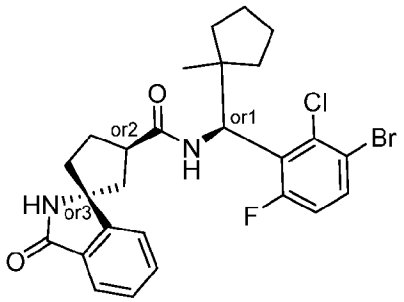
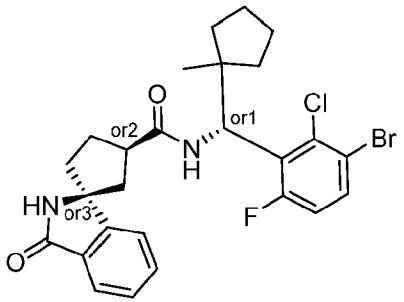
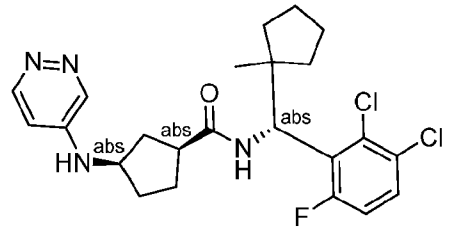
I-2108		(400 MHz, DMSO-d6) 8.38 (dd, J = 4.4, 1.4 Hz, 1H), 8.07 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.30-7.15 (m, 2H), 6.79-6.70 (m, 2H), 5.50 (d, J = 8.4 Hz, 1H), 4.20 (d, J = 6.7 Hz, 1H), 3.04 (t, J = 8.1 Hz, 1H), 2.07-1.93 (m, 2H), 1.82 (dt, J = 14.1, 7.3 Hz, 1H), 1.70 (dd, J = 12.6, 8.0 Hz, 1H), 1.60 (s, 7H), 1.52 (s, 1H), 1.38 (s, 1H), 1.26 (d, J = 12.1 Hz, 2H), 0.97 (s, 3H).	465.15	B	
I-2109		(400 MHz, DMSO-d6) 13.07 (s, 1H), 8.17 (s, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.89 (s, 1H), 7.80 (d, J = 6.9 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.7, 9.0 Hz, 1H), 5.50 (d, J = 8.5 Hz, 1H), 4.20 (q, J = 6.7 Hz, 1H), 3.03 (p, J = 7.6 Hz, 1H), 2.00 - 1.81 (m, 2H), 1.81 - 1.69 (m, 1H), 1.60 (s, 7H), 1.50 (tq, J = 13.5, 7.9 Hz, 2H), 1.38 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	481.2	A	A
I-2110		(400 MHz, DMSO-d6) 14.60 (s, 1H), 8.41 (s, 2H), 8.07 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.51 (d, J = 8.6 Hz, 1H), 4.28 (h, J = 7.1 Hz, 1H), 3.10 - 3.01 (m, 1H), 1.98 - 1.79 (m, 4H), 1.66 - 1.45 (m, 8H), 1.37 (t, J = 6.6 Hz, 1H), 1.26 (q, J = 8.7, 7.8 Hz, 1H), 0.97 (d, J = 2.9 Hz, 3H).	482.1	A	B
I-2111		(400 MHz, DMSO-d6) 8.5-8.49 (m, 1H), 8.47 (d, J = 6.0 Hz, 1H), 8.13 (d, J = 8.7 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 6.94 (d, J = 6.2 Hz, 1H), 6.49 (dd, J = 6.2, 3.1 Hz, 1H), 5.50 (d, J = 8.6 Hz, 1H), 3.79 (s, 1H), 3.03 (t, J = 8.0 Hz, 1H), 2.01 (ddt, J = 23.9, 13.0, 6.1 Hz, 1H), 1.86 (dt, J = 14.1, 7.4 Hz, 1H), 1.69 (dd, J = 12.5, 7.8 Hz, 1H), 1.60 (s, 8H), 1.49 (dt, J = 12.9, 6.7 Hz, 1H), 1.38 (s, 1H), 1.26 (d, J = 11.3 Hz, 2H), 0.97 (d, J = 2.8 Hz, 3H).	465.15	B	

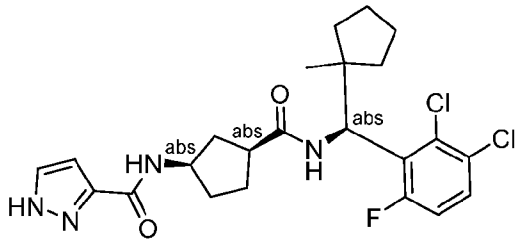
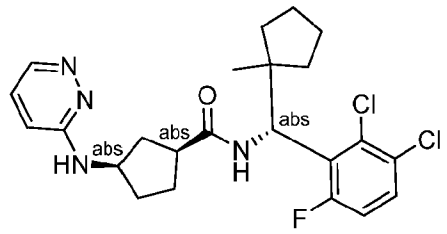
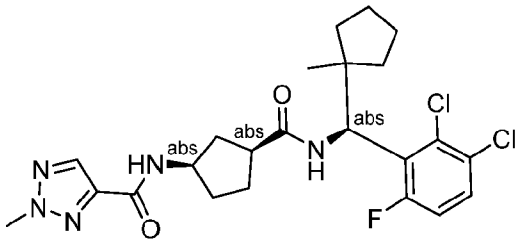
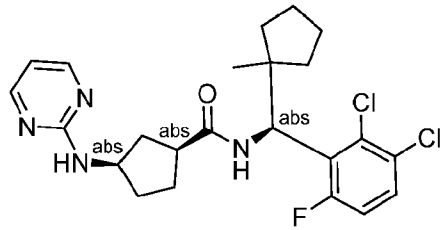
I-2112		(400 MHz, DMSO-d6) 8.12 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 6.63 (s, 1H), 5.48 (d, J = 8.5 Hz, 1H), 3.17 - 3.06 (m, 2H), 3.06 - 2.98 (m, 1H), 2.56 (s, 3H), 1.92 (td, J = 9.0, 8.5, 5.6 Hz, 1H), 1.82 - 1.54 (m, 4H), 1.60 (s, 7H), 1.37 (s, 1H), 1.26 (t, J = 9.2 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	456.1	A	B
I-2113		(400 MHz, DMSO-d6) 8.11 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.7, 9.0 Hz, 1H), 6.65 (s, 1H), 5.48 (d, J = 8.5 Hz, 1H), 3.22 (d, J = 8.8 Hz, 1H), 3.12 (d, J = 8.8 Hz, 1H), 3.02 (p, J = 7.7 Hz, 1H), 2.58 (s, 3H), 1.89 (dd, J = 13.2, 9.3 Hz, 1H), 1.78 (dt, J = 13.0, 5.9 Hz, 2H), 1.72 - 1.44 (m, 9H), 1.38 (d, J = 6.7 Hz, 1H), 1.31 - 1.22 (m, 1H), 0.97 (d, J = 2.8 Hz, 3H).	456.1	A	A
I-2114		(400 MHz, DMSO-d6) 8.08 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.31 - 7.21 (m, 1H), 6.45 (s, 1H), 5.50 (d, J = 8.5 Hz, 1H), 3.14 (q, J = 8.5 Hz, 2H), 2.94 (p, J = 8.2 Hz, 1H), 2.51 (p, J = 1.8 Hz, 3H), 1.85 - 1.71 (m, 3H), 1.71 - 1.50 (m, 9H), 1.41 - 1.33 (m, 1H), 1.27 (d, J = 8.1 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	456.1	A	B
I-2115		(400 MHz, DMSO-d6) 8.09 (d, J = 8.7 Hz, 1H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 6.49 (s, 1H), 5.52 (d, J = 8.6 Hz, 1H), 3.19 (d, J = 8.6 Hz, 1H), 3.13 (d, J = 8.5 Hz, 1H), 2.98 - 2.90 (m, 1H), 2.61 (s, 3H), 1.89 (dd, J = 12.4, 7.8 Hz, 1H), 1.79 - 1.49 (m, 10H), 1.40 - 1.33 (m, 1H), 1.27 (d, J = 8.1 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	456.1	A	A

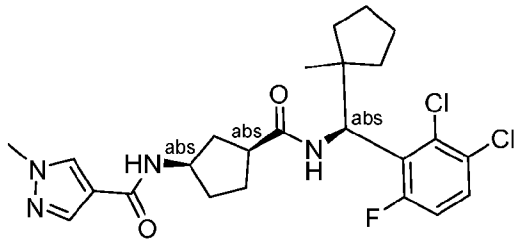
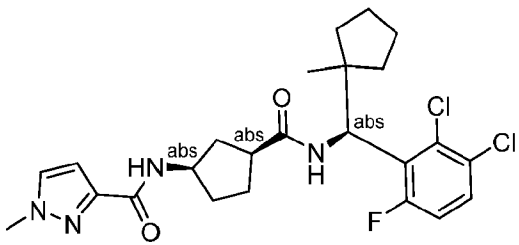
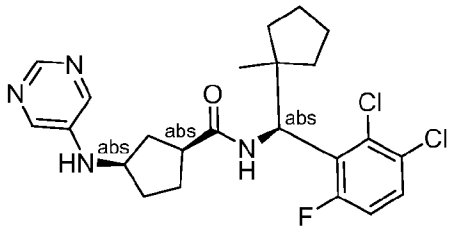
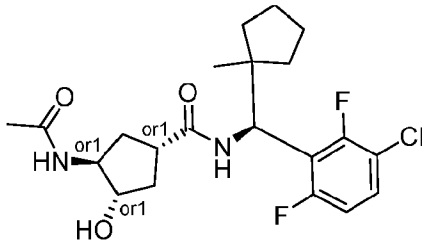
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I-2117		(400 MHz, DMSO-d6) 8.12 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 6.63 (s, 1H), 5.48 (d, J = 8.5 Hz, 1H), 3.17 - 3.06 (m, 2H), 3.06 - 2.98 (m, 1H), 2.56 (s, 3H), 1.97 - 1.87 (m, 1H), 1.82 - 1.64 (m, 3H), 1.60 (s, 7H), 1.38 (s, 1H), 1.26 (d, J = 9.4 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	456.1	E	
I-2118		(400 MHz, DMSO-d6) 8.08 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 6.44 (s, 1H), 5.50 (d, J = 8.6 Hz, 1H), 3.14 (q, J = 8.5 Hz, 2H), 3.01 - 2.88 (m, 1H), 2.60 (s, 3H), 1.83 - 1.70 (m, 3H), 1.69 - 1.50 (m, 9H), 1.38 (s, 1H), 1.30 - 1.24 (m, 1H), 0.97 (d, J = 2.8 Hz, 3H).	456.1	D	
I-2119		(400 MHz, DMSO-d6) 8.09 (d, J = 8.8 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 6.49 (s, 1H), 5.52 (d, J = 8.6 Hz, 1H), 3.19 (d, J = 8.5 Hz, 1H), 3.13 (d, J = 8.6 Hz, 1H), 2.95 (q, J = 7.8 Hz, 1H), 2.61 (s, 3H), 1.89 (dd, J = 12.4, 7.8 Hz, 1H), 1.79 - 1.48 (m, 11H), 1.41 - 1.33 (m, 1H), 1.26 (d, J = 8.6 Hz, 1H), 0.96 (d, J = 2.7 Hz, 3H).	456.1	D	

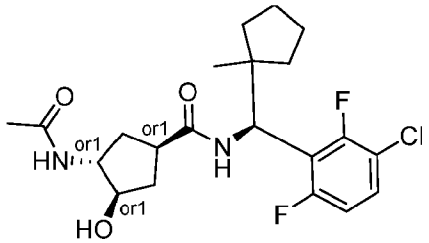
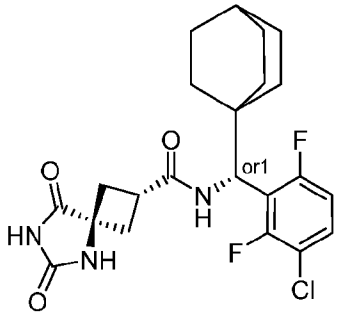
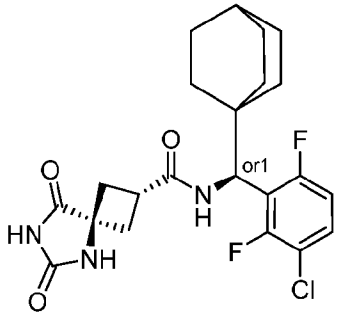
I-2120		(400 MHz, DMSO-d6) 8.56 (s, 1H), 8.27 (d, J = 8.7 Hz, 1H), 7.77 (dd, J = 8.9, 5.2 Hz, 1H), 7.67 - 7.58 (m, 3H), 7.53 - 7.42 (m, 1H), 7.23 (dd, J = 10.8, 8.9 Hz, 1H), 5.58 (d, J = 8.6 Hz, 1H), 3.41 (t, J = 7.9 Hz, 1H), 2.20 - 2.10 (m, 1H), 2.09 - 2.02 (m, 2H), 2.01 - 1.82 (m, 3H), 1.63 - 1.56 (m, 6H), 1.38 (d, J = 8.1 Hz, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	535.15	A	A
I-2121		(400 MHz, DMSO-d6) 8.52 (s, 1H), 8.25 (d, J = 8.7 Hz, 1H), 7.73 (dd, J = 8.9, 5.2 Hz, 1H), 7.65 - 7.57 (m, 3H), 7.51 - 7.43 (m, 1H), 7.18 (dd, J = 10.9, 8.9 Hz, 1H), 5.58 (d, J = 8.6 Hz, 1H), 3.45 - 3.36 (m, 1H), 2.19 (dt, J = 13.8, 6.6 Hz, 1H), 2.12 - 1.98 (m, 2H), 1.95 (t, J = 6.8 Hz, 3H), 1.63 (s, 6H), 1.40 (s, 1H), 1.29 (s, 1H), 0.99 (d, J = 2.8 Hz, 3H).	535.1	B	
I-2122		(400 MHz, DMSO-d6) 8.96 (s, 1H), 8.25 (d, J = 8.6 Hz, 1H), 7.72 (dd, J = 8.9, 5.2 Hz, 1H), 7.61 - 7.49 (m, 3H), 7.47 - 7.39 (m, 1H), 7.15 (dd, J = 10.8, 8.9 Hz, 1H), 5.57 (d, J = 8.5 Hz, 1H), 3.27 (d, J = 8.2 Hz, 1H), 2.23 - 2.10 (m, 3H), 2.05 (s, 1H), 1.90 (dd, J = 13.2, 7.9 Hz, 1H), 1.70 (d, J = 13.0 Hz, 1H), 1.62 (s, 6H), 1.40 (s, 1H), 1.30 (s, 1H), 0.99 (d, J = 2.8 Hz, 3H).	535.1	D	

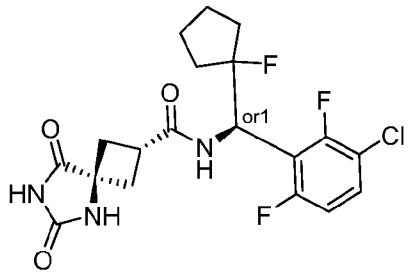
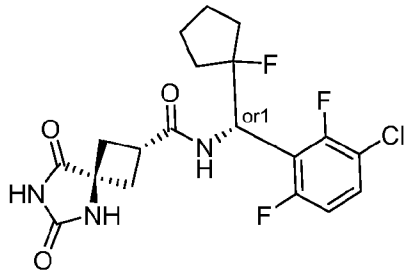
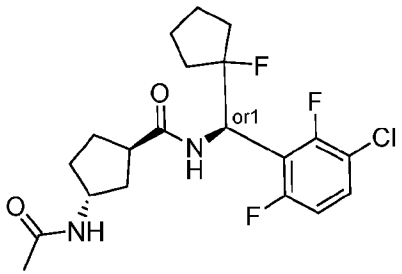
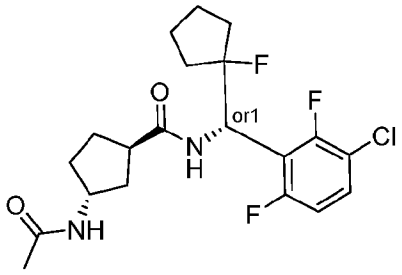
I-2123		(400 MHz, DMSO-d6) 8.98 (s, 1H), 8.25 (d, J = 8.5 Hz, 1H), 7.76 (dd, J = 8.9, 5.2 Hz, 1H), 7.59 (d, J = 4.1 Hz, 3H), 7.46 (dd, J = 7.5, 4.4 Hz, 1H), 7.22 (dd, J = 10.8, 8.9 Hz, 1H), 5.54 (d, J = 8.4 Hz, 1H), 3.33 - 3.22 (m, 1H), 2.28 (dd, J = 13.1, 9.1 Hz, 1H), 2.19 - 1.98 (m, 3H), 1.89 (d, J = 11.7 Hz, 1H), 1.69 (d, J = 11.4 Hz, 1H), 1.58 (s, 6H), 1.36 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.7 Hz, 3H).	535.05	C	
I-2124		(400 MHz, DMSO-d6) 8.52 (s, 1H), 8.25 (d, J = 8.7 Hz, 1H), 7.73 (dd, J = 8.9, 5.2 Hz, 1H), 7.67 - 7.56 (m, 3H), 7.47 (ddd, J = 7.9, 5.5, 2.6 Hz, 1H), 7.17 (dd, J = 10.9, 8.9 Hz, 1H), 5.58 (d, J = 8.6 Hz, 1H), 3.41 (p, J = 8.3 Hz, 1H), 2.20 (dq, J = 14.9, 6.9 Hz, 1H), 2.01 (dd, J = 8.6, 4.1 Hz, 2H), 1.97 - 1.87 (m, 3H), 1.62 (s, 6H), 1.40 (s, 1H), 1.29 (s, 1H), 0.99 (d, J = 2.7 Hz, 3H).	535.1	A	A
I-2125		(400 MHz, DMSO-d6) 8.97 (s, 1H), 8.25 (d, J = 8.6 Hz, 1H), 7.76 (dd, J = 8.8, 5.3 Hz, 1H), 7.63 - 7.57 (m, 3H), 7.49 - 7.41 (m, 1H), 7.22 (dd, J = 10.9, 8.9 Hz, 1H), 5.54 (d, J = 8.4 Hz, 1H), 3.32 - 3.23 (m, 1H), 2.28 (dd, J = 13.1, 9.1 Hz, 1H), 2.05 (ddd, J = 29.1, 13.0, 6.8 Hz, 3H), 1.91 (s, 1H), 1.69 (d, J = 12.5 Hz, 1H), 1.58 (s, 6H), 1.37 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	535.1	A	B

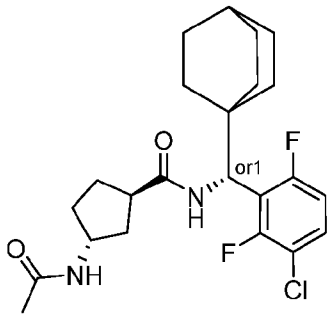
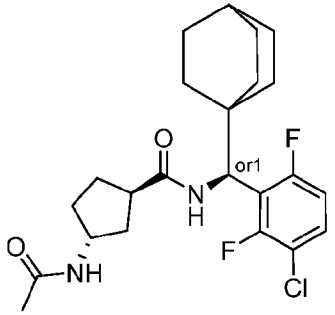
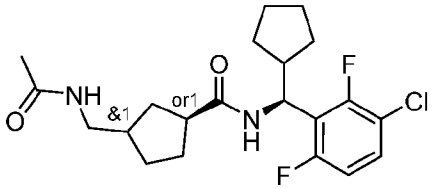
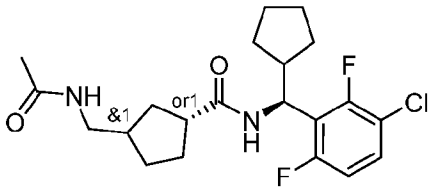
I-2126		(400 MHz, DMSO-d6) 8.96 (s, 1H), 8.26 (d, J = 8.6 Hz, 1H), 7.72 (dd, J = 8.9, 5.2 Hz, 1H), 7.61 - 7.49 (m, 3H), 7.43 (ddd, J = 8.3, 6.8, 1.6 Hz, 1H), 7.15 (dd, J = 10.8, 8.9 Hz, 1H), 5.56 (d, J = 8.5 Hz, 1H), 3.27 (d, J = 8.3 Hz, 1H), 2.14 (dt, J = 19.9, 7.4 Hz, 3H), 2.05 (s, 1H), 1.90 (dd, J = 13.2, 8.1 Hz, 1H), 1.77 - 1.66 (m, 1H), 1.62 (s, 7H), 1.40 (s, 1H), 1.29 (s, 1H), 0.99 (d, J = 2.8 Hz, 3H).	535.05	A	B
I-2127		(400 MHz, DMSO-d6) 8.56 (s, 1H), 8.28 (d, J = 8.8 Hz, 1H), 7.77 (dd, J = 8.9, 5.2 Hz, 1H), 7.65 - 7.58 (m, 3H), 7.52 - 7.43 (m, 1H), 7.23 (dd, J = 10.8, 8.9 Hz, 1H), 5.58 (d, J = 8.6 Hz, 1H), 3.41 (t, J = 8.0 Hz, 1H), 2.22 - 2.12 (m, 1H), 2.11 - 2.02 (m, 2H), 2.00 - 1.84 (m, 3H), 1.59 (s, 6H), 1.37 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	535	D	
I-2128		(400 MHz, DMSO-d6) 8.53 (dd, J = 3.1, 1.0 Hz, 1H), 8.48 (dd, J = 6.1, 1.0 Hz, 1H), 8.11 (d, J = 8.6 Hz, 1H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 6.94 (d, J = 6.2 Hz, 1H), 6.53 (dd, J = 6.2, 3.1 Hz, 1H), 5.51 (d, J = 8.6 Hz, 1H), 3.82 (d, J = 6.2 Hz, 1H), 3.02 (q, J = 7.9 Hz, 1H), 2.00 (dt, J = 14.4, 7.3 Hz, 2H), 1.71 (ddd, J = 12.8, 8.3, 4.3 Hz, 1H), 1.59 (s, 7H), 1.56-1.39 (m, 2H), 1.37 (s, 1H), 1.25 (d, J = 9.5 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	465.1	A	A

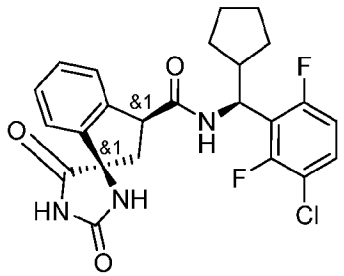
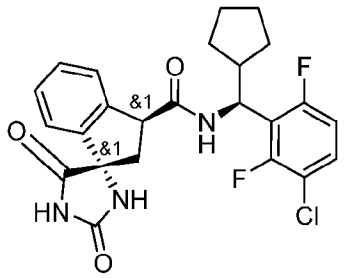
I-2129		(400 MHz, DMSO-d6) 13.20 (s, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.81 (d, J = 7.8 Hz, 2H), 7.65-7.57 (m, 1H), 7.26 (t, J = 9.9 Hz, 1H), 6.62 (s, 1H), 5.51 (d, J = 8.6 Hz, 1H), 4.26 (q, J = 7.0 Hz, 1H), 3.05 (q, J = 7.9 Hz, 1H), 1.91 (s, 2H), 1.90-1.78 (m, 2H), 1.62-1.44 (m, 8H), 1.38 (d, J = 7.7 Hz, 1H), 1.27 (d, J = 7.1 Hz, 1H), 0.97 (d, J = 2.9 Hz, 3H).	484.1	A	B
I-2130		(400 MHz, DMSO-d6) 8.39 (dd, J = 4.4, 1.4 Hz, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 7.20 (dd, J = 9.0, 4.4 Hz, 1H), 6.80-6.71 (m, 2H), 5.52 (d, J = 8.5 Hz, 1H), 4.23 (p, J = 6.0 Hz, 1H), 3.04 (p, J = 7.8 Hz, 1H), 2.00 (dt, J = 12.7, 7.4 Hz, 2H), 1.92-1.73 (m, 2H), 1.60 (t, J = 4.5 Hz, 6H), 1.58-1.42 (m, 2H), 1.38 (d, J = 8.4 Hz, 1H), 1.27 (d, J = 8.0 Hz, 1H), 0.97 (d, J = 2.9 Hz, 3H).	465.15	A	A
I-2131		(400 MHz, DMSO-d6) 8.25 (d, J = 7.4 Hz, 1H), 8.07 (d, J = 14.1 Hz, 2H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.50 (d, J = 8.6 Hz, 1H), 4.26 (q, J = 7.0 Hz, 1H), 4.21 (s, 3H), 3.04 (p, J = 7.8 Hz, 1H), 1.96 - 1.79 (m, 4H), 1.65 - 1.53 (m, 7H), 1.52 - 1.42 (m, 1H), 1.38 (s, 1H), 1.28 (d, J = 7.7 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	496.1	A	A
I-2132		(400 MHz, DMSO-d6) 8.25 (d, J = 4.7 Hz, 2H), 8.04 (d, J = 8.6 Hz, 1H), 7.60 (s, 1H), 7.26 (t, J = 9.9 Hz, 1H), 7.08 (d, J = 7.0 Hz, 1H), 6.53 (t, J = 4.7 Hz, 1H), 5.50 (d, J = 8.5 Hz, 1H), 4.24 - 4.16 (m, 1H), 3.06 - 2.98 (m, 1H), 1.93 (dd, J = 13.3, 6.5 Hz, 2H), 1.90 - 1.71 (m, 2H), 1.59 (s, 6H), 1.50 (s, 2H), 1.37 (s, 1H), 1.26 (s, 1H), 0.96 (d, J = 2.9 Hz, 3H).	465.3	A	B

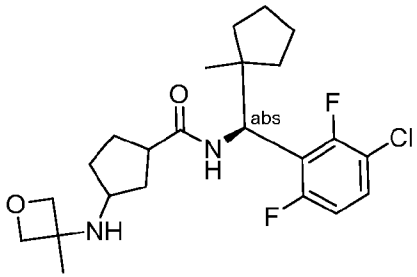
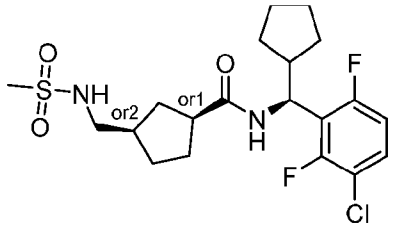
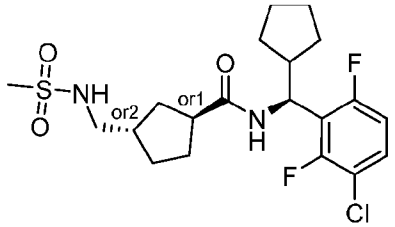
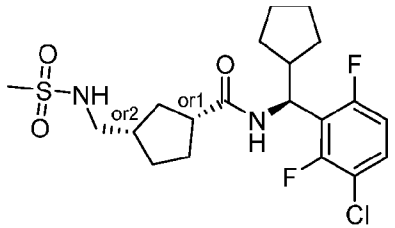
I-2133		(400 MHz, DMSO-d6) 8.09 (d, J = 16.7 Hz, 2H), 7.82 (d, J = 7.7 Hz, 2H), 7.62 (dd, J = 9.0, 4.9 Hz, 1H), 7.26 (t, J = 9.8 Hz, 1H), 5.50 (d, J = 8.5 Hz, 1H), 4.19 (q, J = 6.9 Hz, 1H), 3.84 (s, 3H), 3.06-2.98 (m, 1H), 1.99-1.87 (s, 3H), 1.79-1.68 (m, 1H), 1.60 (s, 6H), 1.48 (s, 2H), 1.38 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	495.2	A	A
I-2134		(400 MHz, Acetonitrile-d3) 7.56-7.46 (m, 2H), 7.11 (dd, J = 11.0, 8.9 Hz, 1H), 6.96 (t, J = 10.7 Hz, 2H), 6.63 (d, J = 2.3 Hz, 1H), 5.71 (d, J = 9.3 Hz, 1H), 4.37 (p, J = 6.8 Hz, 1H), 3.89 (s, 3H), 3.04-2.90 (m, 1H), 2.16-1.97 (m, 2H), 1.96-1.81 (m, 2H), 1.66 (dt, J = 12.5, 6.1 Hz, 7H), 1.64-1.52 (m, 1H), 1.47-1.39 (m, 1H), 1.35-1.27 (m, 1H), 1.01 (d, J = 2.9 Hz, 3H).	495.15	A	B
I-2135		(400 MHz, DMSO-d6) 8.37 (s, 1H), 8.10 (d, J = 8.7 Hz, 1H), 8.07 (s, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 6.12 (d, J = 6.2 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 3.81 (h, J = 6.0 Hz, 1H), 3.04 (p, J = 7.9 Hz, 1H), 3.52 (p, J = 7.9 Hz, 1H), 2.00 (dt, J = 12.7, 7.3 Hz, 2H), 1.87 (dq, J = 8.1, 5.5, 3.3 Hz, 1H), 1.71 (ddd, J = 12.7, 8.3, 4.2 Hz, 1H), 1.63 - 1.47 (m, 8H), 1.37 (s, 1H), 1.25 (d, J = 10.4 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	465.1	A	A
I-2136				A	B

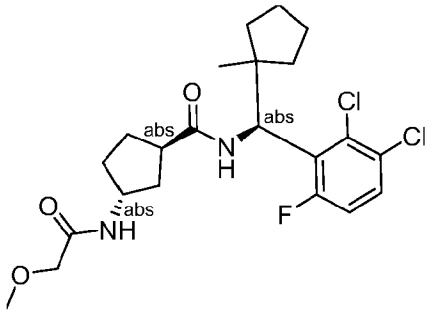
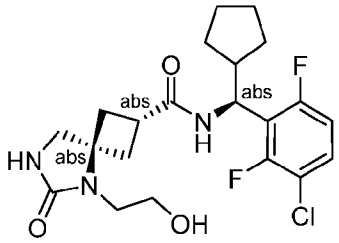
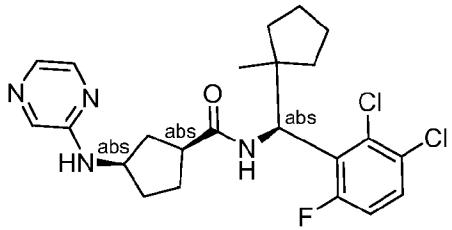
I-2137				A	B
I-2138				D	
I-2139				A	A

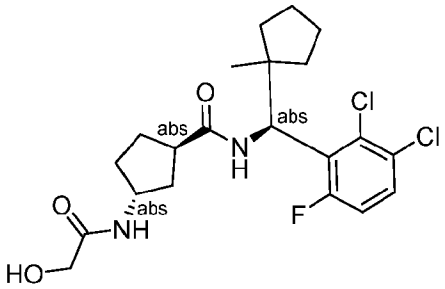
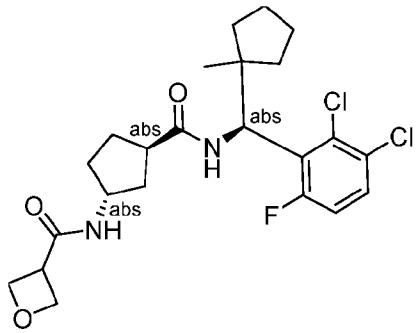
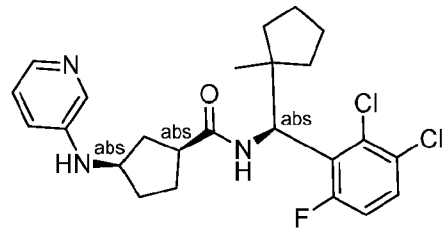
I-2140				E	
I-2141				A	B
I-2142				D	
I-2143				B	B

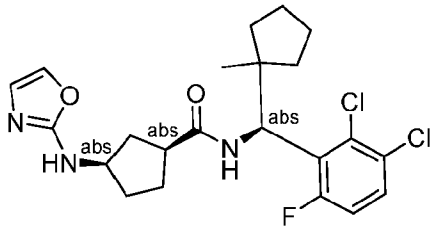
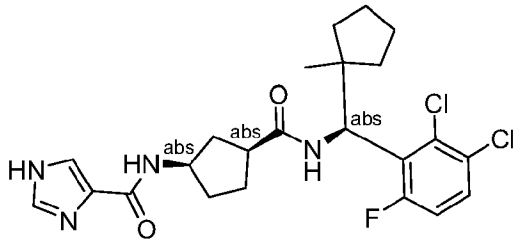
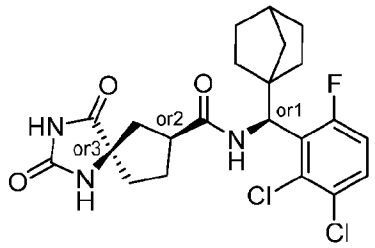
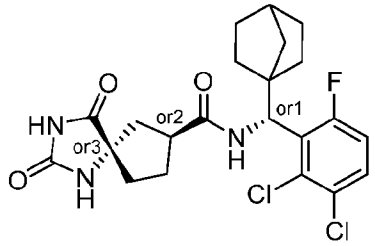
I-2144				A	A
I-2145				D	
I-2146				C	
I-2147				C	

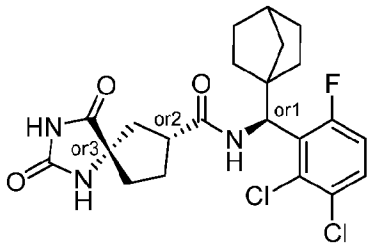
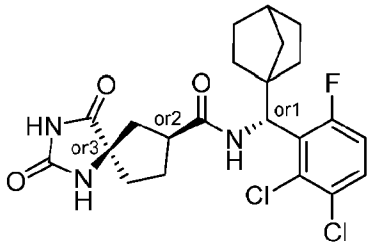
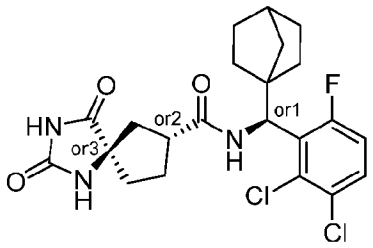
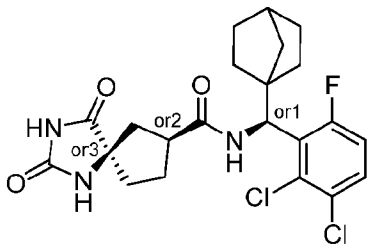
I-2148		NMR (400 MHz, DMSO-d6) 10.68 (br. s, 1H), 9.15 (d, J = 7.1 Hz, 0.5H), 9.10 (d, J = 7.4 Hz, 0.5H), 8.40 (s, 0.5H), 8.36 (s, 0.5H), 7.59 – 7.49 (m, 1H), 7.38 (td, J = 7.4, 1.1 Hz, 0.5H), 7.34 – 7.25 (m, 1H), 7.25 – 7.11 (m, 3H), 6.98 (app. d, J = 7.4 Hz, 0.5H), 4.91 (overlapping dd, J = 11.2, 7.7 Hz, 0.5H), 4.86 (overlapping dd, J = 11.3, 7.2 Hz, 0.5H), 4.27 (app. q, J = 7.7 Hz, 1H), 2.54 (submerged m, 2.5H), 2.36 (dd, J = 12.9, 9.2 Hz, 0.5H), 2.16 – 2.07 (m, 0.5H), 2.05 – 1.96 (m, 0.5H), 1.72 – 1.28 (m, 6H), 1.11 – 0.98 (m, 1H). c.a 1:1 mixture of 2 diastereomers.	474.3	B	
I-2149		NMR (400 MHz, DMSO-d6) 10.76 (br. s, 1H), 9.07 (d, J = 7.0 Hz, 0.6H), 9.00 (d, J = 7.4 Hz, 0.4H), 8.58 (overlapping s, 0.6H), 8.57 (overlapping s, 0.4H), 7.58 – 7.50 (m, 1H), 7.38 (td, J = 7.5, 1.1 Hz, 0.4H), 7.33 – 7.21 (m, 2H), 7.20 – 7.10 (m, 2H), 7.04 – 7.00 (m, 0.6H), 4.89 (overlapping dd, J = 11.1, 7.4 Hz, 0.4H), 4.85 (overlapping dd, J = 11.1, 7.0 Hz, 0.6H), 4.25 – 4.16 (m, 1H), 2.90 (dd, J = 13.7, 8.4 Hz, 0.6H), 2.78 (dd, J = 13.6, 8.5 Hz, 0.4H), 2.55 (submerge m, 1H), 2.29 (overlapping dd, J = 13.5, 7.7 Hz, 0.6H), 2.24 (overlapping dd, J = 13.3, 7.5 Hz, 0.4H), 2.16 – 2.03 (m, 0.4H), 2.00 – 1.89 (m, 0.6H), 1.74 – 1.22 (m, 6H), 1.11 – 0.96 (m, 1H). Mixture of 2 diastereomers in a 3:2 ratio.	474.3	A	B

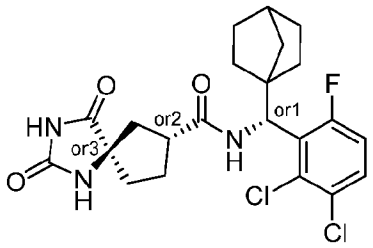
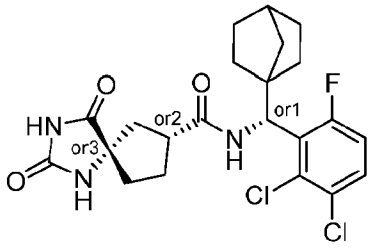
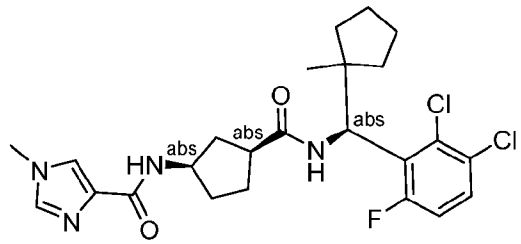
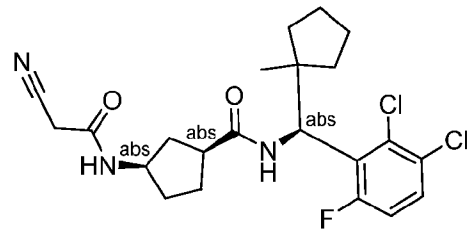
I-2150		NMR (400 MHz, DMSO-d6) 8.11 (d, J = 8.2 Hz, 0.5H), 8.07 (d, J = 8.4 Hz, 0.5H), 7.60 – 7.50 (m, 1H), 7.14 (app. t, J = 9.4 Hz, 1H), 5.20 (d, J = 9.1 Hz, 0.3H), 5.20 (d, J = 8.8 Hz, 0.3H), 5.18 (d, J = 9.0 Hz, 0.2H), 5.17 (d, J = 9.3 Hz, 0.2H), 4.40 – 4.30 (m, 2H), 4.17 – 4.08 (m, 2H), 3.16 – 3.01 (m, 1H), 3.00 – 2.91 (m, 0.4H), 2.86 – 2.74 (m, 0.6H), 2.35 (br. s, 1H), 1.97 – 1.41 (m, 10H), 1.38 (overlapping s, 0.9H), 1.36 (overlapping s, 1.5H), 1.34 (submerged m, 2H), 1.32 (overlapping s, 0.6H), 1.30 – 1.13 (m, 2H), 0.94 (s, 3H).	441.3	B	
I-2151				C	
I-2152				B	
I-2153				B	C

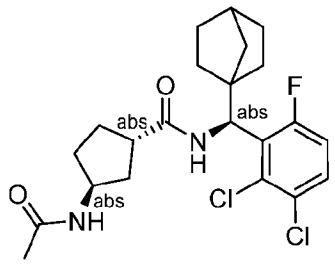
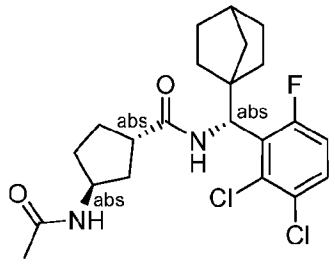
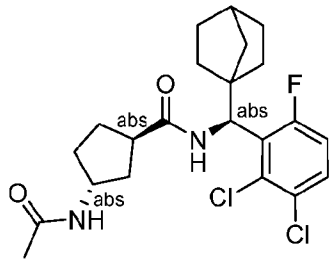
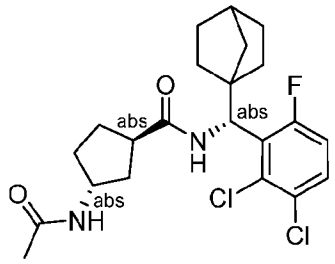
I-2154		(400 MIIz, DMSO-d6) 8.13 - 7.98 (d, J = 8.7 IIz, 1H), 7.67- 7.50 (m, 2H), 7.32 - 7.20 (dd, J = 10.8, 9.0 Hz, 1H), 5.52 - 5.42 (d, J − 8.5 Hz, 1H), 4.19 - 4.00 (q, J = 6.8 Hz, 1H), 3.81 - 3.70 (s, 2H), 3.31 - 3.22 (s, 3H), 3.08 - 2.91 (p, J = 7.6 Hz, 1H), 1.94 - 1.76 (m, 3H), 1.74 - 1.52 (m, 7H), 1.51 - 1.34 (m, 3H), 1.31 - 1.18 (s, 1H), 1.08 - 0.87 (d, J = 2.8 Hz, 3H).	459.1	A	B
I-2155		(400 MHz, DMSO-d6) 8.40 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 6.22 (s, 1H), 4.96 - 4.55 (m, 2H), 3.63-3.38 (m, 2H), 3.32 - 3.05 (m, 4H), 2.93 (tt, J = 9.7, 4.9 Hz, 1H), 2.56 (d, J = 11.6 Hz, 1H), 2.49 - 2.32 (m, 2H), 2.14 (dd, J = 10.2, 6.1 Hz, 1H), 2.04 (dd, J = 12.5, 4.6 Hz, 1H), 1.89 (ddd, J = 24.7, 15.5, 9.3 Hz, 1H), 1.73-1.40 (m, 4H), 1.40 -1.19 (m, 2H), 1.02 (d, J = 9.9 Hz, 1H).	442.25	B	
I-2156		(400 MHz, DMSO-d6) 8.07 (d, J = 8.6 Hz, 1H), 7.97 - 7.86 (m, 2H), 7.61 (dd, J = 7.2, 3.8 Hz, 2H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 7.02 (d, J = 6.4 Hz, 1H), 5.50 (d, J = 8.5 Hz, 1H), 4.14 (q, J = 6.2 Hz, 1H), 3.03 (p, J = 7.8 Hz, 1H), 1.96 (dq, J = 13.4, 7.0 Hz, 2H), 1.91 - 1.80 (m, 1H), 1.74 (ddd, J = 13.2, 8.6, 5.0 Hz, 1H), 1.57 (dt, J − 22.0, 6.2 Hz, 6H), 1.52 - 1.42 (m, 2H), 1.38 (d, J = 8.1 Hz, 1H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	465.2	A	A

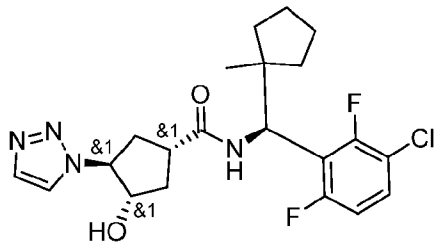
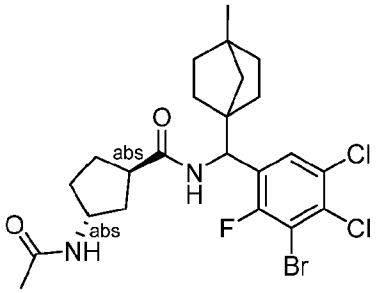
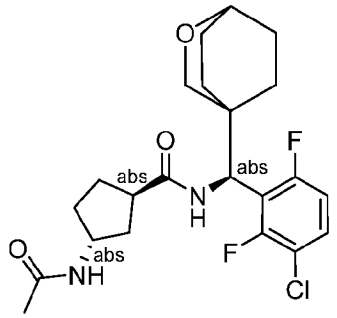
I-2157		(400 MHz, DMSO-d6) 8.20 - 7.88 (d, J = 8.6 Hz, 1H), 7.68 - 7.59 (dd, J = 8.9, 5.0 Hz, 1H), 7.52 - 7.42 (d, J = 7.6 Hz, 1H), 7.32 - 7.16 (dd, J = 10.8, 9.0 Hz, 1H), 5.58 - 5.47 (d, J = 8.6 Hz, 1H), 5.46 - 5.31 (t, J = 5.8 Hz, 1H), 4.50 - 4.02 (m, 1H), 3.83 - 3.70 (d, J = 5.8 Hz, 2H), 3.12 - 2.92 (p, J = 7.9 Hz, 1H), 1.94 - 1.75 (m, 3H), 1.74 - 1.66 (ddd, J = 12.8, 8.9, 6.2 Hz, 1H), 1.65 - 1.52 (t, J = 4.0 Hz, 6H), 1.51 - 1.42 (tdd, J = 9.7, 8.5, 7.3, 3.5 Hz, 2H), 1.41 - 1.34 (m, 1H), 1.32 - 1.23 (d, J = 7.8 Hz, 1H), 1.05 - 0.89 (d, J = 2.8 Hz, 3H).	445.05	A	B
I-2158		(400 MHz, DMSO-d6) 8.20 - 7.99 (d, J = 8.6 Hz, 1H), 7.87 - 7.77 (d, J = 6.8 Hz, 1H), 7.66 - 7.57 (dd, J = 9.0, 5.0 Hz, 1H), 7.34 - 7.19 (dd, J = 10.8, 9.0 Hz, 1H), 5.55 - 5.41 (d, J = 8.5 Hz, 1H), 4.70 - 4.53 (m, 4H), 4.12 - 3.97 (h, J = 6.6 Hz, 1H), 3.75 - 3.60 (m, 1H), 3.06 - 2.89 (p, J = 7.7 Hz, 1H), 1.95 - 1.71 (m, 3H), 1.69 - 1.50 (m, 7H), 1.48 - 1.32 (ddt, J = 25.3, 12.8, 7.1 Hz, 3H), 1.31 - 1.21 (d, J = 8.1 Hz, 1H), 1.02 - 0.90 (d, J = 2.8 Hz, 3H).	471.1	A	B
I-2159		(400 MHz, DMSO-d6) 8.23 - 8.04 (m, 1H), 7.93 (s, 1H), 7.73 (d, J = 4.5 Hz, 1H), 7.62 (dd, J = 9.2, 5.0 Hz, 1H), 7.26 (t, J = 9.9 Hz, 1H), 7.06 (dd, J = 8.5, 4.6 Hz, 1H), 6.85 (d, J = 8.3 Hz, 1H), 5.83 (d, J = 6.0 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 3.75 (q, J = 5.9 Hz, 1H), 3.03 (p, J = 7.9 Hz, 1H), 1.98 (dt, J = 13.7, 7.2 Hz, 2H), 1.92 - 1.78 (m, 1H), 1.75-1.66 (m, 1H), 1.64 - 1.41 (m, 8H), 1.38 (d, J = 7.9 Hz, 1H), 1.27 (d, J = 8.1 Hz, 1H), 0.97 (s, 3H).	464.3	A	B

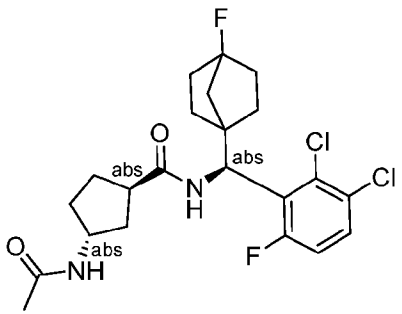
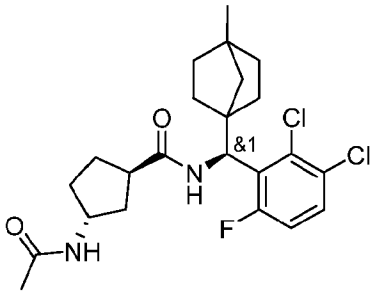
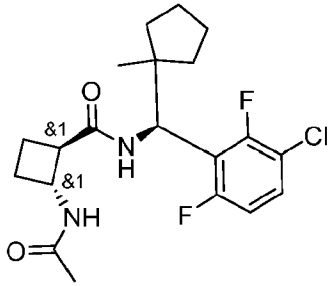
I-2160		(400 MHz, DMSO-d6) 8.37- 7.99 (m, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.39 (s, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 7.07 (d, J = 6.2 Hz, 1H), 6.73 (s, 1H), 5.50 (d, J = 8.5 Hz, 1H), 3.92 (h, J = 6.0 Hz, 1H), 3.01 (p, J = 7.9 Hz, 1H), 1.90 (dq, J = 11.1, 5.8, 4.6 Hz, 2H), 1.80 (ddd, J = 18.4, 9.2, 5.6 Hz, 2H), 1.71-1.16 (m, 10H), 0.97 (d, J = 2.7 Hz, 3H).	454.25	A	B
I-2161		(400 MIIz, DMSO-d6) 12.45 (s, 1II), 8.08 (d, J = 8.6 Hz, 1H), 7.71 (d, J = 1.2 Hz, 1H), 7.60 (dt, J = 12.7, 7.8 Hz, 3H), 7.26 (dd, J − 10.7, 9.0 Hz, 1H), 5.51 (d, J = 8.6 Hz, 1H), 4.25 (q, J = 7.0 Hz, 1H), 3.09-3.01 (m, 1H), 1.96-1.74 (m, 2H), 1.81 (s, 2H), 1.60 (s, 7H), 1.58-1.44 (m, 1H), 1.38 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	481.15	A	A
I-2162		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.34 (d, J = 8.2 Hz, 1H), 7.97 (s, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.6, 9.0 Hz, 1H), 5.65 (d, J = 8.1 Hz, 1H), 3.23 - 2.98 (m, 1H), 2.14 (d, J = 4.9 Hz, 1H), 2.10 - 1.88 (m, 3H), 1.87- 1.70 (m, 3H), 1.66 -1.45 (m, 3H), 1.35 (t, J = 10.2 Hz, 3H), 1.30 - 1.09 (m, 4H).	468.15	A	B
I-2163		(400 MIIz, DMSO-d6) 10.55 (s, 1II), 8.33 (d, J = 8.2 Hz, 1H), 7.96 (s, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.24 (dd, J − 10.6, 8.9 Hz, 1H), 5.65 (d, J − 8.1 Hz, 1H), 3.15 - 3.06 (m, 1H), 2.14 (s, 1H), 2.10 - 1.88 (m, 3H), 1.87 - 1.69 (m, 3H), 1.53 (d, J = 20.9 Hz, 3H), 1.35 (t, J = 10.1 Hz, 3H), 1.23 (dd, J = 21.7, 9.1 Hz, 4H).	468	E	

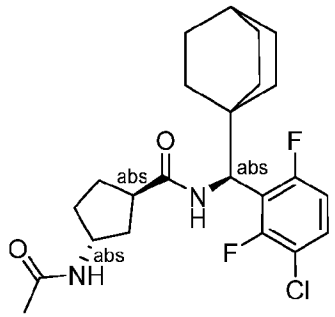
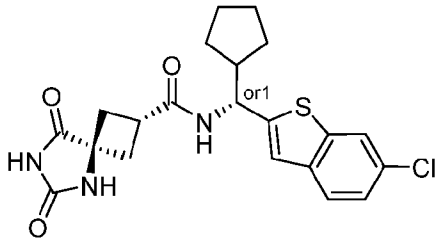
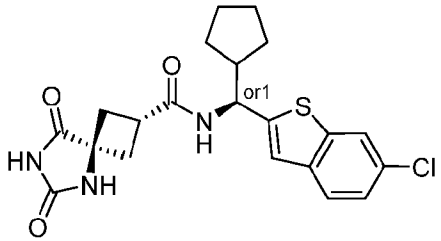
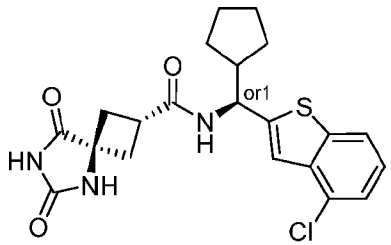
I-2164		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.32 (d, J = 8.1 Hz, 1H), 8.00 (s, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.7, 8.9 Hz, 1H), 5.64 (d, J = 8.0 Hz, 1H), 3.12 (t, J = 8.3 Hz, 1H), 2.16 - 2.06 (m, 2H), 1.96 - 1.84 (m, 3H), 1.73 (t, J = 9.0 Hz, 1H), 1.56 (t, J = 22.7 Hz, 4H), 1.33 (d, J = 10.3 Hz, 3H), 1.30 - 1.15 (m, 4H).	468.2	A	A
I-2165		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.30 (s, 1H), 8.24 (d, J = 8.1 Hz, 1H), 7.60 (dd, J = 9.0, 5.1 Hz, 1H), 7.24 (dd, J = 10.6, 9.0 Hz, 1H), 5.65 (d, J = 8.0 Hz, 1H), 3.10 - 2.97 (m, 1H), 2.14 (s, 1H), 2.08 - 1.92 (m, 3H), 1.87 - 1.74 (m, 2H), 1.66 (dd, J = 11.1, 5.5 Hz, 1H), 1.53 (d, J = 19.4 Hz, 3H), 1.44 - 1.15 (m, 7H).	468.05	B	
I-2166		(400 MHz, DMSO-d6) 10.52 (s, 1H), 8.30 (s, 1H), 8.25 (d, J = 8.1 Hz, 1H), 7.60 (dd, J = 8.9, 5.0 Hz, 1H), 7.24 (dd, J = 10.6, 9.0 Hz, 1H), 5.64 (d, J = 8.0 Hz, 1H), 3.10 - 2.97 (m, 1H), 2.15 (d, J = 3.9 Hz, 1H), 1.98 (dddd, J = 13.3, 9.6, 7.1, 3.1 Hz, 3H), 1.89 - 1.74 (m, 2H), 1.73 - 1.59 (m, 1H), 1.53 (d, J = 23.1 Hz, 3H), 1.35 (dd, J = 14.9, 9.2 Hz, 4H), 1.24 (dd, J = 20.7, 9.4 Hz, 3H).	468.15	A	A
I-2167		(400 MHz, DMSO-d6) 10.60 (s, 1H), 8.30 (s, 1H), 8.24 (d, J = 8.2 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.6, 9.0 Hz, 1H), 5.64 (d, J = 8.0 Hz, 1H), 3.05 (q, J = 8.4 Hz, 1H), 2.17 - 2.07 (m, 2H), 2.03 - 1.86 (m, 3H), 1.65 (p, J = 6.1, 5.4 Hz, 2H), 1.52 (d, J = 20.3 Hz, 3H), 1.33 (q, J = 11.7, 9.2 Hz, 4H), 1.28 - 1.18 (m, 3H).	468.15	A	A

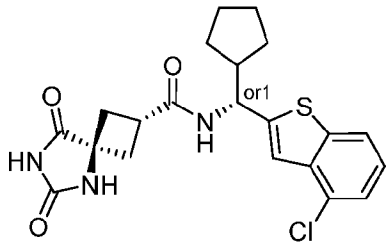
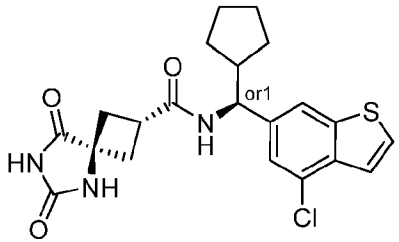
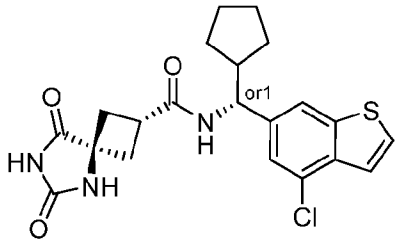
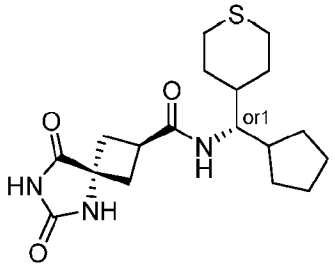
I-2168		(400 MHz, DMSO-d6) 10.62 (s, 1H), 8.29 (s, 1H), 8.23 (d, J = 8.2 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.6, 9.0 Hz, 1H), 5.64 (d, J = 8.1 Hz, 1H), 3.05 (q, J = 8.4 Hz, 1H), 2.23 - 2.08 (m, 2H), 2.03 - 1.86 (m, 3H), 1.65 (p, J = 6.3 Hz, 2H), 1.52 (d, J = 19.7 Hz, 3H), 1.36 (d, J = 13.8 Hz, 3H), 1.24 (d, J = 13.1 Hz, 4H).	468	D	
I-2169		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.31 (d, J = 8.1 Hz, 1H), 7.99 (s, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.6, 8.9 Hz, 1H), 5.64 (d, J = 8.0 Hz, 1H), 3.12 (p, J = 8.4 Hz, 1H), 2.16 - 2.06 (m, 2H), 1.96 - 1.84 (m, 3H), 1.75 (q, J = 9.0, 8.6 Hz, 1H), 1.68 - 1.44 (m, 4H), 1.35 (t, J = 10.0 Hz, 3H), 1.23 (dd, J = 20.3, 9.1 Hz, 4H).	468	C	
I-2170		(400 MHz, DMSO-d6) 8.07 (d, J = 8.6 Hz, 1H), 7.6-7.53 (m, 4H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 5.51 (d, J = 8.6 Hz, 1H), 4.23 (p, J = 6.9 Hz, 1H), 3.68 (s, 3H), 3.04 (p, J = 8.1 Hz, 1H), 1.90 (dt, J = 13.6, 7.2 Hz, 1H), 1.84-1.73 (m, 1H), 1.60 (s, 7H), 1.53 (s, 1H), 1.54-1.41 (m, 1H), 1.38 (s, 1H), 1.25 (d, J = 10.9 Hz, 2H), 0.97 (d, J = 2.8 Hz, 3H).	495.15	A	B
I-2171		(400 MHz, DMSO-d6) 8.28 - 8.16 (d, J = 6.8 Hz, 1H), 8.13 - 7.98 (d, J = 8.6 Hz, 1H), 7.69 - 7.55 (dd, J = 9.0, 5.1 Hz, 1H), 7.33 - 7.19 (dd, J = 10.8, 8.9 Hz, 1H), 5.57 - 5.44 (d, J = 8.7 Hz, 1H), 4.10 - 3.92 (h, J = 6.6 Hz, 1H), 3.66 - 3.47 (d, J = 2.7 Hz, 2H), 3.14 - 2.90 (p, J = 7.7 Hz, 1H), 2.02 - 1.76 (m, 3H), 1.72 - 1.51 (m, 7H), 1.48 - 1.33 (m, 3H), 1.31 - 1.19 (t, J = 6.9 Hz, 1H), 1.02 - 0.91 (d, J = 2.8 Hz, 3H).	454.1	A	A

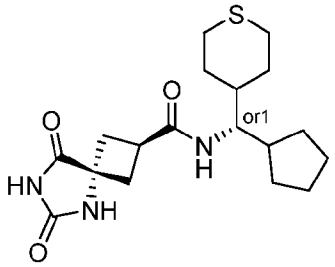
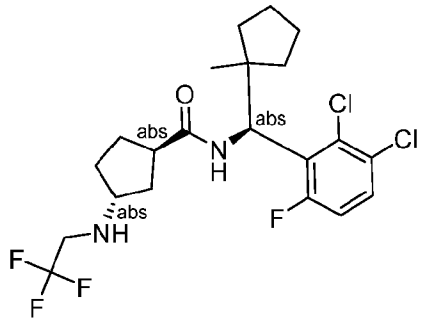
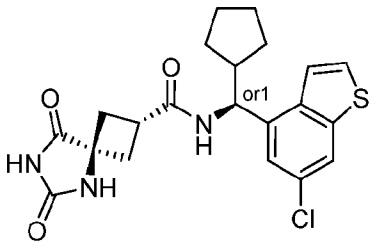
I-2172		(400 MHz, DMSO-d6) 8.08 (d, J = 8.2 Hz, 1H), 7.75 (d, J = 6.9 Hz, 1H), 7.59 (dd, J = 9.0, 5.0 Hz, 1H), 7.24 (dd, J = 10.6, 8.9 Hz, 1H), 5.64 (d, J = 8.1 Hz, 1H), 3.97 (p, J = 6.6 Hz, 1H), 2.94 (p, J = 7.8 Hz, 1H), 2.13 (d, J = 3.9 Hz, 1H), 1.95- 1.81 (m, 2H), 1.76 (s, 3H), 1.73 - 1.45 (m, 6H), 1.37 (ddd, J = 23.6, 13.4, 6.8 Hz, 4H), 1.23 (dd, J = 19.7, 9.3 Hz, 4H).	441.05	A	A
I-2173		(400 MHz, DMSO-d6) 8.08 (d, J = 8.2 Hz, 1H), 7.76 (d, J = 6.9 Hz, 1H), 7.59 (dd, J = 8.9, 5.0 Hz, 1H), 7.24 (dd, J = 10.6, 9.0 Hz, 1H), 5.64 (d, J = 8.1 Hz, 1H), 4.00 (q, J = 6.5 Hz, 1H), 2.94 (p, J = 7.9 Hz, 1H), 2.14 (s, 1H), 1.92-1.76 (m, 3H), 1.77 (s, 3H), 1.66-1.42 (m, 5H), 1.37 (ddd, J = 21.4, 15.3, 8.7 Hz, 4H), 1.26 (d, J = 7.7 Hz, 2H), 1.22 (s, 2H).	441.15	B	
I-2174		(400 MHz, DMSO-d6) 8.08 (d, J = 8.2 Hz, 1H), 7.76 (d, J = 6.9 Hz, 1H), 7.59 (dd, J = 8.9, 5.0 Hz, 1H), 7.24 (dd, J = 10.6, 8.9 Hz, 1H), 5.64 (d, J = 8.1 Hz, 1H), 4.00 (h, J = 6.5 Hz, 1H), 2.94 (p, J = 7.7 Hz, 1H), 2.14 (t, J = 3.9 Hz, 1H), 1.96 - 1.72 (m, 6H), 1.68 - 1.41 (m, 5H), 1.35 (ddt, J = 15.4, 10.8, 3.9 Hz, 4H), 1.23 (dd, J = 20.4, 8.8 Hz, 4H).	441.1	A	A
I-2175		(400 MHz, DMSO-d6) 8.08 (d, J = 8.3 Hz, 1H), 7.75 (d, J = 6.9 Hz, 1H), 7.59 (dd, J = 9.0, 5.1 Hz, 1H), 7.24 (dd, J = 10.6, 8.9 Hz, 1H), 5.64 (d, J = 8.1 Hz, 1H), 3.97 (q, J = 6.5 Hz, 1H), 2.94 (p, J = 7.8 Hz, 1H), 2.17 - 2.06 (m, 1H), 1.87 (tt, J = 11.6, 10.0, 4.2 Hz, 2H), 1.76 (s, 3H), 1.73 - 1.46 (m, 6H), 1.37 (ddd, J = 23.9, 13.5, 6.9 Hz, 4H), 1.23 (dd, J = 19.2, 9.0 Hz, 4H).	441.1	B	

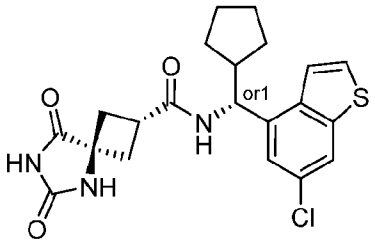
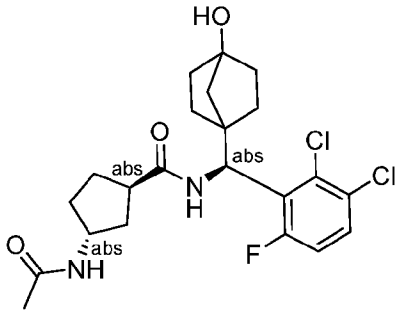
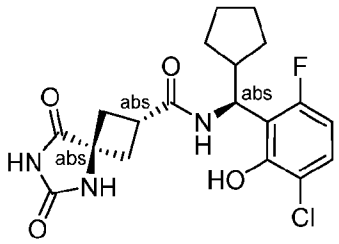
I-2176		(400 MHz, DMSO-d6) as a ca. 1.2:1 mixture of diastereomers, 8.29 (d, J = 8.7 Hz, 1H), 8.28 (d, J = 8.6 Hz, 1H), 8.17 (d, J = 0.9 Hz, 1H), 8.16 (d, J = 0.9 Hz, 1H), 7.73 (d, J = 0.9 Hz, 1H), 7.72 (d, J = 0.9 Hz, 1H), 7.61 – 7.53 (m, 2H), 7.19 – 7.11 (m, 2H), 5.38 (d, J = 4.2 Hz, 1H), 5.34 (d, J = 4.9 Hz, 1H), 5.22 (overlapping d, J = 8.4 Hz, 1H), 5.20 (overlapping d, J = 8.1 Hz, 1H), 4.71 – 4.63 (m, 2H), 4.34 – 4.25 (m, 2H), 3.23 – 3.13 (m, 2H), 2.37 – 2.06 (m, 6H), 1.70 (dt, J = 12.7, 8.9 Hz, 1H), 1.65 – 1.45 (m, 13H), 1.40 – 1.33 (m, 2H), 1.23 – 1.17 (m, 2H), 0.96 (s, 6H).	439.4	B	B
I-2177		NMR (400 MHz, DMSO-d6) 8.18 (d, J = 8.0 Hz, 0.7H), 8.11 (d, J = 7.9 Hz, 0.3H), 8.05 (d, J = 6.5 Hz, 0.6H), 7.80 (d, J = 10.7 Hz, 0.4H), 7.77 (d, J = 6.8 Hz, 1H), 5.56 (d, J = 7.7 Hz, 0.7H), 5.49 (d, J = 7.9 Hz, 0.3H), 4.04 – 3.93 (m, 1H), 3.00 – 2.87 (m, 1H), 1.91 – 1.78 (overlapping m, 2H), 1.76 (overlapping s, 3H), 1.73 – 1.53 (m, 2H), 1.49 – 1.22 (m, 10H), 1.18 – 1.08 (m, 1H), 1.06 (s, 3H). Mixed impurities present. Based on aromatic peak ratios; 3:2 mix of P2B:P2A and a 7:3 dr.	533.3	B	D
I-2178		NMR (400 MHz, DMSO-d6) 8.14 (d, J = 8.7 Hz, 1H), 7.78 (d, J = 6.9 Hz, 1H), 7.57 (app. td, J = 8.7, 5.5 Hz, 1H), 7.14 (app br. t, J = 9.0 Hz, 1H), 5.04 (d, J = 8.5 Hz, 1H), 4.04 – 3.93 (m, 1H), 3.61 (submerged m, 2H), 3.41 (br. s, 1H), 2.92 (app. p, J = 7.7 Hz, 1H), 1.88 – 1.78 (m, 4H), 1.76 (overlapping s, 3H), 1.73 – 1.28 (m, 9H). 9:1 mixture of 2 diastereomers.	441.2	C	

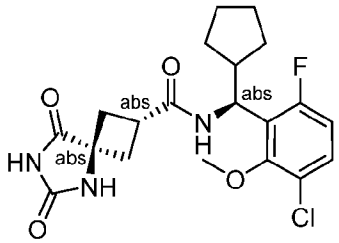
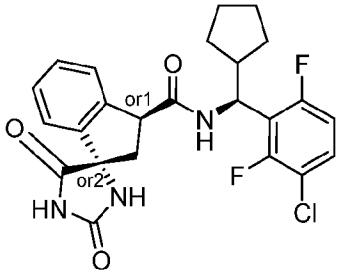
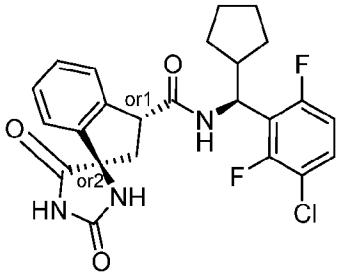
I-2179		HNMR (400 MHz, DMSO-d6) 8.16 (d, J = 8.0 Hz, 1H), 7.77 (d, J = 6.3 Hz, 1H), 7.62 (dd, J = 8.6, 4.8 Hz, 1H), 7.26 (t, J = 9.8 Hz, 1H), 5.50 (d, J = 7.9 Hz, 1H), 4.04 – 3.92 (m, 1H), 2.97 – 2.85 (m, 1H), 1.84 (overlapping m, 5H), 1.76 (overlapping d, J = 1.1 Hz, 3H), 1.69 (overlapping m, 3H), 1.66 – 1.46 (m, 6H), 1.46 – 1.30 (m, 2H). ~ 9:1 diastereomeric ratio. Some alipahtic impurities and residual DMSO.	459.4	A	A
I-2180		NMR (400 MHz, DMSO-d6) (major dr described) 8.06 (d, J = 8.2 Hz,1H), 7.77 (d, J = 6.7 Hz, 1H), 7.59 (dd, J = 8.9, 5.0 Hz, 1H), 7.23 (dd, J = 10.3, 9.3 Hz, 1H), 5.57 (d, J = 8.2 Hz, 1H), 4.04 – 3.94 (m, 1H), 2.98 – 2.88 (m, 1H), 1.90 – 1.78 (overlapping m, 2H), 1.76 (overlapping s, 3H), 1.73 – 1.53 (m, 2H), 1.49 – 1.21 (m, 10H), 1.17 – 1.10 (m, 1H), 1.05 (s, 3H). ~85:15 diastereomeric ratio. Some mixed impurities and residual DMSO present.	455.4	A	B
I-2181		NMR (400 MHz, DMSO-d6) 8.84 (d, J = 8.7 Hz, 0.5H), 8.65 (d, J = 8.5 Hz, 0.5H), 8.35 (overlapping d, J = 7.1 Hz, 0.5H), 8.34 (overlapping d, J = 7.8 Hz, 0.5H), 7.59 – 7.50 (m, 1H), 7.17 – 7.09 (m, 1H), 5.21 (d, J = 8.8 Hz, 0.5H), 5.17 (d, J = 8.6 Hz, 0.5H), 4.19 – 4.03 (m, 1H), 3.00 – 2.88 (m, 1H), 2.07 – 1.96 (m, 1H), 1.85 (submerged m, 2H), 1.85 (overlapping s, 1.5H), 1.82 (overlapping s, 1.5H), 1.76 – 1.45 (m, 7H), 1.42 – 1.31 (m, 1H), 1.25 – 1.16 (m, 1H), 0.99 – 0.93 (s, 3H). ca. 1:1 mixture of 2 trans diastereomers.	399.2	E	

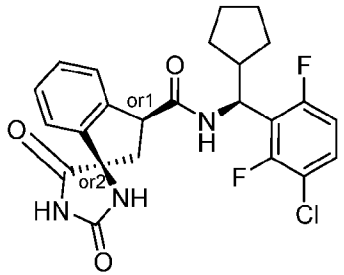
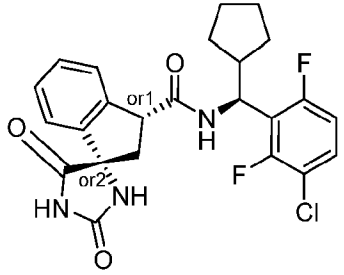
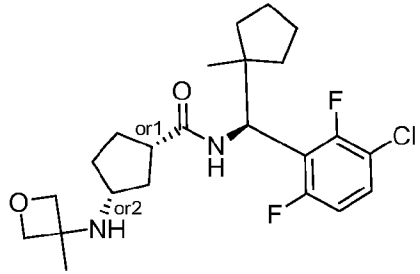
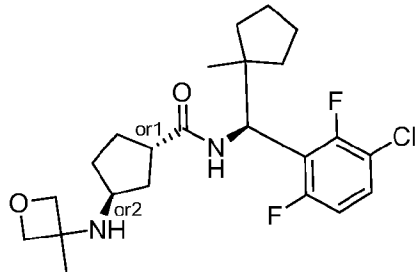
I-2182		NMR (400 MHz, d6-DMSO) 7.99 (d, J = 8.3 Hz, 1H), 7.76 (d, J = 6.8 Hz, 1H), 7.54 (app td, J = 8.7, 5.5 Hz, 1H), 7.20 – 7.04 (m, 1H), 4.95 (br s, 1H), 4.03 – 3.92 (m, 1H), 2.94 (p, J = 8.0 Hz, 1H), 1.87 – 1.72 (overlapping m, 2H), 1.76 (overlapping s, 3H), 1.68 – 1.65 (m, 1H), 1.56 – 1.44 (m, 8H), 1.43 – 1.32 (m, 8H).	439.7	A	A
I-2183		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.45 (d, J = 8.5 Hz, 1H), 8.05 (d, J = 1.9 Hz, 1H), 7.77 (d, J = 8.5 Hz, 1H), 7.45 - 7.21 (m, 2H), 4.95 (t, J = 8.9 Hz, 1H), 3.17 (p, J = 9.1 Hz, 1H), 2.71 (dt, J = 12.0, 8.3 Hz, 2H), 2.37 (p, J = 8.1 Hz, 1H), 2.21 (dddd, J = 21.6, 13.0, 9.1, 4.3 Hz, 2H), 1.82 - 1.72 (m, 1H), 1.65 - 1.42 (m, 5H), 1.34 (d, J = 12.5 Hz, 1H), 1.33 - 1.17 (m, 1H).	432.15	E	
I-2184		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.45 (d, J = 8.5 Hz, 1H), 8.04 (d, J = 1.9 Hz, 1H), 7.77 (d, J = 8.5 Hz, 1H), 7.36 (dd, J = 8.5, 2.0 Hz, 1H), 7.29 (s, 1H), 4.95 (t, J = 8.9 Hz, 1H), 3.17 (p, J = 9.1 Hz, 1H), 2.71 (dt, J = 11.9, 8.3 Hz, 2H), 2.38 (q, J = 8.1 Hz, 1H), 2.21 (dddd, J = 21.5, 12.9, 9.0, 4.2 Hz, 2H), 1.83 - 1.73 (m, 1H), 1.63 - 1.42 (m, 5H), 1.40 - 1.27 (m, 1H), 1.27 - 1.18 (m, 1H).	432.15	E	
I-2185		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.50 (d, J = 8.4 Hz, 1H), 7.90 (d, J = 8.0 Hz, 1H), 7.43 (d, J = 7.7 Hz, 1H), 7.36 - 7.27 (m, 2H), 4.99 (t, J = 8.9 Hz, 1H), 3.18 (p, J = 9.1 Hz, 1H), 2.71 (dt, J = 11.7, 9.0 Hz, 2H), 2.38 (p, J = 8.1 Hz, 1H), 2.22 (dddd, J = 22.1, 12.9, 9.0, 4.2 Hz, 2H), 1.78 (dt, J = 12.0, 6.2 Hz, 1H), 1.65 - 1.44 (m, 5H), 1.33 (dt, J = 14.9, 7.4 Hz, 1H), 1.28 - 1.21 (m, 1H).	432.15	D	

I-2186		(400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.50 (d, J = 8.5 Hz, 1H), 7.90 (d, J = 8.0 Hz, 1H), 7.43 (d, J = 7.6 Hz, 1H), 7.36 - 7.27 (m, 2H), 4.99 (t, J = 8.9 Hz, 1H), 3.18 (p, J = 9.0 Hz, 1H), 2.71 (dt, J = 11.4, 9.1 Hz, 2H), 2.38 (p, J = 8.1 Hz, 1H), 2.22 (dddd, J = 22.1, 12.9, 9.1, 4.1 Hz, 2H), 1.77 (td, J = 10.0, 9.0, 4.3 Hz, 1H), 1.64 - 1.44 (m, 5H), 1.35 (dt, J = 13.1, 7.1 Hz, 1H), 1.28 - 1.21 (m, 1H).	432.15	D	
I-2187		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.60 (s, 1H), 8.35 (d, J = 8.6 Hz, 1H), 7.93 - 7.85 (m, 2H), 7.48 - 7.37 (m, 2H), 4.68 (t, J = 9.3 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.66 (ddd, J = 16.4, 12.1, 9.1 Hz, 2H), 2.34 - 2.19 (m, 2H), 2.14 (ddd, J = 13.0, 9.1, 4.3 Hz, 1H), 1.76 (td, J = 7.8, 4.1 Hz, 1H), 1.66 - 1.39 (m, 4H), 1.38 - 1.20 (m, 2H), 1.11 (dq, J = 12.4, 8.0 Hz, 1H).	432.05	B	
I-2188		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.60 (s, 1H), 8.35 (d, J = 8.6 Hz, 1H), 7.93 - 7.85 (m, 2H), 7.48 - 7.41 (m, 2H), 4.68 (t, J = 9.3 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.66 (ddd, J = 16.4, 12.0, 9.1 Hz, 2H), 2.34 - 2.19 (m, 2H), 2.14 (ddd, J = 12.7, 8.9, 4.3 Hz, 1H), 1.75 (dp, J = 7.4, 4.3 Hz, 1H), 1.66 - 1.39 (m, 4H), 1.38 - 1.20 (m, 2H), 1.11 (dq, J = 12.5, 8.1 Hz, 1H).	432.05	D	
I-2189		(400 MHz, DMSO-d6)10.56 (s, 1H),8.62 (s, 1H), 7.47 (d, J = 9.6 Hz, 1H), 3.58 (td, J = 9.3, 4.5 Hz, 1H), 3.15 (p, J = 9.1 Hz, 1H), 2.72 (s, 1H), 2.70-2.62 (m, 1H), 2.62-2.52 (m, 3H), 2.25-2.15 (m, 2H), 2.03-1.91 (m, 1H), 1.91-1.80 (m, 2H), 1.70-1.46 (m, 8H), 1.38-1.24 (m, 2H), 1.20-1.06 (m, 2H).	336.2	D	

I-2190		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.61 (s, 1H), 7.47 (d, J = 9.7 Hz, 1H), 3.58 (td, J = 9.2, 4.3 Hz, 1H), 3.15 (p, J = 9.1 Hz, 1H), 2.72 (dd, J = 10.2, 6.7 Hz, 1H), 2.67 (dd, J = 18.2, 5.9 Hz, 1H), 2.62-2.52 (m, 3H), 2.20 (td, J = 9.2, 4.0 Hz, 2H), 1.98 (q, J = 8.3 Hz, 1H), 1.94-1.91 (m, 1H), 1.91-1.80 (m, 1H), 1.58 (s, 3H), 1.50-1.40 (m, 5H), 1.36-1.22 (m, 2H), 1.20-1.05 (m, 2H).	336.2	E	
I-2191		(400 MHz, DMSO-d6) 8.20 - 7.98 (d, J = 8.6 Hz, 1H), 7.67 - 7.54 (dd, J = 8.9, 5.0 Hz, 1H), 7.33 - 7.19 (dd, J = 10.8, 9.0 Hz, 1H), 5.50 - 5.27 (d, J = 8.6 Hz, 1H), 3.30 - 3.09 (m, 3H), 3.07 - 2.88 (p, J = 8.1 Hz, 1H), 2.31 - 2.19 (s, 1H), 1.88 - 1.67 (ddt, J = 17.0, 12.1, 6.8 Hz, 3H), 1.65 - 1.49 (m, 5H), 1.47 - 1.12 (m, 4H), 1.06 - 0.84 (d, J = 2.8 Hz, 3H).	469.1	B	
I-2192		(400 MHz, DMSO-d6) 10.54 (s, 1H), 8.60 (s, 1H), 8.41 (d, J = 8.5 Hz, 1H), 8.03 (d, J = 1.8 Hz, 1H), 7.81 (d, J = 5.6 Hz, 1H), 7.70 (d, J = 5.6 Hz, 1H), 7.39 (d, J = 2.0 Hz, 1H), 5.16 - 5.07 (m, 1H), 3.12 (p, J = 9.1 Hz, 1H), 2.65 (ddd, J = 27.0, 12.1, 9.1 Hz, 2H), 2.39 (h, J = 8.1 Hz, 1H), 2.24 (ddd, J = 12.5, 9.0, 4.4 Hz, 1H), 2.11 (ddd, J = 14.2, 9.6, 5.1 Hz, 1H), 1.77 (q, J = 5.6, 5.1 Hz, 1H), 1.70 - 1.33 (m, 4H), 1.27 (dtd, J = 12.1, 7.4, 4.0 Hz, 1H), 1.04 (dq, J = 12.5, 8.0 Hz, 1H).	432.05	B	C

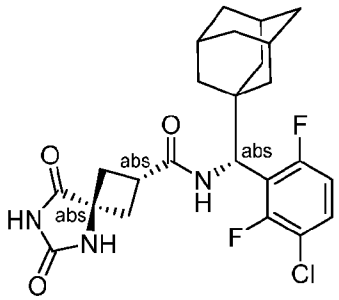
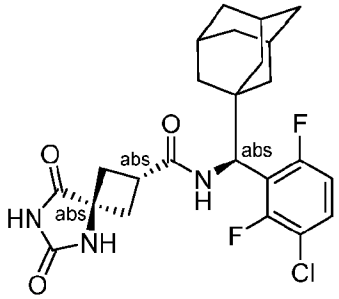
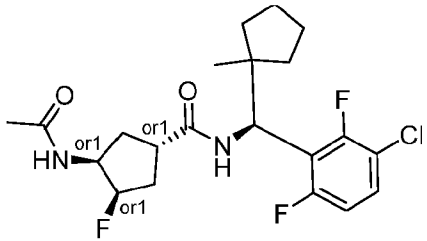
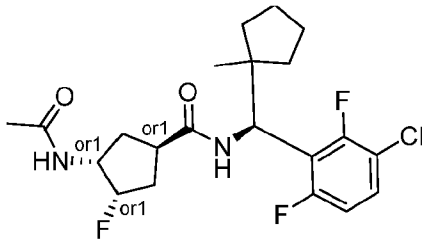
I-2193		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.60 (s, 1H), 8.42 (d, J = 8.4 Hz, 1H), 8.03 (d, J = 1.8 Hz, 1H), 7.80 (d, J = 5.5 Hz, 1H), 7.70 (d, J = 5.6 Hz, 1H), 7.40 (d, J = 1.9 Hz, 1H), 5.12 (dd, J = 9.9, 8.5 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.66 (ddd, J = 27.0, 12.1, 9.1 Hz, 2H), 2.47 - 2.32 (m, 1H), 2.25 (ddd, J = 12.5, 9.1, 4.4 Hz, 1H), 2.11 (ddd, J = 17.4, 8.9, 4.4 Hz, 1H), 1.77 (tq, J = 7.4, 4.7, 3.7 Hz, 1H), 1.70 - 1.33 (m, 5H), 1.27 (dtd, J = 12.0, 7.4, 4.0 Hz, 1H), 1.04 (dq, J = 12.6, 8.0 Hz, 1H).	432.05	E	
I-2194				B	C
I-2195		(400 MHz, DMSO-d6) as a 19:1 mixture of diastereomers, 10.45 (br. s, 1H), 9.79 (br. s, 1H), 8.59 (s, 1H), 8.35 (br. s, 1H), 7.24 (dd, J = 8.8, 5.9 Hz, 1H), 6.63 (app. t, J = 9.2 Hz, 1H), 4.96 (dd, J = 10.7, 8.3 Hz, 1H), 3.14 (app. p, J = 9.1 Hz, 1H), 2.65 (app. t, J = 12.6 Hz, 1H), 2.62 (app. t, J = 12.6 Hz, 1H), 2.58 – 2.50 (overlapping m, 1H), 2.26 – 2.18 (m, 1H), 2.18 – 2.10 (m, 1H), 1.85 – 1.76 (m, 1H), 1.64 – 1.38 (m, 4H), 1.33 – 1.21 (m, 2H), 1.10 – 0.98 (m, 1H). Contains trace DMF.	410.4	B	C

I-2196		(400 MHz, DMSO-d6) as a 19:1 mixture of diastereomers, 10.55 (br. s, 1H), 8.61 (s, 1H), 8.27 (d, J = 7.9 Hz, 1H), 7.39 (dd, J = 8.9, 5.7 Hz, 1H), 7.00 (dd, J = 9.8, 9.2 Hz, 1H), 4.94 (dd, J = 10.8, 8.0 Hz, 1H), 3.94 (s, 3H), 3.17 (app. p, J = 9.1 Hz, 1H), 2.67 (dd, J = 12.0, 9.2 Hz, 1H), 2.61 (dd, J = 12.0, 9.3 Hz, 1H), 2.44 – 2.32 (m, 1H), 2.25 – 2.17 (m, 1H), 2.16 – 2.09 (m, 1H), 1.92 – 1.82 (m, 1H), 1.65 – 1.38 (m, 4H), 1.30 – 1.16 (m, 2H), 1.08 – 0.97 (m, 1H).	424.4	B	
I-2197				C	
I-2198				A	B

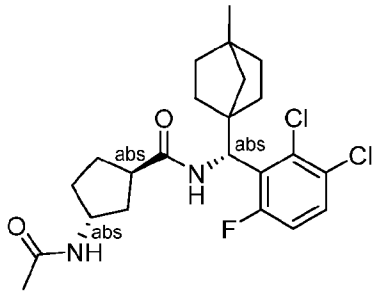
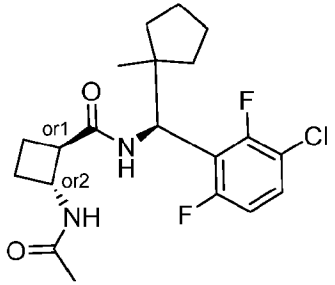
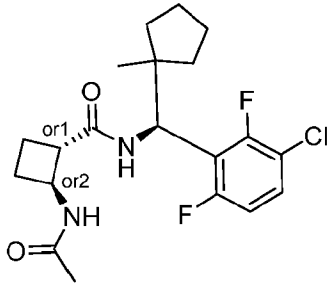
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I-2200				D	
I-2201				B	D
I-2202				D	

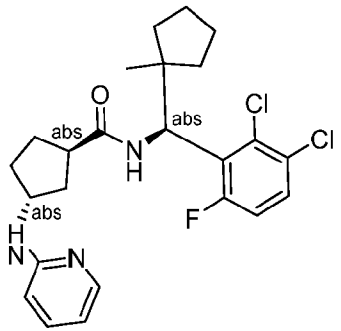
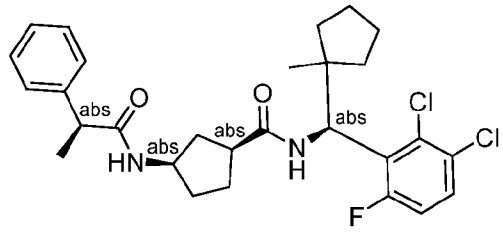
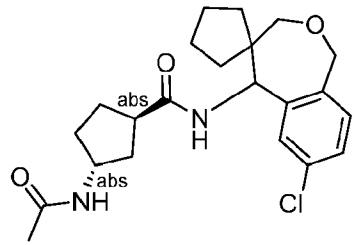
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I-2204			B	D
I-2205			A	B
I-2206			D	

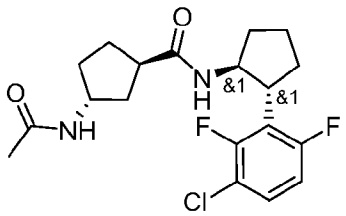
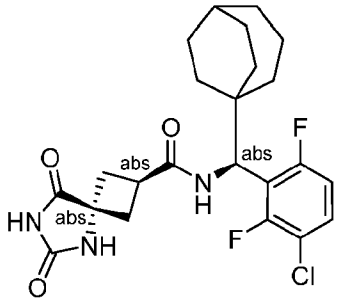
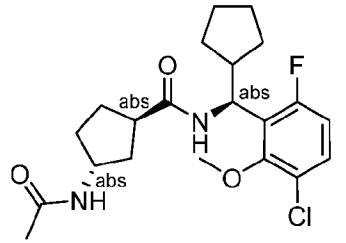
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I-2208			D	
I-2209			B	B
I-2210			D	

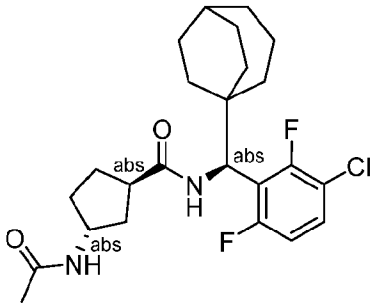
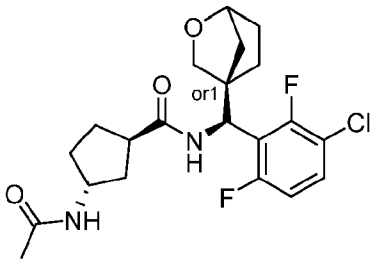
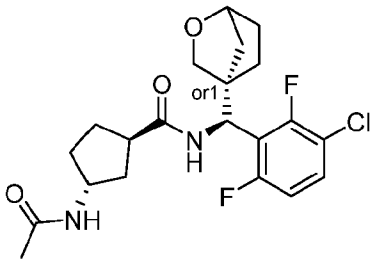
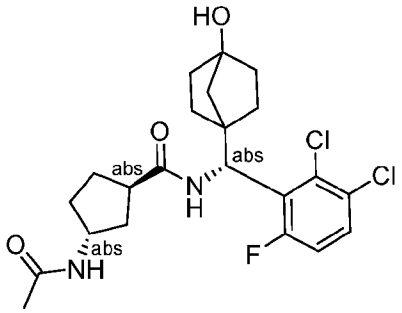
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I-2212				D	
I-2213				A	A
I-2214				A	A

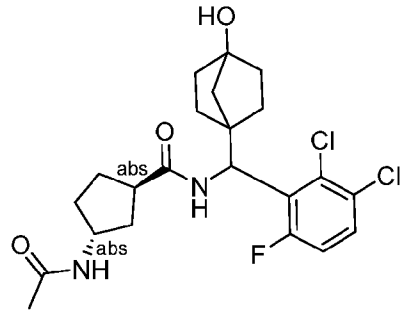
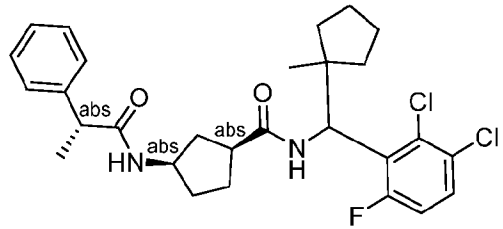
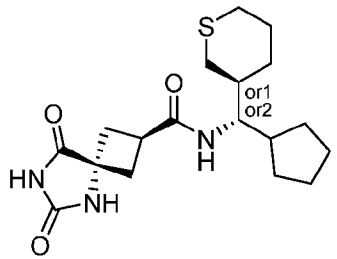
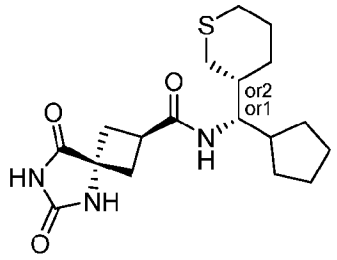
I-2215			B D
I-2216			C
I-2217			A B

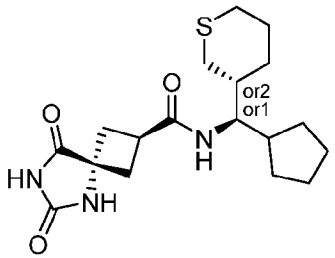
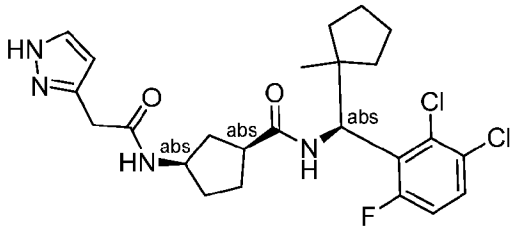
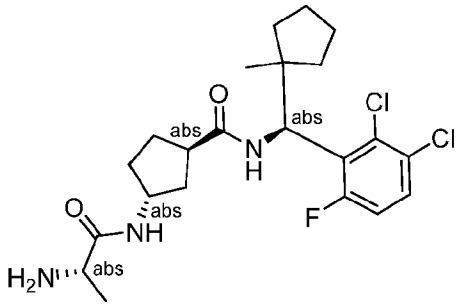
I-2218				C	
I-2219				D	
I-2220				E	

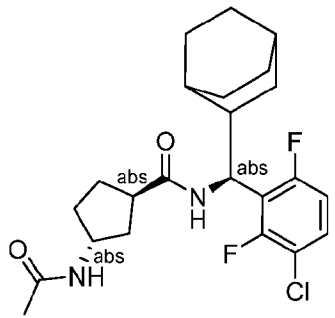
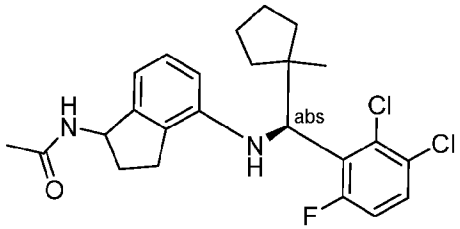
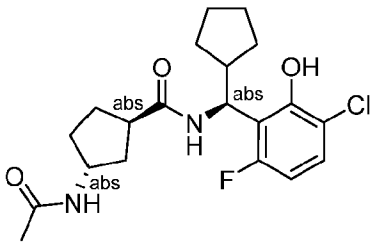
I-2221		(400 MHz, DMSO-d6) 8.05 (d, J = 8.7 Hz, 1H), 7.97 - 7.91 (m, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.38 - 7.30 (m, 1H), 7.26 (t, J = 9.9 Hz, 1H), 6.41 (td, J = 10.9, 10.2, 6.1 Hz, 3H), 5.51 (d, J = 8.6 Hz, 1H), 4.12 (q, J = 6.2 Hz, 1H), 3.01 (q, J = 8.1 Hz, 1H), 1.94 (dq, J = 13.4, 6.9 Hz, 2H), 1.83 (s, 1H), 1.73 (dq, J = 13.2, 7.7, 6.4 Hz, 1H), 1.60 (s, 6H), 1.57 - 1.40 (m, 2H), 1.37 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	464.1	B	B
I-2222		(400 MHz, DMSO-d6) 8.12 - 8.02 (d, J = 8.6 Hz, 1H), 7.96 - 7.84 (d, J = 6.9 Hz, 1H), 7.65 - 7.57 (dd, J = 8.9, 5.0 Hz, 1H), 7.39 - 7.12 (m, 6H), 5.56 - 5.45 (d, J = 8.5 Hz, 1H), 4.05 - 3.92 (q, J = 6.6 Hz, 1H), 3.62 - 3.49 (q, J = 7.0 Hz, 1H), 3.06 - 2.92 (p, J = 7.7 Hz, 1H), 1.99 - 1.87 (dt, J = 13.8, 7.3 Hz, 1H), 1.82 - 1.70 (dq, J = 10.5, 5.2 Hz, 2H), 1.68 - 1.52 (m, 7H), 1.44 - 1.23 (m, 7H), 1.02 -	519.25	B	B
I-2223		NMR (400 MHz, DMSO-d6) 8.17 (d, J = 9.4 Hz, 1H), 7.80 (d, J = 6.3 Hz, 0.5H), 7.79 (d, J = 6.1 Hz, 0.5H), 7.34 (t, J = 1.6 Hz, 1H), 7.24 (dd, J = 8.0, 1.7 Hz, 1H), 7.20 (d, J = 8.0 Hz, 1H), 5.12 – 4.97 (m, 1H), 4.79 (dA of AB, JAB = 13.8 Hz, 1H), 4.57 (ddB of AB, JAB, = 13.8, 0.9 Hz, 1H), 4.08 – 3.99 (m, 1H), 3.81 (ddA of AB, JAB = 12.5, 4.3 Hz, 1H), 3.49 (dB of AB, JAB = 12.5 Hz, 1H), 3.03 – 2.91 (m, 1H), 2.00 – 1.79 (m, 3H), 1.77 (s, 1.5H), 1.76 (s, 1.5H), 1.73 – 1.48 (m, 5H), 1.48 – 1.35 (m, 2H), 1.35 – 1.13 (m, 3H), 1.11 – 1.03 (m, 1H). 1:1 mixture of 2 diastereomers.	405.2	E	

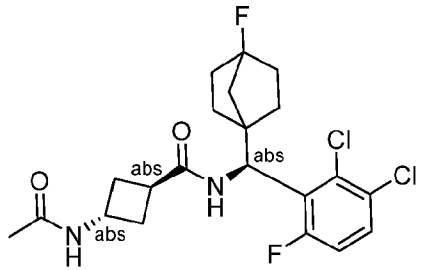
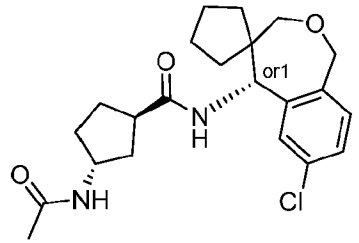
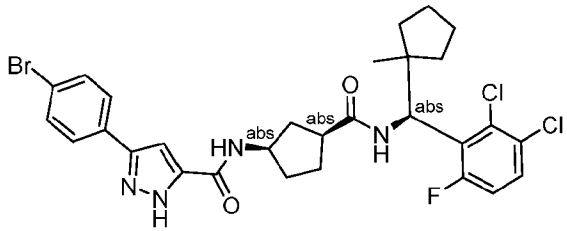
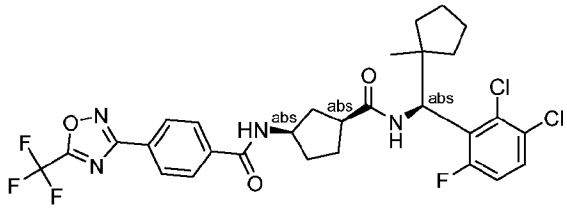
I-2224		NMR (400 MHz, DMSO-d6) 7.88 (d, J = 4.5 Hz, 0.5H), 7.86 (d, J = 4.7 Hz, 0.5H), 7.74 (d, J = 6.9 Hz, 1H), 7.50 – 7.42 (m, 1H), 7.12 – 7.03 (m, 1H), 4.38 (p, J = 8.6 Hz, 1H), 4.00 – 3.88 (m, 1H), 3.21 (dd, J = 8.8, 3.2 Hz, 0.5H), 3.17 (dd, J = 9.3, 3.4 Hz, 0.5H), 2.64 – 2.53 (m, 1H), 2.09 – 1.91 (m, 2H), 1.87 - 1.67 (overlapping m, 5H), 1.74 (s, 1.5H), 1.74 (s, 1.5H), 1.64 – 1.41 (m, 3H), 1.37 – 1.22 (m, 2H). 1:1 diastereomeric ratio	385.4	E	
I-2225		NMR (400 MHz, d6-DMSO) 10.54 (br s, 1H), 8.62 (s, 1H), 8.21 (d, J = 9.0 Hz, 1H), 7.54 (app td, J = 8.7, 5.4 Hz, 1H), 7.17 – 7.07 (m, 1H), 4.96 (d, J = 8.7 Hz, 1H), 3.24 (p, J = 8.8 Hz, 1H), 2.68 – 2.61 (m, 1H), 2.61 – 2.53 (m, 1H), 2.25 – 2.13 (m, 2H), 1.87 – 1.80 (m, 1H), 1.74 – 1.21 (m, 14H). Contains ca. 5% of bicycloctane analogue as an impurity. This batch is ca. 4:1 mixture of diastereomers.	466.3	A	B
I-2226		(400 MHz, DMSO-d6) as a 19:1 mixture of diastereomers, 8.15 (d, J = 8.0 Hz, 1H), 7.77 (d, J = 7.0 Hz, 1H), 7.38 (dd, J = 8.9, 5.7 Hz, 1H), 7.00 (dd, J = 9.9, 9.1 Hz, 1H), 4.93 (dd, J = 10.8, 8.2 Hz, 1H), 4.05 – 3.96 (m, 1H), 3.93 (s, 3H), 2.83 (app. p, J = 7.9 Hz, 1H), 2.43 – 2.31 (m, 1H), 1.92 – 1.72 (m, 4H), 1.76 (s, 3H), 1.66 – 1.16 (m, 9H), 1.08 – 0.97 (m, 1H). Contains ca. 3% DMF by weight, plus aliphatic impurities.	411.4	C	

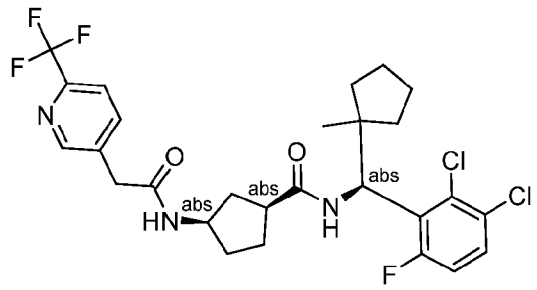
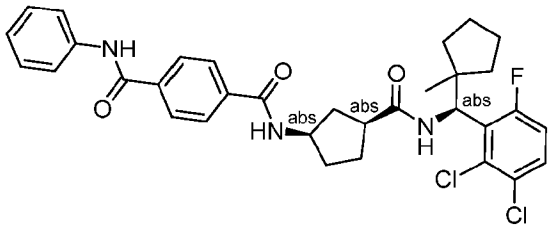
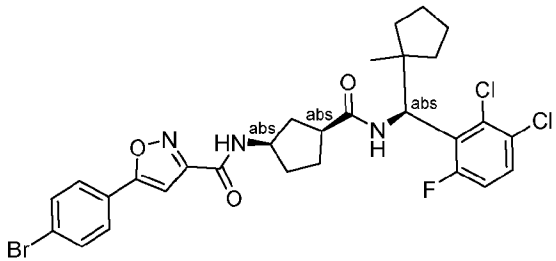
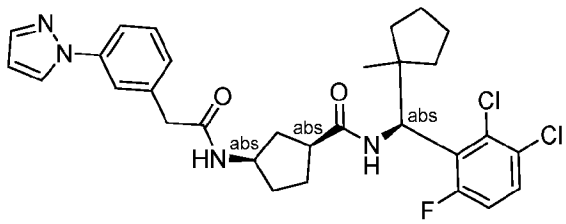
I-2227		NMR (400 MHz, d6-DMSO) 8.06 (d, J = 9.1 Hz, 1H), 7.76 (d, J = 7.0 Hz, 1H), 7.54 (app td, J = 8.6, 5.3 Hz, 1H), 7.11 (app t, J = 9.1 Hz, 1H), 4.95 (d, J = 8.7 Hz, 1H), 4.03 – 3.93 (m, 1H), 3.00 – 2.89 (m, 1H), 1.88 – 1.73 (m, 5H), 1.76 (s, 3H), 1.71 – 1.19 (m, 16H). Contains ca. 5% of bicylooctane analogue as an impurity. This batch is ca. 4:1 mixture of diastereomers.	455.3	B	B
I-2228				C	
I-2229				D	
I-2230				D	

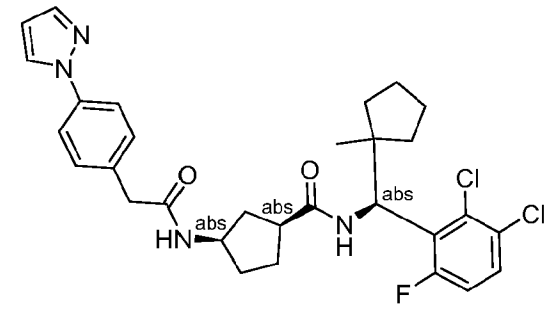
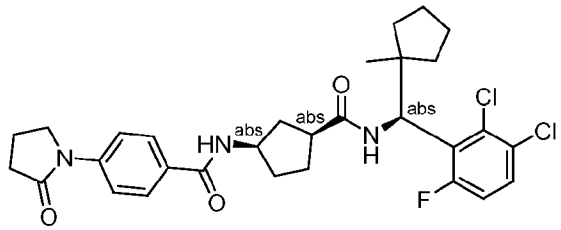
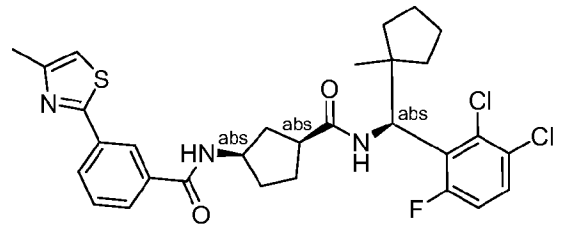
I-2231		NMR (400 MHz, DMSO-d6) -- Major dias described 8.08 (d, J = 8.3 Hz, 1H), 7.78 (d, J = 6.8 Hz, 1H), 7.60 (dd, J = 8.9, 5.1 Hz, 1H), 7.24 (dd, J = 10.5, 9.1 Hz, 1H), 5.48 (d, J = 8.2 Hz, 1H), 4.05 – 3.92 (m, 1H), 3.14 – 3.00 (m, 1H), 2.99 – 2.85 (m, 1H), 1.88 – 1.68 (overlapping m, 3H), 1.76 (s, 3H), 1.66 – 1.53 (m, 2H), 1.53 – 1.42 (m, 8H), 1.42 – 1.26 (m, 3H). Formate salt at 8.34 ppm. ~85:15 diastereomeric ratio. ~ 10% of mixed impurities. Residual DMSO present at 2.54 ppm. Unknown aliphatic impurities around 1 ppm.	457.4	B	C
I-2232		(400 MHz, DMSO-d6) 8.01 (d, J = 8.6 Hz, 1H), 7.91 (d, J = 6.9 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.33-7.16 (m, 6H), 5.46 (d, J = 8.6 Hz, 1H), 3.98 (q, J = 6.8 Hz, 1H), 3.56 (q, J = 7.0 Hz, 1H), 2.98-2.90 (m, 1H), 1.91-1.75 (m, 3H), 1.58 (s, 6H), 1.54-1.35 (m, 2H), 1.36 (s, 1H), 1.29 (d, J = 7.0 Hz, 3H), 1.25 (s, 1H), 0.95 (d, J = 2.8 Hz, 3H).	519.25	C	
I-2233		(400 MHz, Methanol-d4) 3.72 (dd, J = 8.7, 5.0 Hz, 1H), 3.25 (tt, J = 9.6, 8.3 Hz, 1H), 3.00-2.87 (m, 2H), 2.63-2.54 (m, 1H), 2.54 (d, J = 2.8 Hz, 1H), 2.54-2.45 (m, 2H), 2.48-2.38 (m, 2H), 2.21-2.03 (m, 2H), 1.91-1.82 (m, 2H), 1.86-1.68 (m, 2H), 1.71-1.59 (m, 3H), 1.62-1.51 (m, 2H), 1.23 (dqd, J = 16.2, 8.2, 5.0 Hz, 3H).	366.2	E	
I-2234		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.59 (s, 1H), 7.47 (d, J = 9.6 Hz, 1H), 3.69 (td, J = 8.8, 5.2 Hz, 1H), 3.13 (p, J = 9.1 Hz, 1H), 2.70 (ddd, J = 17.6, 12.6, 8.8 Hz, 2H), 2.52-2.40 (m, 3H), 2.34 (dd, J = 13.3, 10.3 Hz, 1H), 2.26 -2.16 (m, 2H), 2.08-1.95 (m, 2H), 1.70 (td, J = 12.2, 11.3, 5.0 Hz, 1H), 1.69-1.53 (m, 3H).1.51 (tdt, J = 25.4, 21.3, 14.3, 6.8 Hz,	366.05	D	

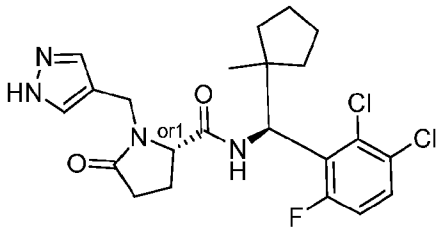
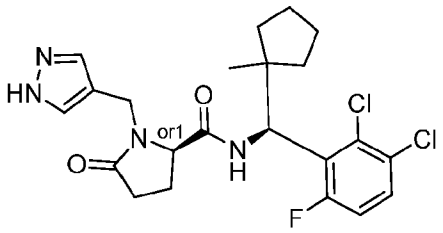
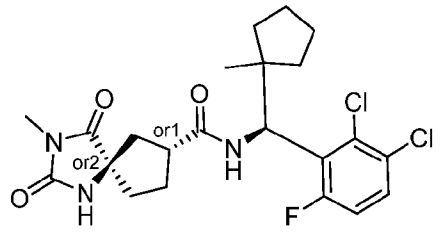
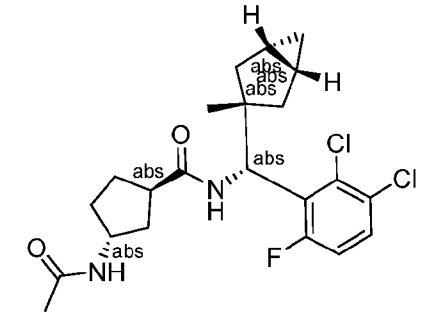
		5H), 1.16 (d, J = 7.9 Hz, 1H), 1.13 (dd, J = 8.5, 4.5 Hz, 1H), 1.10-1.00 (m, 1H).			
I-2235		(400 MHz, Methanol-d4) 3.72 (dd, J = 8.5, 4.9 Hz, 1H), 3.24 (q, J = 9.0 Hz, 1H), 2.93 (tdd, J = 11.7, 8.1, 2.9 Hz, 2H), 2.62-2.38 (m, 5H), 2.19-2.11 (m, 1H), 2.09 (s, 1H), 2.06 (s, 1H), 1.85 (s, 2H), 1.76-1.68 (m, 4H), 1.68-1.53 (m, 3H), 1.29-1.19 (m, 3H).	366.1	E	
I-2236		(400 MHz, DMSO-d6) 12.51 (s, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.93 (s, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 6.09 (s, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.02 (q, J = 6.4 Hz, 1H), 3.03-2.94 (m, 4H), 1.9-1.76 (m, 3H), 1.60 (s, 8H), 1.42-1.34 (m, 3H), 0.97 (d, J = 2.8 Hz, 3H).	495.2	A	A
I-2237		(400 MHz, Chloroform-d) 7.48 - 7.29 (m, 2H), 7.03 - 6.90 (dd, J = 11.1, 8.9 Hz, 1H), 6.42 - 6.29 (d, J = 9.9 Hz, 1H), 5.93 - 5.67 (m, 1H), 4.41 - 4.22 (h, J = 6.7 Hz, 1H), 3.57- 3.43 (q, J = 6.9 Hz, 1H), 2.90 - 2.72 (p, J = 8.5 Hz, 1H), 2.30 - 2.08 (m, 2H), 2.07 - 1.79 (m, 3H), 1.68 - 1.59 (s, 5H), 1.59 - 1.49 (m, 2H), 1.48 - 1.40 (d, J = 12.1 Hz, 1H), 1.39 - 1.33 (d, J = 6.9 Hz, 3H), 1.32 - 1.24 (m, 1H), 1.07 - 0.97 (d, J = 2.8 Hz, 3H).	458.25	A	B

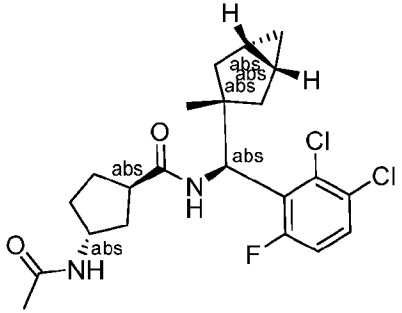
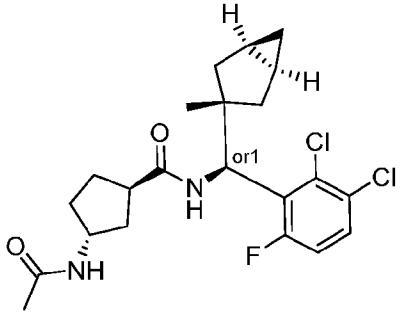
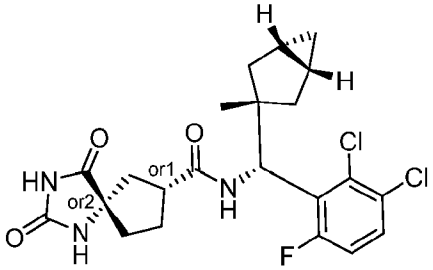
I-2238		NMR (400 MHz, d6-DMSO) 8.30 (d, J = 8.3 Hz, 0.5H, overlapping), 8.28 (d, J = 8.5 Hz, 0.5H, overlapping), 7.79 (d, J = 6.7 Hz, 1H), 7.77 (app t, J = 6.5 Hz, 1H), 7.58 – 7.47 (m, 1H), 7.16 – 7.07 (m, 1H), 5.06 (dd, J = 11.6, 7.8 Hz, 0.5H), 5.01 (dd, J = 11.6, 7.7 Hz, 0.5H), 4.03 - 3.94 (m, 1H, overlapping with residual water), 2.88 – 2.71 (m, 1H), 2.29 – 2.12 (m, 1H), 1.98 – 1.71 (m, 3H, overlapping), 1.76 (s, 1.5H, overlapping), 1.75 (s, 1.5H, overlapping), 1.70 – 1.50 (m, 5H), 1.70 – 1.50 (m, 5H), 1.49 – 1.23 (m, 9H), 1.06 (dd, J = 12.9, 6.6 Hz, 0.5H), 0.88 (d, J = 7.6 Hz, 0.5H, overlapping), 0.86 (d, J = 7.6 Hz, 0.5H, overlapping), 0.75 (dd, J = 12.5, 6.6 Hz, 0.5H).	439.3	A	B
I-2239		NMR (400 MHz, DMSO-d6) 8.13 (d, J = 8.3 Hz, 1H), 7.63 – 7.56 (m, 1H), 7.25 (overlapping dd, J = 9.0, 4.3 Hz, 0.5H), 7.22 (overlapping dd, J = 8.9, 4.3 Hz, 0.5H), 6.94 (app. t, J = 7.7 Hz, 1H), 6.46 (dd, J = 7.4, 2.7 Hz, 1H), 6.28 (d, J = 8.0 Hz, 1H), 5.25 – 5.14 (m, 1H), 5.08 (d, J = 10.4, 0.5H), 5.08 (d, J = 10.4, 0.5H), 4.56 (app. t, J = 9.9 Hz, 1H), 2.84 (d, J = 15.0, 8.9, 3.6 Hz, 0.5H), 2.78 – 2.51 (m, 1.5H), 2.44 – 2.32 (m, 1H), 1.82 (s, 1.5H), 1.80 (s, 1.5H), 1.79 – 1.56 (m, 7H), 1.53 – 1.46 (m, 1H), 1.39 – 1.30 (m, 1H), 1.07 - 1.04 (m, 3H). 1:1 mixture of 2 diastereomers. Ca. 10% of a byproduct.	449.1	E	
I-2240		(400 MHz, DMSO-d6) as a 19:1 mixture of diastereomers, 10.02 (s, 1H), 8.15 (br. d, J = 8.0 Hz, 1H), 7.78 (d, J = 7.0 Hz, 1H), 7.27 (dd, J = 8.9, 5.8 Hz, 1H), 6.69 (dd, J = 9.9, 9.1 Hz, 1H), 4.94 (dd, J = 10.9, 8.4 Hz, 1H), 4.07 – 3.97 (m, 1H), 2.86 – 2.76 (m, 1H), 2.61 – 2.52 (m, 1H), 1.89 – 1.72 (m, 4H), 1.76 (overlapping s, 3H), 1.66 – 1.40 (m, 6H), 1.39 – 1.21 (m, 3H), 1.07 – 0.97 (m, 1H).	397.4	C	

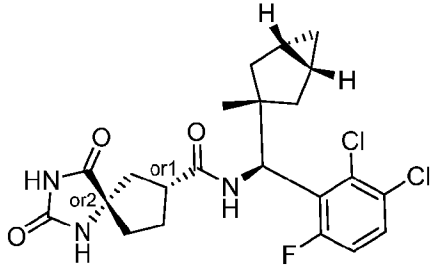
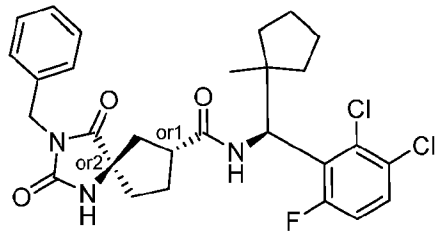
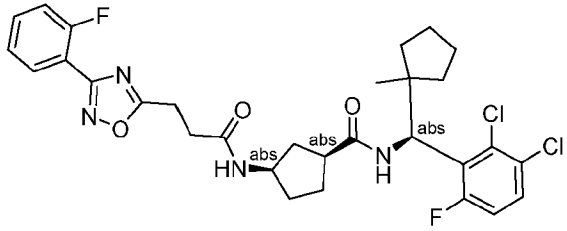
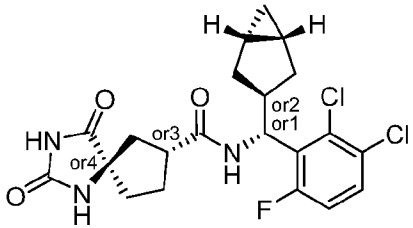
I-2241		NMR (400 MHz, DMSO-d6) 8.12 (d, J = 8.2 Hz, 1H), 8.06 (d, J = 7.5 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.5, 9.1 Hz, 1H), 5.53 (d, J = 8.1 Hz, 1H), 4.21 (app. sext, J = 7.5 Hz, 1H), 3.08 – 2.98 (m, 1H), 2.30 - 2.23 (m, 1H), 2.16 – 1.96 (m, 3H), 1.92 – 1.63 (m, 6H), 1.74 (overlapping s, 3H), 1.63 – 1.44 (m, 4H). Minor formate adduct. ~ 9:1 diastereomeric ratio. (Major described). Residual DMSO present and unknown aliphatic impurity.	445.4	A	A
I-2242				E	
I-2243		(400 MHz, DMSO-d6) 13.65 (s, 1H), 8.32 - 7.88 (m, 2H), 7.80 - 7.58 (m, 5H), 7.33 - 7.09 (m, 2H), 5.51 (d, J = 8.6 Hz, 1H), 4.27 (s, 1H), 3.11 - 3.01 (m, 1H), 1.89 (d, J = 37.4 Hz, 4H), 1.60 (s, 8H), 1.38 (s, 1H), 1.27 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	637.1	B	D
I-2244		(400 MHz, DMSO-d6) 8.51 (d, J = 6.9 Hz, 1H), 8.16 (d, J = 8.4 Hz, 2H), 8.12 - 8.03 (m, 3H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.52 (d, J = 8.5 Hz, 1H), 4.30 (h, J = 6.8 Hz, 1H), 3.07 (p, J = 7.7 Hz, 1H), 2.05 - 1.80 (m, 4H), 1.67 - 1.47 (m, 8H), 1.39 (d, J = 8.2 Hz, 1H), 1.26 (dd, J = 14.5, 9.9 Hz, 1H), 0.98 (d, J = 2.8 Hz, 3H).	627.2	B	

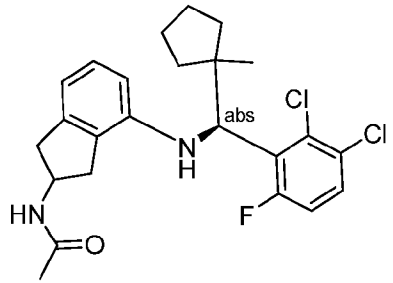
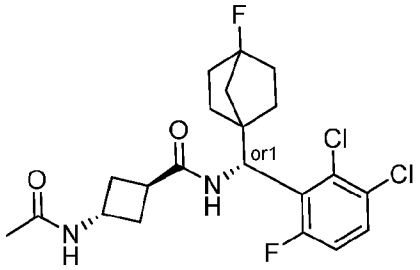
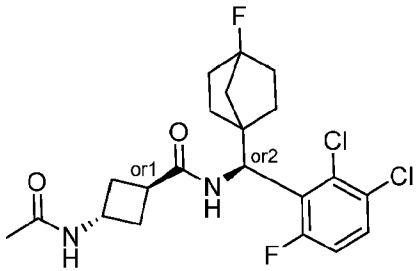
I-2245		(400 MHz, DMSO-d6) 8.63 (d, J = 2.1 Hz, 1H), 8.18 (d, J = 6.9 Hz, 1H), 8.05 (d, J = 8.6 Hz, 1H), 7.95 (dd, J = 8.0, 2.1 Hz, 1H), 7.85 (d, J = 8.1 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.02 (h, J = 6.5 Hz, 1H), 3.57 (s, 2H), 3.00 (p, J = 7.6 Hz, 1H), 1.97 - 1.76 (m, 3H), 1.70 - 1.52 (m, 7H), 1.49 - 1.34 (m, 3H), 1.27 (d, J = 8.9 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	574.1	A	B
I-2246		(400 MHz, DMSO-d6) 10.34 (s, 1H), 8.42 (d, J = 6.9 Hz, 1H), 8.11 - 7.96 (m, 5H), 7.81 - 7.77 (m, 2H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.41 - 7.34 (m, 2H), 7.27 (dd, J = 10.8, 8.9 Hz, 1H), 7.15 - 7.10 (m, 1H), 5.52 (d, J = 8.5 Hz, 1H), 4.29 (p, J = 6.9 Hz, 1H), 3.07 (p, J = 7.9 Hz, 1H), 2.04 - 1.80 (m, 4H), 1.69 - 1.48 (m, 8H), 1.39 (d, J = 8.2 Hz, 1H), 1.32 - 1.23 (m, 1H), 0.98 (d, J = 2.8 Hz, 3H).	610.2	A	A
I-2247		(400 MHz, DMSO-d6) 8.71 (d, J = 7.3 Hz, 1H), 8.08 (d, J = 8.6 Hz, 1H), 7.89 (d, J = 8.2 Hz, 2H), 7.78 (d, J = 8.1 Hz, 2H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.42 (d, J = 1.2 Hz, 1H), 7.26 (t, J = 9.8 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.29 (q, J = 7.0 Hz, 1H), 3.06 (p, J = 8.0 Hz, 1H), 2.03 - 1.79 (m, 4H), 1.60 (s, 7H), 1.38 (s, 1H), 1.33 - 1.21 (m, 2H), 0.98 (d, J = 2.9 Hz, 3H).	638.1	B	
I-2248		(400 MHz, DMSO-d6) 8.47 - 8.44 (d, J = 2.4 Hz, 1H), 8.11 - 8.01 (dd, J = 11.2, 7.8 Hz, 2H), 7.79 - 7.72 (m, 2H), 7.71 - 7.65 (ddd, J = 8.1, 2.3, 1.0 Hz, 1H), 7.63 - 7.57 (dd, J = 9.0, 5.1 Hz, 1H), 7.45 - 7.37 (t, J = 7.9 Hz, 1H), 7.30 - 7.22 (dd, J = 10.8, 8.9 Hz, 1H), 7.20 - 7.15 (dt, J = 7.8, 1.3 Hz, 1H), 6.58 - 6.52 (dd, J = 2.5, 1.7 Hz, 1H), 5.52 - 5.42 (d, J = 8.5 Hz, 1H), 4.07 - 3.95 (p, J = 6.5 Hz, 1H), 3.53 - 3.41 (d, J = 1.5 Hz, 2H), 3.05 - 2.95 (p, J = 7.6 Hz, 1H), 1.95 - 1.78 (m, 3H), 1.71 - 1.51 (m,	571.25	A	A

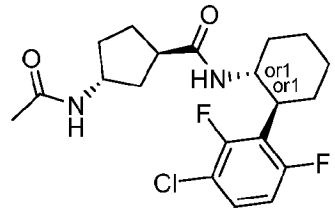
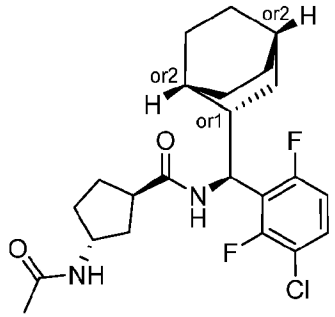
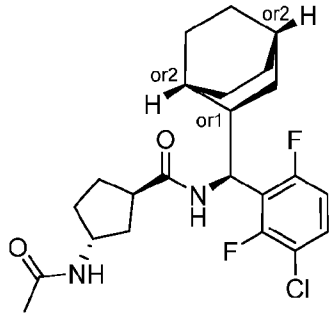
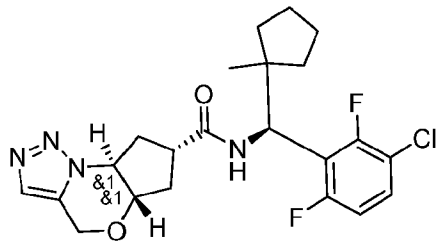
		7H), 1.49 - 1.32 (m, 3H), 1.30 - 1.20 (d, J = 7.1 Hz, 1H), 0.99 - 0.90 (d, J			
I-2249		(400 MHz, DMSO-d6) 8.45 (d, J = 2.4 Hz, 1H), 8.05 (dd, J = 7.8, 3.9 Hz, 2H), 7.80-7.70 (m, 3H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.39-7.31 (m, 2H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 6.53 (dd, J = 2.5, 1.8 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.02 (q, J = 6.6 Hz, 1H), 3.42 (d, J = 1.5 Hz, 2H), 3.00 (t, J = 7.9 Hz, 1H), 1.96-1.76 (m, 3H), 1.60 (s, 7H), 1.49-1.34 (m, 3H), 1.27 (d, J = 8.3 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	571.3	A	A
I-2250		(400 MHz, DMSO-d6) 8.18 (d, J = 6.9 Hz, 1H), 8.06 (d, J = 8.6 Hz, 1H), 7.91 - 7.83 (m, 2H), 7.78 - 7.70 (m, 2H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.26 (p, J = 6.8 Hz, 1H), 3.87 (t, J = 7.0 Hz, 2H), 3.05 (p, J = 8.0 Hz, 1H), 2.55 (s, 2H), 2.14 - 1.93 (m, 2H), 1.96 - 1.70 (m, 4H), 1.64 - 1.42 (m, 8H), 1.39 (d, J = 8.1 Hz, 1H), 1.28 (d, J = 8.1 Hz, 1H), 0.98 (d, J = 2.8 Hz, 3H).	574.25	A	A
I-2251		(400 MHz, DMSO-d6) 8.53 - 8.45 (d, J = 6.9 Hz, 1H), 8.37 - 8.31 (t, J = 1.8 Hz, 1H), 8.11 - 8.01 (m, 2H), 7.95 - 7.89 (dt, J = 8.0, 1.3 Hz, 1H), 7.66 - 7.53 (m, 2H), 7.40 - 7.36 (q, J = 1.0 Hz, 1H), 7.31 - 7.22 (dd, J = 10.8, 9.0 Hz, 1H), 5.57 - 5.45 (d, J = 8.6 Hz, 1H), 4.38 - 4.23 (h, J = 6.8 Hz, 1H), 3.15 - 2.97 (p, J = 7.8 Hz, 1H), 2.49 - 2.40 (d, J = 1.0 Hz, 3H), 2.07 - 1.78 (m, 4H), 1.68 - 1.45 (s, 8H), 1.43 - 1.33 (s, 1H), 1.31 - 1.18 (d, J = 8.0 Hz, 1H), 1.03 - 0.91 (d, J = 2.8 Hz, 3H).	588.15	B	B

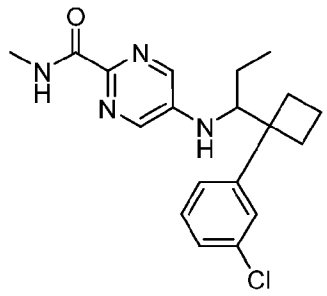
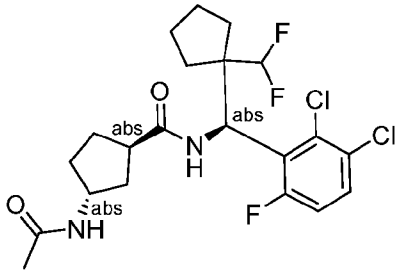
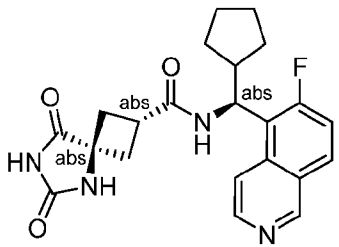
I-2252		(400 MHz, DMSO-d6) 12.74 (s, 1H), 8.46 (d, J = 8.5 Hz, 1H), 7.66- 7.23 (m, 4H), 5.51 (d, J = 8.3 Hz, 1H), 4.70 (d, J = 14.9 Hz, 1H), 4.29 (dd, J = 8.7, 3.6 Hz, 1H), 3.58 (d, J = 14.9 Hz, 1H), 2.22 - 2.03 (m, 3H), 1.63 (s, 6H), 1.53 -1.37 (m, 2H), 1.27 (d, J = 19.6 Hz, 1H), 0.99 (d, J = 2.7 Hz, 3H).	467.1	D	
I-2253		(400 MHz, DMSO-d6) 12.73 (s, 1H), 8.51 (d, J = 8.3 Hz, 1H), 7.66 (dd, J = 9.0, 5.0 Hz, 1H), 7.32 (dd, J = 10.8, 9.0 Hz, 3H), 5.46 (d, J = 8.1 Hz, 1H), 4.59 (d, J = 14.9 Hz, 1H), 4.22 (dd, J = 8.5, 3.5 Hz, 1H), 3.22 (d, J = 14.9 Hz, 1H), 2.35 - 2.07 (m, 3H), 1.76 (tt, J = 10.0, 3.1 Hz, 1H), 1.67 - 1.51 (m, 6H), 1.46 - 1.36 (m, 1H), 1.34 - 1.22 (m, 1H), 0.98 (d, J = 2.9 Hz, 3H).	467.1	D	
I-2254		(400 MHz, DMSO-d6) 8.56 (s, 1H), 8.22 (d, J = 8.5 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 5.49 (d, J = 8.4 Hz, 1H), 3.09 (p, J = 8.2 Hz, 1H), 2.83 (s, 3H), 2.14 (dd, J = 13.1, 10.1 Hz, 1H), 1.95 (dtd, J = 23.9, 11.4, 8.2 Hz, 3H), 1.79 - 1.48 (m, 8H), 1.37 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	470.1	A	A
I-2255		(400 MHz, DMSO-d6) 7.94 (d, J = 8.8 Hz, 1H), 7.75 (d, J = 6.9 Hz, 1H), 7.60 (dd, J = 8.9, 5.1 Hz, 1H), 7.30 - 7.20 (m, 1H), 5.41 (d, J = 8.7 Hz, 1H), 4.00 (q, J = 6.6 Hz, 1H), 2.99 - 2.91 (m, 1H), 2.03 - 1.69 (m, 6H), 1.68 - 1.58 (m, 2H), 1.62 - 1.48 (m, 1H), 1.47 - 1.27 (m, 6H), 1.18 - 0.91 (m, 3H), 0.85 (td, J = 8.1, 4.2 Hz, 1H), 0.09 (q, J = 3.8 Hz, 1H).	441.1	A	A

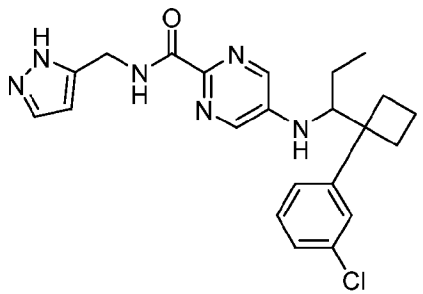
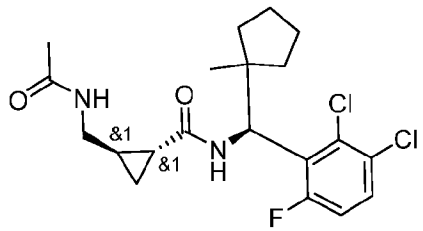
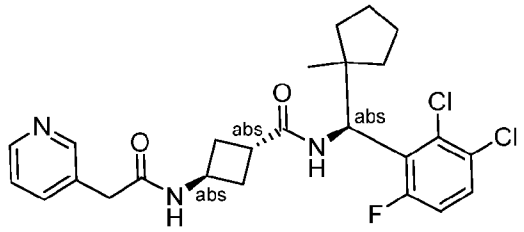
I-2256		(400 MHz, DMSO-d6) 7.94 (d, J = 8.8 Hz, 1H), 7.74 (d, J = 6.9 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.25 (dd, J = 10.7, 8.9 Hz, 1H), 5.41 (d, J = 8.7 Hz, 1H), 3.96 (q, J = 6.5 Hz, 1H), 2.95 (p, J = 7.9 Hz, 1H), 1.96 - 1.75 (m, 2H), 1.75 (s, 3H), 1.74 - 1.45 (m, 5H), 1.35 (dt, J = 14.7, 8.6 Hz, 5H), 1.10 - 1.05 (m, 3H), 0.85 (td, J = 7.9, 4.1 Hz, 1H), 0.10 (q, J = 3.8 Hz, 1H).	441.1	B	
I-2257		(400 MHz, DMSO-d6) 8.03 (d, J = 8.7 Hz, 1H), 7.75 (d, J = 6.9 Hz, 1H), 7.66 - 7.57 (m, 1H), 7.33 - 7.20 (m, 1H), 5.54 (d, J = 8.6 Hz, 1H), 3.98 (p, J = 6.7 Hz, 1H), 2.98 (p, J = 7.9 Hz, 1H), 2.21 (dd, J = 13.8, 6.4 Hz, 1H), 2.00 (dd, J = 13.9, 6.3 Hz, 1H), 1.87 (qd, J = 12.1, 11.4, 4.7 Hz, 2H), 1.76 (d, J = 1.3 Hz, 3H), 1.73 - 1.59 (m, 2H), 1.59 - 1.47 (m, 1H), 1.43 - 1.35 (m, 2H), 1.23 (s, 1H), 1.14 (d, J = 13.7 Hz, 1H), 1.08 - 0.96 (m, 4H), 0.72 (td, J = 8.0, 4.3 Hz, 1H), 0.19 (t, J = 4.2 Hz, 1H).	441.05	D	
I-2258		(400 MHz, DMSO-d6) 10.63 (s, 1H), 8.28 (s, 1H), 8.10 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.31 - 7.21 (m, 1H), 5.42 (d, J = 8.5 Hz, 1H), 3.08 - 3.00 (m, 1H), 2.08 (dd, J = 13.0, 9.9 Hz, 1H), 2.01 - 1.83 (m, 3H), 1.65 (td, J = 12.8, 11.0, 6.7 Hz, 3H), 1.53 (dd, J = 13.1, 5.8 Hz, 2H), 1.45 - 1.29 (m, 3H), 1.10 - 1.05 (m, 3H), 1.05 - 0.93 (m, 1H), 0.85 (td, J = 8.1, 4.1 Hz, 1H), 0.09 (q, J = 3.9 Hz, 1H).	468	A	A

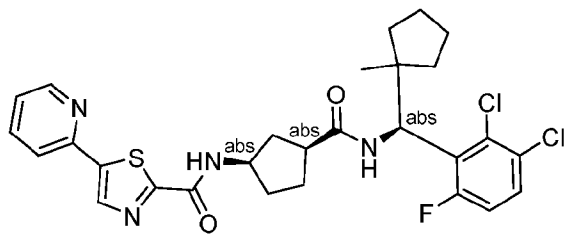
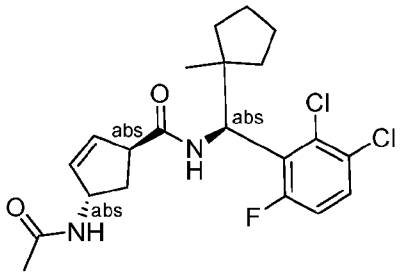
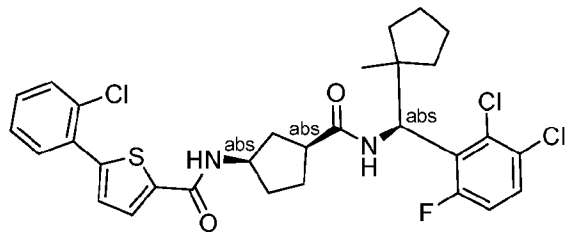
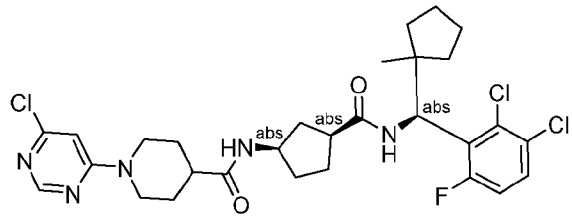
I-2259		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.27 (s, 1H), 8.10 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.25 (dd, J = 10.7, 9.0 Hz, 1H), 5.42 (d, J = 8.6 Hz, 1H), 3.04 (s, 1H), 2.06 - 1.94 (m, 3H), 1.84 - 1.70 (m, 2H), 1.66 (d, J = 5.8 Hz, 2H), 1.54 (dd, J = 12.6, 5.8 Hz, 1H), 1.36 (dt, J = 16.4, 9.5 Hz, 4H), 1.08 (s, 3H), 0.86 (td, J = 8.1, 4.2 Hz, 1H), 0.10 (d, J = 4.0 Hz, 1H).	468.1	B	
I-2260		(400 MHz, DMSO-d6) 8.70 (s, 1H), 8.22 (d, J = 8.6 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.39 - 7.31 (m, 2H), 7.30 -7.16 (m, 4H), 5.49 (d, J = 8.5 Hz, 1H), 4.54 (s, 2H), 3.11 (p, J = 8.3 Hz, 1H), 2.17 (dd, J = 13.1, 10.0 Hz, 1H), 2.08 - 1.88 (m, 3H), 1.71 (dq, J = 13.3, 6.3 Hz, 2H), 1.60 (s, 6H), 1.38 (s, 1H), 1.28 (d, J = 7.2 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	546.25	A	B
I-2261		(400 MHz, DMSO-d6) 8.07-7.93 (m, 3H), 7.71-7.57 (m, 2H), 7.49-7.37 (m, 2H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.01 (p, J = 6.5 Hz, 1H), 3.20 (t, J = 7.2 Hz, 2H), 2.98 (p, J = 7.6 Hz, 1H), 2.66 (t, J = 7.1 Hz, 2H), 1.94-1.74 (m, 3H), 1.64 (dd, J = 8.6, 5.5 Hz, 1H), 1.59 (s, 7H), 1.48-1.34 (m, 3H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	605.05	A	B
I-2262		(400 MHz, DMSO-d6) 10.61 (s, 1H), 8.41 (d, J = 7.1 Hz, 1H), 8.29 (d, J = 1.6 Hz, 1H), 7.59 (dd, J = 9.0, 5.2 Hz, 1H), 7.25 (dd, J = 10.3, 8.9 Hz, 1H), 5.04 (t, J = 8.9 Hz, 1H), 2.90 (s, 1H), 2.25 (s, 1H), 2.17 - 2.05 (m, 2H), 2.01 - 1.82 (m, 3H), 1.62 (td, J = 10.9, 6.3 Hz, 2H), 1.50 - 1.39 (m, 2H), 1.24 (dtd, J = 23.7, 6.6, 6.0, 3.2 Hz, 3H), 0.28 (td, J = 7.9, 4.7 Hz, 1H), 0.13 (q, J = 4.1 Hz, 1H).	454.05	A	A

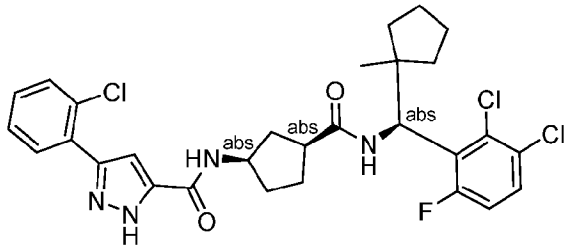
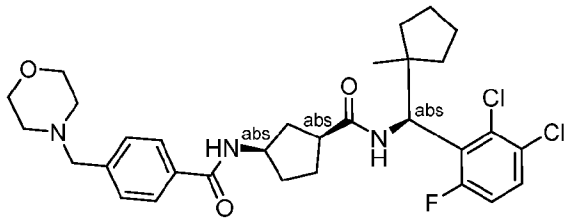
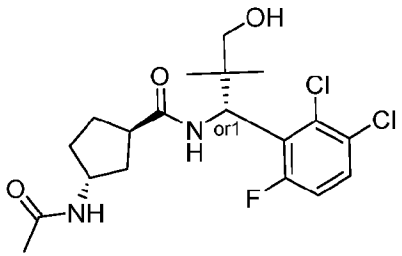
I-2263		NMR (400 MHz, DMSO-d6) 8.19 - 8.13 (m, 1H), 7.60 (overlapping dd, J = 8.8, 5.2 Hz, 0.5H), 7.59 (overlapping dd, J = 8.9, 5.2 Hz, 0.5H), 7.23 (dd, J = 11.4, 9.0 Hz, 0.5H), 6.90 (overlapping t, J = 7.8 Hz, 0.5H), 6.90 (overlapping t, J = 7.8 Hz, 0.5H), 6.47 (d, J = 7.4 Hz, 1H), 6.25 (overlapping d, J = 8.0 Hz, 0.5H), 6.24 (overlapping d, J = 8.0 Hz, 0.5H), 5.06 (d, J = 10.7 Hz, 1H), 4.54 – 4.40 (m, 2H), 3.16 - 2.96 (m, 1H), 3.03 (overlapping m, 1H), 2.72 – 2.62 (m, 1H), 2.59 (overlapping dd, J = 15.8, 5.4 Hz, 0.5H), 2.46 (submerged m, 0.5H), 1.80 (s, 1.5H), 1.79 (s, 1.5H), 1.78 – 1.70 (m, 1H), 1.70 – 1.60 (m, 5H), 1.54 – 1.43 (m, 1H), 1.39 – 1.29 (m, J = 9.5 Hz, 1H), 1.08 – 1.00 (m, 3H). ~1:1 mixture of 2 diastereomers. ~7% of a by-product.	449.1	E	
I-2264				B	
I-2265				E	

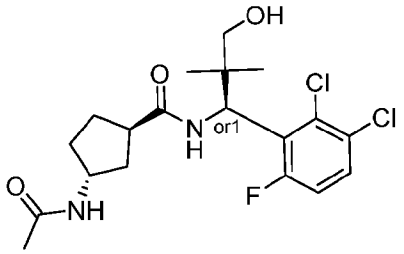
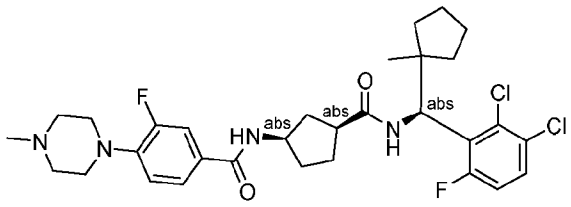
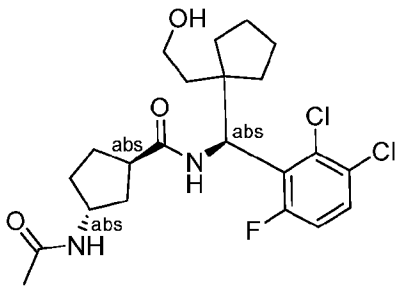
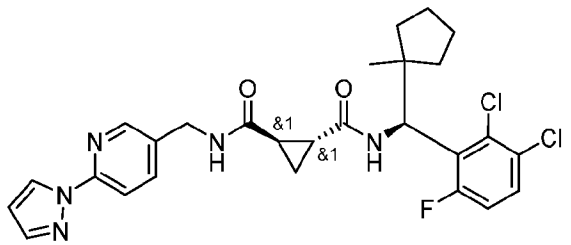
I-2266				A	A
I-2267				C	
I-2268				D	
I-2269		(400 MHz, DMSO-d6) as a ca. 1.4:1 mixture of diastereomers, 8.41 – 8.35 (m, 2H), 7.62 – 7.53 (m, 4H), 7.22 – 7.12 (m, 2H), 5.25 – 5.20 (m, 2H), 5.20 (overlapping d, J = 5.0 Hz, 1H), 5.16 (d, J = 5.2 Hz, 1H), 4.96 – 4.93 (m, 2H), 4.92 – 4.90 (m, 1H), 4.02 – 3.91 (m, 1H), 3.85 – 3.76 (m, 2H), 3.31 – 3.23 (m, 2H), 2.46 (overlapping ddd, J = 12.4, 7.2, 2.0 Hz, 1H), 2.36 – 2.18 (m, 3H), 2.08 – 1.92 (m, 2H), 1.80 (td, J = 11.6, 8.0 Hz, 1H), 1.69 –	451.4	A	B

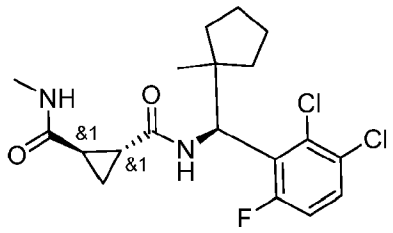
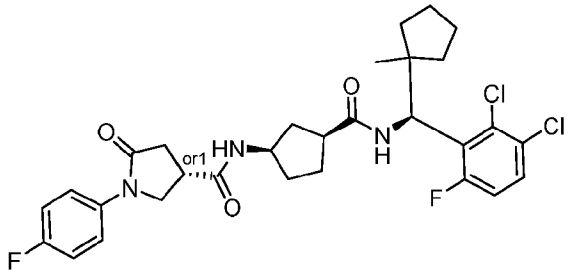
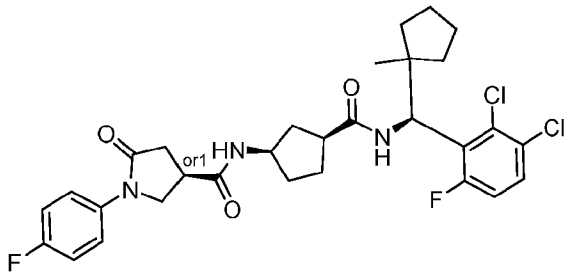
		1.46 (m, 13H), 1.44 – 1.35 (m, 2H), 1.27 – 1.18 (m, 2H), 1.00 – 0.95 (m, 6H).			
I-2270		NMR (400 MHz, DMSO-d6) 8.37 (q, J = 4.6 Hz, 1H), 8.29 (s, 2H), 7.33 (d, J = 7.7 Hz, 1H), 7.27-7.23 (m, 2H), 7.21-7.18 (m, 1H), 6.21 (d, J = 10.0 Hz, 1H), 3.78 (td, J = 10.5, 1.8 Hz, 1H), 2.76 (d, J = 4.8 Hz, 3H), 2.36 – 2.28 (m, 2H), 2.28 – 2.15 (m, 2H), 2.09 – 1.96 (m, 1H), 1.79 – 1.67 (m, 1H), 1.64 – 1.52 (m, 1H), 1.04 – 0.93 (m, 1H), 0.77 (t, J = 7.2 Hz, 3H). ~ 20% mixed impurities. Unknown impurities at 1.2 and 1.27 ppm	359.4	E	
I-2271		NMR (400 MHz, d-DMSO) 8.27 (d, J = 8.8 Hz, 1H), 7.77 (d, J = 6.9 Hz, 1H), 7.65 (dd, J = 9.0, 5.2 Hz, 1H), 7.27 (dd, J = 10.9, 9.0 Hz, 1H), 6.33 (t, J = 56.1 Hz, 1H, CH-F coupling), 5.64 (d, J = 8.6 Hz, 1H), 4.10 – 3.89 (m, 1H), 2.89 (app p, J = 8.0 Hz, 1H), 1.89 – 1.71 (m, 5H, overlapping), 1.76 (s, 3H, overlapping), 1.70 – 1.58 (m, 3H), 1.57 – 1.28 (m, 6H).	465.3	A	B
I-2272		NMR (400 MHz, DMSO-d6) 10.34 (br. s, 1H), 9.29 (s, 1H), 8.61 – 8.57 (m, 2H), 8.51 (d, J = 6.1 Hz, 1H), 8.27 (d, J = 6.2 Hz, 1H), 8.12 (dd, J = 9.0, 5.3 Hz, 1H), 7.54 (dd, J = 10.8, 9.0 Hz, 1H), 5.28 (dd, J = 10.6, 7.5 Hz, 1H), 3.13 (app. p, J = 9.1 Hz, 1H), 2.71 – 2.60 (m, 2H), 2.49 (submerged m, 1H), 2.25 – 2.16 (m, 1H), 2.10 – 2.02 (m, 1H), 2.02 – 1.94 (m, 1H), 1.73 – 1.62 (m, 1H), 1.61 – 1.48 (m, 2H), 1.46 – 1.34 (m, 2H), 1.18 – 1.08 (m, 1H), 1.02 – 0.90 (m, 1H). >17:1 mixture of 2 diastereomers.	411.2	E	

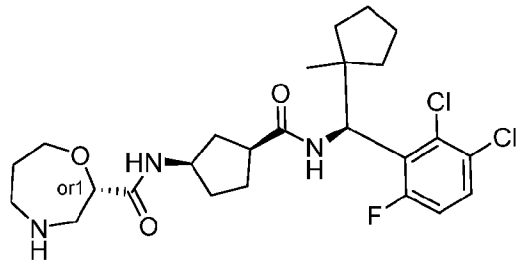
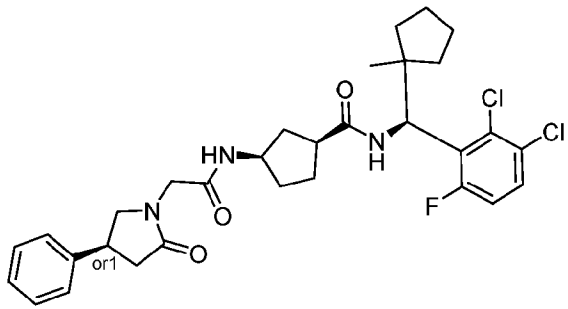
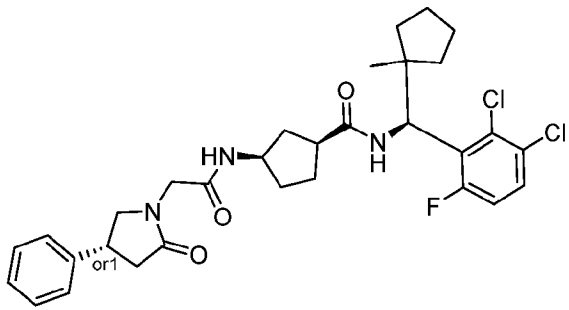
I-2273		NMR (400 MHz, DMSO-d6) 8.69-8.47 (m, 2H), 8.32 (s, 2H), 7.62 (br s, 1H), 7.37 – 7.32 (m, 1H), 7.27 – 7.23 (m, 2H), 7.21-7.18 (m, 1H), 6.27 (d, J = 10.0 Hz, 1H), 6.14 (s, 1H), 4.44 (d, J = 5.7 Hz, 2H), 3.79 (td, J = 10.7, 1.6 Hz, 1H), 2.37 – 2.28 (m, 2H), 2.26 – 2.16 (m, 2H), 2.08 – 1.97 (m, 1H), 1.79 – 1.66 (m, 1H), 1.62 – 1.51 (m, 1H), 1.03 – 0.91 (m, 1H), 0.77 (t, J = 7.2 Hz, 3H). ~ 10 % mixed impurities. Unknown impurities at 1.2 and 1.27 ppm	425.4	E	
I-2274		NMR (400 MHz, DMSO-d6) 8.31 (partially overlapping d, J = 9.3 Hz, 0.5H), 8.28 (partially overlapping d, J = 9.2 Hz, 0.5H), 7.93 (t, J = 5.5 Hz, 0.5H), 7.89 (t, J = 5.5 Hz, 0.5H), 7.62 (partially overlapping t, J = 4.6 Hz, 0.5H), 7.60 (partially overlapping t, J = 4.6 Hz, 0.5H), 7.31 – 7.22 (m, 1H), 5.56 (d, J = 8.9 Hz, 0.5H), 5.51 (d, J = 8.7 Hz, 0.5H), 3.11 – 2.98 (m, 1H), 2.92 – 2.80 (m, 1H), 1.81 (overlapping m, 1H), 1.80 (overlapping s, 1.5H), 1.76 (overlapping s, 1.5H), 1.64 – 1.55 (m, 6H), 1.44 – 1.32 (m, 1H), 1.31 – 1.12 (m, 2H), 1.00 - 0.94 (m, 3H), 0.84 – 0.77 (m, 0.5H), 0.74 – 0.67 (m, 0.5H), 0.66 – 0.60 (m, 0.5H), 0.60 – 0.54 (m, 0.5H). ~1:1 diastereomeric ratio. Residual DMSO.	415.4	B	
I-2275		(400 MHz, DMSO-d6) 8.46 - 8.35 (m, 3H), 8.04 (d, J = 8.7 Hz, 1H), 7.67 - 7.57 (m, 2H), 7.32 (dd, J = 7.8, 4.8 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.52 (d, J = 8.5 Hz, 1H), 4.23 (q, J = 7.8 Hz, 1H), 3.41 (s, 2H), 3.10 (s, 1H), 2.31 (s, 1H), 2.08 (dt, J = 28.9, 9.2 Hz, 3H), 1.59 (s, 6H), 1.37 (s, 1H), 1.26 (s, 1H), 0.95 (d, J = 2.8 Hz, 3H).	492.2	A	A

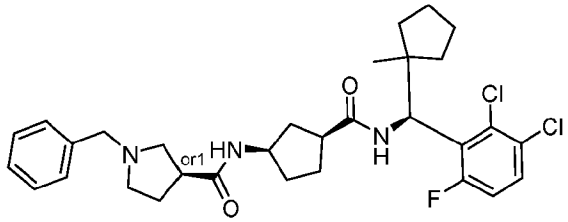
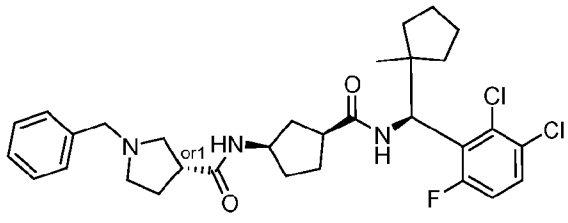
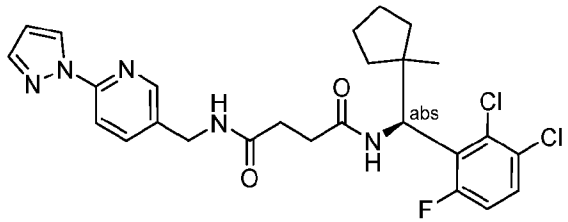
I-2276		(400 MHz, DMSO-d6) 8.67 (dt, J = 4.9, 1.5 Hz, 1H), 8.36 (d, J = 8.0 Hz, 2H), 8.25 (d, J = 7.7 Hz, 1H), 8.11 (d, J = 8.6 Hz, 1H), 8.04 (td, J = 7.7, 1.7 Hz, 1H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.56 (ddd, J = 7.5, 4.8, 1.2 Hz, 1H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.32 (h, J = 7.1 Hz, 1H), 3.10 (p, J = 7.8 Hz, 1H), 1.94 (dddd, J = 34.6, 16.1, 12.8, 7.6 Hz, 3H), 1.73-1.57 (m, 1H), 1.61 (s, 6H), 1.56-1.45 (m, 1H), 1.26 (d, J = 14.6 Hz, 2H), 0.98 (d, J = 2.8 Hz, 3H).	575.2	A	A
I-2277		(400 MHz, DMSO-d6) 8.38 - 8.17 (d, J = 8.7 Hz, 1H), 7.89 - 7.76 (d, J = 7.9 Hz, 1H), 7.66 - 7.55 (dd, J = 9.0, 5.1 Hz, 1H), 7.35 - 7.22 (dd, J = 10.8, 9.0 Hz, 1H), 5.85 - 5.74 (dt, J = 5.5, 2.0 Hz, 1H), 5.72 - 5.62 (m, 1H), 5.59 - 5.49 (d, J = 8.7 Hz, 1H), 4.78 - 4.65 (m, 1H), 3.64 - 3.51 (m, 1H), 2.41 - 2.20 (dt, J = 12.8, 8.1 Hz, 1H), 1.83 - 1.71 (s, 3H), 1.69 - 1.47 (m, 7H), 1.45 - 1.36 (s, 1H), 1.34 - 1.21 (d, J = 7.3 Hz, 1H), 1.17 - 0.78 (d, J = 2.8 Hz, 3H).	427.05	A	A
I-2278		(400 MHz, DMSO-d6) 8.36 (d, J = 6.9 Hz, 1H), 8.09 (d, J = 8.6 Hz, 1H), 7.82 (d, J = 4.0 Hz, 1H), 7.72-7.63 (m, 1H), 7.66-7.56 (m, 2H), 7.49-7.38 (m, 3H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.24 (h, J = 6.7 Hz, 1H), 3.06 (p, J = 7.9 Hz, 1H), 1.95 (ddd, J = 25.4, 11.7, 6.7 Hz, 2H), 1.90-1.76 (m, 2H), 1.65-1.53 (m, 7H), 1.50 (dt, J = 20.4, 7.2 Hz, 1H), 1.39 (d, J = 8.4 Hz, 1H), 1.28 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	607.15	B	
I-2279		(400 MHz, Methanol-d4) 8.28 (d, J = 0.8 Hz, 1H), 7.51 (dd, J = 8.9, 5.1 Hz, 1H), 7.11 (dd, J = 10.9, 8.9 Hz, 1H), 6.86 (d, J = 0.9 Hz, 1H), 5.72 (t, J = 4.6 Hz, 1H), 4.52 (s, 2H), 4.21 (p, J = 6.5 Hz, 1H), 3.03 (q, J = 11.4, 8.6 Hz, 3H), 2.52 (tt, J = 11.4, 3.8 Hz, 1H), 2.17- 1.92 (m, 3H), 1.84 (d, J = 13.6 Hz, 2H), 1.80 - 1.58 (m, 10H), 1.51 (dq, J = 14.4, 8.1,	610.1	A	B

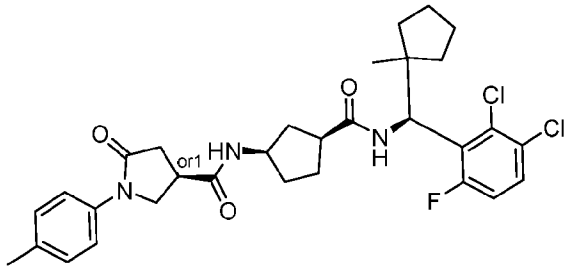
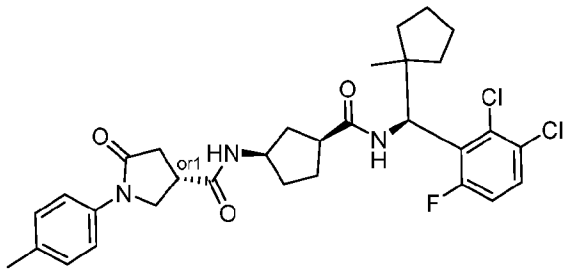
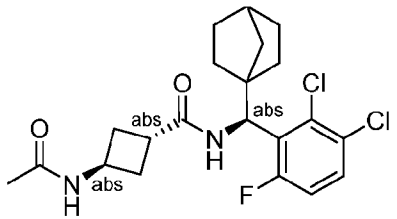
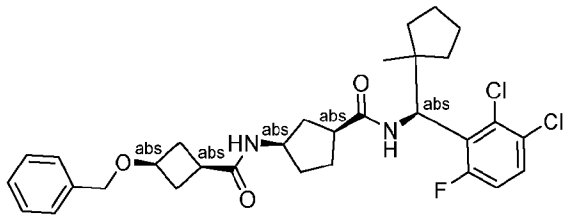
		7.7 Hz, 2H), 1.33 (d, J = 6.4 Hz, 1H), 1.06 (d, J = 3.0 Hz, 3H).			
I-2280		(400 MHz, DMSO-d6)13.78-13.57 (s, 1H), 8.37 (d, J = 6.9 Hz, 1H), 8.10 (t, J = 8.8 Hz, 1H), 7.89 (dd, J = 41.8, 7.6 Hz, 1H), 7.71-7.51 (m, 2H),7.40-7.35 (m, 1H), 7.27 (dd, J = 10.7, 9.0 Hz, 2H), 6.97 (s, 1H), 5.51 (d, J = 8.4 Hz, 1H), 4.28 (s, 1H), 3.10-3.02 (m, 1H), 1.94-1.82 (m,4H), 1.60 (s, 7H), 1.52 (d, J = 10.0 Hz, 1H), 1.38 (s, 1H), 1.26 (d, J = 14.2 Hz, 1H), 0.98 (d, J = 2.8 Hz, 3H).	591.2	A	B
I-2281		(400 MHz, DMSO-d6) 10.05 (s, 1H), 8.34 (d, J = 7.0 Hz, 1H), 8.06 (d, J = 8.6 Hz, 1H), 7.94 (d, J = 7.8 Hz, 2H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.58 (d, J = 7.8 Hz, 2H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 5.51 (d, J = 8.6 Hz, 1H), 4.41 (s, 2H), 4.28 (q, J = 6.9 Hz, 1H), 3.96 (s, 2H), 3.64 (d, J = 12.4 Hz, 2H), 3.24 (s, 1H), 3.07 (q, J = 8.0 Hz, 3H), 2.00 (dt, J = 13.8, 7.2 Hz, 1H), 1.91 (s, 2H), 1.84-1.73 (m, 1H), 1.60 (s, 8H), 1.39 (s, 1H), 1.28 (s, 1H), 0.98 (d, J = 2.9 Hz, 3H).	590.15	A	B
I-2282		(400 MHz, DMSO-d6) 8.05 (d, J = 8.3 Hz, 1H), 7.76 (d, J = 6.9 Hz, 1H), 7.60 (dd, J = 8.9, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.48 (d, J = 8.2 Hz, 1H), 4.80 (t, J = 5.0 Hz, 1H), 4.00 (q, J = 6.5 Hz, 1H), 3.39 (dd, J = 10.5, 5.3 Hz, 1H), 3.30 (s, 2H), 3.16 (dd, J = 10.5, 5.0 Hz, 1H), 2.90 (p, J = 7.8 Hz, 1H), 1.93-1.77 (m, 1H), 1.77 (s, 3H), 1.60 (ddd, J = 13.6, 8.8, 5.4 Hz, 2H), 1.47-1.30 (m, 1H), 0.92 (s, 3H), 0.86 (d, J = 3.0 Hz, 3H).	419.1	B	

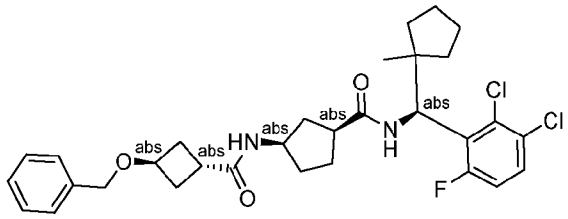
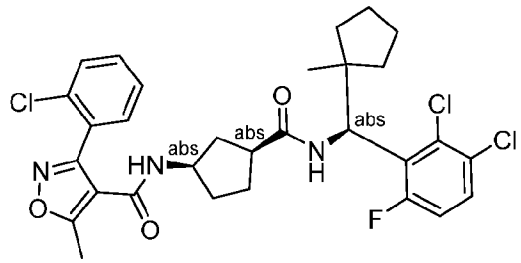
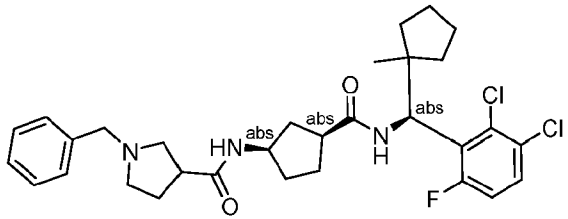
I-2283		(400 MHz, DMSO-d6) 8.06 (d, J = 8.4 Hz, 1H), 7.75 (d, J = 6.9 Hz, 1H), 7.65-7.57 (m, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.48 (d, J = 8.2 Hz, 1H), 4.79 (t, J = 5.0 Hz, 1H), 3.97 (q, J = 6.5 Hz, 1H), 3.39 (dd, J = 10.7, 5.2 Hz, 1H), 3.16 (dd, J = 10.5, 4.9 Hz, 1H), 2.90 (p, J = 7.8 Hz, 1H), 1.93-1.74 (m, 1H), 1.76 (s, 2H), 1.73-1.48 (m, 2H), 1.36 (dd, J = 20.1, 6.5 Hz, 3H), 1.36 (s, 1H), 0.94-0.84 (m, 6H).	419.05	E	
I-2284		(400 MHz, DMSO-d6) 8.13 (d, J = 6.9 Hz, 1H), 8.06 (d, J = 8.6 Hz, 1H), 7.67-7.58 (m, 3H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 7.06 (t, J = 8.7 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.23 (p, J = 6.8 Hz, 1H), 3.10 (s, 4H), 3.03 (q, J = 7.7 Hz, 2H), 2.25 (s, 3H), 2.01-1.72 (m, 3H), 1.60 (s, 7H), 1.58-1.41 (m, 1H), 1.38 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	607.3	A	A
I-2285		(400 MHz, DMSO-d6) 8.15 (d, J = 8.6 Hz, 1H), 7.77 (d, J = 7.0 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.40 (t, J = 4.7 Hz, 1H), 4.00 (q, J = 6.5 Hz, 1H), 3.43 (s, 2H), 2.99 - 2.91 (m, 1H), 1.94 -1.72 (m, 7H), 1.62 (dt, J = 14.0, 8.2 Hz, 3H), 1.56 - 1.30 (m, 8H), 1.15 (t, J = 10.6 Hz, 1H).	459.15	B	B
I-2286		NMR (400 MHz, d6-DMSO) 8.84 (app t, J = 5.8 Hz, 1H), 8.72 (app t, J = 5.7 Hz, 0.8H), 8.67 – 8.55 (m, 3.6H), 8.36 (d, J = 1.0 Hz, 1H), 8.33 (d, J = 1.1 Hz, 0.8H), 7.89 (app t, J = 7.7 Hz, 1.8H), 7.87 – 7.79 (m, 3.6H), 7.64 – 7.58 (m, 1.8H), 7.31 – 7.23 (m, 1.8H), 6.58 – 6.55 (m, 1.8H), 5.53 (d, J = 8.7 Hz, 0.8H), 5.50 (d, J = 8.7 Hz, 1H), 4.47 – 4.22 (m, 3.6H), 2.46 – 2.36 (m, 1.8H), 2.04 – 1.95 (m, 1H), 1.93 – 1.85 (m, 0.8H), 1.65 – 1.55 (m, 10.8H), 1.48 – 1.20 (m, 4.4H), 1.10 – 1.04 (m, 2.8H), 1.00 –	544.4	D	

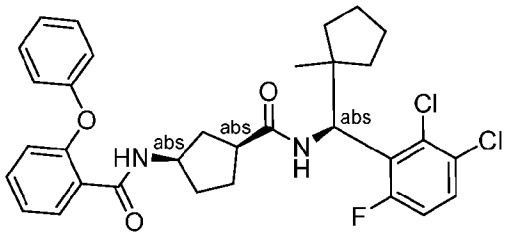
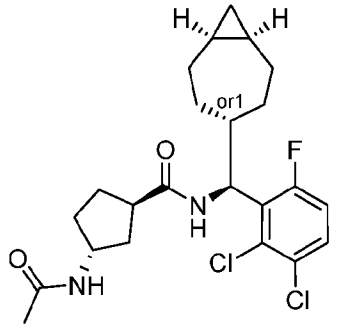
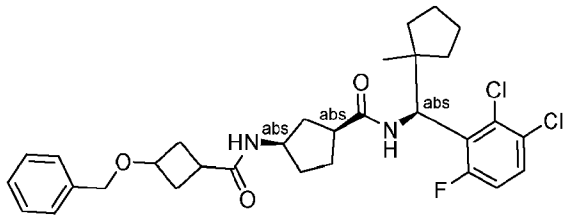
		0.89 (m, 6.2H). Mixture of two trans diastereomers (ca. 5:4).			
I-2287		NMR (400 MHz, d6-DMSO) 8.58 (app t, J = 8.7 Hz, 1H), 8.15 (app q, J = 4.4 Hz, 0.6 H), 8.03 (app q, J = 4.4 Hz, 0.4 H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.28 (dd, J = 10.6, 9.1 Hz, 0.6H), 7.26 (dd, J = 10.6, 9.1 Hz, 0.4H), 5.51 (app t, J = 8.3 Hz, 1H), 2.59 (d, J = 4.6 Hz, 1.6H), 2.55 (d, J = 4.6 Hz, 1.4H), 2.33 (app td, J = 8.7, 5.0 Hz, 1H), 1.92 – 1.86 (m, 0.6H), 1.82 – 1.75 (m, 0.4H), 1.67 – 1.51 (m, 6H, overlapping), 1.36 (br. s, 1H), 1.29 – 1.22 (m, 1H), 1.06 – 0.94 (m, 1.4H, overlapping), 0.96 (s, 3H, overlapping), 0.91 – 0.85 (m, 0.6H).	401.3	D	
I-2288		(400 MHz, DMSO-d6) 8.21 - 8.02 (dd, J = 7.7, 4.0 Hz, 2H), 7.74 - 7.57 (m, 3H), 7.32 - 7.14 (m, 3H), 5.54 - 5.39 (d, J = 8.6 Hz, 1H), 4.14 - 4.01 (p, J = 6.5 Hz, 1H), 4.00 - 3.91 (t, J = 9.1 Hz, 1H), 3.87 - 3.75 (dd, J = 9.6, 6.1 Hz, 1H), 3.24 - 3.11 (h, J = 7.1, 6.3 Hz, 1H), 3.07 - 2.93 (p, J = 7.6 Hz, 1H), 2.76 - 2.59 (m, 2H), 2.00 - 1.74 (ddt, J = 41.0, 15.3, 7.4 Hz, 3H), 1.72 - 1.51 (m, 7H), 1.49 - 1.34 (dt, J = 22.9, 7.5 Hz, 3H), 1.31 - 1.20 (s, 1H), 1.10 - 0.91 (m, 3H).	592.2	A	A
I-2289		(400 MHz, DMSO-d6) 8.21 - 7.95 (t, J = 7.2 Hz, 2H), 7.78 - 7.48 (m, 3H), 7.41 - 7.05 (m, 3H), 5.54 - 5.27 (d, J = 8.5 Hz, 1H), 4.13 - 4.02 (p, J = 6.5 Hz, 1H), 3.99 - 3.92 (dd, J = 9.6, 8.6 Hz, 1H), 3.90 - 3.76 (dd, J = 9.6, 6.1 Hz, 1H), 3.28 - 3.10 (tt, J = 8.7, 7.0 Hz, 1H), 3.07 - 2.93 (p, J = 7.5 Hz, 1H), 2.80 - 2.55 (m, 2H), 2.02 - 1.77 (m, 3H), 1.74 - 1.52 (m, 7H), 1.49 - 1.32 (ddd, J = 17.7, 12.9, 7.2 Hz, 3H), 1.29 - 1.17 (d, J = 34.6 Hz, 1H), 1.09 - 0.85 (m, 3H).	592.15	A	B

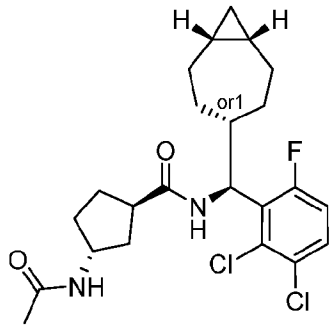
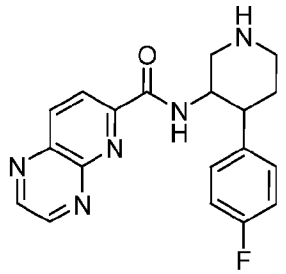
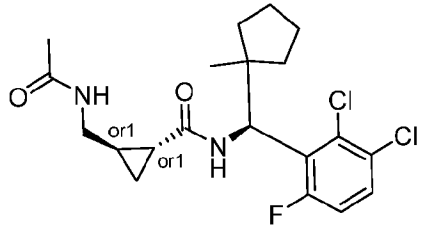
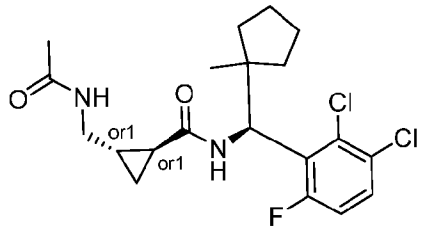
I-2290		(400 MHz, DMSO-d6) 8.05 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.47 (d, J = 7.6 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.49 (d, J = 8.5 Hz, 1H), 4.07 (q, J = 7.0 Hz, 1H), 4.04-3.86 (m, 2H), 3.70 (ddd, J = 12.1, 7.7, 4.3 Hz, 1H), 3.20 (dd, J = 14.0, 3.5 Hz, 1H), 3.01 (q, J = 7.7 Hz, 1H), 2.89 (ddd, J = 13.2, 6.4, 4.8 Hz, 1H), 2.78-2.67 (m, 2H), 1.87 (dt, J = 13.5, 7.2 Hz, 2H), 1.75 (s, 2H), 1.85-1.62 (m, 2H), 1.60 (s, 6H), 1.43 (td, J = 13.5, 8.5 Hz, 2H), 1.31-1.19 (m, 2H), 0.97 (d, J = 2.8 Hz, 3H).	514.2	A	B
I-2291		(400 MHz, DMSO-d6) 8.21 - 8.04 (d, J = 8.6 Hz, 1H), 8.00 - 7.86 (d, J = 6.7 Hz, 1H), 7.66 - 7.52 (dd, J = 9.0, 5.0 Hz, 1H), 7.44 - 6.87 (m, 6H), 5.58 - 5.23 (d, J = 8.5 Hz, 1H), 4.15 - 3.99 (q, J = 6.7 Hz, 1H), 3.97 - 3.68 (m, 3H), 3.65 - 3.53 (p, J = 8.3 Hz, 1H), 3.42 - 3.41 (s, 1H), 3.08 - 2.89 (q, J = 7.8 Hz, 1H), 2.77 - 2.64 (dd, J = 16.6, 9.1 Hz, 1H), 2.49 - 2.44 (s, 1H), 2.42 - 2.28 (dd, J = 16.6, 8.4 Hz, 1H), 1.98 - 1.71 (ddt, J = 29.1, 13.2, 7.3 Hz, 3H), 1.70 - 1.52 (m, 6H), 1.50 - 1.33 (m, 3H), 1.32 - 1.21 (s, 1H), 1.08 - 0.88 (d, J = 2.8 Hz, 3H).	588.2	A	B
I-2292		(400 MHz, DMSO-d6) 8.20 - 8.02 (d, J = 8.6 Hz, 1H), 7.99 - 7.89 (d, J = 6.9 Hz, 1H), 7.66 - 7.56 (dd, J = 9.0, 5.0 Hz, 1H), 7.41 - 7.01 (m, 6H), 5.55 - 5.26 (d, J = 8.5 Hz, 1H), 4.17 - 3.96 (h, J = 6.5 Hz, 1H), 3.93 - 3.82 (d, J = 2.8 Hz, 2H), 3.81 - 3.72 (q, J = 8.6 Hz, 1H), 3.66 - 3.54 (p, J = 8.3 Hz, 1H), 3.47 - 3.37 (dd, J = 9.1, 7.1 Hz, 1H), 3.07 - 2.94 (p, J = 7.6 Hz, 1H), 2.78 - 2.64 (dd, J = 16.6, 9.0 Hz, 1H), 2.44 - 2.31 (dd, J = 16.5, 8.4 Hz, 1H), 1.96 - 1.74 (m, 3H), 1.70 - 1.52 (m, 7H), 1.50 - 1.33 (m, 3H), 1.32 - 1.14 (dt, J = 39.4, 7.3 Hz, 1H), 1.04 - 0.91 (d, J = 2.8 Hz,	588.2	A	B

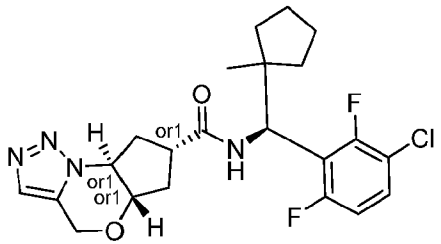
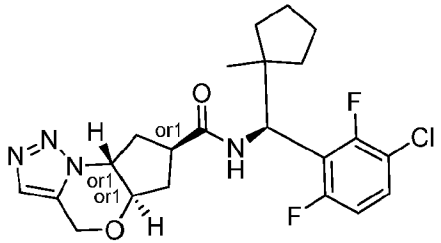
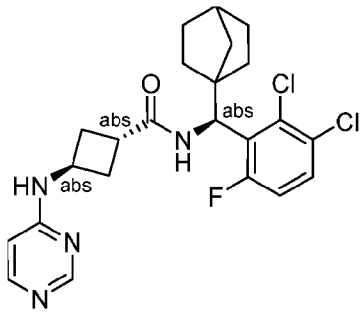
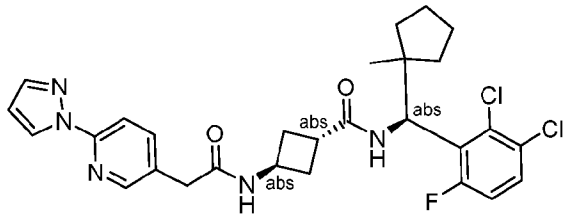
I-2293		(400 MHz, DMSO-d6) 8.16 - 7.98 (d, J = 8.6 Hz, 1H), 7.78 - 7.64 (d, J = 6.9 Hz, 1H), 7.64 - 7.54 (dd, J = 8.9, 5.1 Hz, 1H), 7.37 - 7.11 (m, 6H), 5.55 - 5.28 (m, 1H), 4.06 - 3.93 (h, J = 6.5 Hz, 1H), 3.65 - 3.48 (m, 2H), 3.05 - 2.90 (p, J = 7.5 Hz, 1H), 2.86 - 2.70 (m, 2H), 2.69 - 2.58 (q, J = 7.5 Hz, 1H), 2.44 - 2.26 (p, J = 7.4, 6.9 Hz, 2H), 2.07 - 1.72 (m, 5H), 1.70 - 1.50 (m, 6H), 1.49 - 1.25 (m, 5H), 1.02 - 0.78 (m, 3H).	574.25	A	C
I-2294		(400 MHz, DMSO-d6) 8.18 - 7.97 (d, J = 8.6 Hz, 1H), 7.77 - 7.67 (d, J = 6.9 Hz, 1H), 7.64 - 7.54 (dd, J = 9.0, 5.0 Hz, 1H), 7.39 - 7.27 (m, 4H), 7.27 - 7.16 (m, 2H), 5.55 - 5.28 (d, J = 8.5 Hz, 1H), 4.07 - 3.90 (h, J = 6.5 Hz, 1H), 3.68 - 3.46 (m, 2H), 3.04 - 2.90 (p, J = 7.6 Hz, 1H), 2.86 - 2.72 (dq, J = 10.3, 7.9, 7.3 Hz, 2H), 2.70 - 2.58 (dt, J = 8.2, 3.8 Hz, 1H), 2.44 - 2.23 (m, 2H), 2.01 - 1.71 (m, 5H), 1.69 - 1.50 (d, J = 7.0 Hz, 7H), 1.48 - 1.19 (m, 4H), 1.06 - 0.74 (d, J = 2.8 Hz, 3H).	574.25	A	
I-2295		(400 MHz, DMSO-d6) 8.60 (d, J = 2.6 Hz, 1H), 8.43 (t, J = 6.0 Hz, 1H), 8.34 (d, J = 2.2 Hz, 1H), 8.19 (d, J = 8.8 Hz, 1H), 7.90 - 7.80 (m, 3H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.7, 9.0 Hz, 1H), 6.57 (dd, J = 2.6, 1.7 Hz, 1H), 5.53 (d, J = 8.7 Hz, 1H), 4.37 - 4.22 (m, 2H), 2.61 - 2.51 (m, 1H), 2.36 (tq, J = 15.0, 8.5, 7.6 Hz, 3H), 1.58 (s, 6 H), 1.35 (s, 1H), 1.24 (s, 1H), 0.95 (d, J = 2.8 Hz, 3H).	532.15	D	D

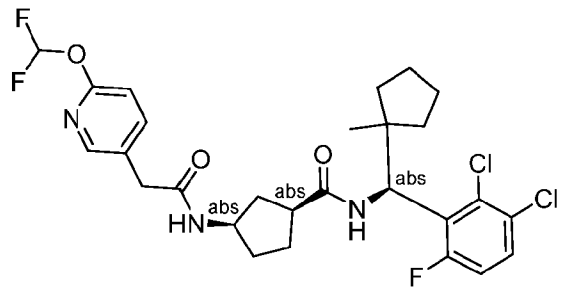
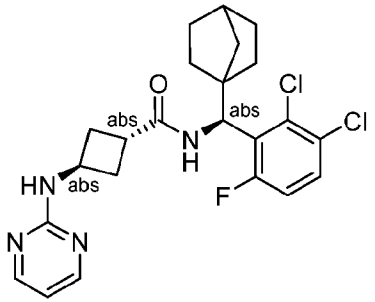
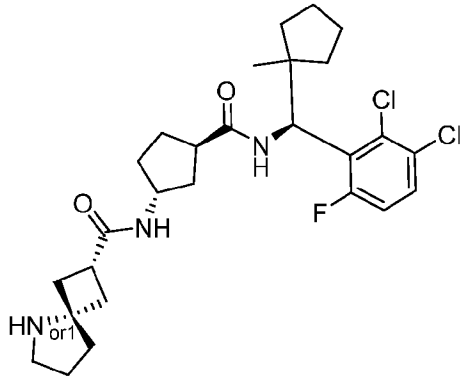
I-2296		(400 MHz, DMSO-d6)8.06 (dd, J = 7.7, 3.1 Hz, 2H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.56-7.49 (m, 2H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 7.17 (d, J = 8.4 Hz, 2H), 5.49 (d, J = 8.5 Hz, 1H), 4.05 (q, J = 6.6 Hz, 1H), 3.94 (t, J = 9.2 Hz, 1H), 3.82 (dd, J = 9.7, 6.2 Hz, 1H), 3.18 (p, J = 8.1 Hz, 1H), 2.99 (q, J = 7.7 Hz, 1H), 2.68 (dd, J = 16.9, 9.3 Hz, 1H), 2.63 (s, 1H), 2.28 (s, 3H), 1.99-1.79 (m, 3H), 1.60 (s, 7H), 1.49-1.35 (m, 3H), 1.29-1.15 (m, 1H), 0.97 (d, J = 2.8 Hz, 3H).	588.3	A	B
I-2297		(400 MHz, DMSO-d6) 8.06 (d, J = 7.9 Hz, 2H), 7.60 (dt, J = 10.8, 5.7 Hz, 1H), 7.59-7.49 (m, 2H), 7.26 (t, J = 9.9 Hz, 1H), 7.17 (d, J = 8.2 Hz, 2H), 5.49 (d, J = 8.5 Hz, 1H), 4.05 (d, J = 6.7 Hz, 1H), 3.94 (t, J = 9.2 Hz, 1H), 3.84-3.72 (m, 1H), 3.22-3.14 (m, 1H), 3.04-2.96 (m, 1H), 2.74-2.57 (m, 2H), 2.28 (s, 3H), 1.93 (dd, J = 13.2, 6.9 Hz, 1H), 1.91-1.78 (m, 2H), 1.66-1.60 (s, 7H), 1.51-1.39 (s, 3H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	588.3	A	A
I-2298		(400 MHz, DMSO-d6) 8.05 (d, J = 8.0 Hz, 2H), 7.60 (dd, J = 8.9, 5.1 Hz, 1H), 7.24 (dd, J = 10.6, 9.0 Hz, 1H), 5.68 (d, J = 8.2 Hz, 1H), 4.22 (h, J = 7.9 Hz, 1H), 3.10-3.01 (m, 1H), 2.26 (tt, J = 7.7, 3.9 Hz, 1H), 2.14 (s, 2H), 2.02 (dt, J = 19.3, 10.3 Hz, 2H), 1.75 (s, 3H), 1.54 (s, 2H), 1.50 (s, 1H), 1.35-1.17 (m, 4H).	427.05	A	A
I-2299		(400 MHz, DMSO-d6) 8.04 (d, J = 8.7 Hz, 1H), 7.70 (d, J = 7.0 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.39 - 7.30 (m, 3H), 7.33 - 7.21 (m, 2H), 7.25 (s, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.36 (s, 2H), 4.18 (p, J = 6.6 Hz, 1H), 4.01 (q, J = 6.6 Hz, 1H), 2.96 (p, J = 7.6 Hz, 1H), 2.86 (tt, J = 9.3, 3.9 Hz, 1H), 2.34 - 2.21 (m, 2H), 2.07 (qd, J = 10.6, 8.6, 5.4 Hz, 2H), 1.92 - 1.73 (m, 3H), 1.59 (d, J = 6.8 Hz, 7H),	575.25	B	B

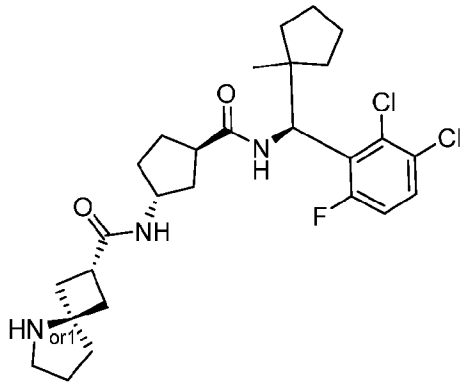
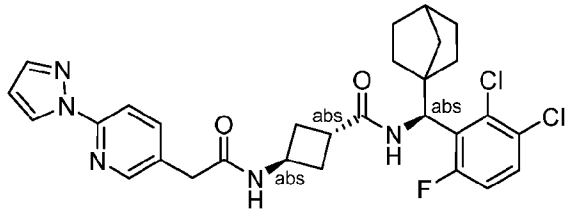
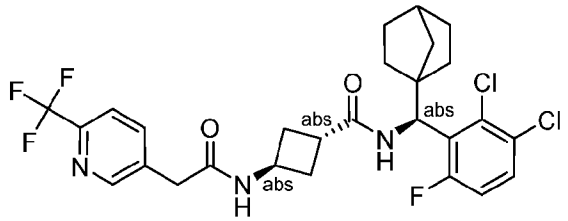
		1.47 - 1.30 (m, 3H), 1.29 - 1.23 (m, 1H), 0.96 (d, J = 2.8 IIz, 3II).			
I-2300		(400 MHz, DMSO-d6) 8.04 (d, J = 8.6 Hz, 1H), 7.70 (d, J = 6.9 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.39 - 7.20 (m, 6H), 5.48 (d, J = 8.5 Hz, 1H), 4.36 (s, 2H), 4.00 (q, J = 6.6 Hz, 1H), 3.89 (p, J = 7.5 Hz, 1H), 2.96 (p, J = 7.8 Hz, 1H), 2.43 (q, J = 8.3 Hz, 1H), 2.26 (dt, J = 10.9, 6.7 Hz, 2H), 1.98 (p, J = 10.0 Hz, 2H), 1.92 - 1.75 (m, 3H), 1.60 (s, 7H), 1.39 (ddt, J = 17.9, 11.8, 6.8 Hz, 3H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	575.3	A	B
I-2301		(400 MHz, DMSO-d6) 8.14 - 7.94 (d, J = 8.6 Hz, 1H), 7.89 - 7.82 (d, J = 7.0 Hz, 1H), 7.66 - 7.40 (m, 5H), 7.29 - 7.20 (dd, J = 10.8, 8.9 Hz, 1H), 5.52 - 5.43 (d, J = 8.5 Hz, 1H), 4.16 - 3.99 (p, J = 6.6 Hz, 1H), 3.02 - 2.87 (dt, J = 15.3, 7.7 Hz, 1H), 2.61 - 2.56 (s, 3H), 2.00 - 1.88 (dt, J = 13.4, 7.0 Hz, 1H), 1.87 - 1.69 (m, 2H), 1.69 - 1.49 (s, 7H), 1.47 - 1.32 (m, 3H), 1.31 - 1.20 (s, 1H), 1.02 - 0.92 (d, J = 2.8 Hz, 3H).	606.1	D	
I-2302		(400 MHz, DMSO-d6) 8.17 - 7.99 (dd, J = 8.5, 4.4 Hz, 1H), 7.76 - 7.54 (m, 2H), 7.41 - 7.08 (m, 6H), 5.53 - 5.41 (d, J = 8.5 Hz, 1H), 4.07 - 3.90 (q, J = 6.6 Hz, 1H), 3.62 - 3.48 (m, 2H), 3.02 - 2.89 (p, J = 7.6 Hz, 1H), 2.85 - 2.72 (m, 2H), 2.69 - 2.57 (m, 1H), 2.43 - 2.25 (m, 2H), 1.98 - 1.70 (m, 5H), 1.68 - 1.52 (s, 7H), 1.48 - 1.20 (m, 4H), 1.01 - 0.91 (d, J = 2.8 Hz, 3H).	574.15	A	B

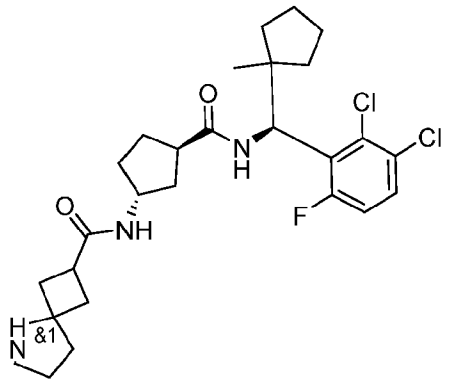
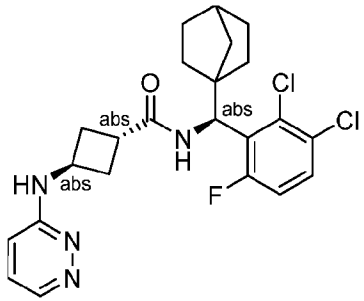
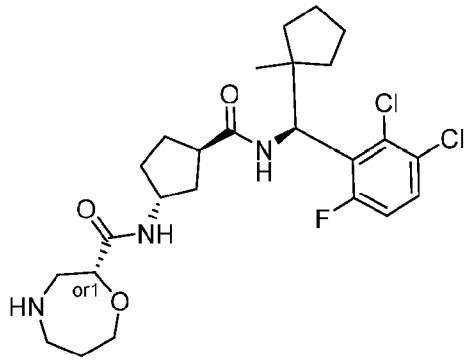
I-2303		(400 MHz, DMSO-d6) 8.05 (d, J = 7.1 Hz, 1H), 7.99 (d, J = 8.7 Hz, 1H), 7.65-7.57 (m, 2H), 7.46 (ddd, J = 8.5, 7.4, 1.8 Hz, 1H), 7.42-7.32 (m, 2H), 7.31-7.20 (m, 2H), 7.12 (ddt, J = 8.4, 7.2, 1.1 Hz, 1H), 6.98 (ddd, J = 8.1, 7.2, 1.2 Hz, 3H), 5.49 (d, J = 8.6 Hz, 1H), 4.14 (q, J = 6.8 Hz, 1H), 3.00-2.91 (m, 1H), 1.93-1.77 (m, 3H), 1.60 (s, 7H), 1.40 (td, J = 13.3, 11.8, 7.3 Hz, 3H), 1.26 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	583.3	D	
I-2304		(400 MHz, DMSO-d6) 8.25 (d, J = 7.8 Hz, 1H), 7.76 (d, J = 7.0 Hz, 1H), 7.58 (dd, J = 8.9, 5.2 Hz, 1H), 7.24 (dd, J = 10.2, 8.9 Hz, 1H), 5.08 (t, J = 8.8 Hz, 1H), 3.99 (q, J = 6.5 Hz, 1H), 2.84 (p, J = 7.7 Hz, 1H), 2.18 - 2.07 (m, 3H), 1.91 - 1.75 (m, 4H), 1.76 (s, 3H), 1.60 (ddd, J = 13.4, 8.7, 5.5 Hz, 1H), 1.49 - 1.29 (m, 2H), 1.22 - 1.01 (m, 4H), 0.92 - 0.75 (m, 4H), 0.61 (s, 1H).	455.2	D	
I-2305		(400 MHz, DMSO-d6) 8.04 (d, J = 8.6 Hz, 1H), 7.70 (d, J = 6.9 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.39 - 7.20 (m, 6H), 5.48 (d, J = 8.5 Hz, 1H), 4.36 (s, 2H), 4.00 (q, J = 6.5 Hz, 1H), 3.95 - 3.83 (m, 1H), 2.96 (p, J = 7.6 Hz, 1H), 2.44 (tt, J = 9.5, 7.4 Hz, 1H), 2.26 (dt, J = 10.9, 6.9 Hz, 2H), 2.10 - 1.86 (m, 2H), 1.81 (s, 2H), 1.89 - 1.73 (m, 1H), 1.59 (d, J = 6.4 Hz, 7H), 1.47 - 1.32 (m, 3H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	575.3	A	B

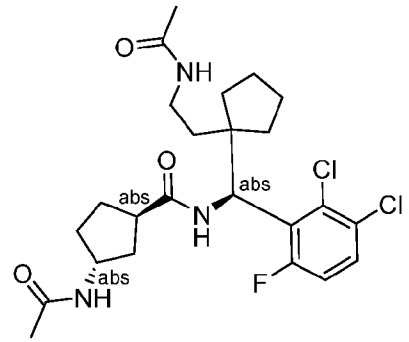
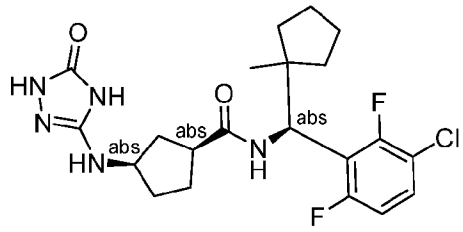
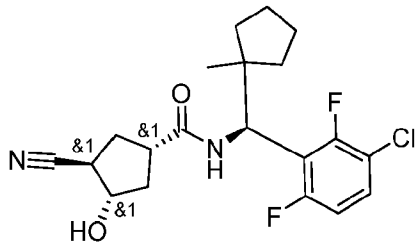
I-2306		(400 MHz, DMSO-d6) 8.25 (d, J = 7.9 Hz, 1H), 7.74 (d, J = 7.0 Hz, 1H), 7.58 (dd, J = 9.0, 5.1 Hz, 1H), 7.24 (t, J = 9.6 Hz, 1H), 5.07 (t, J = 8.9 Hz, 1H), 3.96 (q, J = 6.5 Hz, 1H), 2.93 (s, 1H), 2.83 (q, J = 7.9 Hz, 1H), 2.14 (d, J = 8.3 Hz, 1H), 2.12 - 1.97 (m, 2H), 1.85 (s, 2H), 1.75 (s, 3H), 1.64 - 1.51 (td, J = 12.9, 5.6 Hz, 3H), 1.36 (dd, J = 13.4, 6.4 Hz, 1H), 1.17 (t, J = 7.3 Hz, 4H), 0.82 (s, 2H), 0.77 (s, 2H), 0.61 (s, 1H).	455.2	D	
I-2307				E	
I-2308				C	
I-2309				B	

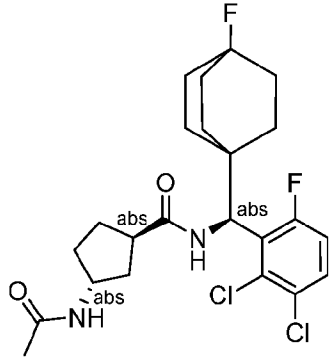
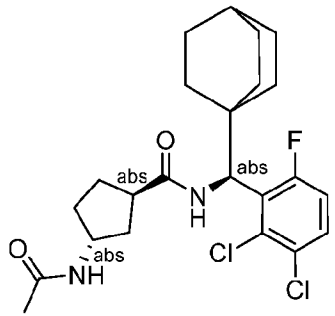
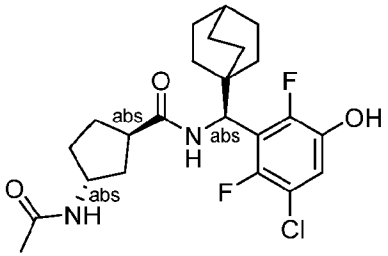
I-2310				A	
I-2311				B	
I-2312		(400 MHz, DMSO-d6) 8.35 (d, J = 1.2 Hz, 1H), 8.10 (d, J = 8.2 Hz, 1H), 8.01 (s, 1H), 7.61 (dd, J = 9.1, 5.4 Hz, 2H), 7.25 (dd, J = 10.6, 8.9 Hz, 1H), 6.36 (s, 1H), 5.70 (d, J = 8.2 Hz, 1H), 4.46 (s, 1H), 3.13 (d, J = 9.0 Hz, 1H), 2.46 - 2.36 (m, 1H), 2.23 (s, 1H), 2.18 - 2.03 (m, 3H), 1.52 (d, J = 18.2 Hz, 3H), 1.44 - 1.29 (m, 3H), 1.29 - 1.17 (m, 4H).	463.1	A	A
I-2313		(400 MHz, DMSO-d6) 8.59 (d, J = 2.5 Hz, 1H), 8.40 (d, J = 7.5 Hz, 1H), 8.31 (d, J = 2.1 Hz, 1H), 8.06 (d, J = 8.7 Hz, 1H), 7.91 - 7.79 (m, 3H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.25 (dd, J = 10.7, 8.9 Hz, 1H), 6.57 (dd, J = 2.6, 1.7 Hz, 1H), 5.52 (d, J = 8.6 Hz, 1H), 4.25 (q, J = 7.8 Hz, 1H), 3.46 (s, 2H), 3.10 (s, 1H), 2.37 - 2.20 (m, 1H), 2.09 (dt, J = 28.7, 8.9 Hz, 3H), 1.59 (s, 6H), 1.31 (d, J = 41.9 Hz, 2H), 0.95 (d, J − 2.8 Hz, 3H).	558.2	A	A

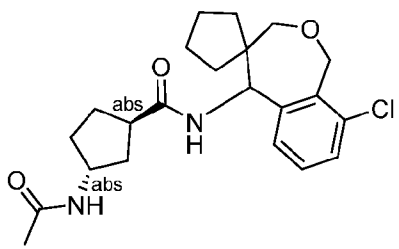
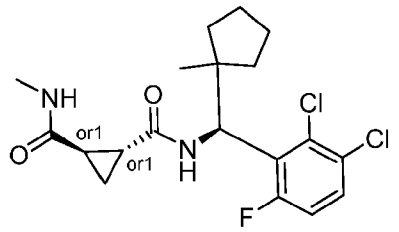
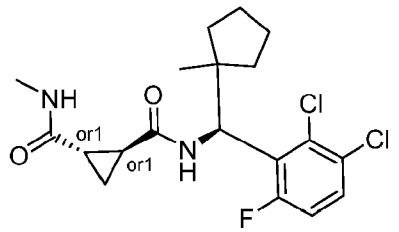
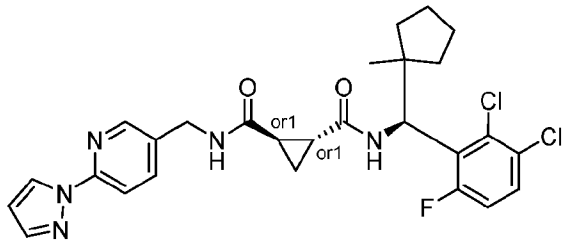
I-2314		(400 MHz, DMSO-d6) 8.13 - 8.03 (m, 3H), 7.89 - 7.48 (m, 3H), 7.31 - 7.21 (m, 1H), 7.04 (d, J = 8.4 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.01 (d, J = 6.3 Hz, 1H), 3.42 (s, 2H), 3.00 (s, 1H), 1.95 - 1.77 (m, 3H), 1.60 (s, 7H), 1.38 (s, 3H), 1.27 (s, 1H), 0.97 (s, 3H).	572.2	A	B
I-2315		(400 MHz, DMSO-d6) 8.23 (d, J = 4.7 Hz, 2H), 8.07 (d, J = 8.2 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.38 (d, J = 7.5 Hz, 1H), 7.25 (dd, J = 10.7, 9.0 Hz, 1H), 6.53 (t, J = 4.8 Hz, 1H), 5.69 (d, J = 8.1 Hz, 1H), 4.44 (h, J = 7.9 Hz, 1H), 3.08 (td, J = 9.1, 4.5 Hz, 1H), 2.39 - 2.31 (m, 1H), 2.22 - 2.07 (m, 4H), 1.63 - 1.45 (m, 3H), 1.34 (dd, J = 15.8, 9.1 Hz, 3H), 1.23 (dd, J = 17.6, 8.1 Hz, 4H).	463.1	A	A
I-2316		(400 MHz, DMSO-d6) 8.05 (d, J = 8.6 Hz, 1H), 7.69-7.57 (m, 2H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.00 (q, J = 6.7 Hz, 1H), 2.96 (p, J = 7.9 Hz, 1H), 2.77 (t, J = 6.4 Hz, 2H), 2.59 (q, J = 8.6 Hz, 1H), 2.13-2.02 (m, 2H), 1.98 (ddd, J = 10.9, 7.6, 3.8 Hz, 2H), 1.85 (dq, J = 14.6, 7.2 Hz, 1H), 1.82-1.73 (m, 1H), 1.67 (td, J = 6.2, 5.7, 3.0 Hz, 3H), 1.60 (s, 7H), 1.57 (d, J = 9.0 Hz, 1H), 1.37 (s, 4H), 0.97 (d, J = 2.8 Hz, 3H).	524.35	A	B

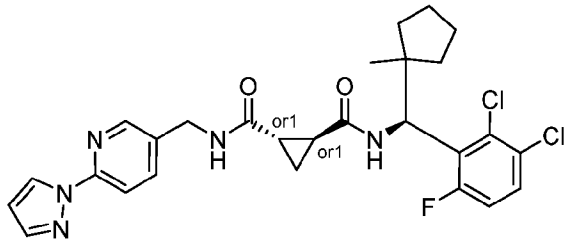
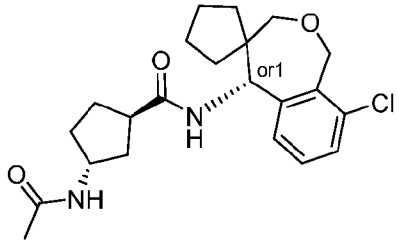
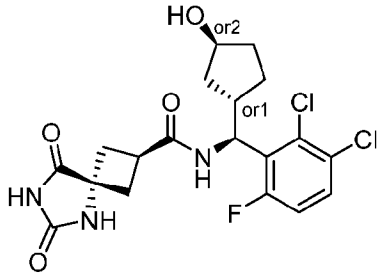
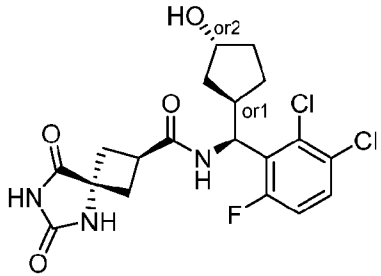
I-2317		(400 MHz, DMSO-d6) 8.03 (d, J = 8.6 Hz, 1H), 7.65-7.56 (m, 2H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 5.48 (d, J = 8.6 Hz, 1H), 4.01 (q, J = 6.6 Hz, 1H), 2.91 (dq, J = 32.5, 7.9 Hz, 2H), 2.76 (d, J = 6.6 Hz, 2H), 2.16-2.05 (m, 1H), 2.00 (s, 1H), 1.92-1.75 (m, 3H), 1.60 (s, 12H), 1.38 (s, 4H), 1.26 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	524.25	A	
I-2318		(400 MHz, DMSO-d6) 8.62-8.56 (m, 1H), 8.38 (d, J = 7.5 Hz, 1H), 8.33-8.27 (m, 1H), 8.07 (d, J = 8.3 Hz, 1H), 7.91-7.78 (m, 3H), 7.60 (dd, J = 8.9, 5.0 Hz, 1H), 7.28-7.15 (m, 1H), 6.57 (dd, J = 2.6, 1.7 Hz, 1H), 5.67 (d, J = 8.1 Hz, 1H), 4.25 (q, J = 7.7 Hz, 1H), 3.46 (s, 2H), 3.08 (dd, J = 10.2, 6.4 Hz, 1H), 2.30 (td, J = 8.0, 4.2 Hz, 1H), 2.19-2.00 (m, 4H), 1.54 (s, 2H), 1.49 (s, 1H), 1.38-1.17 (m, 7H	570.15	A	A
I-2319		(400 MHz, DMSO-d6) 8.61 (d, J = 2.0 Hz, 1H), 8.45 (d, J = 7.5 Hz, 1H), 8.07 (d, J = 8.3 Hz, 1H), 7.93 (dd, J = 8.1, 2.1 Hz, 1H), 7.85 (d, J = 8.0 Hz, 1H), 7.60 (dd, J = 9.0, 5.1 Hz, 1H), 7.23 (dd, J = 10.6, 8.9 Hz, 1H), 5.67 (d, J = 8.2 Hz, 1H), 4.24 (h, J = 7.8 Hz, 1H), 3.55 (s, 2H), 3.13-3.04 (m, 1H), 2.29 (td, J = 8.0, 4.1 Hz, 1H), 2.14 (s, 1H), 2.16-2.00 (m, 3H), 1.52 (d, J = 18.0 Hz, 3H), 1.35 (d, J = 8.6 Hz, 3H), 1.34-1.16 (m, 4H).	572.2	A	A

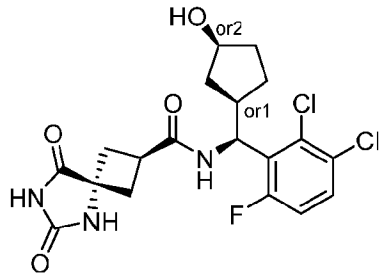
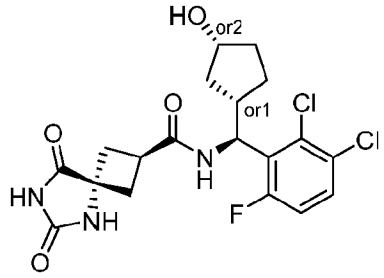
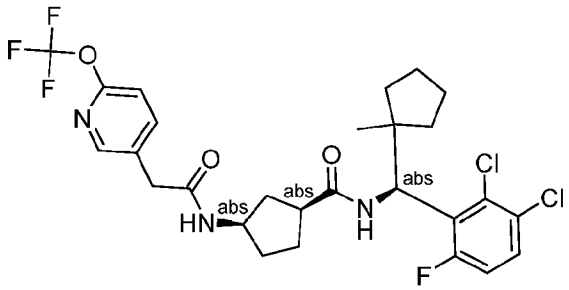
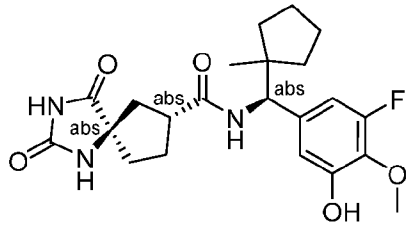
I-2320		(400 MHz, DMSO-d6) 8.07-8.00 (m, 1H), 7.61 (s, 2H), 7.26 (s, 1H), 5.49 (s, 1H), 4.00 (s, 1H), 2.95 (s, 2H), 2.78 (s, 2H), 2.14-2.07 (m, 2H), 2.02 (s, 1H), 1.79 (s, 5H), 1.69 (s, 1H), 1.60 (s, 9H), 1.40-1.34 (m, 4H), 1.28- 1.22 (m, 1H), 0.96 (s, 3H).	524.4	A	
I-2321		(400 MHz, DMSO-d6) 8.40 (dd, J = 4.4, 1.4 Hz, 1H), 8.08 (d, J = 8.3 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.33 -7.17 (m, 2H), 7.07 (d, J = 6.7 Hz, 1H), 6.69 (dd, J = 9.0, 1.4 Hz, 1H), 5.75- 5.53 (m, 1H), 4.38 (h, J = 7.6 Hz, 1H), 3.17 (tt, J = 9.2, 4.2 Hz, 1H), 2.44 (tt, J = 7.8, 3.9 Hz, 1H), 2.29 (ddq, J = 11.5, 7.6, 4.0 Hz, 1H), 2.19 -2.00 (m, 3H), 1.55 (q, J = 16.9, 15.9 Hz, 3H), 1.35 (dd, J = 16.5, 8.9 Hz, 3H), 1.26 (q, J = 8.4, 7.6 Hz, 3H).	463.1	A	A
I-2322		(400 MHz, DMSO-d6) 8.05 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.38 (d, J = 7.6 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.49 (d, J = 8.5 Hz, 1H), 4.06 (q, J = 6.9 Hz, 1H), 3.70 (ddd, J − 12.3, 8.0, 4.2 Hz, 1H), 3.15 (dd, J − 14.1, 3.6 Hz, 1H), 3.00 (q, J = 7.6 Hz, 1H), 2.82 (dt, J = 13.2, 5.6 Hz, 1H), 2.72-2.61 (m, 2H), 2.55 (s, 2H), 1.92-1.63 (m, 3H), 1.76 (s, 3H), 1.60 (s, 7H), 1.43 (tt, J = 17.1, 7.2 Hz, 3H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	514.2	A	B

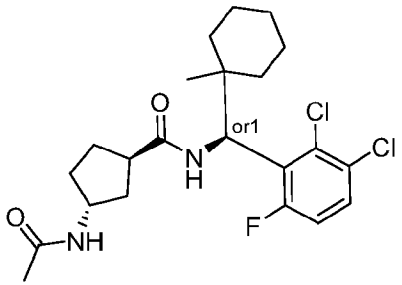
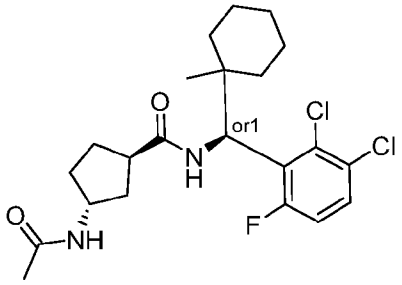
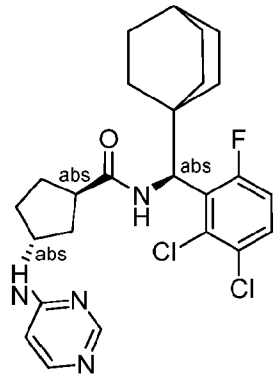
I-2323		(400 MHz, DMSO-d6) 8.11 (d, J = 8.7 Hz, 1H), 7.77 (t, J = 5.6 Hz, 2H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.56 (d, J = 8.6 Hz, 1H), 4.00 (h, J = 6.5 Hz, 1H), 3.08 (tt, J = 11.3, 4.7 Hz, 1H), 2.95 (q, J = 6.3, 5.6 Hz, 2H), 1.91 (dt, J = 13.6, 7.1 Hz, 1H), 1.85 - 1.72 (m, 8H), 1.71 - 1.57 (m, 4H), 1.57 - 1.29 (m, 8H), 1.15 (dd, J = 12.7, 8.2 Hz, 1H).	500.1	B	
I-2324		NMR (400 MHz,) 10.35 (br. s, 1H), 10.18 (s, 1H), 8.13 (d, J = 8.7 Hz, 1H), 7.55 (app. td, J = 8.7, 5.5 Hz, 1H), 7.14 (app. td, J = 9.5, 1.4 Hz, 1H), 5.69 (d, J = 6.3 Hz, 1H), 5.19 (d, J = 8.7 Hz, 1H), 3.78 – 3.67 (m, 1H), 2.97 (app. p, J = 7.8 Hz, 1H), 1.90 – 1.69 (m, 4H), 1.66 – 1.52 (m, 5H), 1.51 – 1.39 (m, 3H), 1.38 – 1.31 (m, 1H), 1.26 – 1.13 (m, 1H), 0.94 (s, 3H). Contains minor impurities.	454.2	A	A
I-2325		(400 MHz, DMSO-d6) as a 1:1 mixture of diastereomers, 8.25 (d, J = 8.6 Hz, 1H), 8.24 (d, J = 8.5 Hz, 1H), 7.59 – 7.52 (m, 2H), 7.18 – 7.11 (m, 2H), 5.57 (d, J = 5.8 Hz, 1H), 5.52 (d, J = 5.9 Hz, 1H), 5.18 (d, J = 8.7 Hz, 1H), 5.16 (d, J = 8.6 Hz, 1H), 4.22 – 4.12 (m, 2H), 3.06 – 2.96 (m, 2H), 2.80 – 2.72 (m, 2H), 2.24 – 1.85 (m, 6H), 1.66 – 1.31 (m, 16H), 1.21 (s, 2H), 0.94 (s, 6H).	397.3	B	

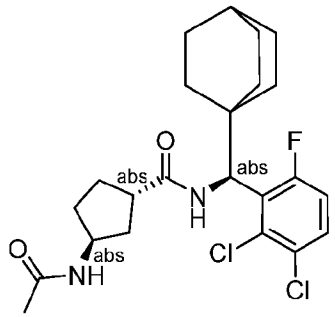
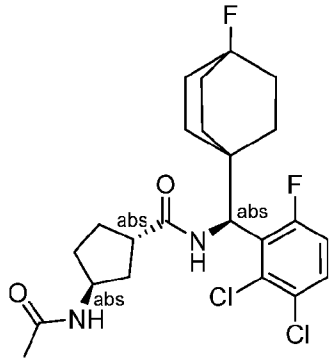
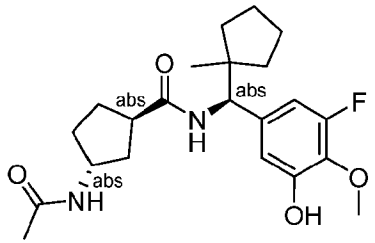
I-2326		NMR (400 MHz, DMSO-d6) 8.05 (d, J = 8.6 Hz, 1H), 7.77 (d, J = 6.8 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.24 (dd, J = 10.7, 9.0 Hz, 1H), 5.30 (d, J = 8.5 Hz, 1H), 4.04 – 3.90 (m, 1H), 2.97 – 2.86 (m, 1H), 1.87 – 1.78 (overlapping m, 2H), 1.76 (overlapping s, 3H), 1.74 – 1.67 (m, 12H), 1.66 – 1.55 (m, 2H), 1.48 – 1.28 (m, 2H). Partial formate at 8.47 ppm. ~95:5 diastereomeric ratio.	473.3	A	
I-2327		NMR (400 MHz, DMSO-d6) 7.95 (d, J = 8.6 Hz, 1H), 7.76 (d, J = 6.8 Hz, 1H), 7.59 (dd, J = 8.9, 5.1 Hz, 1H), 7.22 (dd, J = 10.6, 9.0 Hz, 1H), 5.24 (d, J = 8.6 Hz, 1H), 4.06 – 3.92 (m, 1H), 3.02 – 2.86 (m, 1H), 1.88 – 1.77 (overlapping m, 2H), 1.76 (overlapping s, 3H), 1.65 – 1.56 (m, 1H), 1.54 – 1.41 (m, 14H), 1.42 – 1.29 (overlapping m, 2H). Minor formate at 8.28 ppm. ~95:5 diastereomeric ratio.	455.4	A	
I-2328		(400 MHz, DMSO-d6) as a 1:1 mixture of diastereomers, 9.91 (br. s, 2H), 7.92 (br. d, J = 6.6 Hz, 2H), 7.77 (d, J = 6.9 Hz, 2H), 6.98 (app. t, J = 7.9 Hz, 2H), 4.97 (d, J = 8.4 Hz, 1H), 4.91 (d, J = 8.0 Hz, 1H), 4.04 – 3.94 (m, 2H), 2.93 (app. p, J = 7.7 Hz, 2H), 1.87 – 1.72 (overlapping m, 6H), 1.76 (overlapping s, 6H), 1.66 – 1.57 (m, 2H), 1.56 – 1.30 (m, 30H).	455.4	A	A

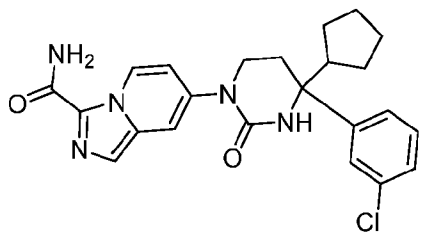
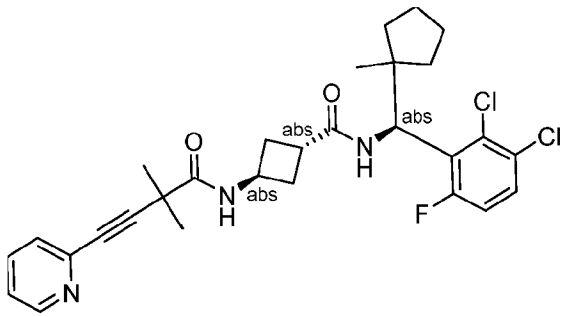
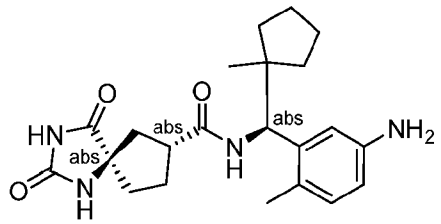
I-2329		NMR (400 MHz, DMSO-d6) 1:1 mixture of 2 diastereomers. 8.12 (d, J = 9.3 Hz, 1H), 7.80 (overlapping d, J = 7.1 Hz, 0.5H), 7.78 (overlapping d, J = 7.2 Hz, 0.5H), 7.33 – 7.28 (m, 2H), 7.26 – 7.21 (m, 1H), 5.16 – 5.06 (m, 1H), 5.02 (dA of AB, JAB = 14.6 Hz, 1H), 4.90 (br. dB of AB, JAB = 14.2 Hz, 1H), 4.08 – 3.97 (m, 1H), 3.82 (br. dd, J = 11.9, 4.0 Hz, 1H), 3.50 (d, J = 12.4 Hz, 1H), 3.02 – 2.90 (m, 1H), 2.00 – 1.78 (m, 3H), 1.77 (overlapping s, 1.5H), 1.75 (s, 1.5H), 1.73 – 1.42 (m, 6H), 1.41 – 1.31 (m, 2H), 1.30 – 1.19 (m, 2H), 1.10 – 1.00 (m, 1H).	405.3	E	
I-2330				D	
I-2331				E	
I-2332				E	

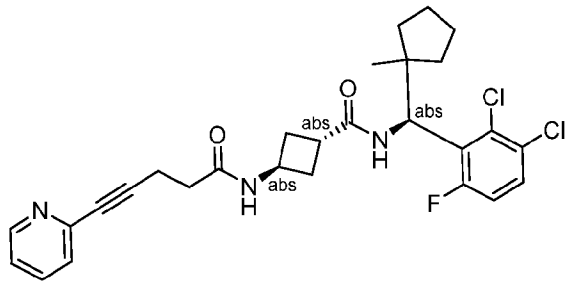
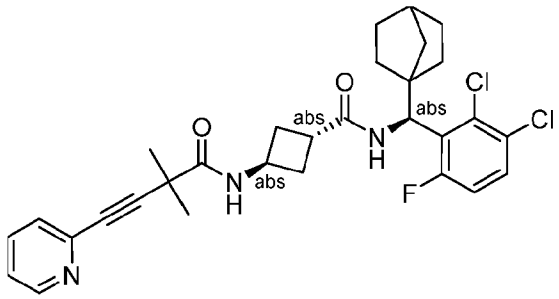
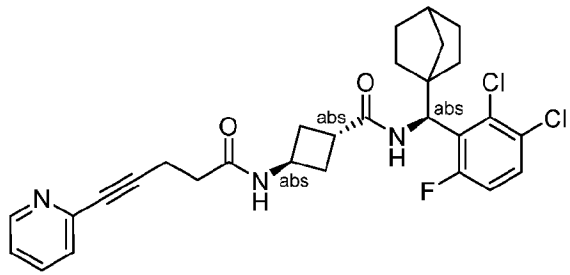
I-2333				D	
I-2334				E	
I-2335		(400 MHz, DMSO-d6) 10.56 (s, 1H), 8.59 (s, 1H), 8.40 (d, J = 7.0 Hz, 1H), 7.59 (dd, J = 8.9, 4.9 Hz, 1H), 7.24 (t, J − 9.6 Hz, 1H), 5.14 (t, J − 9.0 Hz, 1H), 4.58 (d, J = 3.6 Hz, 1H), 4.10 (q, J = 4.9 Hz, 1H), 3.15 (p, J = 9.0 Hz, 1H), 2.62 (ddd, J = 32.6, 12.1, 9.2 Hz, 2H), 2.26 - 2.08 (m, 3H), 1.65 - 1.45 (m, 2H), 1.36 (q, J = 9.6 Hz, 1H), 1.30 - 1.20 (m, 3H).	444.1	A	B
I-2336		(400 MHz, DMSO-d6) 10.55 (s, 1H), 8.59 (s, 1H), 8.44 (d, J = 7.3 Hz, 1H), 7.63 - 7.55 (m, 1H), 7.26 (dd, J = 10.3, 8.9 Hz, 1H), 5.09 - 5.00 (m, 1H), 4.48 (d, J = 3.6 Hz, 1H), 4.18 (s, 1H), 3.16 (p, J = 9.1 Hz, 1H), 2.76 (s, 1H), 2.65 (dd, J = 12.1, 9.0 Hz, 1H), 2.59 - 2.53 (m, 1H), 2.26 - 2.08 (m, 2H), 1.91 - 1.77 (m, 2H), 1.42 (dq, J = 13.6, 7.6, 5.8 Hz, 3H), 1.24 (s, 1H), 1.16 -0.94 (m, 1H).	444.1	C	

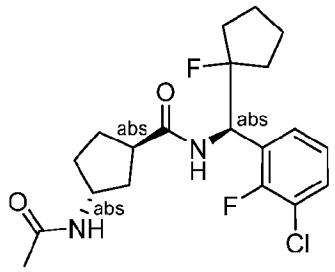
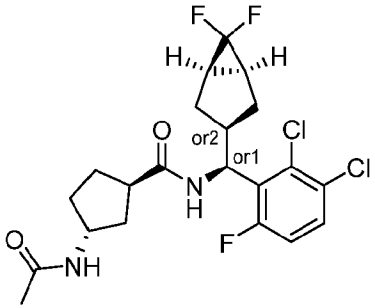
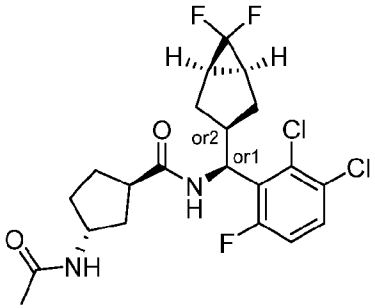
I-2337		(400 MHz, DMSO-d6) 10.51 (s, 1H), 8.59 (s, 1H), 8.37 (d, J = 7.1 Hz, 1H), 7.59 (dd, J = 9.0, 5.2 Hz, 1H), 7.25 (dd, J = 10.3, 9.0 Hz, 1H), 5.13 (s, 1H), 4.55 (d, J = 4.1 Hz, 1H), 4.01 (s, 1H), 3.14 (p, J = 9.0 Hz, 1H), 2.73 - 2.54 (m, 2H), 2.26 - 2.10 (m, 2H), 1.87 (s, 1H), 1.66 (dt, J = 15.2, 7.1 Hz, 1H), 1.58 - 1.38 (m, 3H), 1.24 (s, 1H), 1.06 (s, 1H), 0.98 - 0.83 (m, 1H).	444.1	D	
I-2338		(400 MHz, DMSO-d6) 10.50 (s, 1H), 8.59 (s, 1H), 8.44 (d, J = 7.2 Hz, 1H), 7.59 (dd, J = 9.0, 5.1 Hz, 1H), 7.31 - 7.20 (m, 1H), 5.08 - 4.99 (m, 1H), 4.38 (d, J = 3.2 Hz, 1H), 4.16 - 4.09 (m, 1H), 3.15 (p, J = 9.1 Hz, 1H), 2.79 (s, 1H), 2.61 (ddd, J = 32.7, 12.1, 9.0 Hz, 2H), 2.26 - 2.09 (m, 2H), 2.08 - 2.01 (m, 1H), 1.85 (ddt, J = 14.8, 10.6, 5.5 Hz, 1H), 1.46 (q, J = 11.3, 9.2 Hz, 1H), 1.28 (d, J = 8.4 Hz, 1H), 1.24 (s, 1H), 1.18 (q, J = 12.2, 10.3 Hz, 2H).	444.1	E	
I-2339		(400 MHz, DMSO-d6) 8.21 (s, 1H), 8.14 (d, J = 6.9 Hz, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.88 (dd, J = 8.5, 2.4 Hz, 1H), 7.61 (dd, J = 8.8, 5.0 Hz, 1H), 7.26 (t, J = 8.5 Hz, 2H), 5.48 (d, J = 8.6 Hz, 1H), 4.03 - 3.98 (m, 1H), 3.47 (s, 2H), 2.99 (d, J = 9.1 Hz, 1H), 1.97 - 1.76 (m, 3H), 1.60 (s, 7H), 1.49 - 1.22 (m, 4H), 0.97 (s, 3H).	590.2	A	B
I-2340		(400 MHz, DMSO-d6)10.62 (s, 1H), 9.59 (s, 1H), 8.33 (s, 1H), 8.14 (d, J = 9.5 Hz, 1H), 6.67 (dd, J = 12.0, 2.0 Hz, 1H), 6.61 (t, J = 1.7 Hz, 1H), 4.67 (d, J = 9.5 Hz, 1H), 3.75 (s, 3H), 3.00 (dq, J = 10.2, 7.9 Hz, 1H), 2.11 (dd, J = 13.1, 10.4 Hz, 1H), 2.01 (ddd, J = 12.4, 8.8, 7.2 Hz, 1H), 1.92 (ddd, J = 15.5, 12.6, 7.6 Hz, 2H), 1.82-1.60 (m, 2H), 1.58-	434.05	D	

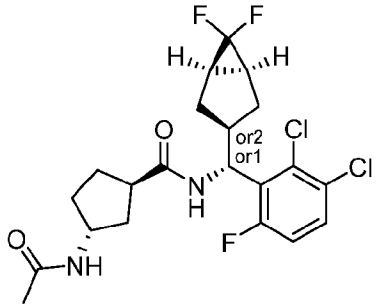
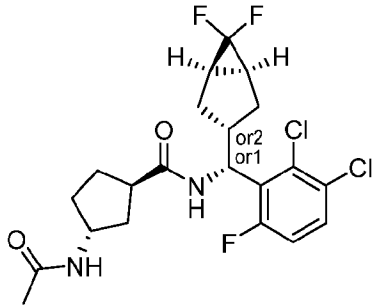
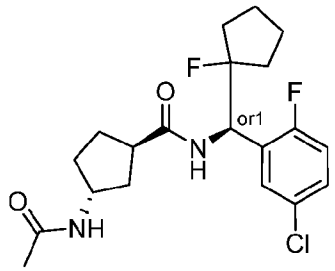
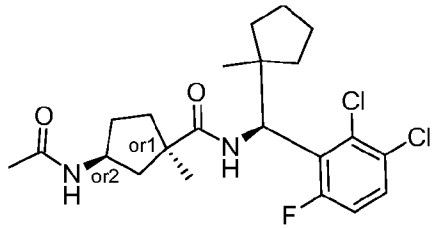
		1.50 (m, 6H), 1.23 (d, J = 8.8 Hz, 1H), 1.08 (s, 1H), 0.82 (s, 3H).			
I-2341		(400 MHz, DMSO-d6) as a 1:1 mixture of diastereomers or atropisomers, 8.02 (d, J = 8.9 Hz, 2H), 7.75 (d, J = 6.8 Hz, 2H), 7.61 (dd, J = 8.9, 5.1 Hz, 2H), 7.25 (dd, J = 10.7, 9.1 Hz, 2H), 5.36 (d, J = 8.8 Hz, 2H), 4.00 – 3.90 (m, 2H), 3.01 – 2.91 (m, 2H), 1.93 – 1.79 (m, 4H), 1.75 (s, 6H), 1.71 – 1.41 (m, 14H), 1.40 – 1.22 (m, 12H), 1.10 – 1.01 (m, 2H), 0.97 (s, 3H), 0.96 (s, 3H). Indicated structure is arbitrarily assigned.	443.3	D	
I-2342		(400 MHz, DMSO-d6) as a 1:1 mixture of diastereomers or atropisomers, 8.01 (d, J = 8.9 Hz, 2H), 7.76 (d, J = 6.8 Hz, 2H), 7.61 (dd, J = 8.9, 5.1 Hz, 2H), 7.25 (dd, J = 10.7, 9.1 Hz, 2H), 5.36 (d, J = 8.8 Hz, 2H), 4.04 – 3.94 (m, 2H), 3.01 – 2.90 (m, 2H), 1.76 (s, 6H), 1.88 – 1.72 (m, 4H), 1.65 – 1.51 (m, 4H), 1.50 – 1.22 (m, 22H), 1.13 – 1.01 (m, 2H), 0.97 (s, 3H), 0.96 (s, 3H). Indicated structure is arbitrarily assigned.	443.3	A	B
I-2343		NMR (400 MHz, DMSO-d6) Major diastereomer described. 8.37 (s, 1H), 8.04 – 7.96 (submerged m, 1H), 7.99 (overlapping d, J = 8.5 Hz, 1H), 7.60 (dd, J = 8.9, 5.1 Hz, 1H), 7.35 (d, J = 6.6 Hz, 1H), 7.23 (dd, J = 10.6, 9.1 Hz, 1H), 6.41 (dd, J = 6.0, 0.9 Hz, 1H), 5.26 (d, J = 8.5 Hz, 1H), 4.22 (br. s, 1H), 3.04 – 2.94 (m, 1H), 1.99 – 1.88 (m, 2H), 1.87 – 1.79 (m, 1H), 1.76 – 1.66 (m, 1H), 1.54 – 1.38 (m, 15H). 9:1 mixture of 2 diastereomers. Partial formate salt at 8.32 ppm.	491.1	A	A

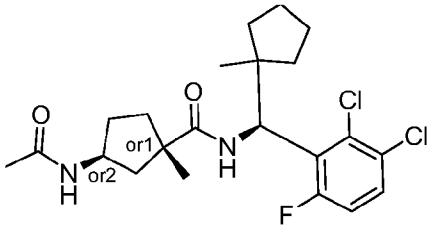
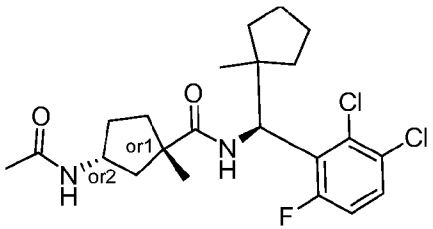
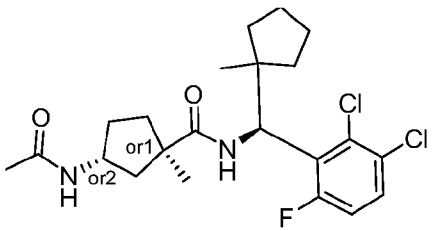
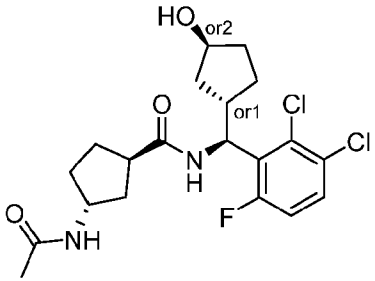
I-2344		NMR (400 MHz, DMSO-d6) 7.96 (d, J = 8.6 Hz, 1H), 7.75 (d, J = 6.9 Hz, 1H), 7.59 (dd, J = 8.9, 5.1 Hz, 1H), 7.22 (dd, J = 10.6, 9.0 Hz, 1H), 5.23 (d, J = 8.5 Hz, 1H), 4.09 – 3.73 (m, 1H), 3.01 – 2.83 (m, 1H), 1.93 – 1.78 (m, 2H), 1.75 (s, 3H), 1.68 – 1.55 (m, 2H), 1.55 – 1.41 (overlapping m, 14H), 1.39 – 1.30 (overlapping m, 1H). Minor formate salt (3% w/w) and aliphatic impurities. ~95:5 diastereomeric ratio.	455.4	A	A
I-2345		NMR (400 MHz, DMSO-d6) 8.06 (d, J = 8.6 Hz, 1H), 7.76 (d, J = 6.8 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.24 (dd, J = 10.7, 9.0 Hz, 1H), 5.29 (d, J = 8.5 Hz, 1H), 4.02 – 3.90 (m, 1H), 2.98 – 2.86 (m, 1H), 1.93 – 1.79 (m, 2H), 1.75 (overlapping s, 3H), 1.73 – 1.62 (overlapping m, 13H), 1.60 – 1.47 (overlapping m, 2H), 1.43 – 1.29 (m, 1H). ~ 95:5 diastereomeric ratio. Presence of ~1 eq. of a formate salt -- est. 18% w/w (DIPEA.formate salt)	473.3	A	B
I-2346		(400 MHz, DMSO-d6) 9.53 (s, 1H), 8.02 (d, J = 9.6 Hz, 1H), 7.78 (d, J = 6.9 Hz, 1H), 6.66 (dd, J = 12.1, 2.0 Hz, 1H), 6.60 (t, J = 1.8 Hz, 1H), 4.67 (d, J = 9.5 Hz, 1H), 4.02 (h, J = 6.6 Hz, 1H), 3.75 (s, 3H), 2.89 (p, J = 8.0 Hz, 1H), 1.92-1.73 (m, 3H), 1.78 (s, 3H), 1.67 (ddd, J = 13.3, 8.8, 5.4 Hz, 1H), 1.62-1.50 (m, 2H), 1.56 (s, 5H), 1.44-1.31 (m, 1H), 1.23 (d, J = 8.8 Hz, 1H), 1.07 (s, 1H), 0.82 (s, 3H).	407.2	D	

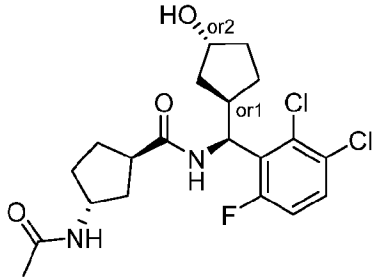
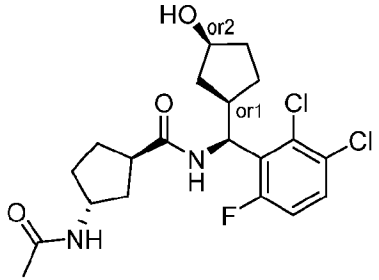
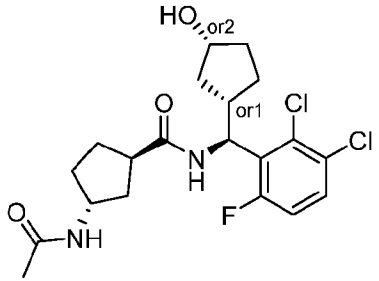
I-2347		(400 MHz, DMSO-d6) 9.21 (dt, J = 7.7, 0.9 Hz, 1H), 7.78 (s, 1H), 7.53 (t, J = 1.4 Hz, 1H), 7.50 - 7.38 (m, 4H), 7.37 (d, J = 0.8 Hz, 1H), 7.33 (dt, J = 8.6, 2.1 Hz, 2H), 7.21 - 7.06 (m, 1H), 3.55 - 3.46 (m, 1H), 3.17 (td, J = 12.1, 3.2 Hz, 1H), 2.48 -2.35 (m, 2H), 2.22 (td, J = 13.2, 4.6 Hz, 1H), 1.68 (dd, J = 11.2, 6.5 Hz, 1H), 1.63 - 1.45 (m, 4H), 1.39 (d, J = 5.7 Hz, 2H), 1.18 - 1.05 (m, 1H).	438.15	E	
I-2348		(400 MHz, DMSO-d6) 8.55 (dt, J = 4.8, 1.5 Hz, 1H), 8.04 (d, J = 8.6 Hz, 1H), 7.95 (d, J = 7.6 Hz, 1H), 7.80 (td, J = 7.7, 1.8 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.52 (dt, J = 7.8, 1.2 Hz, 1H), 7.37 (ddd, J = 7.6, 4.8, 1.2 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.54 (d, J = 8.5 Hz, 1H), 4.33 (h, J = 8.0 Hz, 1H), 3.19 - 3.03 (m, 1H), 2.35 - 2.17 (m, 3H), 2.11 (ddt, J = 11.7, 8.8, 2.7 Hz, 1H), 1.59 (q, J = 10.9, 8.0 Hz, 6H), 1.44 (s, 6H), 1.40 - 1.33 (m, 1H), 1.27 (d, J = 8.1 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	544.15	B	
I-2349		(400 MHz, DMSO-d6) 10.63 (s, 1H), 8.32 (s, 1H), 8.02 (d, J = 9.3 Hz, 1H), 6.76 (d, J = 8.1 Hz, 1H), 6.57 (d, J = 2.3 Hz, 1H), 6.36 (dd, J = 8.0, 2.3 Hz, 1H), 5.07 (d, J = 9.3 Hz, 1H), 4.66 (s, 2H), 2.97 (q, J = 8.6 Hz, 1H), 2.19 (s, 3H), 2.08 (dd, J = 13.0, 10.2 Hz, 1H), 2.07 - 1.91 (m, 2H), 1.91 - 1.70 (m, 2H), 1.70 - 1.60 (m, 1H), 1.57 (s, 4H), 1.56 - 1.49 (m, 2H), 1.27 (d, J = 10.1 Hz, 1H), 1.14 (s, 1H), 0.89 (s, 3H).	399.2	E	

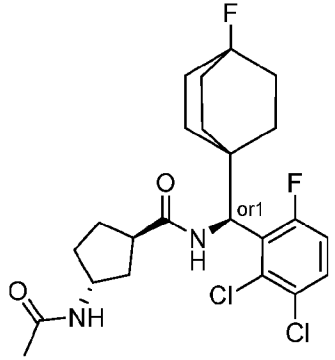
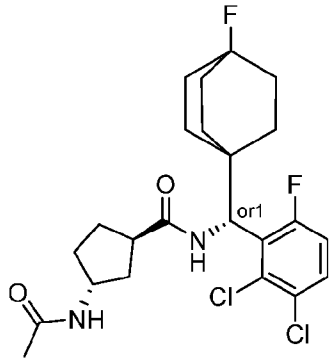
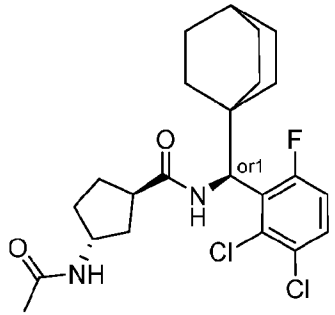
I-2350		(400 MHz, DMSO-d6) 8.51 (dt, J = 4.8, 1.5 Hz, 1H), 8.18 (d, J = 7.5 Hz, 1H), 8.03 (d, J = 8.7 Hz, 1H), 7.76 (td, J = 7.8, 1.9 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.41 (dd, J = 7.8, 1.2 Hz, 1H), 7.34 (ddd, J = 7.6, 4.9, 1.2 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.53 (d, J = 8.5 Hz, 1H), 4.28 (h, J = 7.9 Hz, 1H), 3.08 (tt, J = 9.1, 3.5 Hz, 1H), 2.63 (t, J = 7.4 Hz, 2H), 2.39 - 2.23 (m, 3H), 2.21 - 1.98 (m, 3H), 1.59 (d, J = 5.8 Hz, 6H), 1.41 - 1.32 (m, 1H), 1.27 (q, J = 6.8, 4.3 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	530.1	A	B
I-2351		(400 MHz, DMSO-d6) 8.59 - 8.52 (m, 1H), 8.07 (d, J = 8.2 Hz, 1H), 7.95 (d, J = 7.7 Hz, 1H), 7.80 (td, J = 7.7, 1.9 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.52 (d, J = 7.8 Hz, 1H), 7.37 (ddd, J = 7.6, 4.9, 1.2 Hz, 1H), 7.24 (dd, J = 10.6, 9.0 Hz, 1H), 5.69 (d, J = 8.2 Hz, 1H), 4.32 (h, J = 8.0 Hz, 1H), 3.15 - 3.01 (m, 1H), 2.36 - 2.17 (m, 3H), 2.17 - 2.07 (m, 2H), 1.64 - 1.48 (m, 3H), 1.44 (s, 6H), 1.40 - 1.15 (m, 7H).	556.1	B	
I-2352		(400 MHz, DMSO-d6) 8.54 (dd, J = 5.0, 1.8 Hz, 1H), 8.20 (d, J = 7.5 Hz, 1H), 8.06 (d, J = 8.3 Hz, 1H), 7.84 (td, J = 7.8, 1.8 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.47 (d, J = 7.9 Hz, 1H), 7.44-7.36 (m, 1H), 7.24 (dd, J = 10.6, 8.9 Hz, 1H), 5.68 (d, J = 8.1 Hz, 1H), 4.28 (p, J = 7.8 Hz, 1H), 3.07 (td, J = 9.3, 4.4 Hz, 1H), 2.65 (t, J = 7.3 Hz, 2H), 2.35 (t, J = 7.4 Hz, 2H), 2.29 (td, J = 7.9, 3.9 Hz, 1H), 2.19-1.98 (m, 4H), 1.57-1.47 (m, 3H), 1.34 (s, 3H), 1.33-1.24 (m, 2H), 1.23 (d, J = 10.6 Hz, 2H).	542.1	A	A

I-2353		(400 MHz, DMSO-d6) 8.69 (d, J = 9.1 Hz, 1H), 7.79 (d, J = 6.9 Hz, 1H), 7.51 (td, J = 7.0, 6.5, 2.4 Hz, 2H), 7.24 (td, J = 7.9, 1.0 Hz, 1H), 5.41 (dd, J = 26.0, 9.1 Hz, 1H), 4.02 (h, J = 6.6 Hz, 1H), 2.92 (p, J = 7.8 Hz, 1H), 1.92 - 1.62 (m, 14H), 1.59 - 1.31 (m, 3H).	399.15	B	B
I-2354		(400 MHz, DMSO-d6) 8.35 (dd, J = 27.2, 8.6 Hz, 1H), 7.79 (d, J = 7.0 Hz, 1H), 7.73 - 7.26 (m, 2H), 5.01 (dt, J = 125.4, 9.0 Hz, 1H), 4.02 (q, J = 6.3 Hz, 1H), 2.76 (dt, J = 23.9, 9.3 Hz, 2H), 2.39 - 1.99 (m, 3H), 1.97 - 1.71 (m, 7H), 1.65 (ddd, J = 13.4, 8.9, 5.3 Hz, 2H), 1.44 (ddt, J = 43.6, 19.4, 7.2 Hz, 3H).	463.1	C	
I-2355		(400 MHz, DMSO-d6) 8.33 (d, J = 7.2 Hz, 1H), 7.76 (d, J = 7.0 Hz, 1H), 7.60 (dd, J = 8.9, 5.2 Hz, 1H), 7.27 (dd, J = 10.3, 9.0 Hz, 1H), 5.06 (dd, J = 11.1, 7.3 Hz, 1H), 3.99 (h, J = 6.7 Hz, 1H), 3.11 (d, J = 10.6 Hz, 1H), 2.78 (p, J = 7.8 Hz, 1H), 2.45 (s, 1H), 2.36 - 2.07 (m, 2H), 1.95 - 1.67 (m, 7H), 1.59 (ddd, J = 13.5, 8.9, 5.5 Hz, 1H), 1.50 - 1.17 (m, 4H).	463.1	C	

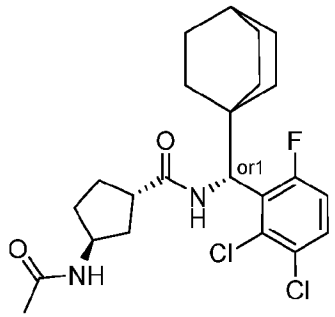
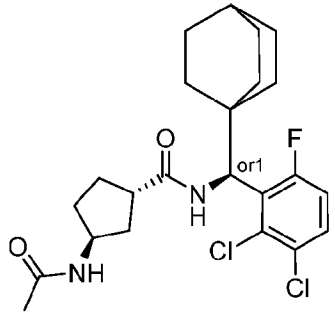
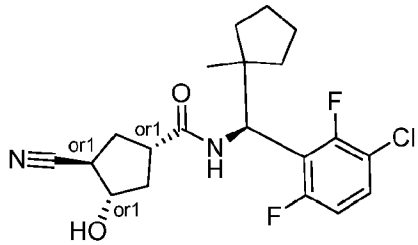
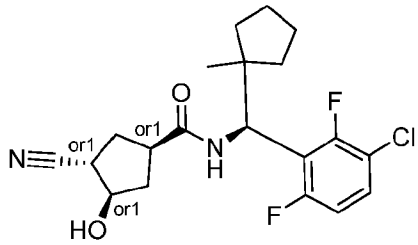
I-2356		(400 MHz, DMSO-d6) 8.38 (d, J = 8.4 Hz, 1H), 7.79 (d, J = 7.0 Hz, 1H), 7.71 - 7.56 (m, 2H), 4.84 (t, J = 9.1 Hz, 1H), 4.02 (h, J = 6.4 Hz, 1H), 2.76 (p, J = 7.9 Hz, 1H), 2.28 (s, 1H), 2.10 (ddd, J = 15.1, 9.6, 6.2 Hz, 3H), 1.95 - 1.74 (m, 7H), 1.64 (ddd, J = 13.9, 8.7, 5.7 Hz, 3H), 1.50 (tt, J = 12.4, 7.8 Hz, 1H), 1.43 - 1.29 (m, 1H).	463.1	D	
I-2357		(400 MHz, DMSO-d6) 8.40 (d, J = 7.2 Hz, 1H), 7.76 (d, J = 7.0 Hz, 1H), 7.61 (dd, J = 9.0, 5.2 Hz, 1H), 7.27 (dd, J = 10.3, 8.9 Hz, 1H), 5.07 (t, J = 9.1 Hz, 1H), 4.00 (h, J = 6.6 Hz, 1H), 2.80 (p, J = 7.9 Hz, 1H), 2.62 (s, 1H), 2.34 (dd, J = 12.8, 7.8 Hz, 1H), 2.24 - 2.01 (m, 2H), 1.95 - 1.72 (m, 7H), 1.69 - 1.51 (m, 3H), 1.48 - 1.23 (m, 2H).	463.1	A	A
I-2358		(400 MHz, DMSO-d6) 8.68 (d, J = 9.4 Hz, 1H), 7.80 (d, J = 6.9 Hz, 1H), 7.67 - 7.61 (m, 1H), 7.40 (ddd, J = 8.8, 4.4, 2.7 Hz, 1H), 7.26 (t, J = 9.2 Hz, 1H), 5.40 (dd, J − 26.6, 9.3 Hz, 1H), 4.03 (h, J − 6.5 Hz, 1H), 2.91 (p, J = 7.9 Hz, 1H), 1.94 - 1.81 (m, 4H), 1.78 (s, 4H), 1.75 - 1.61 (m, 6H), 1.55 (dt, J = 12.6, 7.9 Hz, 1H), 1.48 - 1.33 (m, 2H).	399.1	D	
I-2359		(400 MHz, DMSO-d6) 7.76 (d, J = 7.4 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.30 (dd, J = 11.0, 9.0 Hz, 1H), 7.13 (d, J = 9.0 Hz, 1H), 5.57 (d, J = 8.8 Hz, 1H), 4.08 (h, J = 7.6 Hz, 1H), 2.11 (ddd, J = 12.6, 8.8, 6.0 Hz, 1H), 1.88 (ddd, J = 24.6, 12.7, 6.9 Hz, 2H), 1.73 (s, 3H), 1.76-1.64 (m, 1H), 1.61	443.15	E	

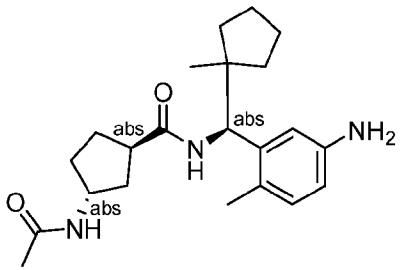
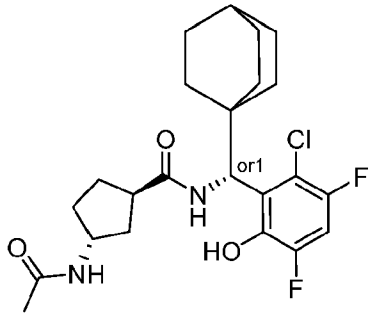
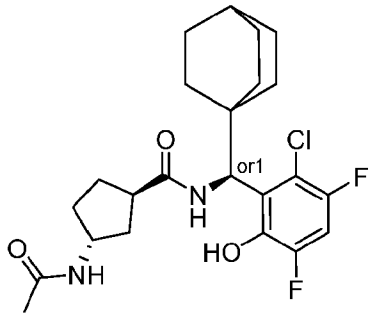
		(s, 6H), 1.39 (ddt, J = 36.1, 20.2, 7.5 Hz, 2H), 1.31 (s, 2H), 1.20 (s, 3H), 0.99 (d, J = 2.9 Hz, 3H).			
I-2360		(400 MHz, DMSO-d6) 7.82 (d, J = 7.3 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.32-7.19 (m, 2H), 5.51 (d, J = 8.7 Hz, 1H), 3.92 (h, J = 7.7 Hz, 1H), 2.34 (dd, J = 13.2, 8.1 Hz, 1H), 2.00 (dt, J = 12.6, 7.6 Hz, 1H), 1.84-1.71 (m, 1H), 1.75 (s, 3H), 1.60 (s, 6H), 1.61-1.49 (m, 1H), 1.42 (dq, J = 15.3, 7.4 Hz, 2H), 1.30 (s, 1H), 1.25 (s, 3H), 1.21 (dd, J = 13.1, 7.6 Hz, 1H), 0.99 (d, J = 2.9 Hz, 3H).	443.1	D	
I-2361		(400 MHz, DMSO-d6) 7.82 (d, J = 7.3 Hz, 1H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.37-7.19 (m, 2H), 5.50 (d, J = 8.5 Hz, 1H), 3.92 (p, J = 7.6, 7.0 Hz, 1H), 2.40 (dd, J = 13.2, 8.0 Hz, 1H), 1.96 (dt, J = 12.4, 7.4 Hz, 1H), 1.75 (s, 3H), 1.78-1.67 (m, 1H), 1.61 (s, 6H), 1.56-1.34 (m, 3H), 1.25 (s, 3H), 1.33-1.18 (m, 2H), 0.99 (d, J = 2.9 Hz, 3H).	443.1	B	
I-2362		(400 MHz, DMSO-d6) 7.77 (d, J = 7.2 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.29 (dd, J = 11.0, 8.9 Hz, 1H), 7.17 (d, J = 8.8 Hz, 1H), 5.53 (d, J = 8.6 Hz, 1H), 4.07 (h, J = 7.4 Hz, 1H), 2.11-2.00 (m, 1H), 1.89 (dt, J = 16.1, 7.1 Hz, 2H), 1.80 (dd, J = 13.1, 8.3 Hz, 1H), 1.73 (s, 3H), 1.61 (s, 6H), 1.61 - 1.51 (m, 1H), 1.45-1.26 (m, 2H), 1.24 (s, 2H), 1.18 (s, 3H), 0.99 (d, J = 2.9 Hz, 3H).	443.15	D	
I-2363		(400 MHz, Methanol-d4) 7.48 (dd, J = 8.9, 5.2 Hz, 1H), 7.10 (dd, J = 10.3, 8.9 Hz, 1H), 5.37 (d, J = 10.7 Hz, 1H), 4.29 (q, J = 5.2 Hz, 1H), 4.28 - 4.15 (m, 1H), 2.91 (p, J = 8.1 Hz, 1H), 2.69 (q, J = 9.0 Hz, 1H), 2.27 (dt, J = 14.1, 6.9 Hz, 1H), 2.16 - 1.95 (m, 2H), 1.92 (s, 4H), 1.86 - 1.58 (m, 5H), 1.58 - 1.34 (m, 4H).	431.15	D	

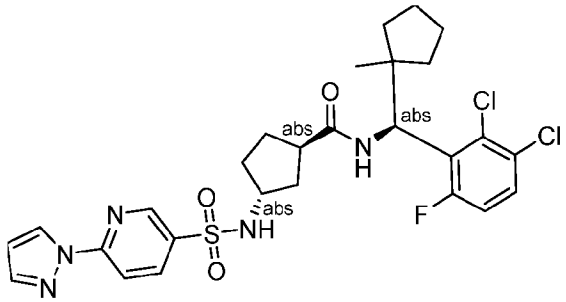
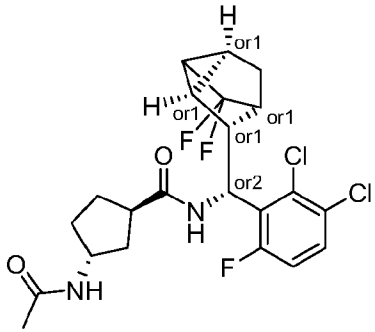
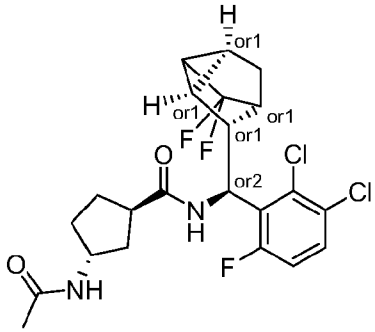
I-2364		(400 MHz, Methanol-d4) 8.45 (s, 1H), 7.49 (dd, J = 9.1, 5.1 Hz, 1H), 7.16 -7.05 (m, 1H), 5.31 (dd, J = 41.0, 10.3 Hz, 1H), 4.36 (s, 1H), 4.31 - 4.13 (m, 1H), 2.93 (t, J = 8.1 Hz, 2H), 2.04 (ddd, J = 41.9, 15.7, 8.2 Hz, 4H), 1.94 - 1.74 (m, 3H), 1.72 - 1.42 (m, 8H), 1.24 (d, J = 13.7 Hz, 1H), 1.03 (s, 1H).	431.05	E	
I-2365		(400 MHz, Methanol-d4) 8.39 (d, J = 7.6 Hz, 1H), 7.48 (dd, J = 8.9, 5.2 Hz, 1H), 7.10 (dd, J = 10.4, 8.9 Hz, 1H), 5.35 (d, J = 9.3 Hz, 1H), 4.26 - 4.13 (m, 2H), 2.91 (p, J = 8.0 Hz, 1H), 2.67 (d, J = 9.6 Hz, 1H), 2.16 -1.89 (m, 7H), 1.89 - 1.76 (m, 2H), 1.75 -1.56 (m, 5H), 1.50 (dq, J = 13.8, 7.2 Hz, 1H), 1.29 (d, J = 14.7 Hz, 1H).	431.15	E	
I-2366		(400 MHz, Methanol-d4) 8.63 - 8.35 (m, 1H), 7.49 (ddd, J = 9.1, 5.3, 1.8 Hz, 1H), 7.31 - 6.95 (m, 1H), 5.30 (dd, J = 43.4, 11.1 Hz, 1H), 4.30 (s, 1H), 4.26 - 4.14 (m, 1H), 3.19 - 2.78 (m, 2H), 2.25 - 1.98 (m, 4H), 1.91 (d, J = 5.7 Hz, 4H), 1.86 -1.58 (m, 4H), 1.56 - 1.23 (m, 4H).	431.15	E	

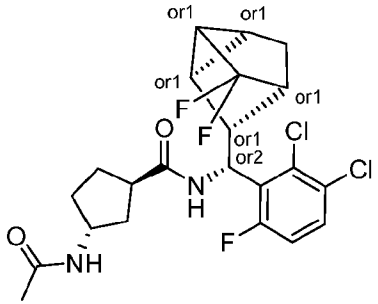
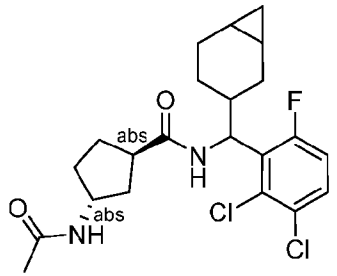
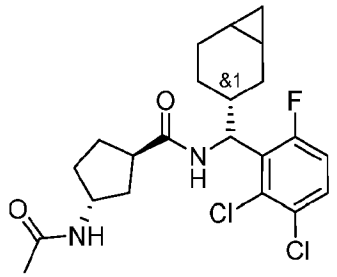
I-2367				A	B
I-2368				B	
I-2369				A	A

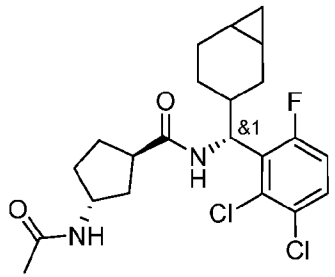
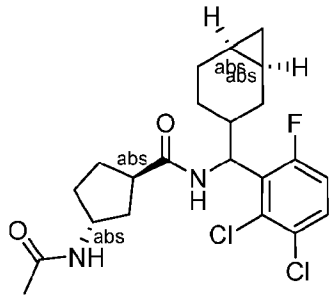
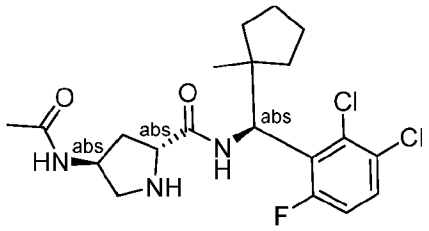
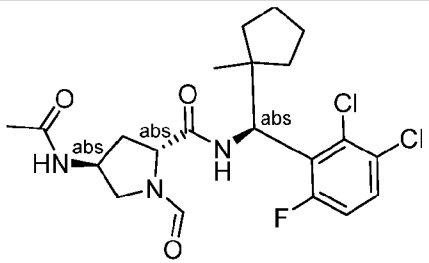
I-2370				C
I-2371				E
I-2372				A B

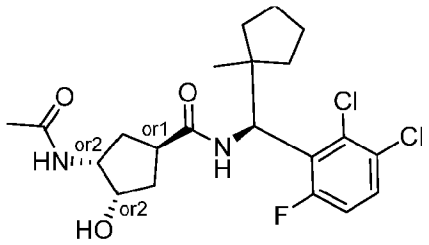
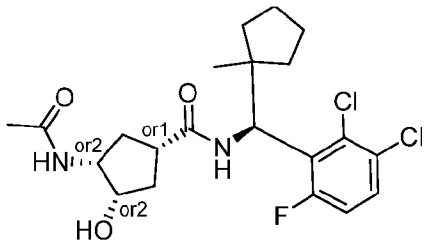
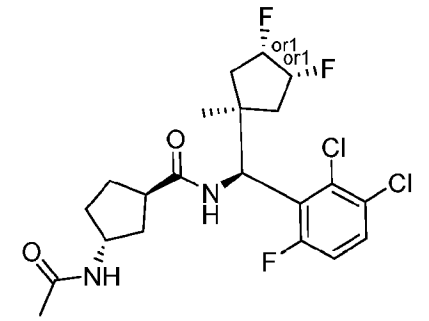
I-2373				C	
I-2374				A	A
I-2375				C	
I-2376				B	

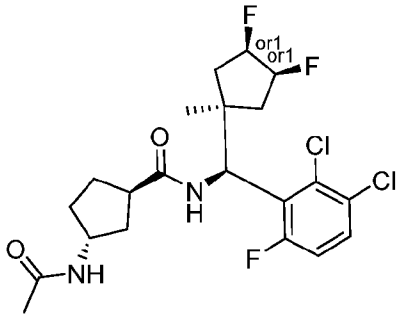
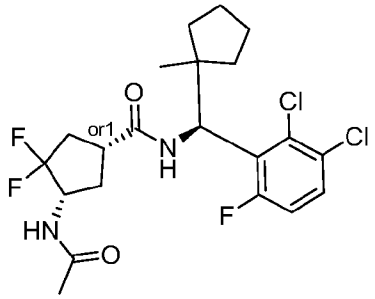
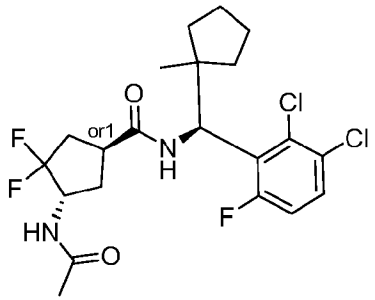
I-2377		(400 MHz, DMSO-d6) 7.87 (d, J = 9.4 Hz, 1H), 7.76 (d, J = 6.9 Hz, 1H), 6.75 (d, J = 8.0 Hz, 1H), 6.58 (d, J = 2.3 Hz, 1H), 6.36 (dd, J = 8.1, 2.3 Hz, 1H), 5.07 (d, J = 9.3 Hz, 1H), 4.63 (s, 2H), 4.03 (h, J = 6.5 Hz, 1H), 2.88 (p, J = 8.0 Hz, 1H), 2.18 (s, 3H), 1.84 (dt, J = 12.6, 5.8 Hz, 2H), 1.78 (s, 3H), 1.75 - 1.46 (m, 9H), 1.36 (dq, J = 14.6, 7.8 Hz, 1H), 1.30 - 1.24 (m, 1H), 1.14 (dd, J = 9.8, 4.9 Hz, 1H), 0.89 (s, 3H).	372.2	E	
I-2378				A	A
I-2379				D	

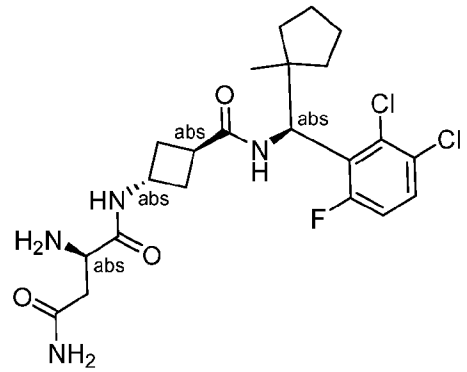
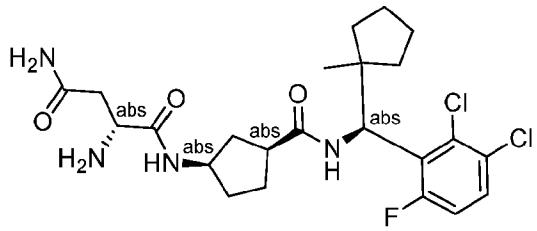
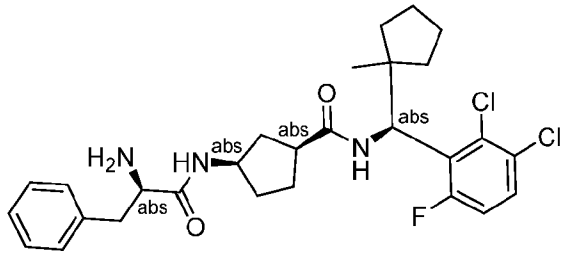
I-2380				C	
I-2381		(400 MHz, DMSO-d6) 8.58 (d, J = 7.0 Hz, 1H), 7.78 (d, J = 7.1 Hz, 1H), 7.62 (dd, J = 9.0, 5.3 Hz, 1H), 7.29 (dd, J = 10.3, 9.0 Hz, 1H), 5.05 (s, 1H), 4.01 (h, J = 6.4 Hz, 1H), 2.84 (p, J = 7.9, 7.3 Hz, 2H), 1.99- 1.84 (m, 3H), 1.77 (d, J = 8.0 Hz, 8H), 1.62 (ddd, J = 13.0, 8.9, 5.6 Hz, 1H), 1.53 (s, 1H), 1.50-1.27 (m, 2H).	475.05	A	B
I-2382		(400 MHz, DMSO-d6) 8.58 (d, J = 7.0 Hz, 1H), 7.77 (d, J = 7.0 Hz, 1H), 7.62 (dd, J = 9.0, 5.3 Hz, 1H), 7.29 (dd, J = 10.4, 9.0 Hz, 1H), 5.06 (d, J = 9.8 Hz, 1H), 3.97 (h, J = 6.6 Hz, 1H), 2.84 (p, J = 8.1, 7.6 Hz, 2H), 1.97 - 1.76 (m, 6H), 1.76 (s, 4H), 1.69 -1.48 (m, 4H), 1.45- 1.32 (m, 1H).	475.05	E	

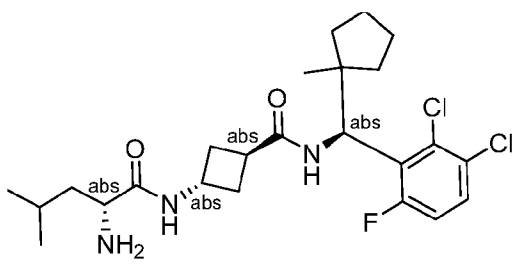
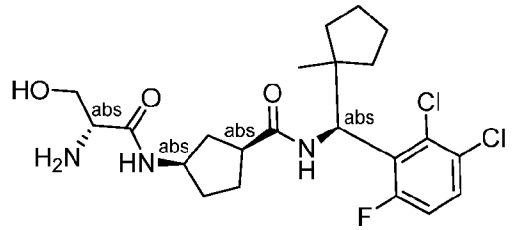
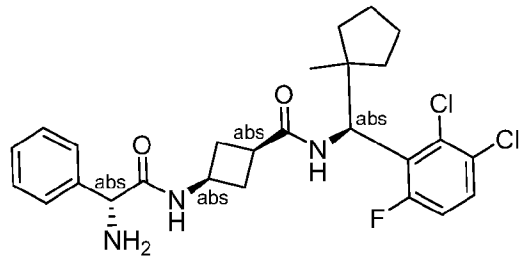
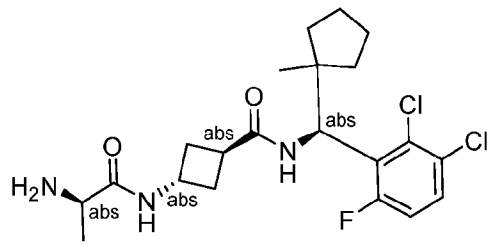
I-2383		(400 MHz, DMSO-d6) 8.45 (d, J = 7.4 Hz, 1H), 7.76 (d, J = 7.0 Hz, 1H), 7.65 (dd, J = 9.0, 5.2 Hz, 1H), 7.32 (dd, J = 10.3, 9.0 Hz, 1H), 5.17 (s, 1H), 3.99 (h, J = 6.5 Hz, 1H), 2.82 (q, J = 7.8 Hz, 1H), 2.70 (d, J = 11.8 Hz, 1H), 2.22 (s, 1H), 1.91 - 1.69 (m, 9H), 1.68 - 1.52 (m, 2H), 1.50 - 1.28 (m, 2H), 1.08 (t, J = 5.2 Hz, 1H).	475.05	A	A
I-2384		(400 MHz, DMSO-d6) 8.39- 8.24 (m, 1H), 7.76 (d, J = 6.3 Hz, 1H), 7.61 (ddd, J = 8.6, 5.2, 3.1 Hz, 1H), 7.36-7.24 (m, 1H), 5.60 (d, J = 16.1 Hz, 1H), 5.51 (q, J = 10.9, 10.4 Hz, 1H), 5.29-5.03 (m, 1H), 3.99 (dd, J = 13.9, 7.1 Hz, 1H), 3.32 (s, 4H), 2.85 (dt, J = 16.6, 8.2 Hz, 1H), 2.36 (d, J = 16.2 Hz, 1H), 2.22 (s, 1H), 2.12-1.79 (m, 3H), 1.76 (dd, J = 5.5, 1.2 Hz, 3H), 1.67- 1.55 (m, 1H), 1.36 (d, J = 6.6 Hz, 1H), 1.02- 0.89 (m, 2H).	441.15	B	
I-2385		(400 MHz, DMSO-d6) 8.26 (t, J = 6.8 Hz, 1H), 7.76 (dd, J = 6.9, 4.5 Hz, 1H), 7.59 (ddd, J = 8.7, 5.2, 3.1 Hz, 1H), 7.25 (dd, J = 10.2, 8.9 Hz, 1H), 4.95 (dt, J = 71.6, 9.0 Hz, 1H), 3.97 (dq, J = 12.2, 6.3 Hz, 1H), 2.97-2.62 (m, 1H), 1.83 (dd, J = 13.8, 6.5 Hz, 1H), 1.75 (d, J = 5.3 Hz, 4H), 1.72-1.29 (m, 4H), 1.24 (s, 2H), 1.13-0.96 (m, 1H), 0.85 (dq, J = 13.5, 5.4, 4.7 Hz, 2H), 0.81- 0.68 (m, 1H), 0.60-0.43 (m, 1H), 0.08--0.02 (m, 2H), -0.13 (q, J = 5.0 Hz, 1H).	441.15	B	

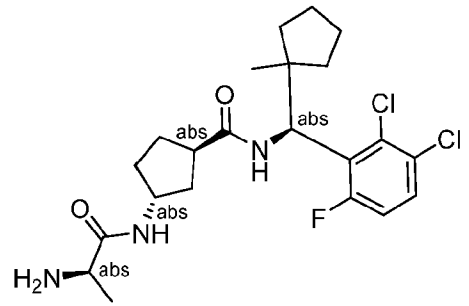
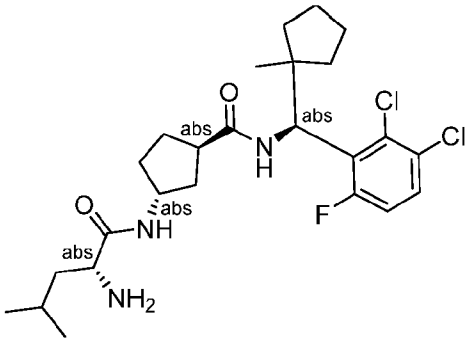
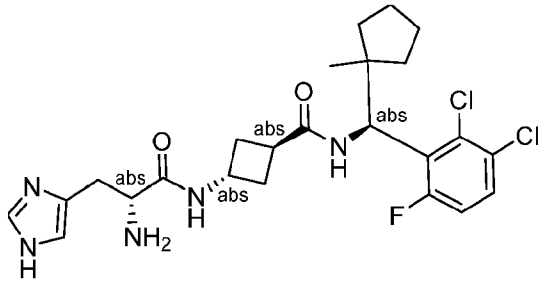
I-2386		(400 MHz, DMSO-d6) 8.62-8.06 (m, 1H), 7.75 (d, J = 6.8 Hz, 1H), 7.60 (ddd, J = 11.2, 8.9, 5.3 Hz, 1H), 7.26 (dddd, J = 13.5, 10.2, 7.9, 3.5 Hz, 1H), 5.8-5.43 (m, 1H), 5.21-4.78 (m, 1H), 3.97 (p, J = 6.6 Hz, 1H), 3.33 (s, 7H), 3.02- 2.61 (m, 2H), 2.42-1.80 (m, 1H), 1.75 (d, J = 1.3 Hz, 3H), 1.68-0.28 (m, 7H).	441.15	D	
I-2387		(400 MHz, DMSO-d6) 8.24 (t, J = 6.2 Hz, 1H), 7.75 (d, J = 6.2 Hz, 1H), 7.59 (ddt, J = 8.7, 5.9, 3.1 Hz, 1H), 7.24 (td, J = 9.3, 5.9 Hz, 1H), 5.11-4.75 (m, 1H), 3.96 (dt, J = 12.8, 7.2 Hz, 1H), 3.32 (s, 4H), 3.07-2.65 (m, 1H), 2.41-1.87 (m, 1H), 1.82 (s, 2H), 1.82-1.72 (m, 3H), 1.71-0.20 (m, 8H), 0.11 - -0.24 (m, 2H).	441.15	A	
I-2388		(400 MHz, DMSO-d6) 8.71 (d, J = 9.8 Hz, 1H), 7.90 (d, J = 6.7 Hz, 1H), 7.66 (dd, J = 9.0, 5.1 Hz, 1H), 7.32 (dd, J = 11.1, 9.0 Hz, 1H), 5.54 (d, J = 9.7 Hz, 1H), 3.97 (q, J = 5.7, 5.0 Hz, 1H), 3.85 (t, J = 7.6 Hz, 1H), 2.88 (dd, J = 11.1, 5.6 Hz, 1H), 2.78 (dd, J − 11.1, 4.4 Hz, 1H), 1.91 (ddd, J − 13.3, 8.7, 4.8 Hz, 1H), 1.78 (s, 4H), 1.69 - 1.44 (m, 7H), 1.36 (d, J = 11.9 Hz, 1H), 1.24 (q, J = 6.2, 4.8 Hz, 1H), 0.95 (d, J = 2.4 Hz, 3H).	430.15	B	
I-2389		(400 MHz, DMSO-d6) 8.38 (dd, J = 102.1, 8.8 Hz, 1H), 8.20 - 7.84 (m, 2H), 7.64 (ddd, J = 8.9, 5.1, 3.8 Hz, 1H), 7.29 (ddd, J = 10.7, 8.9, 2.0 Hz, 1H), 5.50 (dd, J = 20.6, 8.7 Hz, 1H), 4.72 - 4.48 (m, 1H), 4.24 (dq, J = 41.2, 5.8, 5.4 Hz, 1H), 3.57 (dd, J = 10.8, 5.6 Hz, 1H), 3.51 - 3.39 (m, 1H), 2.08 (dtt, J = 30.5, 12.8, 5.9 Hz, 2H), 1.80 (d, J = 1.1 Hz, 3H), 1.71 - 1.49 (m, 6H), 1.36 (d, J = 13.3 Hz,	458.15	B	

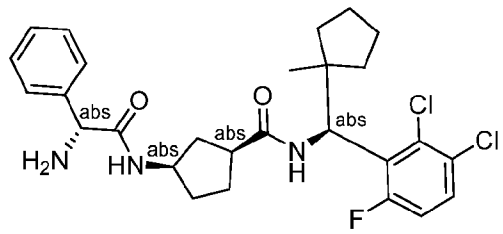
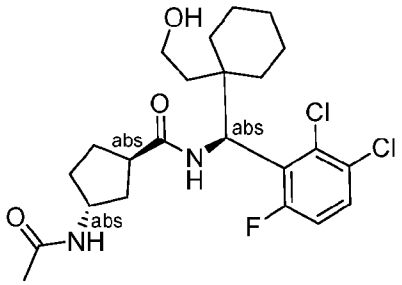
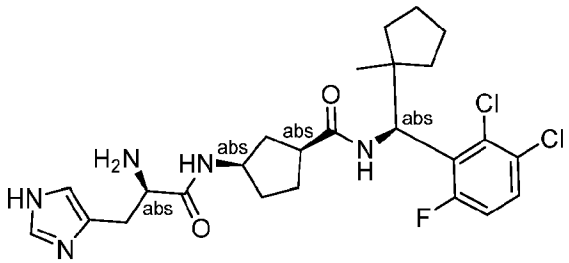
		1H), 1.25 (d, J = 9.2 Hz, 1H), 0.96 (dd, J = 10.4, 2.8 IIz, 3I1).			
I-2390		(400 MHz, DMSO-d6) 8.10 (d, J = 8.5 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.47 (d, J = 7.7 Hz, 1H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 5.45 (d, J = 8.5 Hz, 1H), 4.80 - 4.74 (m, 1H), 3.96 (p, J = 3.4 Hz, 1H), 3.92 - 3.82 (m, 1H), 3.12 (dd, J = 9.9, 4.4 Hz, 1H), 1.85 - 1.74 (m, 5H), 1.72 - 1.49 (m, 8H), 1.37 (s, 1H), 1.25 (d, J = 9.2 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	445.1	B	B
I-2391		(400 MHz, DMSO-d6) 8.10 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.49 (d, J = 7.4 Hz, 1H), 7.25 (dd, J = 10.7, 8.9 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.79 - 4.73 (m, 1H), 3.92 (q, J = 8.6, 7.8 Hz, 2H), 3.11 (dt, J = 13.1, 6.7 Hz, 1H), 1.81 (s, 5H), 1.70 - 1.51 (m, 8H), 1.37 (s, 1H), 1.26 (d, J = 7.6 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	445.2	A	A
I-2392		(400 MHz, DMSO-d6) 8.11 (d, J = 8.9 Hz, 1H), 7.76 (d, J − 6.9 Hz, 1H), 7.65 (dd, J − 9.0, 5.0 Hz, 1H), 7.30 (t, J = 9.8 Hz, 1H), 5.57 (d, J = 8.7 Hz, 1H), 5.19 - 5.10 (m, 1H), 5.00 (s, 1H), 3.98 (q, J = 6.5 Hz, 1H), 2.96 (q, J = 8.1 Hz, 1H), 2.24 - 1.98 (m, 2H), 1.98 - 1.78 (m, 3H), 1.76 (s, 3H), 1.70 (d, J = 6.6 Hz, 2H), 1.70 - 1.59 (m, 1H), 1.53 (s, 1H), 1.38 (dd, J = 13.4, 6.3 Hz, 1H), 1.07 (d, J = 2.9 Hz, 3H).	465.05	D	

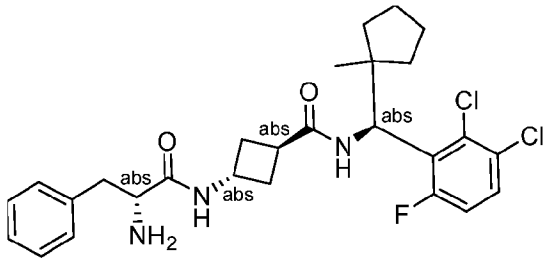
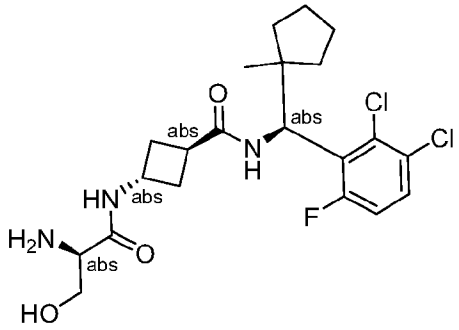
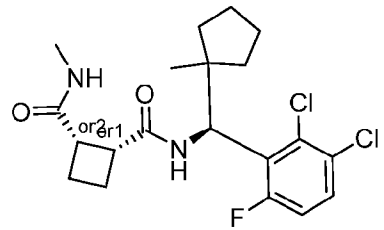
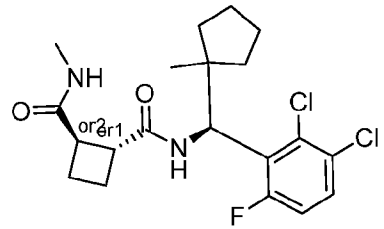
I-2393		(400 MHz, DMSO-d6) 8.10 (d, J = 8.8 Hz, 1H), 7.77 (d, J = 6.9 Hz, 1H), 7.65 (dd, J = 9.0, 5.1 Hz, 1H), 7.30 (dd, J = 10.8, 8.9 Hz, 1H), 5.57 (d, J = 8.8 Hz, 1H), 5.13 (dt, J = 9.2, 4.5 Hz, 1H), 5.02 (ddd, J = 18.6, 9.5, 5.6 Hz, 1H), 4.01 (h, J = 6.4 Hz, 1H), 2.97 (p, J = 7.8 Hz, 1H), 2.25 - 1.98 (m, 2H), 1.94 - 1.75 (m, 7H), 1.74 - 1.60 (m, 2H), 1.46 (dq, J = 12.0, 8.7, 7.5 Hz, 1H), 1.36 (dt, J = 13.0, 6.8 Hz, 1H), 1.07 (d, J = 2.8 Hz, 3H).	465.05	B	B
I-2394		(400 MHz, DMSO-d6) 8.29 (d, J = 8.5 Hz, 1H), 8.04 (d, J = 8.9 Hz, 1H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.27 (dd, J = 10.7, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.47 (dt, J = 18.2, 9.2 Hz, 1H), 3.14 (d, J = 9.2 Hz, 1H), 2.29 - 2.11 (m, 2H), 2.06 - 1.92 (m, 1H), 1.86 (s, 4H), 1.61 (s, 6H), 1.39 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	465.05	A	A
I-2395		(400 MHz, DMSO-d6) 8.29 (d, J = 8.5 Hz, 1H), 8.02 (d, J = 8.8 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 5.47 (d, J = 8.4 Hz, 1H), 4.48 - 4.08 (m, 1H), 3.16 (dd, J = 9.8, 5.2 Hz, 1H), 2.32 (tt, J = 16.7, 7.4 Hz, 2H), 1.83 (s, 3H), 1.83 - 1.71 (m, 2H), 1.59 (d, J = 8.9 Hz, 6H), 1.38 (d, J = 9.7 Hz, 1H), 1.28 (d, J = 8.0 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	465.05	A	B

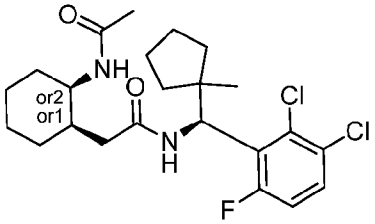
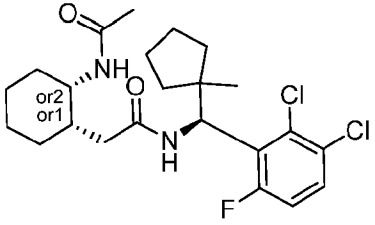
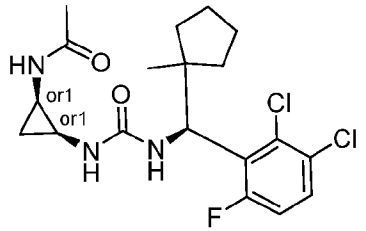
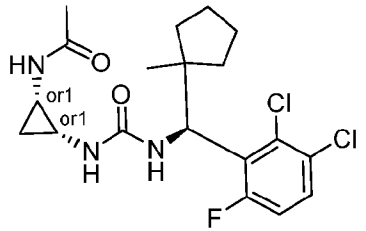
I-2396		(400 MHz, DMSO-d6) 8.06 (dd, J = 8.3, 5.3 Hz, 2H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.36 (s, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 6.82 (s, 1H), 5.52 (d, J − 8.5 Hz, 1H), 4.26 (h, J − 7.9 Hz, 1H), 3.38 (dd, J = 9.1, 4.1 Hz, 1H), 3.07 (q, J = 8.6, 6.5 Hz, 1H), 2.36 (dd, J = 14.8, 4.0 Hz, 1H), 2.25 (tt, J = 8.1, 4.3 Hz, 1H), 2.20 - 2.03 (m, 4H), 1.94 (s, 2H), 1.59 (d, J = 6.7 Hz, 6H), 1.36 (d, J = 10.7 Hz, 1H), 1.27 (d, J = 8.3 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	487.2	A	B
I-2397		(400 MHz, DMSO-d6) 8.07 (d, J = 8.7 Hz, 1H), 7.75 (d, J = 7.3 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.38 (s, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 6.83 (s, 1H), 5.49 (d, J = 8.6 Hz, 1H), 4.03 (q, J = 6.7 Hz, 1H), 3.42 (dd, J = 9.2, 4.0 Hz, 1H), 2.99 (p, J = 7.7 Hz, 1H), 2.37 (dd, J = 14.9, 4.0 Hz, 1H), 2.14 (dd, J = 14.9, 9.2 Hz, 1H), 2.03 - 1.70 (m, 5H), 1.60 (s, 7H), 1.50 - 1.34 (m, 3H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	501.2	A	B
I-2398		(400 MHz, DMSO-d6) 8.03 (d, J = 8.6 Hz, 1H), 7.68 - 7.58 (m, 2H), 7.33 - 7.23 (m, 3H), 7.19 (d, J = 7.2 Hz, 3H), 5.49 (d, J = 8.5 Hz, 1H), 4.02 (h, J = 6.7 Hz, 1H), 3.00 - 2.83 (m, 2H), 2.62 (dd, J = 13.3, 7.9 Hz, 2H), 1.92 - 1.70 (m, 5H), 1.66 - 1.46 (m, 7H), 1.35 (ddt, J = 38.9, 19.5, 6.1 Hz, 4H), 0.97 (d, J = 2.8 Hz, 3H).	534.1	B	

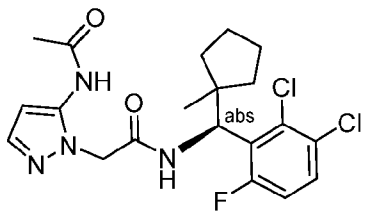
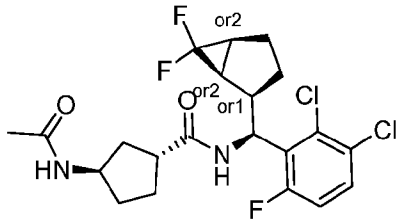
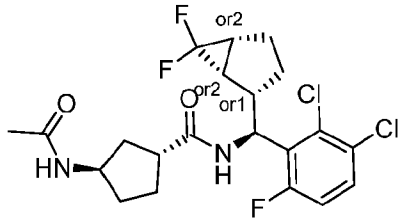
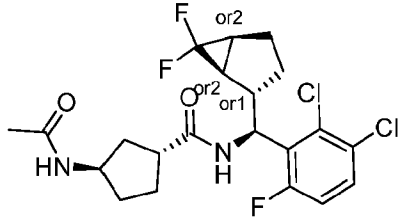
I-2399		(400 MHz, DMSO-d6) 8.04 (dd, J = 10.3, 8.3 Hz, 2H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.53 (d, J = 8.5 Hz, 1H), 4.26 (h, J = 8.0 Hz, 1H), 3.08 (ddt, J = 14.2, 8.9, 4.4 Hz, 2H), 2.27 (ddt, J = 11.6, 7.4, 3.4 Hz, 1H), 2.18 - 2.02 (m, 3H), 1.74 (s, 2H), 1.70 - 1.50 (m, 7H), 1.32 (ddt, J = 27.8, 19.4, 4.4 Hz, 3H), 1.18 (ddd, J = 13.3, 8.9, 5.7 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H), 0.85 (dd, J = 13.7, 6.6 Hz, 6H).	486.1	B	C
I-2400		(400 MHz, DMSO-d6) 8.07 (d, J = 8.7 Hz, 1H), 7.70 (d, J = 7.4 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.49 (d, J = 8.5 Hz, 1H), 4.70 (t, J = 5.1 Hz, 1H), 4.04 (h, J = 6.7 Hz, 1H), 3.49 (dt, J = 9.5, 4.3 Hz, 1H), 3.41-3.34 (m, 1H), 3.14 (dd, J = 6.4, 4.7 Hz, 1H), 3.00 (p, J = 7.6 Hz, 1H), 2.00 - 1.72 (m, 5H), 1.69 - 1.52 (m, 7H), 1.51 - 1.34 (m, 3H), 1.31 - 1.23 (m, 1H), 0.97 (d, J = 2.8 Hz, 3H).	474.15	A	B
I-2401		(400 MHz, DMSO-d6) 8.27 (d, J = 7.9 Hz, 1H), 8.05 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.47 (s, 1H), 7.40-7.32 (m, 1H), 7.35- 7.18 (m, 4H), 5.51 (d, J = 8.6 Hz, 1H), 4.32-4.17 (m, 2H), 3.08 (tt, J = 8.4, 4.2 Hz, 1H), 2.30 (s, 2H), 2.23 (ddt, J = 8.0, 6.0, 2.6 Hz, 1H), 2.18-2.03 (m, 3H), 1.61- 1.51 (m, 6H), 1.35 (d, J = 10.7 Hz, 1H), 1.29-1.22 (m, 1H), 0.95 (d, J = 2.8 Hz, 3H).	506.2	A	B
I-2402		(400 MHz, DMSO-d6) 8.05 (d, J = 8.6 Hz, 1H), 7.97 (d, J = 8.0 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.7, 8.9 Hz, 1H), 5.53 (d, J = 8.5 Hz, 1H), 4.27 (q, J = 8.0 Hz, 1H), 3.21 - 3.03 (m, 2H), 2.31 - 2.21 (m, 1H), 2.10 (tdd, J = 19.8, 14.4, 8.9 Hz, 3H), 1.88 (s, 2H), 1.59 (d, J = 5.9 Hz, 6H), 1.37 (t, J = 6.8 Hz, 1H), 1.26 (s, 1H), 1.08 (d, J = 6.8 Hz, 3H), 0.96 (d, J = 2.8 Hz, 3H).	444.2	A	B

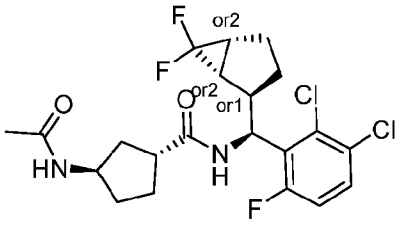
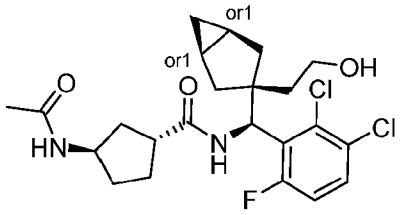
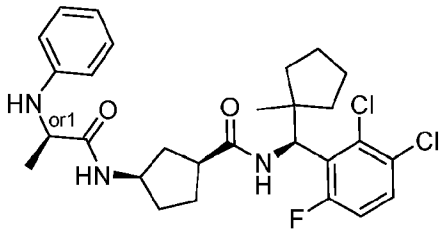
I-2403		(400 MHz, DMSO-d6) 8.07 (d, J = 8.6 Hz, 1H), 7.67 (d, J = 7.3 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.49 (d, J = 8.5 Hz, 1H), 4.03 (h, J = 6.7 Hz, 1H), 3.20 (q, J = 6.8 Hz, 1H), 3.00 (p, J = 7.7 Hz, 1H), 2.00 (s, 2H), 1.89 (dt, J = 13.7, 7.2 Hz, 1H), 1.88-1.74 (m, 2H), 1.69-1.52 (m, 7H), 1.49-1.36 (m, 2H), 1.39-1.33 (m, 1H), 1.30-1.23 (m, 1H), 1.10 (d, J = 6.8 Hz, 3H), 0.97 (d, J = 2.8 Hz, 3H).	458.15	A	B
I-2404		(400 MHz, DMSO-d6) 8.06 (d, J = 8.6 Hz, 1H), 7.71 (d, J = 7.2 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.02 (h, J = 6.6 Hz, 1H), 3.08 (dd, J = 8.9, 5.3 Hz, 1H), 2.99 (p, J = 7.5 Hz, 1H), 2.00 - 1.75 (m, 5H), 1.75 - 1.50 (m, 8H), 1.38 (tdd, J = 13.6, 9.4, 6.4 Hz, 4H), 1.31 - 1.15 (m, 2H), 0.97 (d, J = 2.8 Hz, 3H), 0.86 (dd, J = 13.4, 6.6 Hz, 6H).	500.1	B	
I-2405		(400 MHz, Chloroform-d) 7.81 (s, 1H), 7.57 (s, 1H), 7.37 (dd, J = 8.9, 5.3 Hz, 1H), 7.02 - 6.93 (m, 1H), 6.85 (s, 1H), 6.39 (s, 1H), 5.85 (d, J = 9.8 Hz, 1H), 4.44 (q, J = 7.6 Hz, 1H), 3.64 (s, 1H), 3.17-2.88 (m, 3H), 2.63 (s, 1H), 2.53 (s, 1H), 2.23 (q, J = 9.7 Hz, 1H), 2.11 (q, J = 9.7 Hz, 1H), 1.68 (s, 5H), 1.58 (s, 1H), 1.44 (t, J = 7.9 Hz, 1H), 1.35-1.23 (m, 1H), 1.00 (d, J = 2.9 Hz, 3H).	510.3	A	C

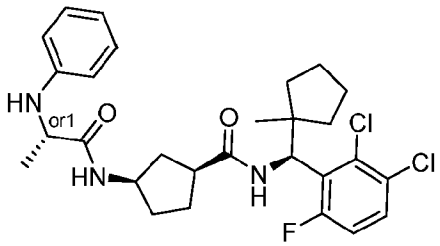
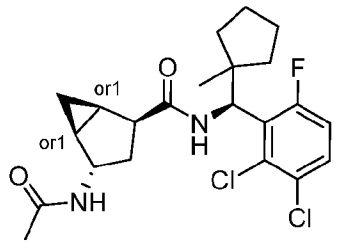
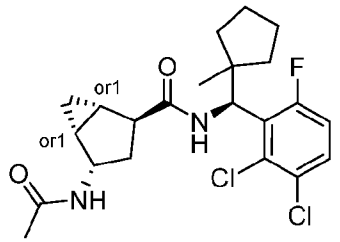
I-2406		(400 MHz, DMSO-d6) 8.39 (d, J = 7.1 Hz, 1H), 8.05 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.46 (d, J = 7.0 Hz, 2H), 7.43 - 7.33 (m, 3H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 6.62 (s, 2H), 5.45 (d, J = 8.5 Hz, 1H), 4.64 (s, 1H), 4.04 (q, J = 6.9 Hz, 1H), 2.98 (d, J = 7.9 Hz, 1H), 1.95 - 1.73 (m, 3H), 1.64 - 1.32 (m, 10H), 1.25 (s, 1H), 0.95 (d, J = 2.8 Hz, 3H).	518.15	A	B
I-2407		(400 MHz, DMSO-d6)8.16 (d, J = 8.8 Hz, 1H), 7.78 (d, J = 7.0 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 5.41 (d, J = 8.7 Hz, 1H), 4.41 (t, J = 4.7 Hz, 1H), 4.00 (q, J = 6.6 Hz, 1H), 3.44 (ddd, J = 16.9, 10.9, 5.6 Hz, 2H) ,2.94 (p, J = 7.9 Hz, 1H), 1.95-1.88 (m, 4H), 1.87 (s, 3H), 1.83 (d, J = 6.9 Hz, 1H), 1.77 (d, J = 1.7 Hz, 1H), 1.62 (ddd, J = 13.3, 8.8, 5.3 Hz, 2H), 1.59-1.50 (m, 4H), 1.46-1.29 (m, 3H), 1.06 (dt, J = 12.8, 7.2 Hz, 1H), 0.91 (d, J = 12.9 Hz, 1H), 0.79 (q, J = 12.4, 10.1 Hz, 1H).	473.1	A	B
I-2408		(400 MHz, Chloroform-d) 7.55 (d, J = 28.8 Hz, 2H), 7.37 (dd, J = 8.9, 5.3 Hz, 1H), 6.95 (dd, J = 11.0, 8.9 Hz, 1H), 6.88 (s, 1H), 6.42 (s, 1H), 5.82 (d, J = 9.8 Hz, 1H), 4.27 (s, 1H), 3.66 (s, 1H), 3.08 (s, 1H), 2.98 (d, J = 14.1 Hz, 1H), 2.83 - 2.67 (m, 1H), 2.28 - 2.14 (m, 1H), 2.07 (s, 1H), 1.97 - 1.75 (m, 3H), 1.68 (s, 5H), 1.62 - 1.51 (m, 1H), 1.50 - 1.36 (m, 2H), 1.28 (d, J = 4.7 Hz, 1H), 1.01 (d, J = 2.8 Hz, 3H).	524.25	A	D

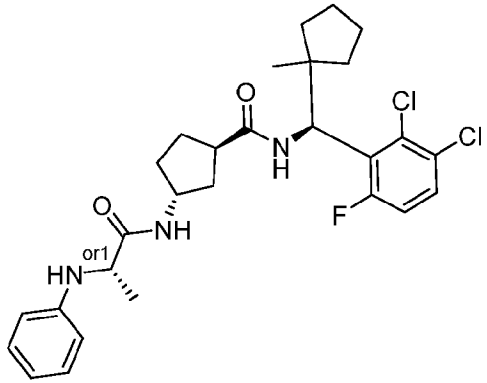
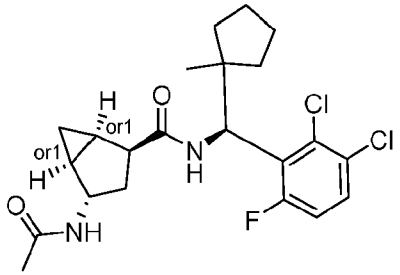
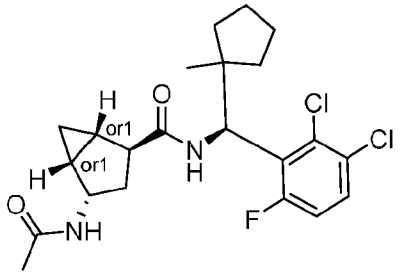
I-2409		(400 MHz, DMSO-d6) 8.04 (d, J = 8.6 Hz, 1H), 7.98 (d, J = 7.9 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.31 - 7.22 (m, 3H), 7.21 - 7.15 (m, 3H), 5.53 (d, J = 8.5 Hz, 1H), 4.27 (h, J = 8.0 Hz, 1H), 3.29 (dd, J = 8.0, 5.4 Hz, 1H), 3.04 (tt, J = 9.1, 3.5 Hz, 1H), 2.86 (dd, J = 13.2, 5.4 Hz, 1H), 2.59 (dd, J = 13.3, 7.9 Hz, 1H), 2.22 (ddt, J = 11.5, 7.6, 3.6 Hz, 1H), 2.15 - 1.96 (m, 3H), 1.79 (s, 2H), 1.60 (s, 6H), 1.43 - 1.32 (m, 1H), 1.31 - 1.21 (m, 1H), 0.96 (d, J = 2.8 Hz, 3H).	520.1	A	C
I-2410		(400 MHz, DMSO-d6) 8.04 (t, J = 8.7 Hz, 2H), 7.61 (dd, J = 9.0, 4.9 Hz, 1H), 7.25 (t, J = 9.8 Hz, 1H), 5.52 (d, J = 8.5 Hz, 1H), 4.70 (s, 1H), 4.28 (q, J = 8.1 Hz, 1H), 3.46 (dd, J = 10.5, 4.7 Hz, 1H), 3.40 - 3.31 (m, 1H), 3.15 - 3.05 (m, 2H), 2.25 (d, J = 9.2 Hz, 1H), 2.16 (t, J = 9.3 Hz, 1H), 2.09 (t, J = 7.8 Hz, 2H), 1.99 (s, 2H), 1.60 (s, 6H), 1.36 (d, J = 9.3 Hz, 1H), 1.30 - 1.24 (m, 1H), 0.96 (d, J = 2.9 Hz, 3H).	460.2	A	B
I-2411		(400 MHz, DMSO-d6) 8.37 (d, J = 9.0 Hz, 1H), 7.68 (d, J = 4.8 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 5.54 (d, J = 8.9 Hz, 1H), 3.29 (d, J = 8.3 Hz, 1H), 3.00 (q, J = 8.8, 8.2 Hz, 1H), 2.56 (d, J = 4.6 Hz, 3H), 1.99-1.85 (m, 4H), 1.60 (s, 6H), 1.36 (d, J = 10.8 Hz, 1H), 1.25 (s, 1H), 0.95 (d, J = 2.7 Hz, 3H).	415	E	
I-2412		(400 MHz, DMSO-d6)8.34 (d, J = 8.8 Hz, 1H), 7.74 (q, J = 4.5 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.50 (d, J = 8.8 Hz, 1H), 3.22 (q, J = 9.0 Hz, 1H), 3.05 (q, J = 9.0 Hz, 1H), 2.59 (d, J = 4.6 Hz, 3H), 1.99-1.75 (m, 4H), 1.59 (d, J = 6.5 Hz, 6H), 1.38-1.31 (m, 1H), 1.24 (d, J = 7.8 Hz, 1H), 0.95 (d, J = 2.8 Hz, 3H).	415.05	E	

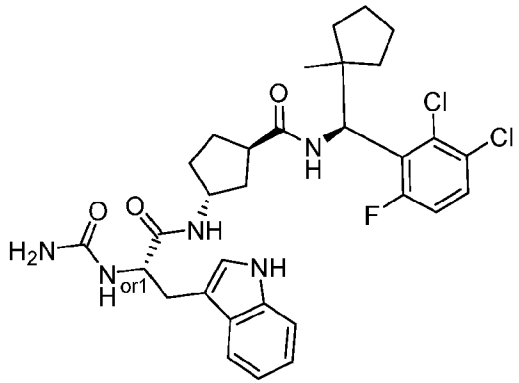
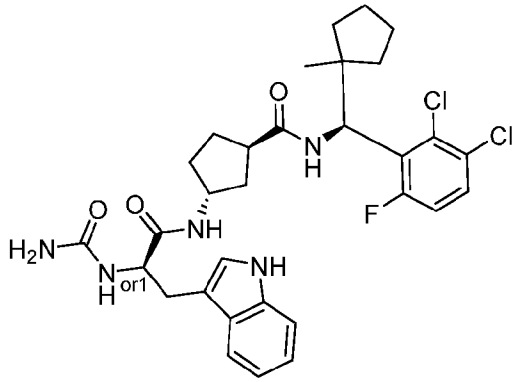
I-2413		(400 MHz, DMSO-d6) 8.26 (d, J = 8.5 Hz, 1H), 7.73 (d, J = 8.9 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.46 (d, J = 8.4 Hz, 1H), 3.36 (d, J = 10.5 Hz, 1H), 2.23 (dd, J = 14.0, 4.2 Hz, 1H), 2.05 (dd, J = 14.0, 9.5 Hz, 1H), 1.81 (s, 3H), 1.60 (t, J = 5.0 Hz, 9H), 1.57-1.42 (m, 1H), 1.38 (s, 1H), 1.29 (t, J = 10.8 Hz, 2H), 1.13 (q, J = 12.2, 11.5 Hz, 2H), 0.97 (d, J = 2.6 Hz, 4H), 0.85- 0.71 (m, 1H).	457.1	D	
I-2414		(400 MHz, DMSO-d6) 8.20 (d, J = 8.8 Hz, 1H), 7.70-7.57 (m, 2H), 7.25 (dd, J = 10.7, 8.9 Hz, 1H), 5.53 (d, J = 8.6 Hz, 1H), 2.55 (s, 1H), 2.20-2.02 (m, 2H), 1.72 (s, 3H), 1.67 (s, 3H), 1.59 (s, 10H), 1.37 (s, 1H), 1.27 (d, J = 7.4 Hz, 2H), 1.08 (d, J = 12.5 Hz, 1H), 0.96 (d, J = 2.7 Hz, 3H).	457.1	D	
I-2415		(400 MHz, DMSO-d6) 7.83 (d, J = 4.1 Hz, 1H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.28 (dd, J = 10.9, 9.0 Hz, 1H), 6.66 (d, J = 9.4 Hz, 1H), 6.05 (d, J = 2.7 Hz, 1H), 5.45 (d, J = 9.5 Hz, 1H), 2.61 (d, J = 7.0 Hz, 1H), 2.38 (tt, J = 7.9, 3.5 Hz, 1H), 1.83 (s, 3H), 1.61 (d, J = 9.9 Hz, 1H), 1.60 (s, 5H), 1.30 (d, J = 11.8 Hz, 1H), 1.20 (d, J = 8.3 Hz, 1H), 0.96 (td, J = 7.9, 6.1 Hz, 1H), 0.91 (d, J = 2.6 Hz, 3H), 0.43 (q, J = 5.3 Hz, 1H).	416.05	D	
I-2416		(400 MHz, DMSO-d6) 7.76 (d, J = 4.3 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 6.68 (d, J = 9.8 Hz, 1H), 6.08 (d, J = 2.5 Hz, 1H), 5.53 (d, J = 9.7 Hz, 1H), 2.65 (s, 1H), 2.46-2.38 (m, 1H), 1.84 (s, 3H), 1.65-1.54 (m, 6H), 1.31 (s, 1H), 1.20 (d, J = 8.4 Hz, 1H), 0.98- 0.87 (m, 4H), 0.38 (q, J = 5.3 Hz, 1H).	416.05	C	

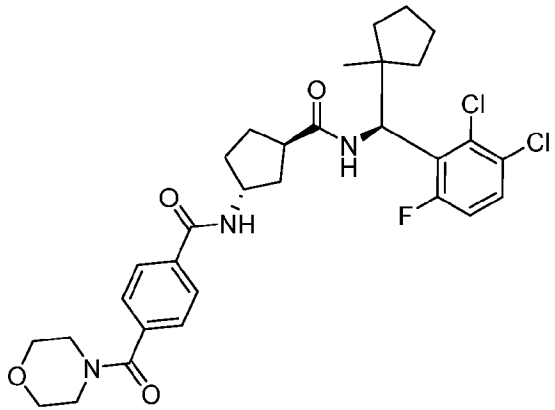
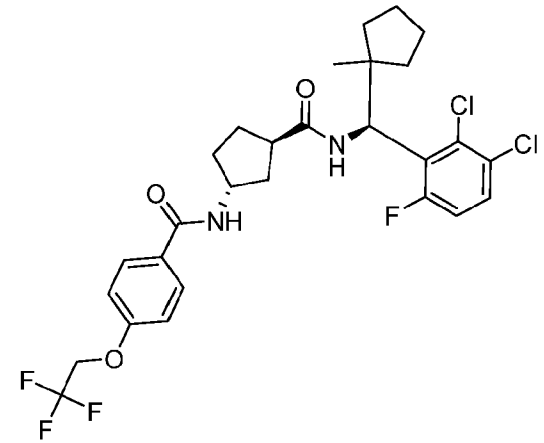
I-2417		(400 MHz, DMSO-d6) 9.92 (s, 1H), 8.19 (d, J = 9.1 Hz, 1H), 7.64 (dd, J = 9.0, 5.1 Hz, 1H), 7.36 (d, J = 1.9 Hz, 1H), 7.30 (dd, J = 10.8, 9.0 Hz, 1H), 6.23 (d, J = 1.9 Hz, 1H), 5.55 (d, J = 8.9 Hz, 1H), 5.00 - 4.66 (m, 2H), 2.00 (s, 3H), 1.59 (d, J = 9.3 Hz, 6H), 1.42 - 1.31 (m, 1H), 1.24 (s, 1H), 0.94 (d, J = 2.7 Hz, 3H).	441.15	D	
I-2418		(400 MHz, DMSO-d6) 8.43 (d, J = 7.5 Hz, 1H), 7.77 (d, J = 6.9 Hz, 1H), 7.65 (dd, J = 9.0, 5.2 Hz, 1H), 7.31 (dd, J = 10.3, 9.0 Hz, 1H), 5.11 (dd, J = 11.4, 7.4 Hz, 1H), 3.97 (q, J = 6.5 Hz, 1H), 2.84 (dq, J = 23.9, 8.2 Hz, 2H), 2.19 (dt, J = 14.5, 7.3 Hz, 1H), 2.04 (s, 1H), 1.99 - 1.81 (m, 3H), 1.75 (m, 4H), 1.69 - 1.48 (m, 4H), 1.35 (tt, J = 16.5, 9.0 Hz, 2H).	463.15	D	
I-2419		(400 MHz, DMSO-d6) 8.62 (d, J = 7.3 Hz, 1H), 7.78 (d, J = 7.0 Hz, 1H), 7.63 (dd, J = 9.0, 5.2 Hz, 1H), 7.29 (dd, J = 10.3, 8.9 Hz, 1H), 5.10 (dd, J = 11.9, 7.2 Hz, 1H), 4.01 (p, J = 6.5 Hz, 1H), 2.87 (dt, J = 23.1, 9.7 Hz, 2H), 2.25 (td, J = 8.5, 4.2 Hz, 1H), 2.20 - 2.03 (m, 2H), 1.98 - 1.72 (m, 7H), 1.62 (ddd, J = 12.9, 8.8, 5.5 Hz, 1H), 1.53 - 1.29 (m, 3H), 1.12 (d, J = 11.5 Hz, 1H).	463.15	A	B
I-2420		(400 MHz, DMSO-d6) 8.43 (d, J = 7.5 Hz, 1H), 7.78 (d, J = 7.0 Hz, 1H), 7.64 (dd, J = 9.0, 5.2 Hz, 1H), 7.31 (dd, J = 10.3, 9.0 Hz, 1H), 5.11 (dd, J = 11.5, 7.5 Hz, 1H), 4.00 (p, J = 6.5 Hz, 1H), 2.85 (dt, J = 27.8, 8.7 Hz, 2H), 2.19 (ddd, J = 14.3, 8.3, 5.5 Hz, 1H), 2.09 - 1.99 (m, 1H), 1.97 - 1.80 (m, 2H), 1.76 (m, 6H), 1.67 - 1.55 (m, 2H), 1.51 - 1.27 (m, 3H).	463.15	C	

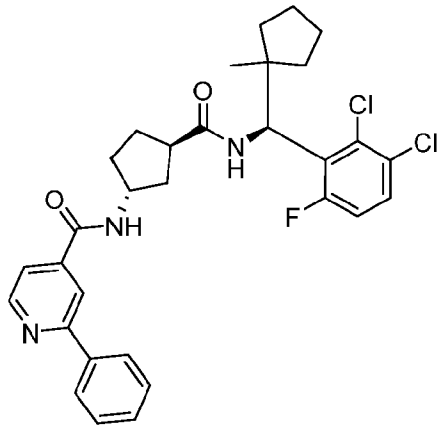
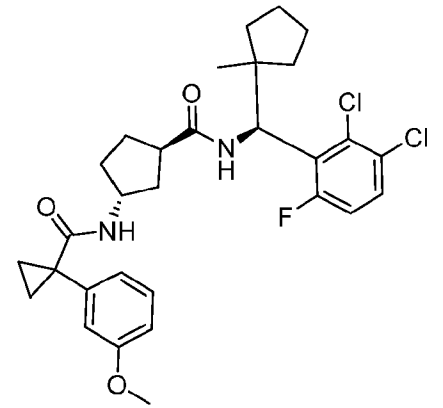
I-2421		(400 MHz, DMSO-d6) 8.49 (dd, J = 104.0, 8.1 Hz, 1H), 7.79 (dd, J = 15.0, 7.0 Hz, 1H), 7.72 - 7.59 (m, 1H), 7.29 (dd, J = 10.3, 9.0 Hz, 1H), 5.22 - 4.88 (m, 1H), 3.99 (dq, J = 26.3, 6.5 Hz, 1H), 2.83 (tq, J = 23.1, 8.8, 7.8 Hz, 2H), 2.25 (ddd, J = 14.4, 8.5, 5.6 Hz, 1H), 2.20 - 2.01 (m, 2H), 1.87 (dddd, J = 22.8, 12.7, 10.1, 6.9 Hz, 3H), 1.76 (d, J = 7.1 Hz, 3H), 1.65 (ddt, J = 15.2, 12.3, 7.5 Hz, 2H), 1.54 (ddd, J = 13.3, 8.8, 5.1 Hz, 1H), 1.49 - 1.31 (m, 2H), 1.11 (t, J = 11.6 Hz, 1H).	463.15	D	
I-2422		(400 MHz, DMSO-d6) 8.00 (d, J = 8.8 Hz, 1H), 7.77 (d, J = 6.9 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.26 (dd, J = 10.7, 9.0 Hz, 1H), 5.40 (d, J = 8.7 Hz, 1H), 4.41 (t, J = 4.8 Hz, 1H), 4.00 (q, J = 6.6 Hz, 1H), 3.52 (dp, J = 13.5, 5.3 Hz, 2H), 2.95 (q, J = 7.8 Hz, 1H), 2.01 - 1.73 (m, 8H), 1.71 - 1.57 (m, 3H), 1.50 - 1.30 (m, 3H), 1.25 (s, 2H), 1.10 (d, J = 13.6 Hz, 1H), 0.76 (td, J = 8.0, 4.1 Hz, 1H), -0.26 (q, J = 3.9 Hz, 1H).	471.2	D	
I-2423		(400 MHz, DMSO-d6) 8.04 (d, J = 8.6 Hz, 1H), 7.78 (d, J = 7.2 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 7.07 (t, J = 7.8 Hz, 2H), 6.58 - 6.51 (m, 3H), 5.68 (d, J = 7.3 Hz, 1H), 5.47 (d, J = 8.5 Hz, 1H), 4.02 (h, J = 6.7 Hz, 1H), 3.77 (p, J = 6.9 Hz, 1H), 2.97 (p, J = 7.5 Hz, 1H), 1.89 (dt, J = 13.7, 7.2 Hz, 1H), 1.77 (dddt, J = 15.4, 11.5, 6.9, 3.5 Hz, 2H), 1.60 (dt, J = 7.9, 4.4 Hz, 7H), 1.46 - 1.20 (m, 7H), 0.96 (d, J = 2.8 Hz, 3H).	534.3	B	

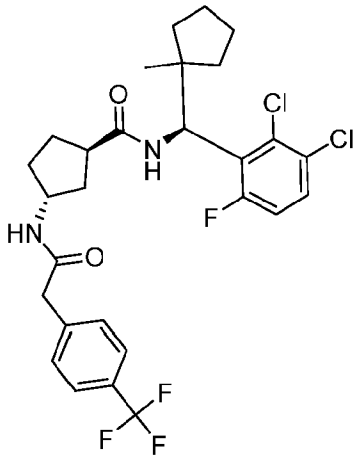
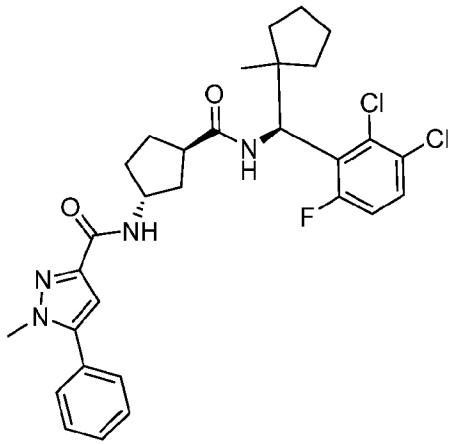
I-2424		(400 MHz, DMSO-d6) 8.00 (d, J = 9.0 Hz, 1H), 7.79 (d, J = 7.2 Hz, 1H), 7.60 (dd, J = 8.9, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 7.06 (t, J = 7.8 Hz, 2H), 6.55 (dt, J = 6.9, 2.8 Hz, 3H), 5.68 (d, J = 7.4 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.02 (h, J = 6.5 Hz, 1H), 3.83 - 3.41 (m, 1H), 2.95 (p, J = 7.6 Hz, 1H), 1.89 (dt, J = 13.6, 7.1 Hz, 1H), 1.84 - 1.71 (m, 2H), 1.66 - 1.49 (m, 7H), 1.39 (tq, J = 13.0, 5.2, 4.2 Hz, 3H), 1.28 (d, J = 6.8 Hz, 4H), 1.09 - 0.82 (m, 3H).	534.25	B	
I-2425		(400 MHz, DMSO-d6) 8.49 (d, J = 8.5 Hz, 1H), 7.71-7.58 (m, 2H), 7.25 (dd, J = 10.7, 9.0 Hz, 1H), 5.52 (d, J = 8.4 Hz, 1H), 4.07 (t, J = 7.5 Hz, 1H), 3.02 (d, J = 8.1 Hz, 1H), 1.71-1.59 (m, 10H), 1.48-1.40 (m, 2H), 1.31 (dd, J = 13.5, 6.7 Hz, 2H), 1.24 (dt, J = 9.0, 4.6 Hz, 1H), 1.00 (d, J = 2.8 Hz, 3H), 0.46 (td, J = 8.2, 5.2 Hz, 1H), 0.10 (q, J = 4.3 Hz, 1H).	441.05	A	B
I-2426		(400 MHz, DMSO-d6) 8.47 (d, J = 8.7 Hz, 1H), 7.83 (d, J = 8.5 Hz, 1H), 7.64 (dd, J = 9.0, 5.0 Hz, 1H), 7.30 (dd, J = 10.8, 8.9 Hz, 1H), 5.55 (d, J = 8.7 Hz, 1H), 4.16-4.08 (m, 1H), 3.08 (d, J = 8.1 Hz, 1H), 1.74 (s, 3H), 1.73-1.66 (m, 1H), 1.63-1.52 (m, 6H), 1.48 (d, J = 14.6 Hz, 1H), 1.42-1.35 (m, 1H), 1.32-1.25 (m, 1H), 1.20 (ddt, J = 12.4, 8.8, 4.9 Hz, 2H), 0.98 (d, J = 2.8 Hz, 3H), 0.42 (td, J = 8.2, 5.2 Hz, 1H), 0.09 (q, J = 4.3 Hz, 1H).	441.05	C	

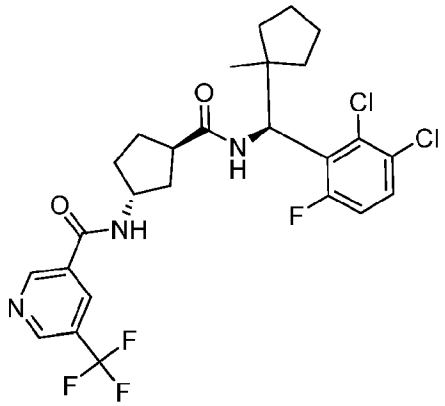
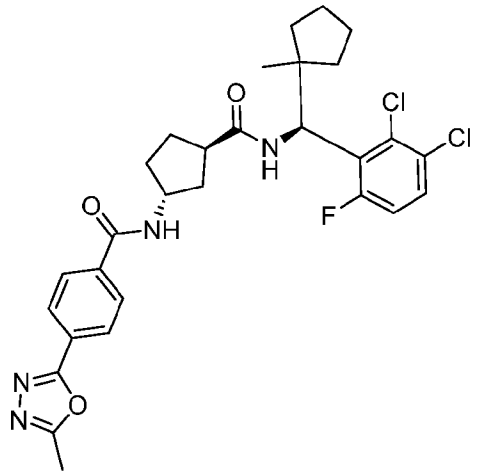
I-2427		1H NMR (400 MHz, DMSO-d6) 8.00 (d, J = 9.0 Hz, 1H), 7.79 (d, J = 7.2 Hz, 1H), 7.60 (dd, J = 8.9, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 7.06 (t, J = 7.8 Hz, 2H), 6.55 (dt, J = 6.9, 2.8 Hz, 3H), 5.68 (d, J = 7.4 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.02 (h, J = 6.5 Hz, 1H), 3.83 - 3.41 (m, 1H), 2.95 (p, J = 7.6 Hz, 1H), 1.89 (dt, J = 13.6, 7.1 Hz, 1H), 1.84 - 1.71 (m, 2H), 1.66 - 1.49 (m, 7H), 1.39 (tq, J = 13.0, 5.2, 4.2 Hz, 3H), 1.28 (d, J = 6.8 Hz, 4H), 1.09 - 0.82 (m, 3H).	534.25	B	
I-2428		1H NMR (400 MHz, DMSO-d6) 8.49 (d, J = 8.5 Hz, 1H), 7.71-7.58 (m, 2H), 7.25 (dd, J = 10.7, 9.0 Hz, 1H), 5.52 (d, J = 8.4 Hz, 1H), 4.07 (t, J = 7.5 Hz, 1H), 3.02 (d, J = 8.1 Hz, 1H), 1.71-1.59 (m, 10H), 1.48-1.40 (m, 2H), 1.31 (dd, J = 13.5, 6.7 Hz, 2H), 1.24 (dt, J = 9.0, 4.6 Hz, 1H), 1.00 (d, J = 2.8 Hz, 3H), 0.46 (td, J = 8.2, 5.2 Hz, 1H), 0.10 (q, J = 4.3 Hz, 1H).	441.05	A	B
I-2429		1H NMR (400 MHz, DMSO-d6) 8.47 (d, J = 8.7 Hz, 1H), 7.83 (d, J = 8.5 Hz, 1H), 7.64 (dd, J = 9.0, 5.0 Hz, 1H), 7.30 (dd, J = 10.8, 8.9 Hz, 1H), 5.55 (d, J = 8.7 Hz, 1H), 4.16-4.08 (m, 1H), 3.08 (d, J = 8.1 Hz, 1H), 1.74 (s, 3H), 1.73-1.66 (m, 1H), 1.63-1.52 (m, 6H), 1.48 (d, J = 14.6 Hz, 1H), 1.42-1.35 (m, 1H), 1.32-1.25 (m, 1H), 1.20 (ddt, J = 12.4, 8.8, 4.9 Hz, 2H), 0.98 (d, J = 2.8 Hz, 3H), 0.42 (td, J = 8.2, 5.2 Hz, 1H), 0.09 (q, J = 4.3 Hz, 1H).	441.05	C	

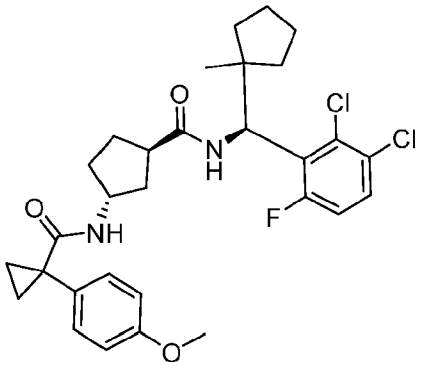
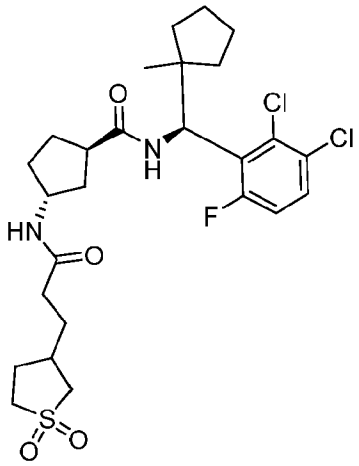
I-2430		1H NMR (400 MHz, DMSO-d6) 10.78 (d, J = 2.5 Hz, 1H), 8.03 (d, J = 8.6 Hz, 1H), 7.80 (d, J = 7.1 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.54 (d, J = 7.9 Hz, 1H), 7.35 - 7.18 (m, 2H), 7.10 - 7.01 (m, 2H), 6.99 - 6.91 (m, 1H), 6.13 (s, 1H), 5.48 (d, J = 8.5 Hz, 3H), 4.38 - 4.29 (m, 1H), 3.98 (p, J = 6.7 Hz, 1H), 2.93 (qd, J = 14.4, 6.7 Hz, 3H), 1.86 (dt, J = 13.7, 7.2 Hz, 1H), 1.70 (dt, J = 10.1, 5.1 Hz, 2H), 1.59 (d, J = 7.1 Hz, 7H), 1.46 - 1.32 (m, 2H), 1.31 - 1.14 (m, 2H), 0.96 (d, J = 2.8 Hz, 3H).	616.3	A	B
I-2431		1H NMR (400 MHz, DMSO-d6) 10.79 (d, J = 2.4 Hz, 1H), 8.13 - 7.91 (m, 1H), 7.83 (d, J = 7.1 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.55 (d, J = 7.9 Hz, 1H), 7.33 - 7.21 (m, 2H), 7.10 - 6.99 (m, 2H), 6.98 - 6.88 (m, 1H), 6.11 (d, J = 8.4 Hz, 1H), 5.64 - 5.29 (m, 3H), 4.35 (q, J = 7.3 Hz, 1H), 4.01 (p, J = 6.7 Hz, 1H), 3.02 - 2.82 (m, 3H), 1.89 - 1.71 (m, 3H), 1.61 (t, J = 5.0 Hz, 6H), 1.50 - 1.32 (m, 4H), 1.27 (dd, J = 11.6, 7.0 Hz, 1H), 0.98 (d, J = 2.8 Hz, 3H).	616.3	A	D

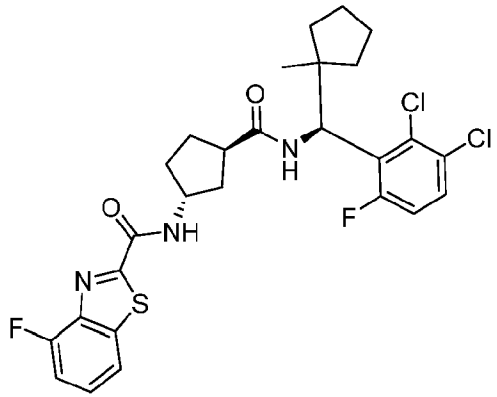
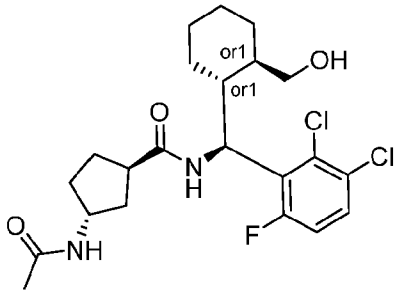
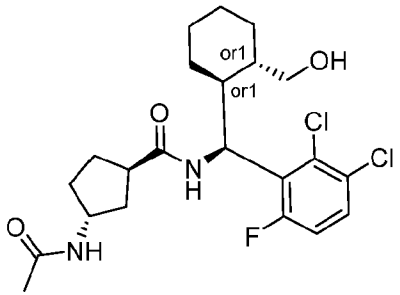
I-2432		1H NMR (400 MHz, DMSO-d6) 8.34 (d, J = 6.9 Hz, 1H), 8.05 (d, J = 8.6 Hz, 1H), 7.90 (d, J = 8.1 Hz, 2H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.52 - 7.44 (m, 2H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.28 (h, J = 6.8 Hz, 1H), 3.60 (d, J = 32.4 Hz, 6H), 3.32 - 3.21 (m, 2H), 3.06 (p, J = 7.9 Hz, 1H), 2.03 - 1.75 (m, 4H), 1.67 - 1.44 (m, 8H), 1.43 - 1.22 (m, 2H), 0.98 (d, J = 2.8 Hz, 3H).	604.3	A	B
I-2433		1H NMR (400 MHz, DMSO-d6) 8.16 (d, J = 6.9 Hz, 1H), 8.06 (d, J = 8.6 Hz, 1H), 7.91 - 7.82 (m, 2H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 7.18 - 7.07 (m, 2H), 5.51 (d, J = 8.5 Hz, 1H), 4.84 (q, J = 8.9 Hz, 2H), 4.25 (h, J = 6.8 Hz, 1H), 3.05 (p, J = 7.9 Hz, 1H), 2.07 - 1.75 (m, 4H), 1.69 - 1.44 (m, 8H), 1.39 (d, J = 7.6 Hz, 1H), 1.27 (t, J = 5.9 Hz, 1H), 0.97 (d, J = 2.9 Hz, 3H).	589.15	A	C

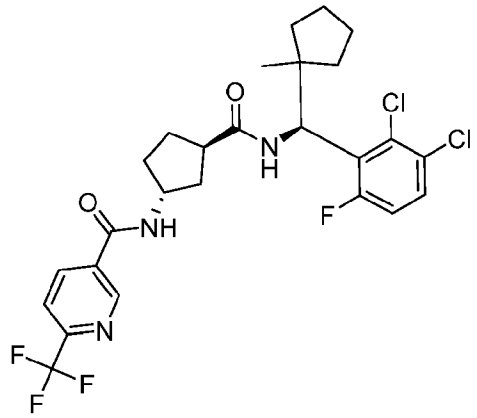
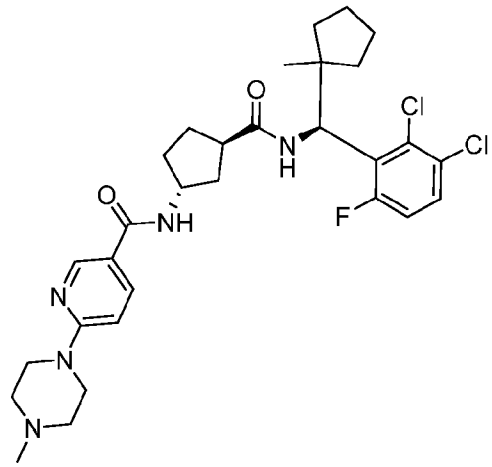
I-2434		1H NMR (400 MHz, DMSO-d6) 8.83- 8.77 (m, 1H), 8.65 (d, J = 6.8 Hz, 1H), 8.29 (s, 1H), 8.19 -8.12 (m, 2H), 8.09 (d, J = 8.7 Hz, 1H), 7.72 (dd, J = 5.1, 1.5 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.58 - 7.46 (m, 3H), 7.27 (dd, J = 10.8, 8.9 Hz, 1H), 5.52 (d, J = 8.6 Hz, 1H), 4.31 (q, J = 6.8 Hz, 1H), 3.08 (p, J = 7.8 Hz, 1H), 2.15 - 1.78 (m, 4H), 1.61 (s, 8H), 1.39 (s, 1H), 1.26 (d, J = 14.3 Hz, 1H), 0.98 (d, J = 2.8 Hz, 3H).	568.3	B	
I-2435		1H NMR (400 MHz, DMSO-d6) 8.00 (d, J = 8.6 Hz, 1H), 7.60 (dd, J = 9.0, 5.1 Hz, 1H), 7.31 - 7.19 (m, 2H), 6.90 (dt, J = 7.6, 1.3 Hz, 1H), 6.85 (dq, J = 8.3, 1.3 Hz, 2H), 6.47 (d, J = 7.4 Hz, 1H), 5.47 (d, J = 8.5 Hz, 1H), 4.05 (q, J = 7.1 Hz, 1H), 3.76 (s, 3H), 2.90 (p, J = 7.8 Hz, 1H), 1.85 (dt, J = 13.6, 7.1 Hz, 1H), 1.78 - 1.65 (m, 2H), 1.59 (s, 7H), 1.49 - 1.23 (m, 6H), 1.01 - 0.91 (m, 5H).	561.3	D	

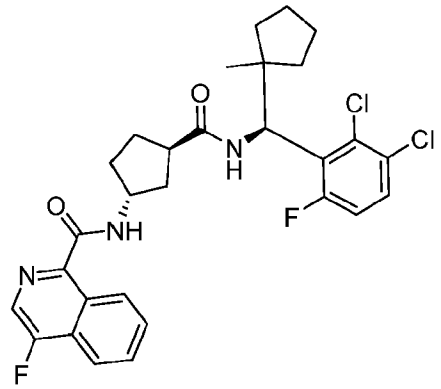
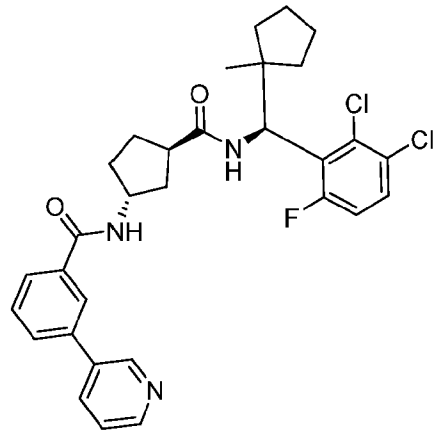
I-2436		1H NMR (400 MHz, DMSO-d6) 8.11 (d, J = 6.9 Hz, 1H), 8.05 (d, J = 8.6 Hz, 1H), 7.67 (d, J = 7.9 Hz, 2H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.47 (d, J = 7.9 Hz, 2H), 7.26 (t, J = 9.9 Hz, 1H), 5.48 (d, J = 8.6 Hz, 1H), 4.06-3.98 (m, 1H), 3.49 (s, 2H), 3.04- 2.95 (m, 1H), 1.90 (dt, J = 13.7, 7.3 Hz, 1H), 1.82 (s,23H), 1.60 (s, 7H), 1.41 (dd, J = 31.4, 7.9 Hz, 1H), 1.40 (s, 2H), 1.26 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	573.1	B	
I-2437		1H NMR (400 MHz, DMSO-d6) 8.07 (d, J = 8.6 Hz, 1H), 7.87 (d, J = 7.5 Hz, 1H), 7.66-7.43 (m, 6H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 6.77 (s, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.27 (dt, J = 15.3, 7.5 Hz, 1H), 3.91 (s, 3H), 3.06 (p, J = 7.9 Hz, 1H), 1.92 (dq, J = 15.3, 7.5 Hz, 1H), 1.86 (s, 3H), 1.61 (s, 7H), 1.53-1.42 (m, 1H), 1.39 (s, 1H), 1.28 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	571.3	B	

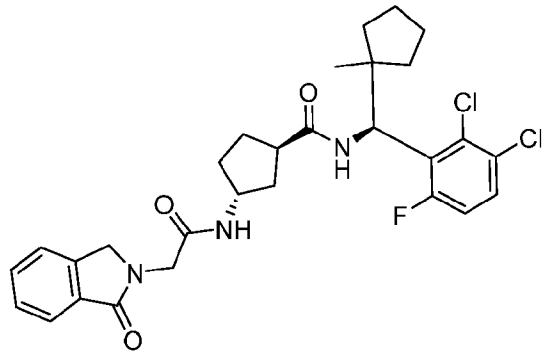
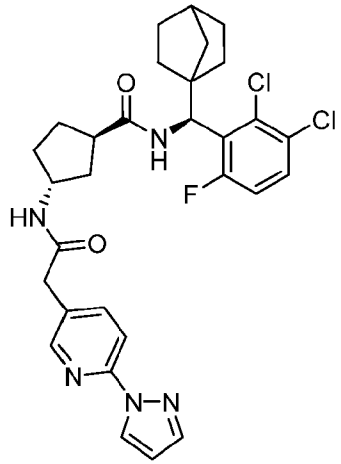
I-2438		1H NMR (400 MHz, DMSO-d6) 9.28 (d, J = 2.0 Hz, 1H), 9.13 (d, J = 2.1 Hz, 1H), 8.70 (d, J = 6.8 Hz, 1H), 8.58 (d, J = 2.2 Hz, 1H), 8.08 (d, J = 8.6 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.35 - 6.94 (m, 1H), 5.52 (d, J = 8.5 Hz, 1H), 4.30 (h, J = 6.6 Hz, 1H), 3.08 (p, J = 7.8 Hz, 1H), 2.08 - 1.75 (m, 4H), 1.70 - 1.45 (m, 8H), 1.38 (s, 1H), 1.27 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	560.2	A	B
I-2439		1H NMR (400 MHz, DMSO-d6) 8.47 (d, J = 6.9 Hz, 1H), 8.10 - 8.00 (m, 5H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 5.52 (d, J = 8.5 Hz, 1H), 4.29 (q, J = 6.8 Hz, 1H), 3.07 (p, J = 7.9 Hz, 1H), 2.61 (s, 3H), 2.08 - 1.78 (m, 4H), 1.70- 1.45 (m, 8H), 1.38 (s, 1H), 1.28 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	573.3	A	B

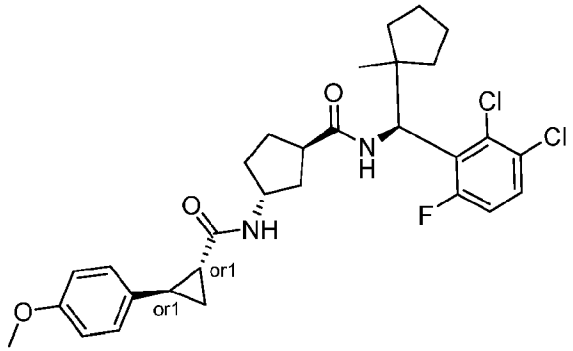
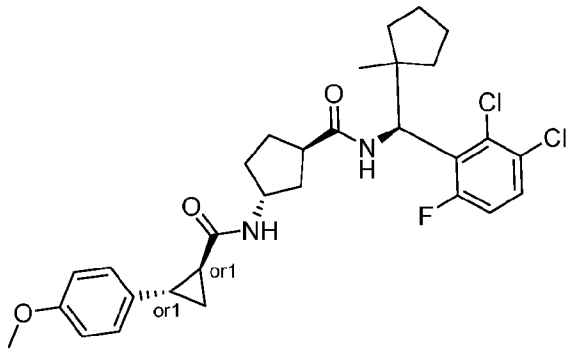
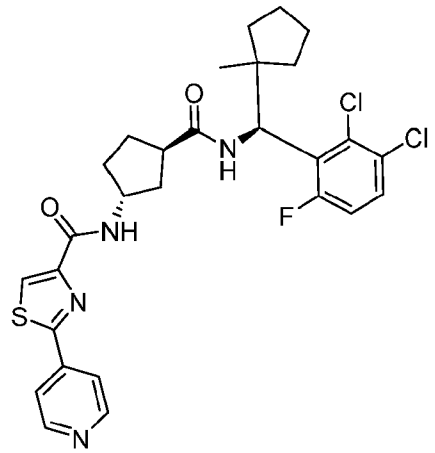
I-2440		1H NMR (400 MHz, DMSO-d6) 8.00 (d, J = 8.6 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.35 - 7.19 (m, 3H), 6.91 (d, J = 8.5 Hz, 2H), 6.25 (d, J = 7.5 Hz, 1H), 5.46 (d, J = 8.5 Hz, 1H), 4.04 (q, J = 7.3 Hz, 1H), 3.76 (s, 3H), 2.92 - 2.84 (m, 1H), 1.84 (dt, J = 13.6, 7.2 Hz, 1H), 1.78 - 1.63 (m, 1H), 1.62 - 1.47 (m, 7H), 1.36 (dd, J = 13.2, 5.6 Hz, 2H), 1.27 (dd, J = 13.0, 4.7 Hz, 5H), 0.95 (d, J = 2.7 Hz, 3H), 0.94 - 0.84 (m, 2H).	561.3	C	
I-2441		1H NMR (400 MHz, DMSO-d6) 8.03 (t, J = 7.7 Hz, 1H), 7.77 (d, J = 6.9 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.49 (d, J = 8.5 Hz, 1H), 4.02 (q, J = 6.6 Hz, 1H), 3.21 (ddd, J = 21.3, 11.8, 7.0 Hz, 2H), 3.09 - 2.93 (m, 2H), 2.68 (dd, J = 13.0, 10.3 Hz, 1H), 2.26 (qd, J = 12.3, 11.5, 6.5 Hz, 2H), 2.08 (t, J = 7.5 Hz, 2H), 1.88 (dt, J = 19.4, 6.5 Hz, 2H), 1.80 (p, J = 4.8 Hz, 1H), 1.67 (s, 2H), 1.69 - 1.58 (m, 8H), 1.42 (s, 1H), 1.37 (dd, J = 12.1, 6.2 Hz, 2H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	561.25	A	

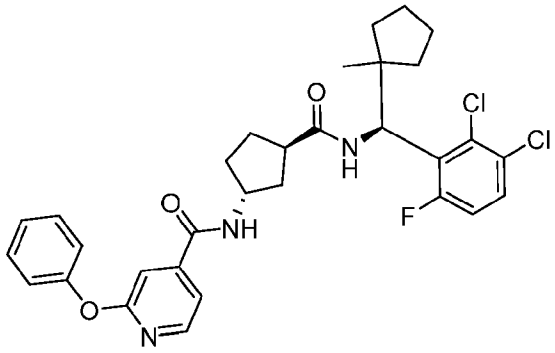
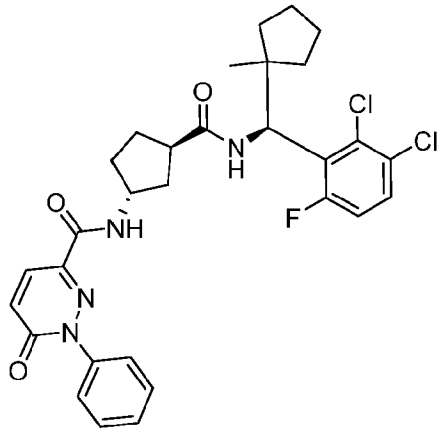
I-2442		1H NMR (400 MHz, DMSO-d6) 9.05 (d, J = 7.7 Hz, 1H), 8.14 - 8.02 (m, 2H), 7.61 (ddd, J = 10.8, 5.3, 3.3 Hz, 2H), 7.53 - 7.44 (m, 1H), 7.27 (dd, J = 10.7, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.33 (p, J = 7.2 Hz, 1H), 3.10 (p, J = 7.8 Hz, 1H), 2.03 - 1.96 (m, 1H), 1.94 (s, 3H), 1.95 - 1.86 (m, 1H), 1.79 - 1.68 (m, 1H), 1.61 (s, 6H), 1.39 (s, 1H), 1.28 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	566.2	B	
I-2443		1H NMR (400 MHz, DMSO-d6) 8.12 (d, J = 7.4 Hz, 1H), 7.77 (d, J = 7.1 Hz, 1H), 7.58 (dd, J = 9.0, 5.2 Hz, 1H), 7.24 (dd, J = 10.1, 8.9 Hz, 1H), 5.38 (t, J = 8.6 Hz, 1H), 4.47 (t, J = 5.2 Hz, 1H), 4.01 (q, J = 6.5 Hz, 1H), 3.48 (t, J = 5.7 Hz, 2H), 2.78 (p, J = 7.7 Hz, 1H), 2.11 - 2.06 (m, 1H), 1.91 - 1.71 (m, 3H), 1.76 (s, 3H), 1.59 (ddt, J = 18.7, 10.0, 4.8 Hz, 1H), 1.53 (s, 4H), 1.51 - 1.42 (m, 1H), 1.31 (dd, J = 11.4, 6.4 Hz, 1H), 1.26 - 1.14 (m, 1H), 1.20 (s, 3H), 0.78 - 0.70 (m, 1H).	459.2	D	
I-2444		1H NMR (400 MHz, DMSO-d6) 8.11 (d, J = 8.4 Hz, 1H), 7.77 (d, J = 7.0 Hz, 1H), 7.58 (dd, J = 9.0, 5.0 Hz, 1H), 7.22 (dd, J = 10.6, 8.9 Hz, 1H), 5.66 (dd, J = 8.4, 5.9 Hz, 1H), 4.36 (t, J = 4.8 Hz, 1H), 4.00 (q, J = 6.6 Hz, 1H), 3.44 (dt, J = 9.3, 4.4 Hz, 1H), 3.33 - 3.25 (m, 1H), 2.93 (p, J = 7.9 Hz, 1H), 1.91 - 1.78 (m, 5H), 1.77 (s, 3H), 1.74 - 1.54 (m, 3H), 1.53 - 1.31 (m, 1H), 1.42 (s, 1H), 1.30 - 1.14 (m, 2H), 1.11 (d, J = 11.4 Hz, 4H).	459.2	D	

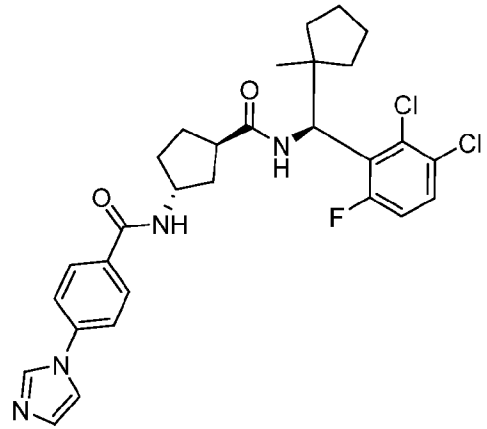
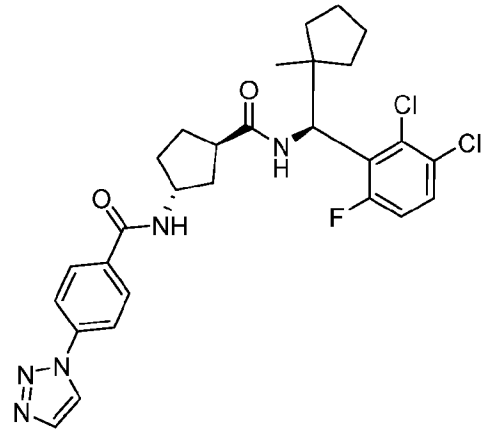
I-2445		1H NMR (400 MHz, DMSO-d6) 9.13 (d, J = 2.1 Hz, 1H), 8.69 (d, J = 6.8 Hz, 1H), 8.45 (dd, J = 8.2, 2.2 Hz, 1H), 8.06 (dd, J = 10.4, 8.3 Hz, 2H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.27 (dd, J = 10.8, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.29 (p, J = 6.6 Hz, 1H), 3.07 (p, J = 7.7 Hz, 1H), 2.08 - 1.73 (m, 4H), 1.70 - 1.44 (m, 8H), 1.39 (s, 1H), 1.28 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	560.2	A	A
I-2446		1H NMR (400 MHz, DMSO-d6) 8.59 (d, J = 2.4 Hz, 1H), 8.22 - 7.88 (m, 3H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 6.84 (d, J = 9.0 Hz, 1H), 5.51 (d, J = 8.6 Hz, 1H), 4.23 (p, J = 6.7 Hz, 1H), 3.58 (t, J = 5.1 Hz, 4H), 3.04 (p, J = 7.8 Hz, 1H), 2.38 (t, J = 5.1 Hz, 4H), 2.21 (s, 3H), 2.05 - 1.73 (m, 4H), 1.69 - 1.45 (m, 8H), 1.41 (d, J = 21.2 Hz, 1H), 1.26 (d, J = 12.8 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	590.25	A	B

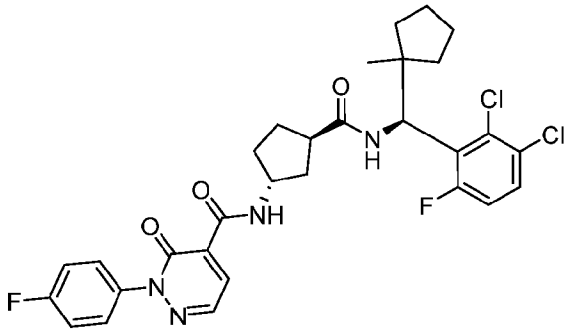
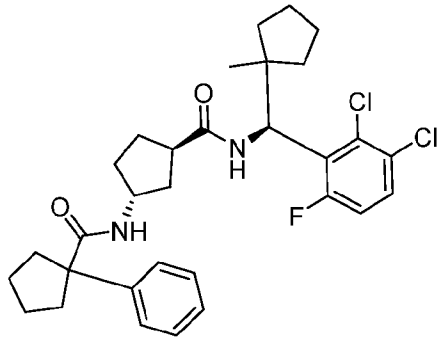
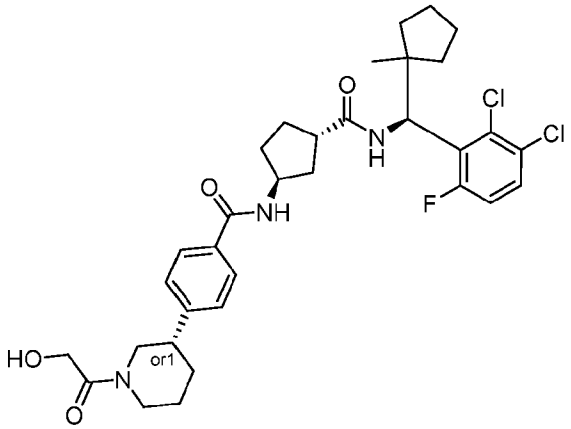
I-2447		1H NMR (400 MHz, DMSO-d6) 9.00 - 8.88 (m, 1H), 8.68 (d, J = 7.4 Hz, 1H), 8.55 (d, J = 1.7 Hz, 1H), 8.18 (d, J = 8.4 Hz, 1H), 8.10 (d, J = 8.6 Hz, 1H), 7.97 (ddd, J = 8.3, 6.9, 1.2 Hz, 1H), 7.86 (ddd, J = 8.4, 6.9, 1.3 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 5.52 (d, J = 8.5 Hz, 1H), 4.38 (h, J = 6.9 Hz, 1H), 3.09 (p, J = 7.9 Hz, 1H), 2.13 - 1.93 (m, 2H), 1.94 - 1.81 (m, 2H), 1.71 - 1.46 (m, 8H), 1.40 (d, J = 7.7 Hz, 1H), 1.28 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	560.25	D	
I-2448		1H NMR (400 MHz, DMSO-d6) 9.22 (d, J = 2.2 Hz, 1H), 8.84 (dd, J = 5.4, 1.4 Hz, 1H), 8.70 (d, J = 8.3 Hz, 1H), 8.41 (d, J = 7.0 Hz, 1H), 8.24 (t, J = 1.9 Hz, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.98 (tt, J = 5.5, 1.8 Hz, 3H), 7.71 - 7.58 (m, 2H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 5.52 (d, J = 8.5 Hz, 1H), 4.31 (p, J = 7.0 Hz, 1H), 3.08 (p, J = 7.9 Hz, 1H), 2.10 - 1.75 (m, 4H), 1.61 (s, 6H), 1.58 - 1.45 (m, 2H), 1.39 (s, 1H), 1.28 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	568.3	A	B

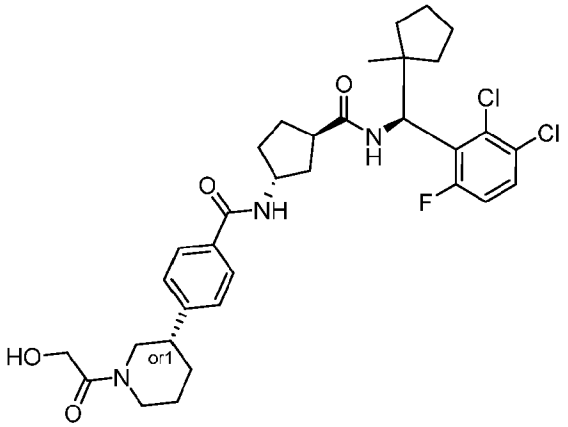
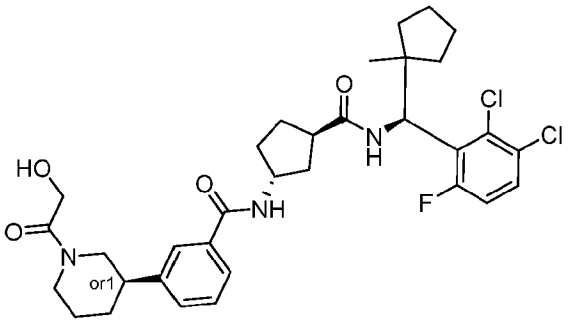
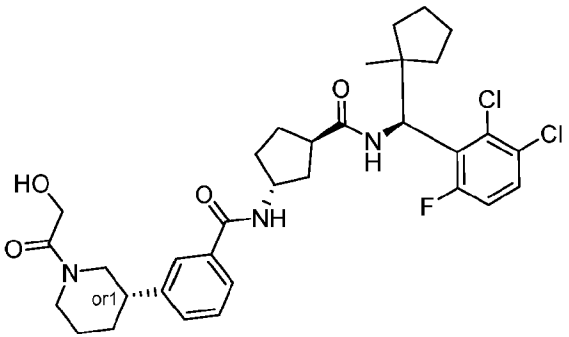
I-2449		1H NMR (400 MHz, DMSO-d6) 8.13 -7.94 (m, 2H), 7.73 - 7.67 (m, 1H), 7.67 - 7.55 (m, 3H), 7.50 (ddd, J = 8.2, 5.7, 2.8 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.49 (d, J = 8.6 Hz, 1H), 4.52 (s, 2H), 4.07 (dt, J = 13.4, 6.4 Hz, 1H), 3.00 (p, J = 7.6 Hz, 1H), 1.86 (ddt, J = 33.3, 13.2, 6.4 Hz, 3H), 1.73 - 1.50 (m, 7H), 1.49 - 1.32 (m, 3H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	560.3	A	A
I-2450		1H NMR (400 MHz, DMSO-d6) 8.60 (d, J = 2.6 Hz, 1H), 8.32 (s, 1H), 8.11 (d, J = 9.3 Hz, 2H), 7.92-7.83 (m, 2H), 7.82 (d, J = 1.6 Hz, 1H), 7.60 (dd, J = 9.1, 5.0 Hz, 1H), 7.30-7.20 (m, 1H), 6.60-6.55 (m, 1H), 5.64 (d, J = 8.1 Hz, 1H), 4.03 (d, J = 6.6 Hz, 1H), 3.47 (s, 2H), 2.99 (s, 1H), 2.32 (s, 1H), 2.14 (s, 1H), 1.87- 1.80 (m, 2H), 1.55 (s, 1H), 1.37 (s, 9H), 1.33 (d, J = 10.1 Hz, 1H), 1.24 (t, J = 9.9 Hz, 2H).	584.3	A	

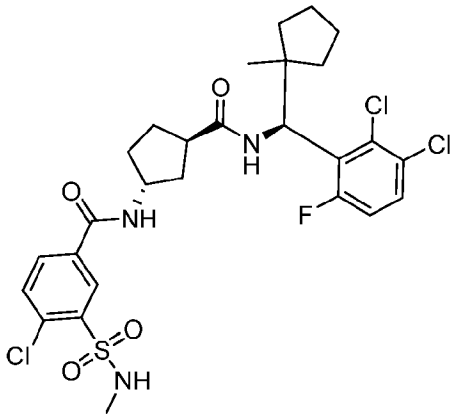
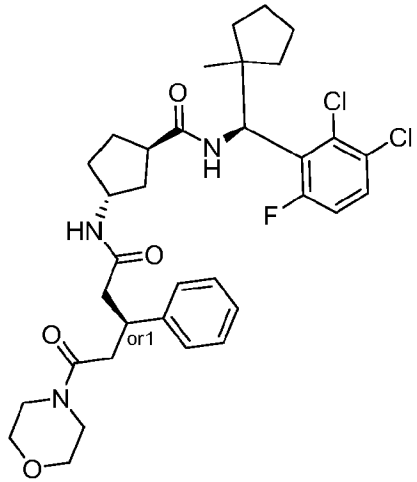
I-2451		1H NMR (400 MHz, DMSO-d6) 8.09 - 8.01 (m, 2H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.25 (dd, J = 10.7, 8.9 Hz, 1H), 7.08 - 6.99 (m, 2H), 6.88 - 6.80 (m, 2H), 5.48 (d, J = 8.5 Hz, 1H), 4.06 (h, J = 6.5 Hz, 1H), 3.72 (s, 3H), 2.97 (p, J = 7.7 Hz, 1H), 2.18 (ddd, J = 9.4, 6.1, 4.1 Hz, 1H), 1.92 - 1.72 (m, 4H), 1.71 - 1.48 (m, 7H), 1.50 - 1.33 (m, 3H), 1.31 - 1.22 (m, 2H), 1.08 (ddd, J = 8.2, 6.1, 3.9 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	561.15	A	
I-2452		1H NMR (400 MHz, DMSO-d6) 8.05 (dd, J = 15.8, 7.8 Hz, 2H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.7, 8.9 Hz, 1H), 7.07 - 7.00 (m, 2H), 6.88 - 6.79 (m, 2H), 5.49 (d, J = 8.6 Hz, 1H), 4.06 (q, J = 6.4 Hz, 1H), 3.71 (s, 3H), 2.97 (q, J = 7.9 Hz, 1H), 2.16 (ddd, J = 9.6, 6.1, 4.1 Hz, 1H), 1.93 - 1.71 (m, 4H), 1.60 (s, 7H), 1.41 (dt, J = 18.5, 7.2 Hz, 3H), 1.27 (tt, J = 10.3, 4.8 Hz, 2H), 1.09 (ddd, J = 8.2, 6.1, 3.9 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	561.15	B	
I-2453		1H NMR (400 MHz, DMSO-d6) 8.80-8.74 (m, 2H), 8.45 (s, 1H), 8.30 (d, J = 7.6 Hz, 1H), 8.14-8.02 (m,3H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.32 (p, J = 7.2 Hz, 1H), 3.10 (p, J = 7.9 Hz, 1H), 2.06-1.82 (m, 4H), 1.68 (q, J = 6.4, 4.8 Hz, 1H), 1.63-1.58 (m, 6H), 1.51 (dd, J = 12.7, 7.9 Hz, 1H), 1.38 (s, 1H), 1.26 (d, J = 14.1 Hz, 1H), 0.98 (d, J = 2.8 Hz, 3H).	575.1	A	

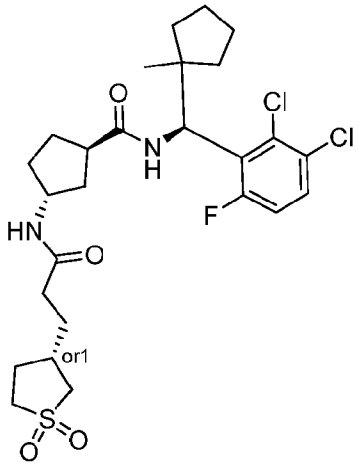
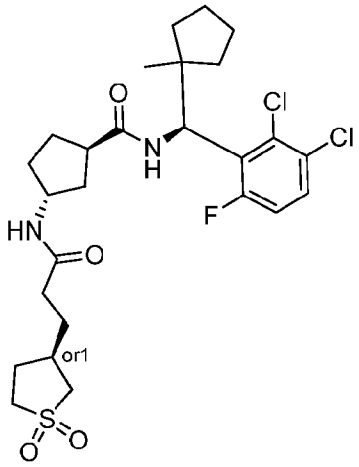
I-2454		1H NMR (400 MHz, DMSO-d6) 8.58 (d, J = 6.8 Hz, 1H), 8.26 (d, J = 5.2 Hz, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.49 (d, J = 5.2 Hz, 1H), 7.43 (dd, J = 15.8, 8.0 Hz, 3H), 7.31-7.19 (m, 2H), 7.14 (d, J = 8.0 Hz, 2H), 5.51 (d, J = 8.5 Hz, 1H), 4.27 (q, J = 6.7 Hz, 1H), 3.06 (p, J = 7.8 Hz, 1H), 2.54-2.47 (m, 2H), 2.04-1.75 (m, 2H), 1.65-1.43 (m, 8H), 1.39 (d, J = 8.0 Hz, 1H), 1.27 (t, J = 5.5 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	584.15	A	
I-2455		1H NMR (400 MHz, DMSO-d6) 8.26 (d, J = 7.6 Hz, 1H), 8.06 (d, J = 8.6 Hz, 1H), 7.91 (d, J = 9.7 Hz, 1H), 7.68-7.61 (m, 2H), 7.60 (dd, J = 8.9, 5.1 Hz, 1H), 7.59-7.50 (m, 2H), 7.50-7.43 (m, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 7.14 (d, J = 9.7 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.26 (h, J = 7.3 Hz, 1H), 3.08-2.96 (m, 1H), 2.01-1.73 (m, 4H), 1.59 (t, J = 5.7 Hz, 7H), 1.49-1.38 (m, 1H), 1.37 (s, 1H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	585.15	A	

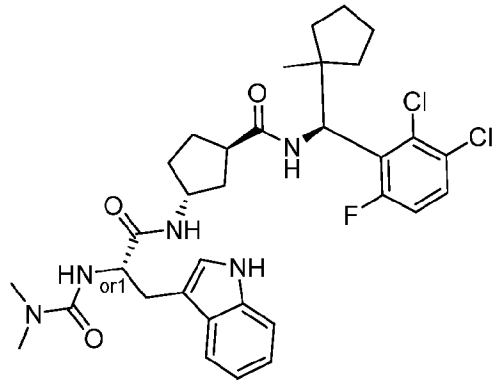
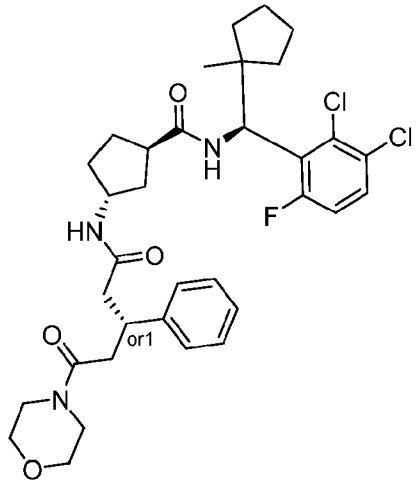
I-2456		1H NMR (400 MHz, DMSO-d6) 8.43 - 8.28 (m, 2H), 8.07 (d, J = 8.7 Hz, 1H), 8.03 - 7.96 (m, 2H), 7.86 (t, J = 1.5 Hz, 1H), 7.82 - 7.74 (m, 2H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.27 (dd, J = 10.8, 8.9 Hz, 1H), 7.15 (d, J = 1.2 Hz, 1H), 5.52 (d, J = 8.5 Hz, 1H), 4.29 (q, J = 6.8 Hz, 1H), 3.06 (p, J = 7.9 Hz, 1H), 2.05 - 1.77 (m, 4H), 1.73 - 1.44 (m, 8H), 1.38 (s, 1H), 1.27 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	557.15	A	B
I-2457		1H NMR (400 MHz, DMSO-d6) 8.94 (d, J = 1.2 Hz, 1H), 8.42 (d, J = 6.9 Hz, 1H), 8.11 - 8.00 (m, 6H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 5.52 (d, J = 8.5 Hz, 1H), 4.29 (p, J = 6.8 Hz, 1H), 3.08 (q, J = 8.0 Hz, 1H), 2.06 - 1.80 (m, 4H), 1.64 - 1.57 (m, 8H), 1.38 (s, 1H), 1.26 (d, J = 15.1 Hz, 1H), 0.98 (d, J = 2.8 Hz, 3H).	558.1	A	A

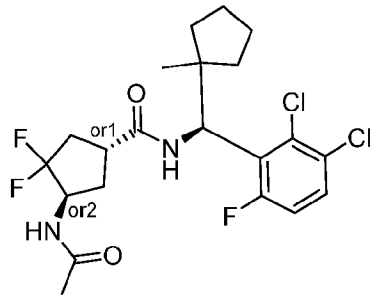
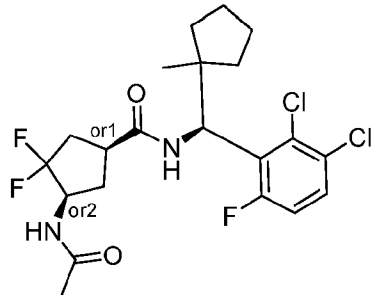
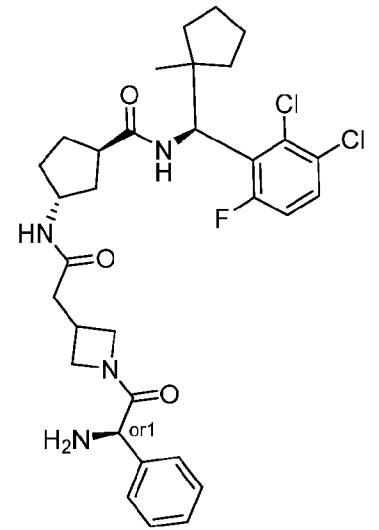
I-2458		1H NMR (400 MHz, DMSO-d6) 9.44 (d, J = 7.4 Hz, 1H), 8.51 - 8.12 (m, 3H), 7.62 (ddt, J = 8.9, 6.5, 4.3 Hz, 3H), 7.54 - 7.34 (m, 2H), 7.25 (dd, J = 10.7, 8.9 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.31 (p, J = 6.2, 5.6 Hz, 1H), 3.06 (p, J = 8.0 Hz, 1H), 2.08 (s, 1H), 2.05 - 1.89 (m, 2H), 1.89 - 1.70 (m, 2H), 1.59 (s, 5H), 1.55 - 1.42 (m, 2H), 1.37 (s, 1H), 1.27 (d, J = 7.0 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	603.25	D	
I-2459		1H NMR (400 MHz, DMSO-d6) 7.97 (d, J = 8.6 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.36 - 7.20 (m, 5H), 7.23 - 7.14 (m, 2H), 5.46 (d, J = 8.5 Hz, 1H), 3.99 (p, J = 7.0 Hz, 1H), 2.99 - 2.88 (m, 1H), 1.73 (dtt, J = 15.6, 10.1, 6.0 Hz, 5H), 1.66 - 1.48 (m, 11H), 1.41 - 1.21 (m, 4H), 0.96 (d, J = 2.8 Hz, 3H).	559.15	D	
I-2460		1H NMR (400 MHz, DMSO-d6) 8.30 - 8.15 (m, 1H), 8.06 (d, J = 8.6 Hz, 1H), 7.80 (d, J = 8.1 Hz, 2H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.37 (dd, J = 11.4, 8.0 Hz, 2H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.54 (s, 1H), 4.47 - 4.34 (m, 1H), 4.26 (h, J = 6.8 Hz, 1H), 4.20 - 4.02 (m, 2H), 3.70 (t, J = 13.6 Hz, 1H), 3.12 - 2.96 (m, 2H), 2.77 (td, J = 12.1, 7.2 Hz, 1H), 2.70 - 2.60 (m, 1H), 2.02 - 1.83 (m, 4H), 1.83 - 1.67 (m, 3H), 1.67 - 1.41 (m, 9H), 1.39 (d, J = 7.7 Hz, 1H), 1.27 (t, J = 5.6 Hz, 1H), 0.97 (d, J = 2.9 Hz, 3H).	632.35	A	B

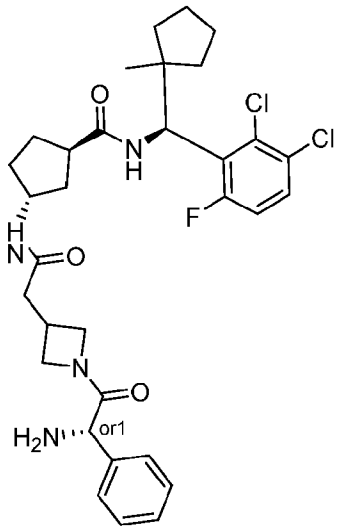
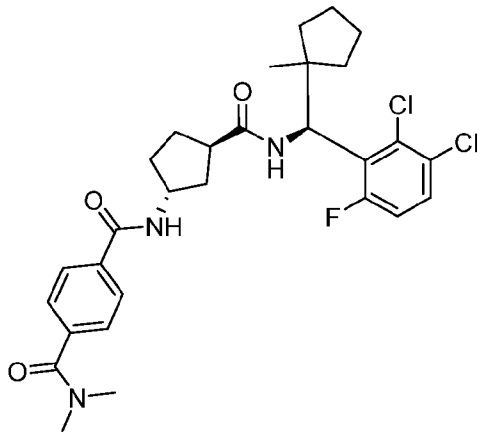
I-2461		1H NMR (400 MHz, DMSO-d6) 8.42 - 8.14 (m, 1H), 8.06 (d, J = 8.6 Hz, 1H), 7.80 (d, J = 8.0 Hz, 2H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.37 (dd, J = 11.3, 7.9 Hz, 2H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.54 (s, 1H), 4.40 (dd, J = 21.3, 12.3 Hz, 1H), 4.26 (h, J = 6.6 Hz, 1H), 4.10 (dd, J = 21.6, 8.1 Hz, 2H), 3.70 (t, J = 13.7 Hz, 1H), 3.13 - 2.96 (m, 2H), 2.83 - 2.72 (m, 1H), 2.63 (d, J = 12.5 Hz, 1H), 2.02 - 1.85 (m, 4H), 1.79 (dt, J = 21.7, 7.6 Hz, 3H), 1.64 - 1.36 (m, 10H), 1.28 (d, J = 7.5 Hz, 1H), 0.97 (d, J = 2.9 Hz, 3H).	632.35	A	B
I-2462		1H NMR (400 MHz, DMSO-d6) 8.22 (t, J = 7.9 Hz, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.72 (t, J = 9.1 Hz, 2H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.41 (q, J = 9.4, 7.6 Hz, 2H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.53 (dt, J = 10.4, 5.4 Hz, 1H), 4.43 (t, J = 12.1 Hz, 1H), 4.26 (p, J = 6.8 Hz, 1H), 4.20-4.03 (m, 2H), 3.71 (t, J = 14.8 Hz, 1H), 3.08 (s, 1H), 3.06-2.96 (m, 1H), 2.74 (t, J = 12.1 Hz, 2H), 1.94 (s, 4H), 1.60 (s, 6H), 1.58-1.42 (m, 3H), 1.39 (s, 1H), 1.28 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	632.2	A	B
I-2463		1H NMR (400 MHz, DMSO-d6) 8.23 (t, J = 7.9 Hz, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.77-7.68 (m, 2H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.41 (q, J = 9.2, 7.6 Hz, 2H), 7.27 (dd, J = 10.8, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.53 (dt, J = 10.4, 5.3 Hz, 1H), 4.43 (t, J = 12.7 Hz, 1H), 4.26 (p, J = 6.9 Hz, 1H), 4.21-4.03 (m, 2H), 3.71 (t, J = 14.9 Hz, 1H), 3.14-2.96 (m, 2H), 2.74 (t, J = 12.1 Hz, 1H), 2.63 (d, J = 12.7 Hz, 1H), 1.94 (s, 4H), 1.93-1.82 (m, 3H), 1.82-1.75 (m, 3H), 1.60 (s, 6H), 1.38 (s, 1H), 1.28 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	632.3	A	B

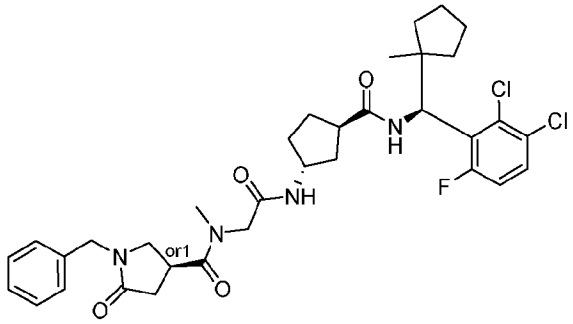
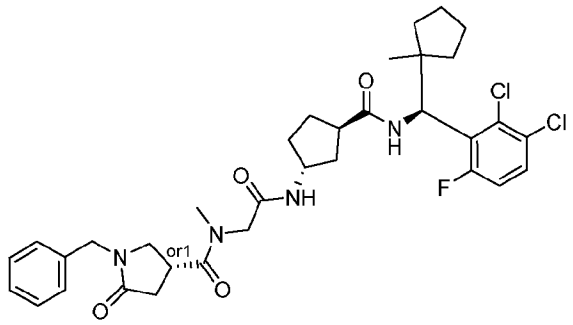
I-2464		1H NMR (400 MHz, DMSO-d6) 8.63 (d, J = 6.9 Hz, 1H), 8.40 (d, J = 2.2 Hz, 1H), 8.23 - 8.04 (m, 2H), 7.93 - 7.75 (m, 2H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.27 (h, J = 6.8 Hz, 1H), 3.06 (p, J = 7.8 Hz, 1H), 2.48 (s, 2H), 2.05 - 1.76 (m, 4H), 1.74 - 1.44 (m, 8H), 1.38 (dd, J = 8.9, 4.6 Hz, 1H), 1.27 (t, J = 5.7 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	620.2	A	A
I-2465		1H NMR (400 MHz, DMSO-d6) 8.01 (d, J = 8.7 Hz, 1H), 7.66 (d, J = 6.9 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.30 - 7.12 (m, 6H), 5.47 (d, J = 8.5 Hz, 1H), 3.92 (q, J = 6.7 Hz, 1H), 3.54 - 3.42 (m, 3H), 3.37 (dd, J = 10.5, 5.4 Hz, 3H), 3.29 (td, J = 7.6, 7.1, 3.2 Hz, 1H), 2.92 (p, J = 7.9 Hz, 1H), 2.71 - 2.55 (m, 2H), 2.43 (dd, J = 14.2, 7.2 Hz, 1H), 2.35 (dd, J = 14.2, 7.9 Hz, 1H), 1.82 (dt, J = 13.6, 7.1 Hz, 1H), 1.70 (s, 1H), 1.69 (dq, J = 11.0, 5.5 Hz, 2H), 1.60 (s, 6H), 1.54 (s, 1H), 1.37 (p, J = 7.7, 7.2 Hz, 2H), 1.27 (d, J = 8.3 Hz, 2H), 1.14 (dt, J = 13.6, 7.1 Hz, 1H), 0.96 (d, J = 2.	646.4	A	A

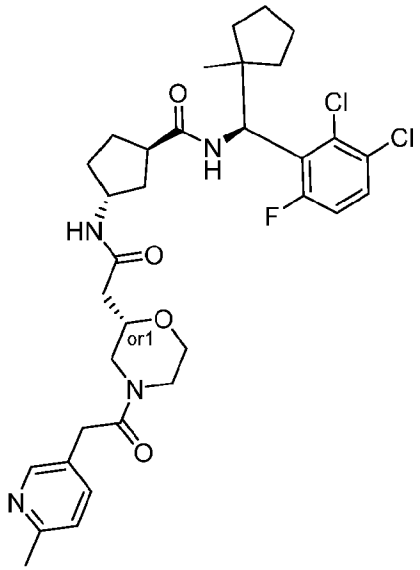
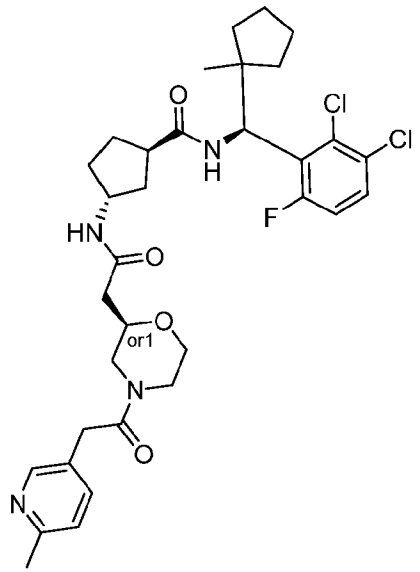
I-2466		1H NMR (400 MHz, DMSO-d6) 8.03 (d, J = 8.7 Hz, 1H), 7.78 (d, J = 6.9 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.30 - 7.21 (m, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.01 (q, J = 6.6 Hz, 1H), 3.28 - 3.13 (m, 2H), 3.10 - 2.86 (m, 2H), 2.68 (dd, J = 13.1, 10.4 Hz, 1H), 2.33 - 2.18 (m, 2H), 2.08 (t, J = 7.5 Hz, 2H), 1.87 (ddd, J = 16.5, 11.3, 5.9 Hz, 2H), 1.83 - 1.74 (m, 1H), 1.70 (ddd, J = 10.8, 8.5, 2.7 Hz, 1H), 1.69 - 1.63 (m, 2H), 1.61 (d, J = 8.8 Hz, 7H), 1.46 - 1.32 (m, 3H), 1.27 (s, 1H), 0.97 (d, J = 2.7 Hz, 3H).	561.25	A	B
I-2467		1H NMR (400 MHz, DMSO-d6) 8.05 (d, J = 8.6 Hz, 1H), 7.78 (d, J = 6.9 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.01 (q, J = 6.6 Hz, 1H), 3.28 - 3.13 (m, 2H), 3.09 - 2.88 (m, 2H), 2.68 (dd, J = 13.0, 10.3 Hz, 1H), 2.34 - 2.18 (m, 2H), 2.08 (t, J = 7.1 Hz, 2H), 1.94 - 1.62 (m, 4H), 1.62 (s, 3H), 1.60 (s, 4H), 1.60 - 1.54 (m, 2H), 1.40 (dq, J = 18.3, 6.7, 5.4 Hz, 3H), 1.28 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	561.3	A	B

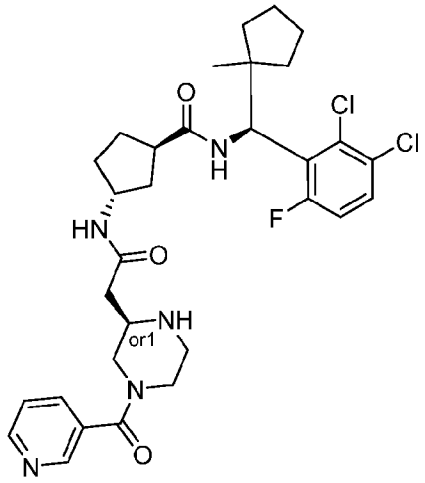
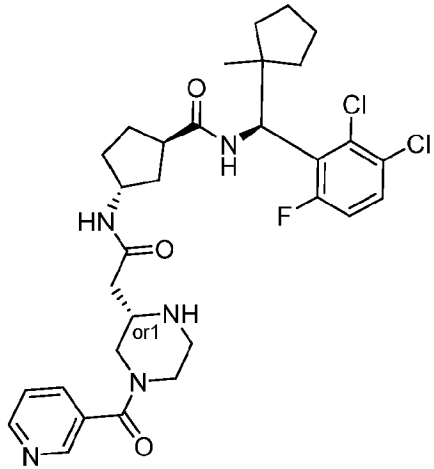
I-2468		1H NMR (400 MHz, Methanol-d4) 7.97 (d, J = 9.1 Hz, 1H), 7.61 (d, J = 7.8 Hz, 1H), 7.51 (dd, J = 8.9, 5.1 Hz, 1H), 7.34 (d, J = 8.0 Hz, 1H), 7.17 - 7.07 (m, 3H), 7.03 (t, J = 7.6 Hz, 1H), 5.70 (d, J = 8.9 Hz, 1H), 4.43 (t, J = 7.1 Hz, 1H), 4.16 - 4.06 (m, 1H), 3.24 - 3.10 (m, 2H), 2.87 (s, 6H), 1.99 (dq, J = 14.7, 7.7, 6.9 Hz, 1H), 1.72 (d, J = 13.3 Hz, 9H), 1.51 (dt, J = 21.5, 7.4 Hz, 2H), 1.31 (s, 2H), 1.21 (dt, J = 12.9, 7.0 Hz, 1H), 1.04 (d, J = 2.9 Hz, 3H).	644.2	A	B
I-2469		1H NMR (400 MHz, DMSO-d6) 7.96 (d, J = 8.6 Hz, 1H), 7.67 (d, J = 7.1 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.30 - 7.19 (m, 5H), 7.19 - 7.11 (m, 1H), 5.47 (d, J = 8.5 Hz, 1H), 3.93 (q, J = 6.7 Hz, 1H), 3.47 (q, J = 9.3, 8.2 Hz, 3H), 3.40 - 3.22 (m, 6H), 2.88 (h, J = 7.3, 6.8 Hz, 1H), 2.71 - 2.55 (m, 2H), 2.44 (dd, J = 14.2, 7.5 Hz, 1H), 2.34 (dd, J = 14.1, 7.7 Hz, 1H), 1.75 (h, J = 6.3 Hz, 3H), 1.60 (s, 6H), 1.38 (s, 3H), 1.25 (s, 2H), 0.96 (d, J = 2.8 Hz, 3H).	646.4	A	B

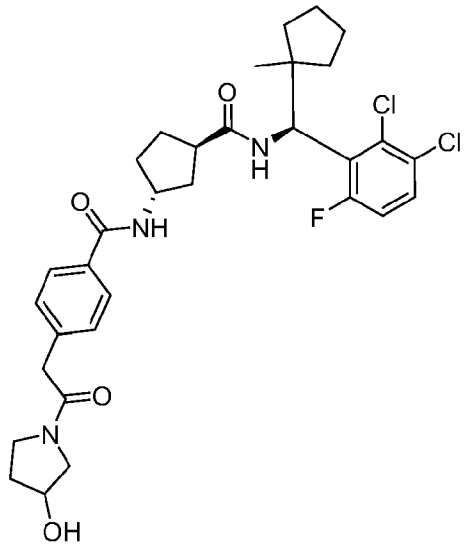
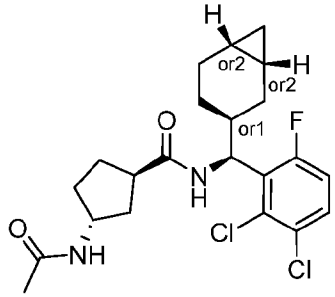
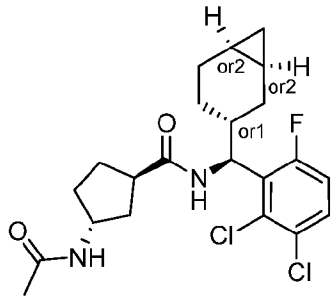
I-2470		1H NMR (400 MHz, DMSO-d6) 8.28 (d, J = 8.6 Hz, 1H), 8.03 (d, J − 8.8 Hz, 1H), 7.62 (dd, J − 8.9, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.51 (d, J = 8.4 Hz, 1H), 4.47 (dp, J = 18.0, 8.9 Hz, 1H), 3.14 (dtd, J = 12.5, 9.0, 8.1, 3.5 Hz, 1H), 2.25 (q, J = 3.9, 3.3 Hz, 1H), 2.24-2.12 (m, 1H), 1.97 (ddd, J = 12.5, 8.5, 3.6 Hz, 1H), 1.86 (s, 3H), 1.85-1.78 (m, 1H), 1.61 (s, 6H), 1.42-1.35 (m, 1H), 1.31-1.24 (m, 1H), 0.97 (d, J = 2.9 Hz, 3H).	465.1	A	A
I-2471		1H NMR (400 MHz, DMSO-d6) 8.27 (d, J = 8.5 Hz, 1H), 8.00 (d, J = 8.8 Hz, 1H), 7.66-7.58 (m, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.46 (d, J = 8.6 Hz, 1H), 4.38 (dq, J = 17.8, 8.9 Hz, 1H), 3.19-3.09 (m, 1H), 2.39-2.26 (m, 2H), 1.83 (s, 3H), 1.77 (dt, J = 13.2, 8.9 Hz, 2H), 1.60 (s, 6H), 1.39 (s, 1H), 1.27 (d, J = 8.6 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	465.05	A	B
I-2472		1H NMR (400 MHz, DMSO-d6) 8.09- 8.01 (m, 1H), 7.82 (dd, J = 23.4, 6.9 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.34 (d, J = 4.7 Hz, 4H), 7.32-7.21 (m, 2H), 5.48 (d, J = 8.2 Hz, 1H), 4.48- 4.34 (m, 1H), 3.99 (q, J = 10.1, 8.8 Hz, 2H), 3.96-3.81 (m, 1H), 3.52 (ddd, J = 33.1, 9.8, 5.7 Hz, 1H), 2.96 (s, 1H), 2.76- 2.68 (m, 1H), 2.37 (d, J = 7.5 Hz, 1H), 2.25 (d, J = 7.8 Hz, 1H), 1.94-1.76 (m, 1H), 1.80 (s, 2H), 1.60 (s, 7H), 1.39 (q, J = 7.2 Hz, 2H), 1.27 (s, 2H), 0.97 (t, J = 2.7 Hz, 3H).	617.15	A	B

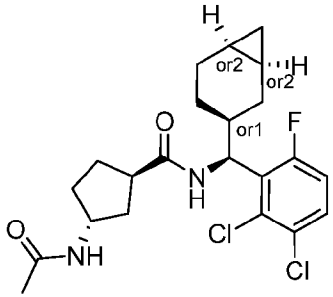
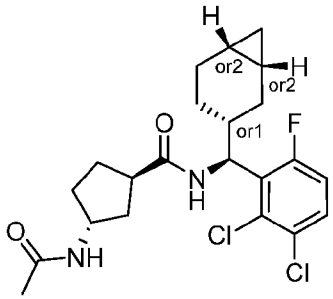
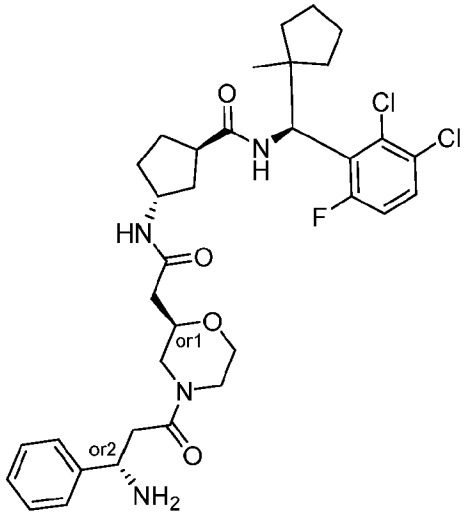
I-2473		1H NMR (400 MHz, DMSO-d6) 8.05 (dd, J = 8.6, 5.0 Hz, 1H), 7.82 (dd, J = 22.5, 7.0 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.33 (d, J = 4.8 Hz, 4H), 7.32-7.21 (m, 2H), 5.48 (d, J = 8.5 Hz, 1H), 4.40 (dd, J = 20.1, 9.3 Hz, 1H), 3.99 (s, 1H), 3.97-3.82 (m, 2H), 3.60-3.43 (m, 1H), 2.97 (q, J = 7.9 Hz, 1H), 2.37 (d, J = 7.7 Hz, 1H), 2.25 (dd, J = 7.7, 2.9 Hz, 1H), 1.86 (tt, J = 15.1, 7.6 Hz, 1H), 1.78 (s, 3H), 1.60 (s, 7H), 1.42-1.34 (m, 2H), 1.28 (d, J = 7.3 Hz, 2H), 0.97 (d, J = 2.8 Hz, 3H).	617.2	A	B
I-2474		1H NMR (400 MHz, DMSO-d6) 8.34 (d, J = 6.9 Hz, 1H), 8.06 (d, J = 8.6 Hz, 1H), 7.92 - 7.86 (m, 2H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.51 - 7.44 (m, 2H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.27 (p, J = 6.8 Hz, 1H), 3.07 (q, J = 7.9 Hz, 1H), 3.00 (s, 3H), 2.89 (s, 3H), 1.91 (s, 2H), 2.03 - 1.76 (m, 2H), 1.63 - 1.43 (m, 8H), 1.38 (s, 1H), 1.27 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	562.3	A	B

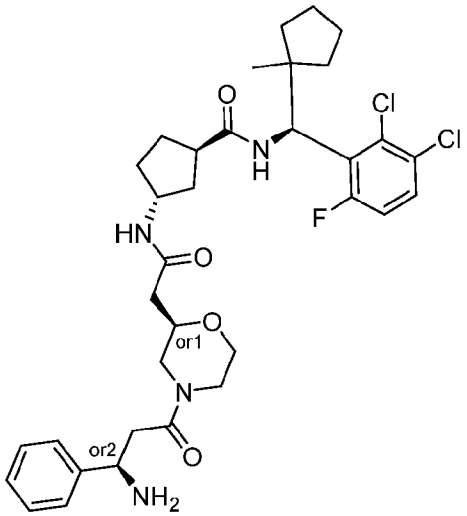
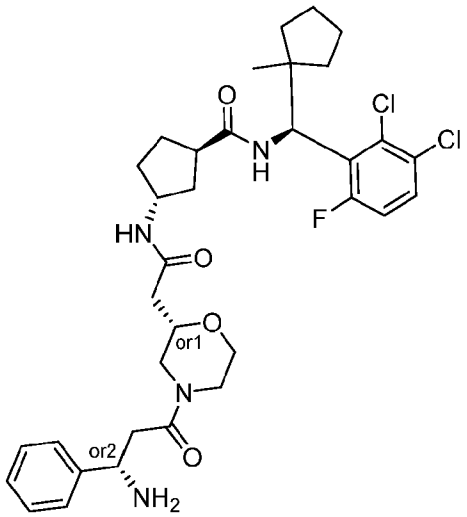
I-2475		1H NMR (400 MHz, DMSO-d6) 8.09 - 7.97 (m, 1H), 7.81 (d, J = 6.9 Hz, 1H), 7.61 (ddd, J = 9.0, 5.1, 1.9 Hz, 1H), 7.39 - 7.19 (m, 6H), 5.48 (d, J = 8.5 Hz, 1H), 4.45 - 4.31 (m, 2H), 4.05 - 3.79 (m, 3H), 3.63 (tt, J = 9.3, 6.1 Hz, 1H), 3.46 (q, J = 8.6, 7.8 Hz, 1H), 2.97 (s, 3H), 2.78 (s, 1H), 2.62 (dd, J = 16.8, 9.7 Hz, 2H), 2.49 (s, 1H), 1.98 - 1.76 (m, 3H), 1.60 (s, 6H), 1.58 (s, 1H), 1.39 (tt, J = 14.0, 7.8 Hz, 3H), 1.30 - 1.24 (m, 1H), 0.97 (d, J = 2.8 Hz, 3H).	659.35	A	B
I-2476		1H NMR (400 MHz, DMSO-d6) 8.09 - 7.98 (m, 1H), 7.81 (d, J = 6.9 Hz, 1H), 7.61 (ddd, J = 9.0, 5.1, 1.3 Hz, 1H), 7.34 (td, J = 7.1, 1.5 Hz, 2H), 7.31 - 7.18 (m, 4H), 5.48 (d, J = 8.5 Hz, 1H), 4.45 - 4.29 (m, 2H), 4.08 - 3.98 (m, 1H), 4.01 - 3.84 (m, 1H), 3.63 (tt, J = 9.5, 6.1 Hz, 1H), 3.46 (td, J = 8.7, 8.2, 5.5 Hz, 1H), 3.40 - 3.29 (m, 1H), 3.39 - 3.35 (m, 1H), 2.99 (s, 1H), 2.97 (s, 2H), 2.77 (s, 1H), 2.68 - 2.48 (m, 2H), 1.99 - 1.74 (m, 3H), 1.60 (s, 6H), 1.67 - 1.52 (m, 1H), 1.48 - 1.31 (m, 3H), 1.27 (d, J = 8.0 Hz, 1H), 1.00 - 0.94 (m, 3H).	659.35	A	B

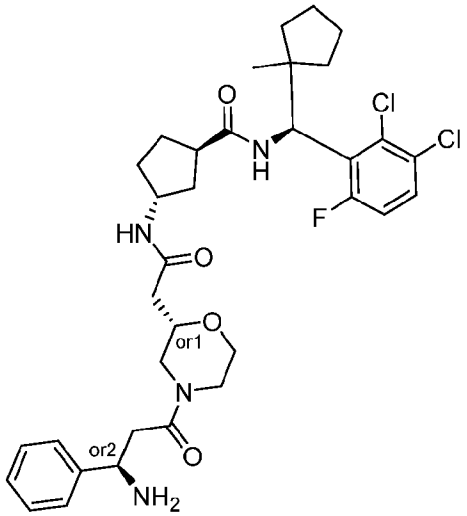
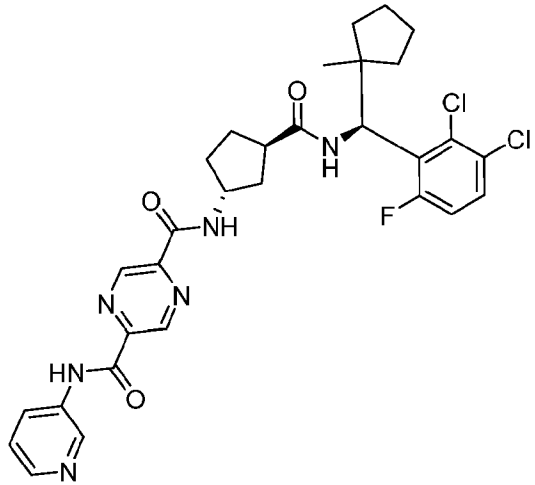
I-2477		1H NMR (400 MHz, DMSO-d6) 8.28 (d, J = 2.3 Hz, 1H), 8.05 (d, J = 8.6 Hz, 1H), 7.88-7.81 (m, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.49 (dd, J = 7.9, 2.4 Hz, 1H), 7.25 (t, J = 9.8 Hz, 1H), 7.18 (dd, J = 8.1, 2.4 Hz, 1H), 5.49 (d, J = 8.5 Hz, 1H), 4.19 (dd, J = 62.2, 13.2 Hz, 1H), 3.95 (d, J = 13.1 Hz, 1H), 3.84 (d, J = 15.2 Hz, 1H), 3.75 (d, J = 15.9 Hz, 1H), 3.71-3.62 (m, 2H), 3.60 (d, J = 8.6 Hz, 1H), 3.11 (t, J = 12.1 Hz, 1H), 2.96-2.87 (m, 1H), 2.73 (t, J = 11.7 Hz, 1H), 2.43 (s, 4H), 2.33-2.16 (m, 2H), 1.96-1.68 (m, 3H) , 1.60 (s, 7H), 1.38 (s, 2H), 1.26 (s, 2H), 0.97 (d, J = 2.8 Hz, 3H).	647.2	A	B
I-2478		1H NMR (400 MHz, DMSO-d6) 8.28 (d, J = 2.3 Hz, 1H), 8.09-8.00 (m, 1H), 7.88-7.81 (m, 1H), 7.61 (dd, J = 9.0, 5.0 Hz,1H), 7.49 (dd, J = 8.0, 2.3 Hz, 1H), 7.25 (t, J = 9.9 Hz, 1H), 7.18 (dd, J = 7.9, 2.4 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.19 (dd, J = 64.0, 13.1 Hz, 1H), 3.96 (d, J = 13.9 Hz, 1H), 3.84 (d, J = 15.4 Hz, 1H), 3.79 (s, 1H), 3.75 (d, J = 15.7 Hz, 1H), 3.68 (d, J = 7.0 Hz, 1H), 3.59 (d, J = 7.8 Hz, 1H), 3.11 (t, J = 12.0 Hz, 1H), 2.97-2.87 (m, 1H), 2.73 (t, J = 12.4 Hz, 1H), 2.43 (s, 4H), 2.24 (h, J = 7.6, 7.0 Hz, 2H), 1.96-1.72 (m,3H), 1.59 (s, 7H), 1.42 (dt, J = 19.1, 6.6 Hz, 1H),	647.2	A	B

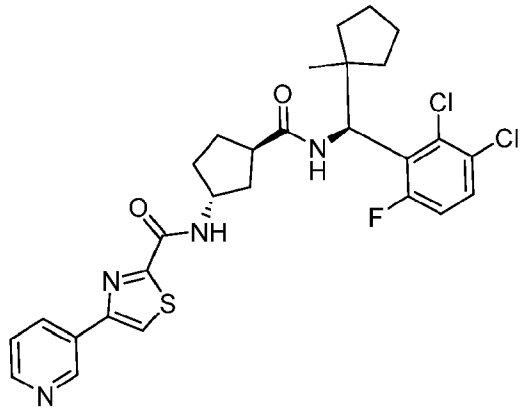
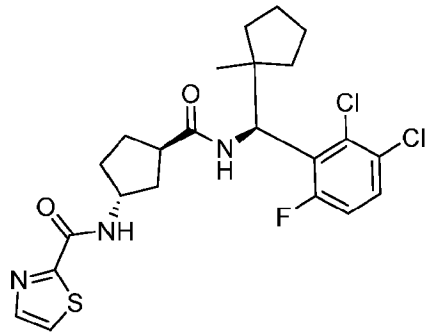
I-2479		1H NMR (400 MHz, DMSO-d6) 8.93 - 8.51 (m, 2H), 8.19 - 7.74 (m, 3H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.48 (d, J = 8.0 Hz, 1H), 7.26 (t, J = 9.8 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.28 (d, J = 19.2 Hz, 1H), 4.05 (s, 1H), 3.89 (s, 1H), 2.88 (d, J = 49.4 Hz, 4H), 2.61 (d, J = 39.0 Hz, 2H), 2.21 (s, 1H), 2.08 (s, 1H), 1.84 (s, 2H), 1.59 (s, 9H), 1.37 (d, J = 9.2 Hz, 2H), 1.31 - 1.08 (m, 2H), 0.96 (d, J = 2.9 Hz, 3H).	618.35	A	B
I-2480		1H NMR (400 MHz, DMSO-d6) 8.62 (d, J = 13.0 Hz, 2H), 8.04 (d, J = 8.6 Hz, 1H), 7.88 (d, J = 50.4 Hz, 2H), 7.61 (ddd, J = 9.0, 5.1, 1.6 Hz, 1H), 7.47 (s, 1H), 7.25 (t, J = 9.8 Hz, 1H), 5.49 (d, J = 8.5 Hz, 1H), 4.29 (s, 1H), 4.05 (s, 1H), 3.91 (s, 1H), 3.12 - 2.80 (m, 4H), 2.66 (t, J = 11.6 Hz, 2H), 2.35 - 2.05 (m, 2H), 1.91 (d, J = 89.4 Hz, 4H), 1.48 (d, J = 81.9 Hz, 9H), 1.25 (d, J = 8.4 Hz, 2H), 0.96 (s, 3H).	618.3	A	B

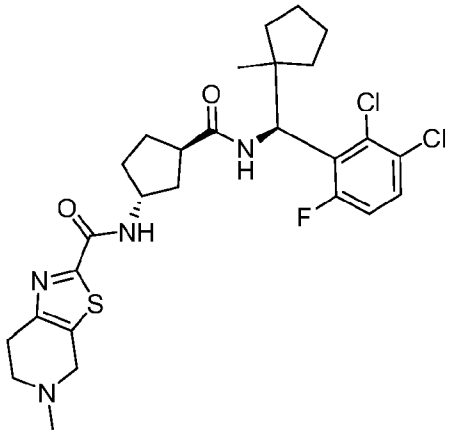
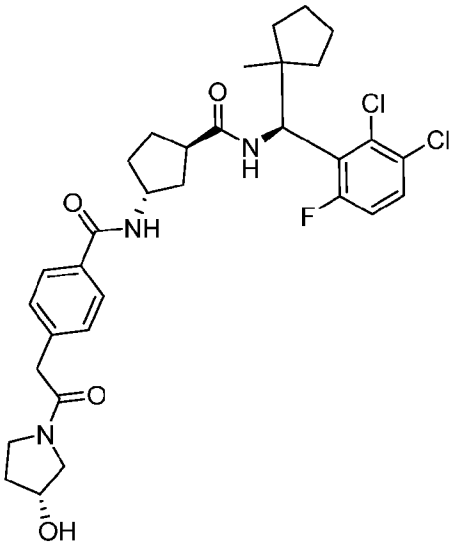
I-2481		1H NMR (400 MHz, DMSO-d6) 8.18 (d, J = 6.9 Hz, 1H), 8.06 (d, J = 8.6 Hz, 1H), 7.82 - 7.70 (m, 2H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.34 - 7.17 (m, 3H), 5.50 (d, J = 8.5 Hz, 1H), 4.96 (dd, J = 41.8, 3.5 Hz, 1H), 4.26 (dq, J = 20.1, 7.0, 5.5 Hz, 2H), 3.67 (d, J = 16.2 Hz, 2H), 3.62 - 3.36 (m, 2H), 3.31 - 3.21 (m, 1H), 3.04 (p, J = 7.9 Hz, 1H), 2.04 - 1.69 (m, 6H), 1.67 - 1.43 (m, 8H), 1.37 (s, 1H), 1.25 (d, J = 12.9 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	618.35	A	B
I-2482		1H NMR (400 MHz, DMSO-d6) 8.47 (t, J = 8.1 Hz, 1H), 7.78 (d, J = 7.0 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.28 (ddd, J = 10.4, 8.9, 1.5 Hz, 1H), 5.84-5.75 (m, 1H), 5.74-5.60 (m, 1H), 5.12-4.96 (m, 1H), 4.00 (q, J = 6.5 Hz, 1H), 2.83 (q, J = 7.9 Hz, 1H), 2.71 (s, 1H), 2.15 (s, 1H), 1.91-1.73 (m, 3H), 1.77 (s, 3H), 1.67-1.52 (m, 1H), 1.47-1.33 (m, 1H), 1.33 (s, 4H), 1.24 (s, 1H), 0.94 (dd, J = 13.3, 7.1 Hz, 3H).	441.05	C	
I-2483		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 7.7 Hz, 1H), 7.78 (d, J = 7.0 Hz, 1H), 7.58 (dd, J = 9.0, 5.2 Hz, 1H), 7.25 (dd, J = 10.2, 8.9 Hz, 1H), 4.90 (t, J = 8.9 Hz, 1H), 4.00 (p, J = 6.4 Hz, 1H), 2.83 (p, J = 7.7 Hz, 1H), 2.47-2.38 (m, 1H), 1.81 (ddt, J = 19.8, 14.1, 8.2 Hz, 4H), 1.77 (s, 4H), 1.67-1.51 (m, 2H), 1.38 (ddt, J = 29.7, 12.4, 7.4 Hz, 2H), 1.09-0.97 (m, 1H), 0.86 (s, 3H), 0.91-0.74 (m, 1H), 0.53 (td, J = 8.8, 4.2 Hz, 1H).	441	B	

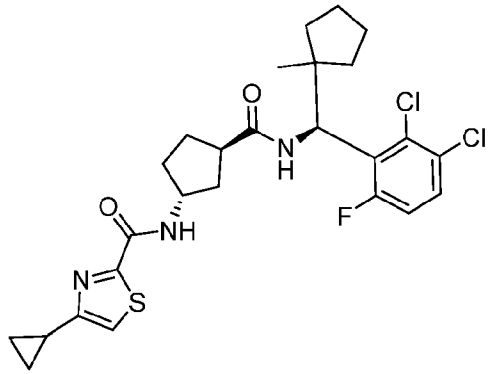
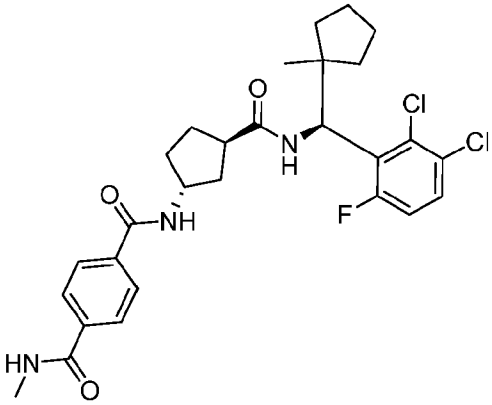
I-2484		1H NMR (400 MHz, DMSO-d6) 8.31 (t, J = 12.6 Hz, 1H), 7.77 (d, J = 7.1 Hz, 1H), 7.61 (t, J = 7.2 Hz, 1H), 7.28 (t, J = 9.6 Hz, 1H), 5.57-5.48 (m, 1H), 5.09 (s, 1H), 4.93 (d, J = 10.2 Hz, 1H), 4.00 (d, J = 6.7 Hz, 1H), 2.84 (s, 1H), 2.69 (s, 1H), 2.17 (s, 2H), 2.04 (s, 1H), 1.86 (s, 2H), 1.77 (s, 4H), 1.61 (s, 1H), 1.44 (s, 2H), 1.25 (d, J = 9.8 Hz, 1H), 1.10 (d, J = 11.1 Hz, 1H), 0.94 (dd, J = 20.7, 7.0 Hz, 3H),	441.2	C	
I-2485		1H NMR (400 MHz, DMSO-d6) 8.34 (d, J = 7.9 Hz, 1H), 7.78 (d, J = 6.9 Hz, 1H), 7.60 (dd, J = 8.9, 5.1 Hz, 1H), 7.27 (dd, J = 10.2, 8.9 Hz, 1H), 5.63-5.56 (m, 1H), 5.48 (d, J = 10.3 Hz, 1H), 5.23 (t, J = 9.4 Hz, 1H), 4.00 (h, J = 6.5 Hz, 1H), 2.87 (p, J = 7.8 Hz, 1H), 2.23 (s, 1H), 1.91-1.73 (m, 1H), 1.77 (s, 6H), 1.64 (dq, J = 18.2, 7.0, 6.2 Hz, 4H), 1.52-1.30 (m, 3H), 0.99 (d, J = 7.0 Hz, 3H).	441.15	A	B
I-2486		1H NMR (400 MHz, DMSO-d6) 8.04 (d, J = 8.6 Hz, 1H), 7.82 (dt, J = 13.0, 6.7 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.40 (d, J = 7.7 Hz, 4H), 7.37 - 7.18 (m, 2H), 5.49 (t, J = 6.7 Hz, 1H), 4.28 (s, 1H), 4.02 (q, J = 6.5 Hz, 1H), 3.79 (d, J = 14.1 Hz, 2H), 3.74 - 3.47 (m, 1H), 3.33 (s, 1H), 3.24 (t, J = 11.6 Hz, 2H), 2.97 (s, 1H), 2.90 - 2.73 (m, 2H), 2.73 - 2.63 (m, 3H), 2.40 - 1.74 (m, 4H), 1.60 (s, 7H), 1.51 - 1.21 (m, 5H), 0.97 (d, J = 3.3 Hz, 3H).	661.4	A	B

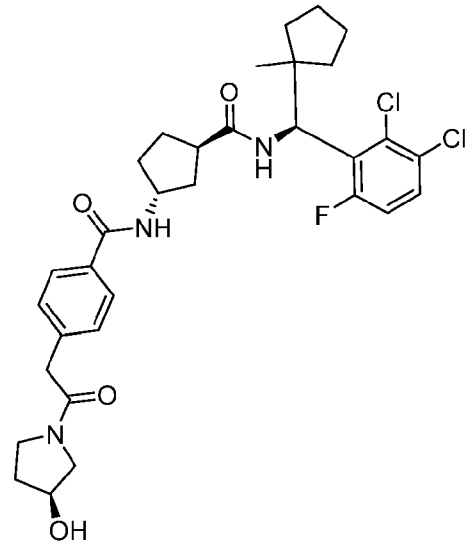
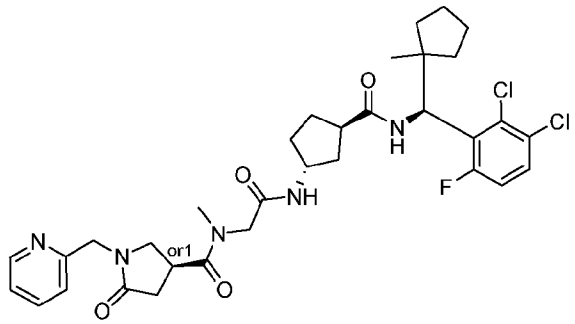
I-2487		1H NMR (400 MHz, DMSO-d6) 8.04 (d, J = 8.6 Hz, 1H), 7.82 (d, J = 6.9 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.40 (d, J = 7.6 Hz, 2H), 7.36 - 7.19 (m, 4H), 5.53 - 5.46 (m, 1H), 4.21 (dd, J = 56.8, 12.8 Hz, 2H), 4.01 (d, J = 7.4 Hz, 1H), 3.80 (d, J = 12.5 Hz, 1H), 3.70 - 3.43 (m, 2H), 3.30 (s, 2H), 3.15 - 2.90 (m, 2H), 2.67 - 2.55 (m, 1H), 2.45 - 2.32 (m, 1H), 2.20 (dt, J = 14.3, 6.8 Hz, 2H), 1.96 - 1.74 (m, 4H), 1.60 (s, 7H), 1.48 - 1.24 (m, 5H), 0.97 (s, 3H).	661.4	A	B
I-2488		1H NMR (400 MHz, DMSO-d6) 8.04 (d, J = 8.5 Hz, 1H), 7.82 (d, J = 6.9 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.47 - 7.36 (m, 2H), 7.36 - 7.20 (m, 4H), 5.49 (d, J = 8.5 Hz, 1H), 4.28 (d, J = 14.2 Hz, 2H), 4.17 - 3.96 (m, 1H), 3.79 (d, J = 12.5 Hz, 1H), 3.65 (t, J = 15.0 Hz, 2H), 3.12 - 2.93 (m, 2H), 2.73 (d, J = 11.7 Hz, 1H), 2.66 - 2.54 (m, 2H), 2.37 (d, J = 11.8 Hz, 1H), 2.22 (d, J = 6.4 Hz, 2H), 1.80 (s, 4H), 1.60 (s, 7H), 1.49 - 1.22 (m, 5H), 0.97 (d, J = 2.2 Hz, 3H).	661.4	A	B

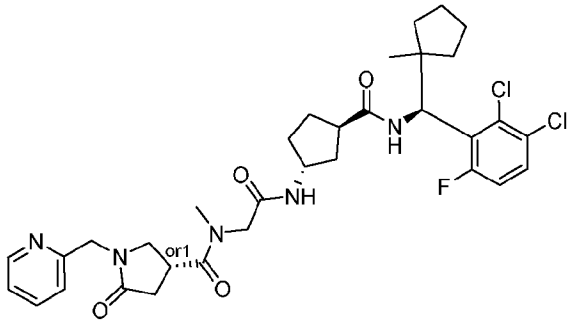
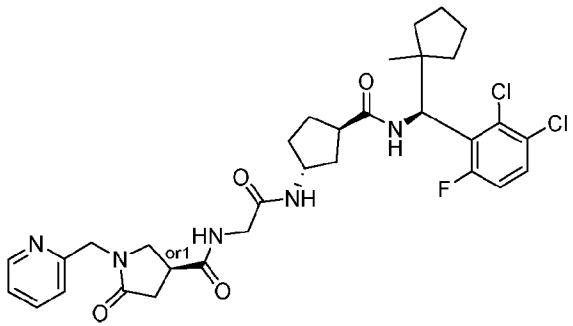
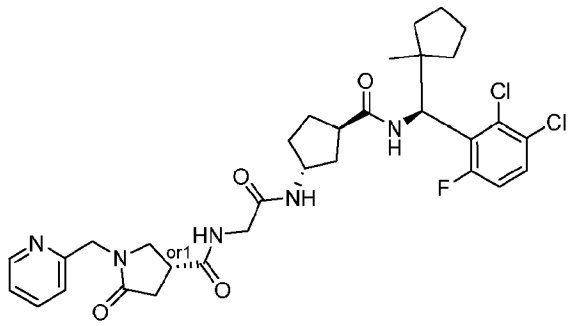
I-2489		1H NMR (400 MHz, DMSO-d6) 8.12 - 8.02 (m, 1H), 7.90 - 7.74 (m, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.40 (d, J = 7.6 Hz, 2H), 7.35 - 7.18 (m, 4H), 5.49 (d, J = 8.5 Hz, 1H), 4.38 - 4.23 (m, 2H), 4.15 (d, J = 13.5 Hz, 1H), 4.02 (d, J = 6.7 Hz, 2H), 3.74 (dd, J = 32.5, 15.7 Hz, 1H), 3.31 - 3.18 (m, 1H), 3.09 - 2.77 (m, 3H), 2.75 - 2.56 (m, 1H), 2.31 - 2.17 (m, 2H), 1.96 - 1.74 (m, 4H), 1.60 (s, 7H), 1.50 - 1.23 (m, 5H), 0.97 (s, 3H).	661.45	A	B
I-2490		1H NMR (400 MHz, DMSO-d6) 11.20 (s, 1H), 9.33 (d, J = 1.4 Hz, 1H), 9.28 (d, J = 1.4 Hz, 1H), 9.09 (d, J = 2.5 Hz, 1H), 8.92 (d, J = 7.8 Hz, 1H), 8.36 (dd, J = 4.7, 1.5 Hz, 1H), 8.31 (dt, J = 8.4, 2.1 Hz, 1H), 8.10 (d, J = 8.7 Hz, 1H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.43 (dd, J = 8.3, 4.7 Hz, 1H), 7.27 (t, J = 9.8 Hz, 1H), 5.52 (d, J = 8.5 Hz, 1H), 4.37 (p, J = 7.2 Hz, 1H), 3.11 (q, J = 7.9 Hz, 1H), 2.05 - 1.85 (m, 4H), 1.69 (p, J = 7.7 Hz, 1H), 1.63 - 1.44 (m, 7H), 1.39 (s, 1H), 1.27 (t, J = 11.2 Hz, 1H), 0.98 (d, J = 2.8 Hz, 3H).	613.45	A	A

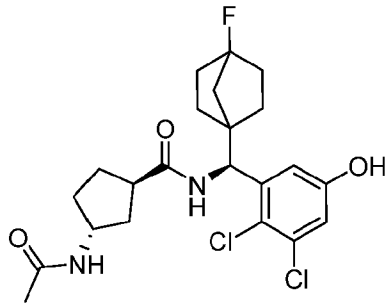
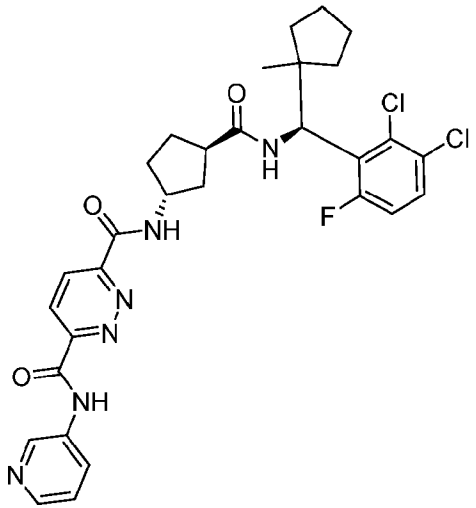
I-2491		1H NMR (400 MHz, DMSO-d6) 9.35 (d, J = 2.2 Hz, 1H), 8.71 (d, J = 7.7 Hz, 1H), 8.63 - 8.54 (m, 2H), 8.44 (dt, J = 8.0, 2.0 Hz, 1H), 8.11 (d, J = 8.6 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.53 (dd, J = 8.0, 4.8 Hz, 1H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.32 (q, J = 7.2 Hz, 1H), 3.11 (p, J = 7.8 Hz, 1H), 2.01 (dt, J = 13.7, 7.1 Hz, 1H), 1.94 (s, 3H), 1.95 - 1.85 (m, 1H), 1.61 (s, 6H), 1.62 - 1.44 (m, 1H), 1.39 (s, 1H), 1.27 (t, J = 10.9 Hz, 1H), 0.98 (d, J = 2.8 Hz, 3H).	575.25	B	B
I-2492		1H NMR (400 MHz, DMSO-d6) 8.66 (d, J = 7.7 Hz, 1H), 8.11 - 7.98 (m, 3H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.28 (h, J = 7.1 Hz, 1H), 3.06 (p, J = 7.9 Hz, 1H), 1.89 (dddd, J = 24.2, 15.7, 12.6, 7.6 Hz, 4H), 1.60 (s, 7H), 1.57 - 1.42 (m, 1H), 1.38 (s, 1H), 1.27 (s, 1H), 0.97 (d, J − 2.9 Hz, 3H).	498.2	B	B

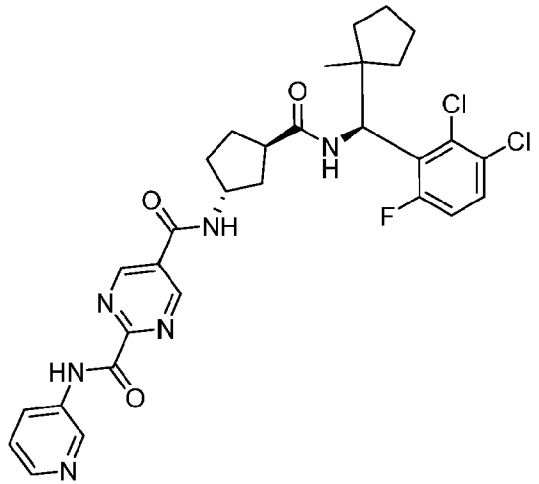
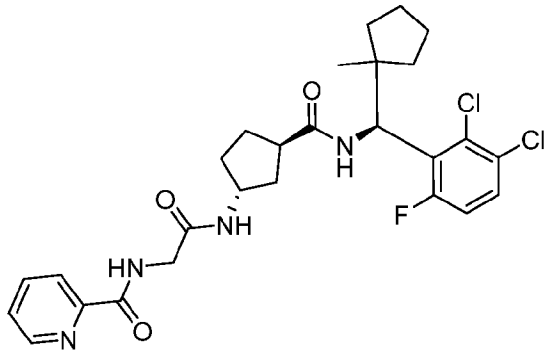
I-2493		1H NMR (400 MHz, DMSO-d6) 8.53 (d, J = 7.7 Hz, 1H), 8.06 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.50 (d, J = 8.6 Hz, 1H), 4.25 (h, J = 7.1 Hz, 1H), 3.65 (d, J = 1.7 Hz, 2H), 3.05 (p, J = 7.8 Hz, 1H), 2.88 - 2.80 (m, 2H), 2.74 (t, J = 5.7 Hz, 2H), 2.38 (s, 3H), 1.87 (dddd, J = 19.6, 12.2, 10.3, 5.5 Hz, 4H), 1.62 (dd, J = 19.5, 9.8 Hz, 2H), 1.60 (s, 5H), 1.46 (dt, J = 12.2, 8.0 Hz, 1H), 1.38 (d, J = 8.4 Hz, 1H), 1.27 (d, J = 7.3 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	567.3	A	B
I-2494		1H NMR (400 MHz, DMSO-d6) 8.18 (d, J = 7.0 Hz, 1H), 8.05 (d, J = 8.5 Hz, 1H), 7.76 (d, J = 8.1 Hz, 2H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.27 (dd, J = 19.9, 8.9 Hz, 3H), 5.50 (d, J = 8.5 Hz, 1H), 5.01 (d, J = 3.7 Hz, 1H), 4.90 (d, J = 3.2 Hz, 2H), 4.32- 4.22 (m, 2H), 3.67 (d, J = 16.1 Hz, 2H), 3.54 (dt, J = 11.4, 6.6 Hz, 1H), 3.32-3.22 (m, 1H), 3.08-3.00 (m,1H), 1.99- 1.93 (m, 1H), 1.91 (s, 5H), 1.90-1.81 (m, 1H), 1.82 (s, 6H), 1.60 (s, 1H), 1.38 (s,1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	618.4	A	B

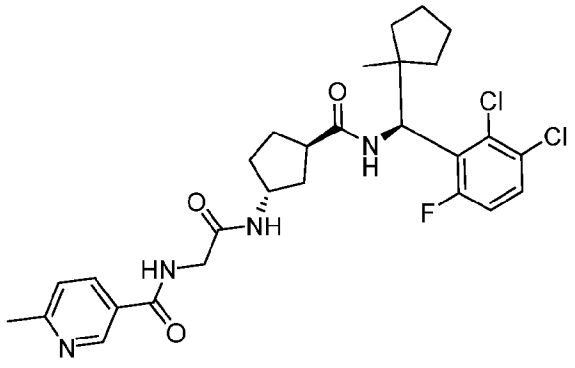
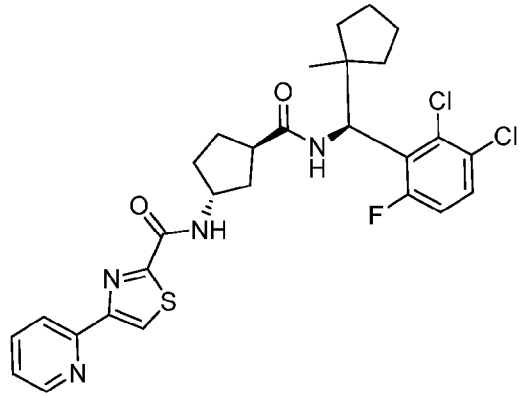
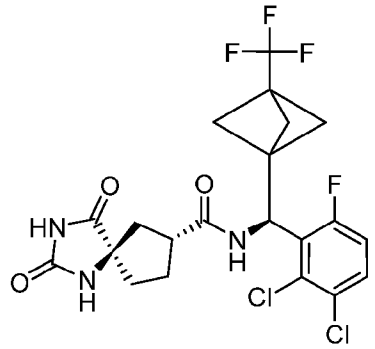
I-2495		1H NMR (400 MHz, DMSO-d6) 8.40 (d, J = 7.7 Hz, 1H), 8.08 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.53 (s, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.50 (d, J = 8.5 Hz, 1H), 4.26 (p, J = 7.2 Hz, 1H), 3.07 (q, J = 7.8 Hz, 1H), 2.13 (tt, J = 8.3, 5.0 Hz, 1H), 1.95 (dd, J = 13.1, 6.9 Hz, 1H), 1.89 (s, 1H), 1.93-1.80 (m, 2H), 1.65 (s, 1H), 1.60 (s, 5H), 1.59 (s, 1H), 1.46 (dt, J = 12.2, 8.0 Hz, 1H), 1.38 (s, 1H), 1.27 (s, 1H), 0.99-0.89 (m, 5H), 0.87 (tt, J − 4.6, 2.1 Hz, 2H).	538.2	B	
I-2496		1H NMR (400 MHz, DMSO-d6) 8.55 (q, J = 4.5 Hz, 1H), 8.36 (d, J = 6.9 Hz, 1H), 8.06 (d, J = 8.6 Hz, 1H), 7.90 (s, 4H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.31 - 7.22 (m, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.28 (q, J = 6.8 Hz, 1H), 3.07 (q, J = 7.9 Hz, 1H), 2.80 (d, J = 4.5 Hz, 3H), 1.91 (s, 1H), 2.04 - 1.76 (m, 3H), 1.64 - 1.57 (m, 7H), 1.59 - 1.43 (m, 1H), 1.39 (d, J = 8.4 Hz, 1H), 1.27 (t, J = 5.9 Hz, 1H), 0.98 (d, J = 2.9 Hz, 3H).	548.3	A	A

I-2497		1H NMR (400 MHz, DMSO-d6) 8.18 (d, J = 6.9 Hz, 1H), 8.05 (d, J = 8.6 Hz, 1H), 7.80 - 7.73 (m, 2H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.33 - 7.21 (m, 3H), 5.51 (d, J = 8.6 Hz, 1H), 4.95 (dd, J = 41.6, 3.5 Hz, 1H), 4.32 - 4.21 (m, 2H), 3.67 (d, J = 16.1 Hz, 2H), 3.62 - 3.35 (m, 2H), 3.32 - 3.22 (m, 1H), 3.04 (p, J = 7.9 Hz, 1H), 2.02 - 1.67 (m, 6H), 1.67 - 1.42 (m, 8H), 1.37 (s, 1H), 1.25 (d, J = 12.9 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	618.2	A	A
I-2498		1H NMR (400 MHz, DMSO-d6) 8.61 (d, J = 5.3 Hz, 1H), 8.05 (t, J = 7.7 Hz, 1H), 7.97 (s, 1H), 7.83 (d, J = 7.0 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.45 (s, 2H), 7.25 (ddd, J − 10.6, 8.9, 1.4 Hz, 1H), 5.48 (dd, J − 8.7, 2.4 Hz, 1H), 4.67 - 4.44 (m, 2H), 4.02 (d, J = 8.3 Hz, 1H), 3.92 (t, J = 8.6 Hz, 1H), 3.83 (d, J = 16.1 Hz, 1H), 3.70 - 3.65 (m, 1H), 3.62 (t, J = 9.0 Hz, 1H), 3.53 - 3.41 (m, 2H), 2.99 (s, 3H), 2.79 (s, 1H), 2.71 - 2.52 (m, 1H), 1.97 簽C 1.74 (m, 3H), 1.68 - 1.50 (m, 7H), 1.49 - 1.30 (m, 3H), 1.25 (d, J = 9.3 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	660.1	A	B

I-2499		1H NMR (400 MHz, DMSO-d6) 8.62 (d, J = 4.9 Hz, 1H), 8.19 - 7.75 (m, 3H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.47 (s, 2H), 7.34 - 7.17 (m, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.65 - 4.45 (m, 2H), 4.09 - 3.97 (m, 2H), 3.96 - 3.90 (m, 1H), 3.84 (d, J = 16.1 Hz, 1H), 3.71 - 3.60 (m, 1H), 3.48 (ddd, J = 13.0, 9.2, 3.6 Hz, 2H), 2.99 (s, 3H), 2.79 (s, 1H), 2.70 - 2.53 (m, 1H), 1.99 -1.72 (m, 3H), 1.60 (q, J = 7.6, 6.5 Hz, 7H), 1.40 (td, J = 11.6, 10.5, 6.4 Hz, 3H), 1.25 (d, J = 10.5 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	660.35	A	B
I-2500		1H NMR (400 MHz, DMSO-d6) 8.57 (d, J = 4.9 Hz, 1H), 8.30 - 8.17 (m, 1H), 8.06 (d, J = 8.6 Hz, 1H), 7.93 - 7.78 (m, 2H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.37 (d, J = 8.5 Hz, 2H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.48 (d, J = 8.6 Hz, 1H), 4.61 - 4.40 (m, 2H), 4.02 (h, J = 6.6 Hz, 1H), 3.67 (d, J = 5.7 Hz, 2H), 3.55 (t, J = 9.2 Hz, 1H), 3.39 (dd, J = 9.6, 5.8 Hz, 1H), 3.25 (tt, J = 8.8, 6.6 Hz, 1H), 3.01 - 2.87 (m, 1H), 2.56 (d, J = 16.8 Hz, 1H), 1.93 - 1.74 (m, 3H), 1.68 - 1.49 (m, 7H), 1.48 - 1.31 (m, 3H), 1.30 - 1.21 (m, 1H), 1.17 (t, J = 7.3 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	646.1	B	
I-2501		1H NMR (400 MHz, DMSO-d6) 8.57 (d, J = 5.1 Hz, 1H), 8.24 (t, J = 5.6 Hz, 1H), 8.05 (d, J = 8.6 Hz, 1H), 7.86 (dd, J = 17.1, 6.8 Hz, 2H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.38 (s, 2H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.64 - 4.42 (m, 2H), 4.01 (p, J = 6.6 Hz, 1H), 3.67 (d, J = 5.7 Hz, 2H), 3.55 (t, J = 9.1 Hz, 1H), 3.39 (dd, J = 9.6, 5.7 Hz, 1H), 3.24 (tt, J = 8.6, 6.7 Hz, 1H), 3.04 - 2.87 (m, 1H), 2.56 (d, J = 16.8 Hz, 1H), 1.88 (dt, J = 13.7, 7.2 Hz, 1H), 1.83 - 1.72 (m, 2H), 1.58 (d, J = 6.9 Hz, 7H), 1.49 - 1.30 (m, 3H), 1.25 (d, J = 8.2 Hz, 1H), 1.17 (t, J = 7.2 Hz,	646.15	A	B

I-2502		1H NMR (400 MHz, DMSO-d6) 10.07 (s, 1H), 8.18 (d, J = 8.5 Hz, 1H), 7.78 (d, J = 6.8 Hz, 1H), 6.90 (d, J = 2.7 Hz, 1H), 6.79 (d, J = 2.8 Hz, 1H), 5.41 (d, J = 8.4 Hz, 1H), 4.01 (h, J = 6.4 Hz, 1H), 2.88 (p, J = 7.8 Hz, 1H), 1.89 - 1.72 (m, 9H), 1.71 - 1.55 (m, 6H), 1.54 - 1.32 (m, 4H).	458.85	A	A
I-2503		1H NMR (400 MHz, DMSO-d6) 11.25 (s, 1H), 9.07 (d, J = 2.5 Hz, 1H), 8.99 (d, J = 7.6 Hz, 1H), 8.47 (d, J = 8.7 Hz, 1H), 8.42 (s, 1H), 8.41 - 8.37 (m, 1H), 8.32 (ddd, J = 8.3, 2.6, 1.5 Hz, 1H), 8.06 (dd, J − 27.4, 8.7 Hz, 1H), 7.66 - 7.56 (m, 1H), 7.46 (dd, J = 8.3, 4.7 Hz, 1H), 7.26 (dt, J = 10.5, 8.2 Hz, 1H), 5.50 (dd, J = 17.1, 8.5 Hz, 1H), 4.40 (q, J = 7.2 Hz, 1H), 3.17 - 3.00 (m, 1H), 2.16 - 1.69 (m, 5H), 1.66 - 1.48 (m, 7H), 1.38 (s, 1H), 1.25 (d, J = 15.1 Hz, 1H), 0.97 (dd, J = 6.5, 2.7 Hz, 3H).	613.15	A	B

I-2504		1H NMR (400 MHz, DMSO-d6) 11.15 (s, 1H), 9.35 (s, 2H), 9.05 (d, J = 2.5 Hz, 1H), 8.84 (d, J = 6.8 Hz, 1H), 8.50-8.17 (m, 2H), 8.11 (d, J = 8.7 Hz, 1H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.43 (dd, J = 8.4, 4.7 Hz, 1H), 7.36-7.23 (m, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.31 (q, J = 6.9 Hz, 1H), 3.17-3.02 (m, 1H), 2.13-1.79 (m, 5H), 1.61 (s, 7H), 1.39 (s, 1H), 1.26 (d, J = 15.5 Hz, 1H), 0.98 (d, J = 2.7 Hz, 3H).	613.1	A	A
I-2505		1H NMR (400 MHz, DMSO-d6) 9.03 (d, J = 2.2 Hz, 1H), 8.87 (t, J = 5.9 Hz, 1H), 8.71 (dd, J = 4.9, 1.7 Hz, 1H), 8.21 (dt, J = 8.0, 2.0 Hz, 1H), 8.05 (d, J = 8.6 Hz, 1H), 7.90 (d, J = 7.0 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.52 (dd, J = 8.0, 4.8 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.49 (d, J = 8.5 Hz, 1H), 4.06 (h, J = 6.6 Hz, 1H), 3.86 (d, J = 5.9 Hz, 2H), 3.00 (p, J = 7.4 Hz, 1H), 1.86 (ddt, J = 39.5, 14.9, 7.3 Hz, 3H), 1.73 - 1.50 (m, 7H), 1.50 - 1.31 (m, 3H), 1.32 - 1.19 (m, 1H), 0.97 (d, J = 2.8 Hz, 3H).	549.1	A	A

I-2506		1H NMR (400 MHz, DMSO-d6) 8.91 (d, J = 2.3 Hz, 1H), 8.78 (t, J = 5.9 Hz, 1H), 8.20 - 8.01 (m, 2H), 7.89 (d, J = 7.0 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.36 (d, J = 8.1 Hz, 1H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.06 (h, J = 6.6 Hz, 1H), 3.84 (d, J = 5.9 Hz, 2H), 2.99 (p, J = 7.6 Hz, 1H), 2.52 (s, 3H), 1.98 - 1.74 (m, 3H), 1.72 - 1.51 (m, 7H), 1.50 - 1.33 (m, 3H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	563.2	A	B
I-2507		1H NMR (400 MHz, DMSO-d6) 8.71 - 8.62 (m, 2H), 8.52 (s, 1H), 8.29 (d, J = 7.9 Hz, 1H), 8.11 (d, J = 8.6 Hz, 1H), 7.97 (td, J = 7.7, 1.8 Hz, 1H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.45 - 7.38 (m, 1H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.31 (p, J = 7.1 Hz, 1H), 3.11 (p, J = 7.8 Hz, 1H), 2.10 - 1.86 (m, 1H), 1.93 (s, 3H), 1.71 (dd, J = 13.2, 7.5 Hz, 1H), 1.60 (s, 6H), 1.51 (dd, J = 12.9, 7.9 Hz, 1H), 1.38 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.9 Hz, 3H).	575.2	B	
I-2508		1H NMR (400 MHz, DMSO-d6) 10.61 (s, 1H), 8.47 (d, J = 7.4 Hz, 1H), 8.32 (d, J = 2.9 Hz, 1H), 7.63 (dd, J = 9.0, 4.9 Hz, 1H), 7.29 (t, J = 9.6 Hz, 1H), 5.54 (d, J = 7.3 Hz, 1H), 3.06-2.97 (m, 1H), 2.16 (dd, J = 13.2, 10.1 Hz, 1H), 1.94 (q, J = 9.3 Hz, 9H), 1.66 (tt, J = 12.5, 6.5 Hz, 2H).	508	C	

I-2509		609.35	B
I-2510		588.1	A A

I-2511		613.1	A	A
I-2512		571.1	A	B

I-2513		522.15	A	A
I-2514		557.15	A	B

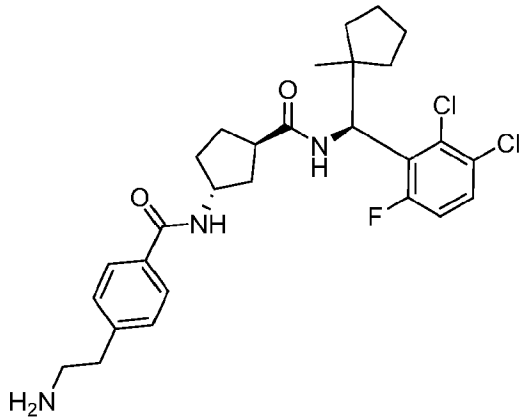
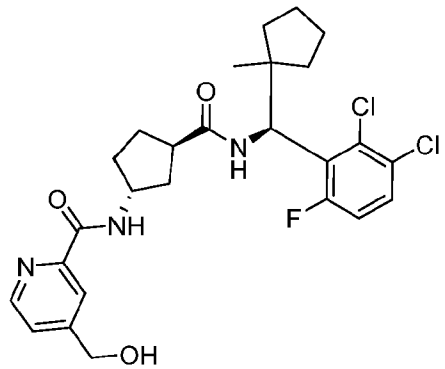
I-2515		571.35	A	A
I-2516		523.1	A	A

I-2517		617.1	B
I-2518		549.15	B

I-2519		557.4	A	A
I-2520		587.1	A	

I-2521		589.1	B	C
I-2522		620.05	B	

I-2523		512.2	A	B
I-2524		549.15	A	A

I-2525			534.4	A	B
I-2526		1H NMR (400 MHz, DMSO-d6) 8.56 (dd, J = 4.9, 0.8 Hz, 1H), 8.47 (d, J = 7.8 Hz, 1H), 8.09 (d, J = 8.6 Hz, 1H), 8.00 (dd, J = 1.8, 0.9 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.54 - 7.46 (m, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.58 - 5.48 (m, 2H), 4.62 (d, J = 5.7 Hz, 2H), 4.31 (p, J = 6.9 Hz, 1H), 3.07 (p, J = 7.9 Hz, 1H), 2.00 - 1.80 (m, 1H), 1.88 (s, 3H), 1.60 (s, 7H), 1.38 (s, 1H), 1.25 (d, J = 12.8 Hz, 2H), 0.97 (d, J = 2.8 Hz, 3H).	522.2	A	A

I-2527		512.25	A	
I-2528		588.25	A	B
I-2529		590.15	A	B

I-2530		544.1	A A
I-2531		557.4	A B

I-2532		588.25	A	B
I-2533		521.15	A	B

I-2534		545.15	A	B
I-2535		591.4	B	

I-2536		574.15	A	B
I-2537		537.2	A	B

I-2538		549.2	B
			A
I-2539		549.15	A
			B

I-2540		523.2	B	
I-2541		597.15	C	

I-2542		559.35	A	B
I-2543		548.15	D	

I-2544		583.1	B	B
I-2545		549.1	B	A
I-2546		560.2	B	B

I-2547		597.4	B	B
I-2548		552.15	C	B

I-2549		535.15	D	
I-2550		524.25	B	B

I-2551		544.15	A	A
I-2552		535.15	D	

I-2553		534.35	B	A
I-2554		584.1	A	B

I-2555		565.4	C	B
I-2556		547.15	D	

I-2557		549.15	D	D
I-2558		585.25	B	B

I-2559		597.3	D	
I-2560		552.15	B	C

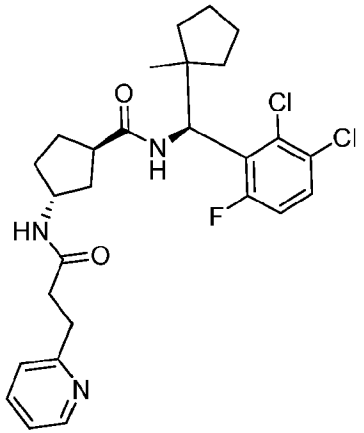
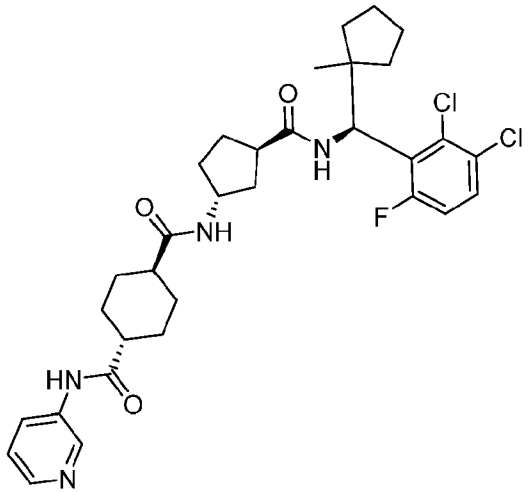
I-2561		527.1	C	
I-2562		535.15	B	B

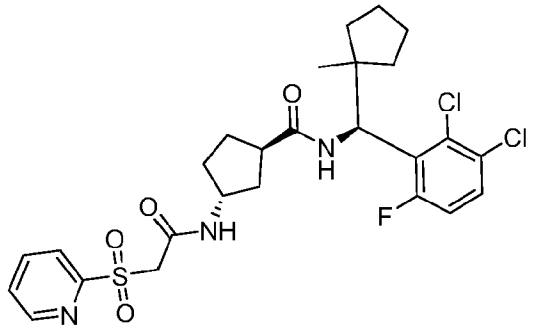
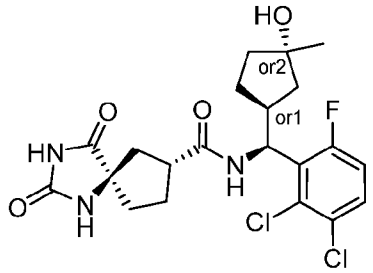
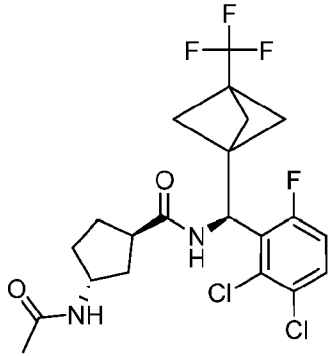
I-2563		565.25	B	C
I-2564		603.4	B	B

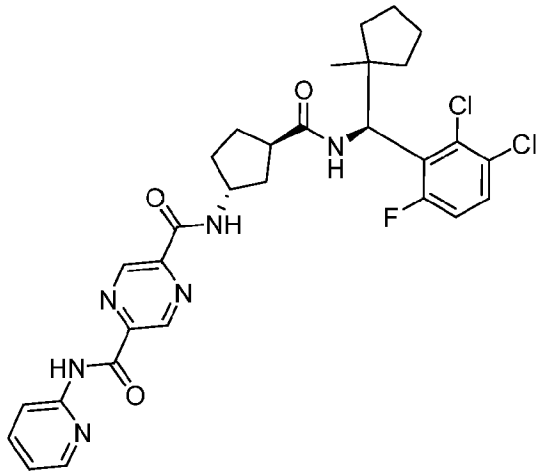
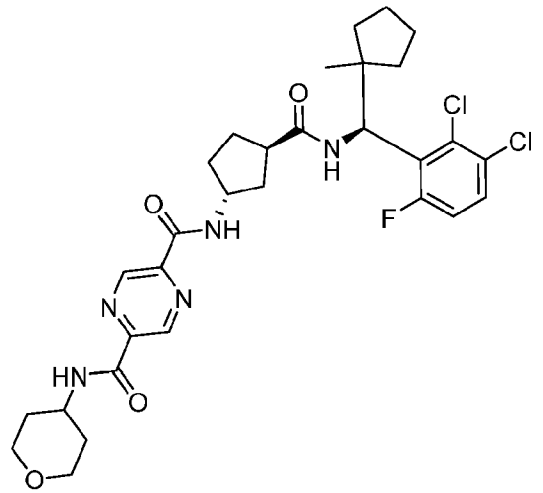
I-2565		557.4	C	B
I-2566		521.15	B	B

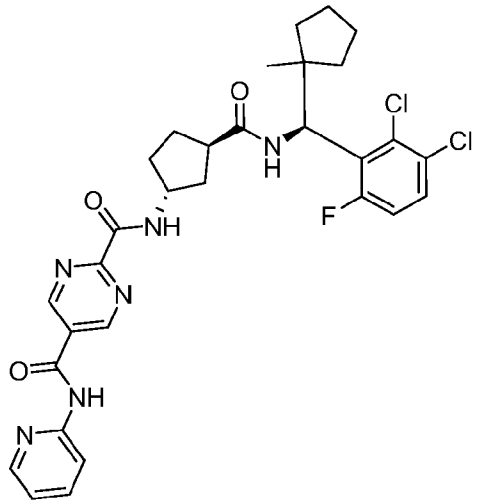
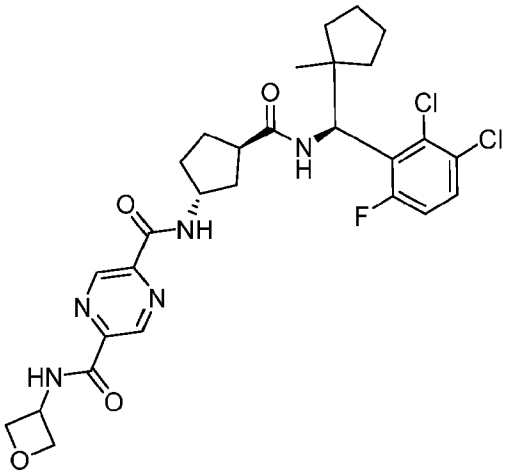
I-2567		548.1	B	B
I-2568		520.1	B	B

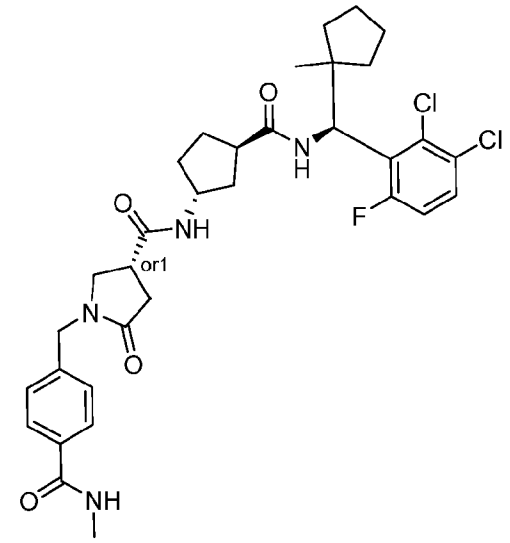
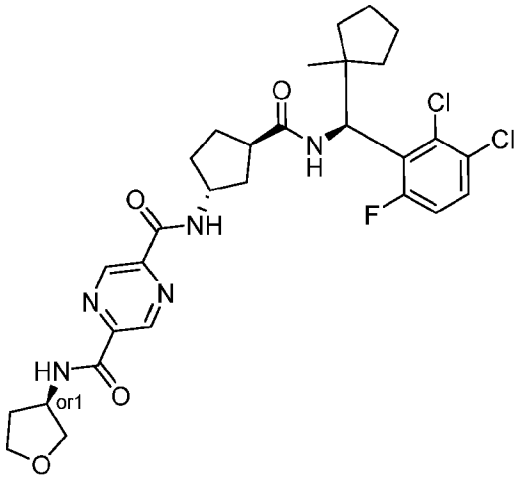
I-2569		535.25	B	B
I-2570		530.2	A	A

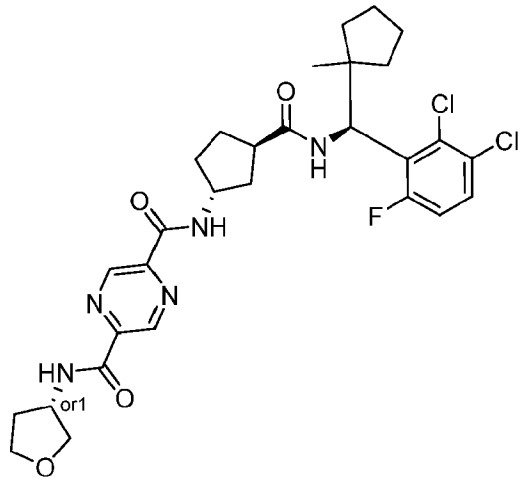
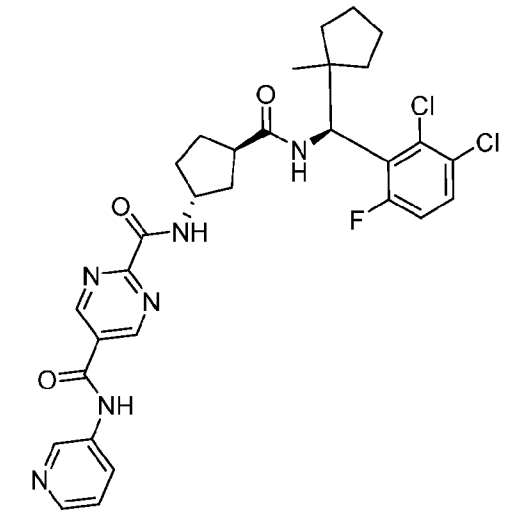
I-2571			520.15	B	A
I-2572		1H NMR (400 MHz, DMSO-d6) 10.06 (s, 1H), 8.81 - 8.59 (m, 1H), 8.23 (dd, J = 4.6, 1.5 Hz, 1H), 8.03 (ddd, J = 8.3, 2.6, 1.5 Hz, 2H), 7.75 - 7.51 (m, 2H), 7.37 - 7.12 (m, 2H), 5.48 (d, J = 8.6 Hz, 1H), 4.01 (p, J = 6.6 Hz, 1H), 2.97 (q, J = 7.7 Hz, 1H), 2.33 (s, 1H), 2.08 (s, 1H), 1.88 (q, J = 5.8 Hz, 3H), 1.80 (d, J = 15.3 Hz, 4H), 1.59 (d, J = 6.4 Hz, 7H), 1.40 (d, J = 9.6 Hz, 7H), 1.26 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	617.4	B	A

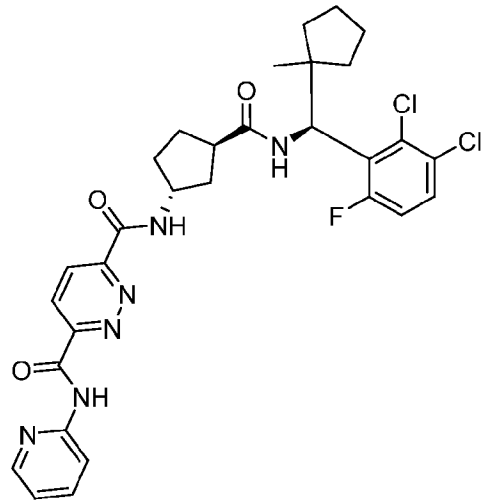
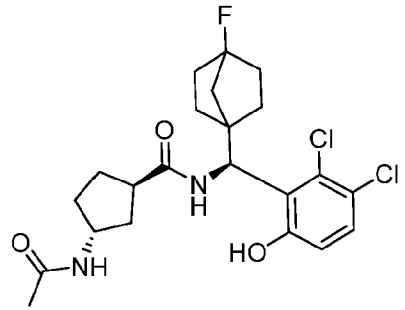
I-2573		1H NMR (400 MHz, DMSO-d6) 8.81 - 8.76 (m, 1H), 8.27 (d, J = 6.9 Hz, 1H), 8.14 (td, J = 7.8, 1.7 Hz, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.99 (d, J = 7.9 Hz, 1H), 7.77 - 7.71 (m, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 5.46 (d, J = 8.5 Hz, 1H), 4.36 (s, 2H), 3.89 (h, J = 6.6 Hz, 1H), 2.96 (p, J = 7.6 Hz, 1H), 1.90 - 1.71 (m, 3H), 1.67 - 1.48 (m, 7H), 1.39 (ddt, J = 16.4, 8.2, 3.7 Hz, 2H), 1.28 (ddd, J = 13.1, 8.4, 3.6 Hz, 2H), 0.96 (d, J = 2.8 Hz, 3H).	570.2	B	A
I-2574		1H NMR (400 MHz, DMSO-d6) 10.61 (s, 1H), 8.38 (d, J = 7.1 Hz, 1H), 8.29 (s, 1H), 7.58 (dd, J = 8.9, 5.1 Hz, 1H), 7.24 (dd, J = 10.3, 8.9 Hz, 1H), 5.11 (t, J = 8.9 Hz, 1H), 4.36 (s, 1H), 2.95 - 2.87 (m, 1H), 2.59 (s, 1H), 2.11 (dd, J = 13.1, 10.2 Hz, 1H), 2.05 - 1.78 (m, 4H), 1.65 (dq, J = 16.1, 6.5, 5.3 Hz, 3H), 1.57 - 1.37 (m, 2H), 1.36 - 1.21 (m, 2H), 1.12 (s, 3H).	472.05	E	
I-2575		1H NMR (400 MHz, DMSO-d6) 8.34 (d, J = 7.5 Hz, 1H), 7.78 (d, J = 7.0 Hz, 1H), 7.62 (ddd, J = 8.9, 5.4, 3.4 Hz, 1H), 7.28 (ddt, J = 13.1, 9.6, 3.2 Hz, 1H), 5.53 (d, J = 7.3 Hz, 1H), 4.01 (d, J = 7.7 Hz, 1H), 2.96-2.87 (m, 1H), 1.94 (d, J = 7.9 Hz, 5H), 1.90 (s, 2H), 1.85-1.78 (m, 3H), 1.77 (s,2H), 1.62 (q, J = 6.2 Hz, 1H), 1.51-1.32 (m, 2H).	481.1	D	

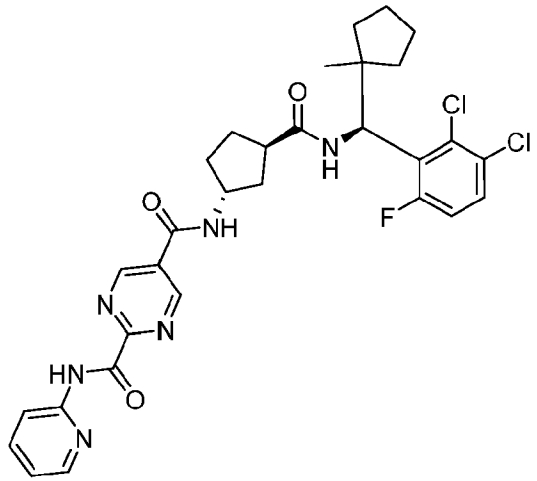
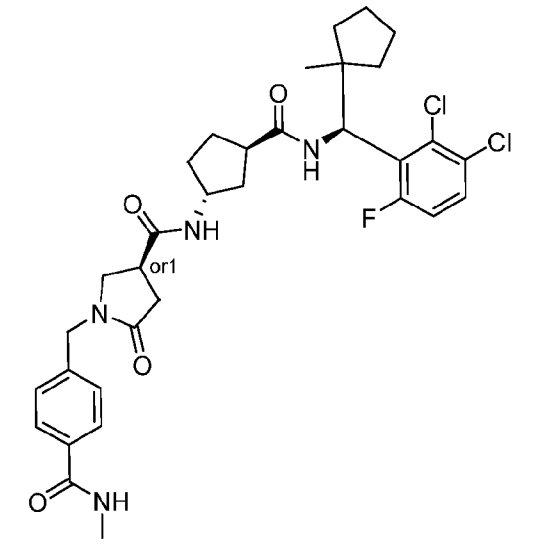
I-2576		1H NMR (400 MHz, DMSO-d6) 10.42 (s, 1H), 9.31 (d, J = 16.9 Hz, 2H), 8.93 (d, J = 7.4 Hz, 1H), 8.44 (s, 1H), 8.25 (d, J = 8.3 Hz, 1H), 8.10 (d, J = 8.6 Hz, 1H), 7.94 (t, J = 8.0 Hz, 1H), 7.63 (d, J = 7.9 Hz, 1H), 7.26 (d, J = 10.5 Hz, 2H), 5.51 (d, J = 8.5 Hz, 1H), 4.42 - 4.34 (m, 1H), 3.09 (s, 1H), 1.91 (s, 4H), 1.60 (s, 8H), 1.38 (s, 1H), 1.27 (s, 1H), 0.97 (s, 3H).	613.35	C	
I-2577		1H NMR (400 MHz, DMSO-d6) 9.19 (s, 2H), 9.01 (d, J = 8.4 Hz, 1H), 8.86 (d, J = 7.7 Hz, 1H), 8.09 (d, J = 8.6 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 5.51 (d, J − 8.5 Hz, 1H), 4.36 (h, J − 7.2 Hz, 1H), 4.14 - 4.01 (m, 1H), 3.93 - 3.83 (m, 2H), 3.40 (td, J = 11.4, 4.1 Hz, 2H), 3.13 - 3.04 (m, 1H), 2.02 - 1.83 (m, 4H), 1.77 - 1.47 (m, 12H), 1.38 (s, 1H), 1.26 (d, J = 14.7 Hz, 1H), 0.97 (d, J = 2.7 Hz, 3H).	620.15	B	A

I-2578		1H NMR (400 MHz, DMSO-d6) 11.42 (s, 1H), 9.40 (s, 2H), 8.83 (d, J = 7.6 Hz, 1H), 8.53 - 8.35 (m, 1H), 8.22 (d, J = 8.3 Hz, 1H), 8.10 (d, J = 8.6 Hz, 1H), 7.98 - 7.84 (m, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.44 - 7.08 (m, 2H), 5.52 (d, J = 8.6 Hz, 1H), 4.33 (q, J = 7.0 Hz, 1H), 3.08 (p, J = 8.0 Hz, 1H), 2.08 - 1.80 (m, 4H), 1.71 - 1.47 (m, 8H), 1.39 (s, 1H), 1.26 (d, J = 16.4 Hz, 1H), 0.98 (d, J = 2.8 Hz, 3H).	613.3	A	A
I-2579		1H NMR (400 MHz, DMSO-d6) 9.84 (d, J = 6.8 Hz, 1H), 9.21 (d, J = 1.4 Hz, 1H), 9.17 (d, J = 1.4 Hz, 1H), 8.89 (d, J = 7.8 Hz, 1H), 8.10 (d, J = 8.6 Hz, 1H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.27 (dd, J = 10.7, 9.0 Hz, 1H), 5.50 (d, J = 8.6 Hz, 1H), 5.07 (h, J = 7.0 Hz, 1H), 4.82 - 4.60 (m, 4H), 4.36 (q, J = 7.2 Hz, 1H), 3.08 (p, J = 7.9 Hz, 1H), 2.05 - 1.74 (m, 4H), 1.72 - 1.44 (m, 8H), 1.38 (s, 1H), 1.25 (d, J = 13.3 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	592.1	B	A

I-2580		1H NMR (400 MHz, DMSO-d6) 8.40 (d, J = 4.7 Hz, 1H), 8.03 (d, J = 8.6 Hz, 1H), 7.93 (d, J = 6.8 Hz, 1H), 7.79 (d, J = 8.0 Hz, 2H), 7.60 (dd, J = 8.9, 5.0 Hz, 1H), 7.30 (s, 1H), 7.30 - 7.20 (m, 2H), 5.48 (d, J = 8.6 Hz, 1H), 4.43 (d, J = 15.4 Hz, 1H), 4.37 (d, J = 15.3 Hz, 1H), 3.99 (p, J = 6.4 Hz, 1H), 3.40 (t, J = 9.2 Hz, 1H), 3.21 (dd, J = 9.6, 5.9 Hz, 1H), 3.12 - 2.99 (m, 1H), 2.96 (p, J = 7.6 Hz, 1H), 2.77 (d, J = 4.5 Hz, 3H), 2.48 (s, 1H), 1.89 (dt, J = 13.6, 7.1 Hz, 1H), 1.78 (s, 2H), 1.59 (s, 8H), 1.38 (ddd, J = 26.8, 12.4, 6.5 Hz, 2H), 1.26 (s, 2H), 0.96 (d, J = 2.8 Hz, 3H).	645.35	B	B
I-2581		1H NMR (400 MHz, DMSO-d6) 9.21-9.16 (m, 2H), 9.13 (d, J = 7.2 Hz, 1H), 8.86 (d, J = 7.8 Hz, 1H), 8.08 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.51 (d, J − 8.5 Hz, 1H), 4.51 (ddt, J − 15.0, 7.0, 3.5 Hz, 1H), 4.34 (p, J = 7.2 Hz, 1H), 3.87 (dt, J = 9.0, 6.6 Hz, 2H), 3.73 (td, J = 8.1, 5.9 Hz, 1H), 3.63 (dd, J = 8.8, 4.8 Hz, 1H), 3.14-3.02 (m, 1H), 2.16 (dtd, J = 12.6, 7.9, 6.5 Hz, 1H), 2.10- 2.00 (m, 1H), 2.04- 1.86 (m, 2H), 1.90-1.81 (m, 2H), 1.73-1.43 (m, 8H), 1.38 (d, J = 8.4 Hz, 1H), 1.28 (d, J = 7.1 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	606.3	B	A

I-2582		1H NMR (400 MHz, DMSO-d6) 9.21-9.16 (m, 2H), 9.13 (d, J = 7.0 Hz, 1H), 8.86 (d, J = 7.7 Hz, 1H), 8.08 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.31-7.21 (m, 1H), 5.50 (d, J = 8.6 Hz, 1H), 4.52 (s, 1H), 4.35 (q, J = 7.2 Hz, 1H), 3.87 (q, J = 6.9 Hz, 2H), 3.73 (q, J = 7.8 Hz, 1H), 3.63 (dd, J = 8.7, 4.8 Hz, 1H), 3.12-3.04 (m, 1H), 2.16 (dd, J = 12.6, 7.0 Hz, 1H), 2.09-1.97 (m, 1H), 1.93 (dt, J = 24.9, 7.2 Hz, 3H), 1.60 (s, 7H), 1.50 (s, 1H), 1.37 (s, 1H), 1.26 (s, 2H), 0.97 (d, J = 2.7 Hz, 3H).	606.3	B	B
I-2583		1H NMR (400 MHz, DMSO-d6) 10.91 (s, 1H), 9.40 (s, 2H), 8.93 (d, J = 2.6 Hz, 1H), 8.83 (d, J = 7.6 Hz, 1H), 8.38 (d, J = 4.7 Hz, 1H), 8.19 (d, J = 8.4 Hz, 1H), 8.10 (d, J = 8.7 Hz, 1H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.46 (dd, J = 8.3, 4.7 Hz, 1H), 7.27 (t, J = 9.8 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.32 (q, J = 7.1 Hz, 1H), 3.12 - 3.04 (m, 1H), 2.05 - 1.86 (m, 4H), 1.60 (s, 8H), 1.51 (s, 1H), 1.38 (s, 1H), 0.98 (d, J = 2.9 Hz, 3H).	613.35	B	B

I-2584		1H NMR (400 MHz, DMSO-d6) 10.60 (s, 1H), 9.19 (d, J = 7.6 Hz, 1H), 8.52 (d, J = 8.6 Hz, 1H), 8.48 - 8.41 (m, 2H), 8.28 (dt, J = 8.4, 1.0 Hz, 1H), 8.09 (d, J = 8.6 Hz, 1H), 7.95 (ddd, J = 8.3, 7.3, 1.9 Hz, 1H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.31 - 7.22 (m, 2H), 5.52 (d, J = 8.5 Hz, 1H), 4.41 (q, J = 7.1 Hz, 1H), 3.15 - 3.07 (m, 1H), 2.07 - 1.84 (m, 4H), 1.79 - 1.68 (m, 1H), 1.60 (s, 7H), 1.38 (s, 1H), 1.27 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	613.1	C	
I-2585		1H NMR (400 MHz, DMSO-d6) 10.47 (s, 1H), 7.90 (d, J = 14.8 Hz, 1H), 7.79 (d, J = 7.0 Hz, 1H), 7.33 (dd, J = 8.8, 2.7 Hz, 1H), 6.82 (dd, J = 9.0, 5.3 Hz, 1H), 5.67 (d, J = 9.3 Hz, 1H), 4.04 (q, J = 6.6 Hz, 1H), 2.98 - 2.78 (m, 1H), 1.87 (dq, J = 15.3, 7.4 Hz, 4H), 1.77 (s, 4H), 1.75 - 1.56 (m, 7H), 1.51 (dt, J = 15.5, 7.7 Hz, 2H), 1.39 (dd, J = 13.9, 7.8 Hz, 2H).	457.15	E	

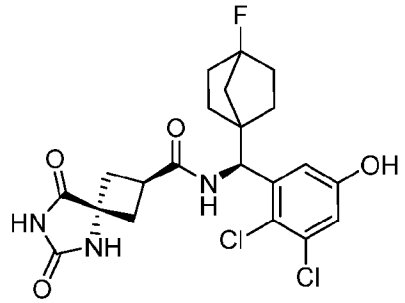
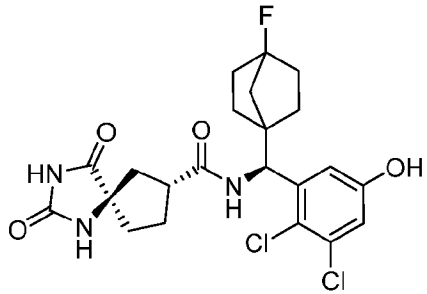
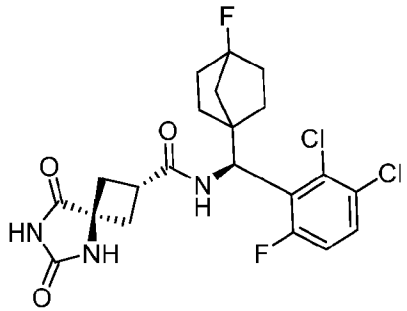
I-2586		1H NMR (400 MHz, DMSO-d6) 10.59 (s, 1H), 9.36 (s, 2H), 8.83 (d, J = 6.8 Hz, 1H), 8.42 (d, J = 4.9 Hz, 1H), 8.27 (d, J = 8.3 Hz, 1H), 8.09 (d, J = 8.6 Hz, 1H), 7.98-7.89 (m, 1H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.32-7.24 (m, 1H), 7.24 (d, J = 6.9 Hz, 1H), 5.52 (d, J = 8.5 Hz, 1H), 4.32 (q, J = 6.8 Hz, 1H), 3.09 (t, J = 7.9 Hz, 1H), 2.10-1.79 (m, 4H), 1.61 (s, 8H), 1.39 (s, 2H), 0.98 (d, J = 2.9 Hz, 3H).	613.25	B	A
I-2587		1H NMR (400 MHz, DMSO-d6) 8.40 (d, J = 4.8 Hz, 1H), 8.02 (d, J = 8.6 Hz, 1H), 7.94 (d, J = 6.9 Hz, 1H), 7.84 - 7.77 (m, 2H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.33 - 7.20 (m, 3H), 5.47 (d, J = 8.5 Hz, 1H), 4.41 (s, 2H), 4.00 (q, J − 6.7 Hz, 1H), 3.39 (t, J − 9.2 Hz, 1H), 3.24 (dd, J − 9.6, 6.0 Hz, 1H), 3.10 - 3.01 (m, 1H), 2.96 (p, J = 7.6 Hz, 1H), 2.78 (d, J = 4.5 Hz, 3H), 2.47 (d, J = 7.0 Hz, 2H), 1.84 (ddt, J = 38.0, 15.4, 7.6 Hz, 1H), 1.81 (s, 2H), 1.62 - 1.50 (m, 7H), 1.37 (s, 3H), 1.25 (s, 1H), 0.95 (d, J = 2.7 Hz, 3H).	645.35	B	C

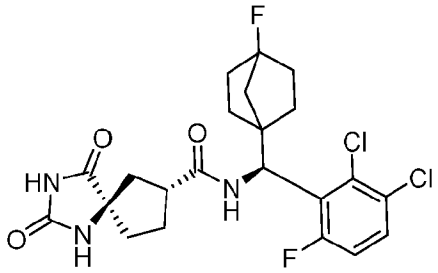
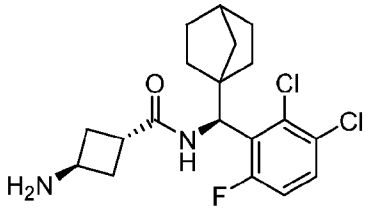
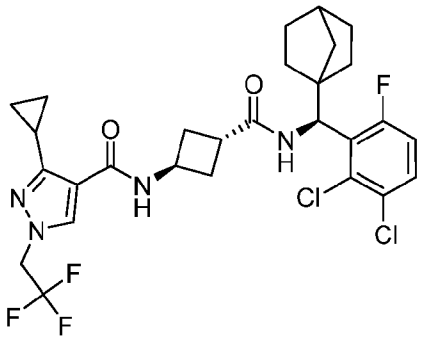
I-2588			D	D
I-2589			A	A
I-2590			D	D

I-2591			B	A
I-2592			A	A
I-2593			B	B

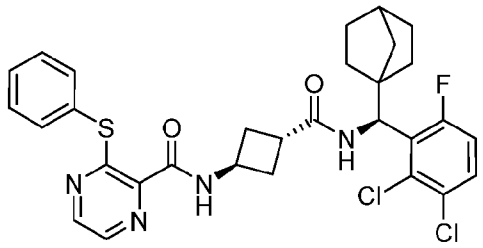
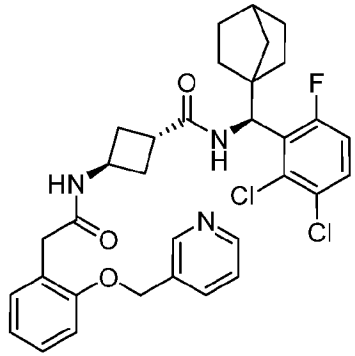
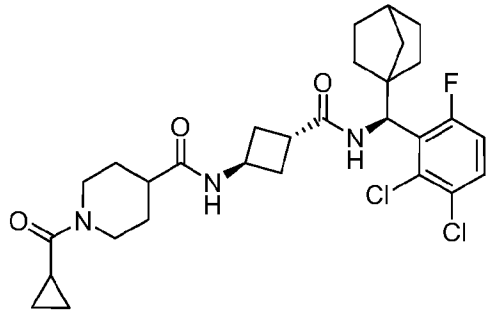
I-2594			B	B
I-2595			D	B
I-2596			B	B

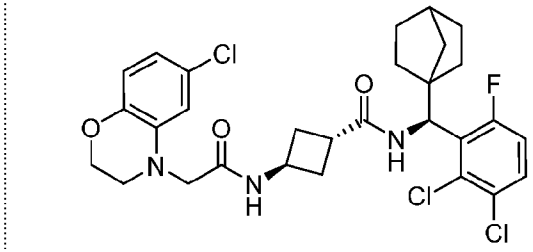
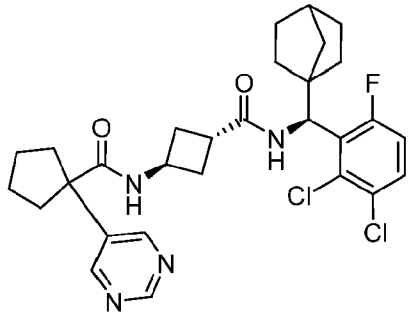
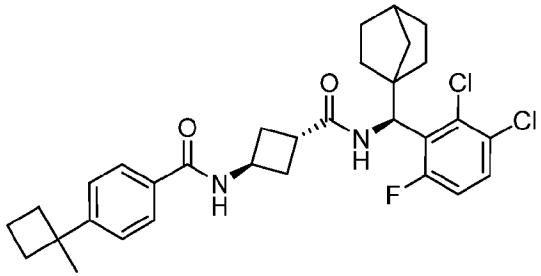
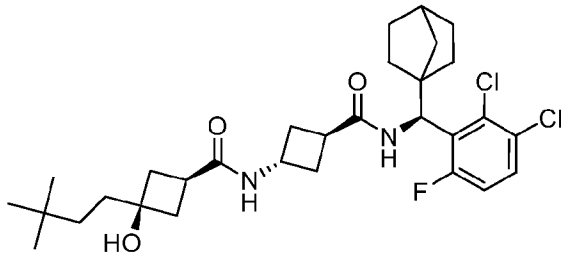
I-2597			B	B
I-2598		465.1	B	B
I-2599		401.05	C	

I-2600		1H NMR (400 MHz, DMSO-d6) 10.58 (s, 1H), 10.07 (s, 1H), 8.64 (s, 1H), 8.26 (d, J = 8.5 Hz, 1H), 6.91 (d, J = 2.8 Hz, 1H), 6.78 (d, J = 2.8 Hz, 1H), 5.44 (d, J = 8.2 Hz, 1H), 3.20 (p, J = 9.2 Hz, 1H), 2.79 - 2.59 (m, 2H), 2.36 - 2.11 (m, 2H), 1.87 - 1.72 (m, 3H), 1.67 (d, J = 10.4 Hz, 3H), 1.63 (d, J = 8.3 Hz, 1H), 1.58 (d, J = 8.6 Hz, 1H), 1.54 - 1.33 (m, 2H).	470.05	A	A
I-2601		1H NMR (400 MHz, DMSO-d6) 10.35 (d, J = 209.4 Hz, 2H), 8.43 - 8.19 (m, 2H), 6.86 (dd, J = 41.7, 2.8 Hz, 2H), 5.43 (d, J = 8.4 Hz, 1H), 2.99 (p, J = 8.0 Hz, 1H), 2.12 (dd, J = 13.1, 10.2 Hz, 1H), 1.95 (qd, J = 13.3, 12.8, 8.0 Hz, 3H), 1.78 (s, 2H), 1.74 (d, J = 5.1 Hz, 1H), 1.68 (td, J = 10.5, 9.5, 5.7 Hz, 4H), 1.64 (s, 1H), 1.59 (t, J = 7.1 Hz, 2H), 1.52 - 1.16 (m, 2H).	484	A	B
I-2602		1H NMR (400 MHz, DMSO-d6) 10.57 (s, 1H), 8.61 (s, 1H), 8.28 (d, J = 8.2 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.6, 9.0 Hz, 1H), 5.53 (d, J = 8.0 Hz, 1H), 3.22 (p, J = 9.1, 9.1, 9.0, 9.0 Hz, 1H), 2.61 (m, 2H), 2.21 (m, 2H), 1.69 (m, 10H).	472.1	A	A

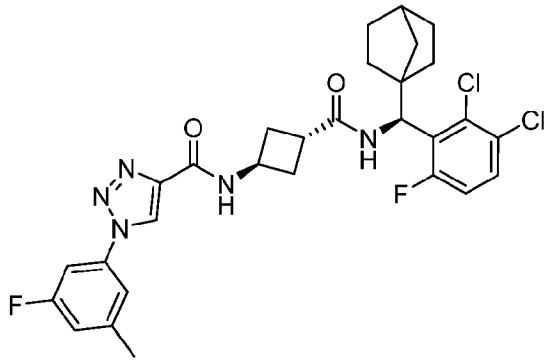
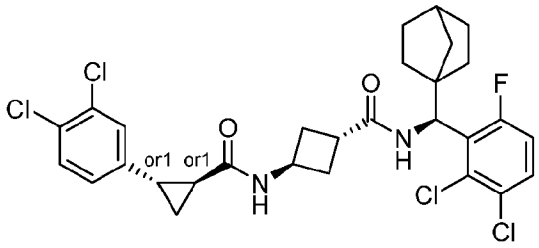
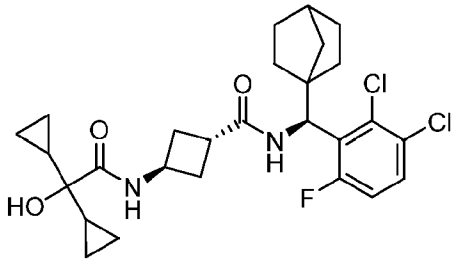
I-2603		1H NMR (400 MHz, DMSO-d6) 10.62 (s, 1H), 8.29 (d, J = 8.9 Hz, 2H), 7.63 (dd, J = 9.0, 5.0 Hz, 1H), 7.27 (dd, J = 10.6, 8.9 Hz, 1H), 5.51 (d, J = 8.0 Hz, 1H), 3.02 (t, J = 8.6, 8.6 Hz, 1H), 2.10 (m, 1H), 1.77 (m, 15H).	486.15	A	A
I-2604		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.3 Hz, 4H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.5, 8.9 Hz, 1H), 5.66 (d, J = 8.0 Hz, 1H), 3.64 (s, 2H), 3.24 (dt, J = 9.3, 4.2 Hz, 1H), 2.46 - 2.22 (m, 3H), 2.13 (q, J = 3.8, 3.4 Hz, 2H), 1.51 (d, J = 20.9 Hz, 3H), 1.29 (ddq, J = 27.7, 18.8, 9.4, 7.6 Hz, 7H).	385.15		
I-2605			601	B	B

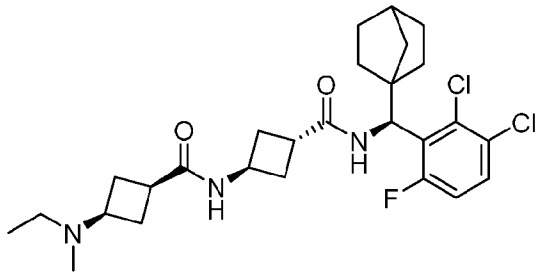
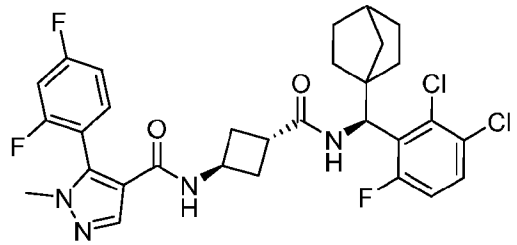
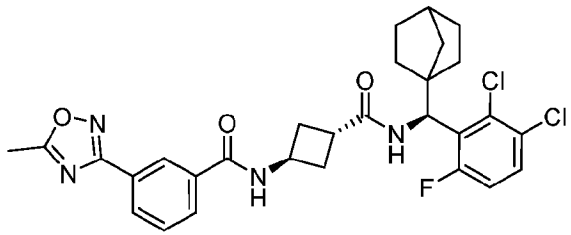
I-2606		551	A	A
I-2607		619	B	A
I-2608		525.2	B	A

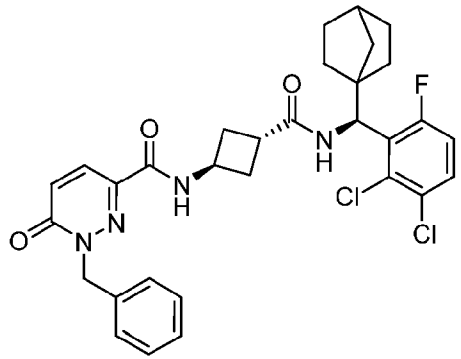
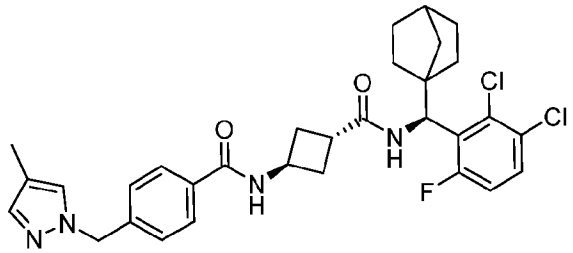
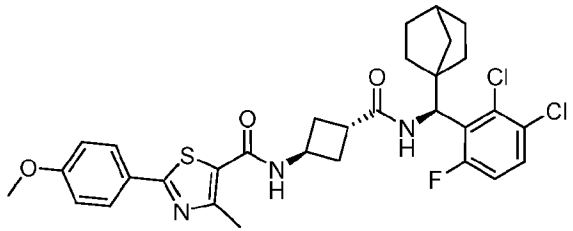
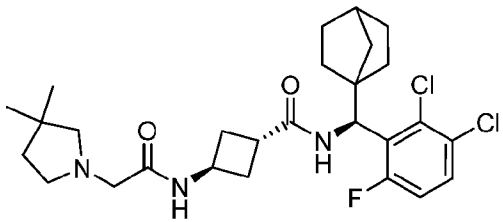
I-2609		1H NMR (500 MHz, DMSO-d6) ? 9.08 (d, J = 8.1 Hz, 1H), 8.45 (d, J = 2.4 Hz, 1H), 8.36 (d, J = 2.4 Hz, 1H), 8.10 (d, J = 8.3 Hz, 1H), 7.59 (dd, J = 9.0, 5.0 Hz, 1H), 7.47 (dd, J = 6.7, 3.0 Hz, 2H), 7.42 (q, J = 3.7 Hz, 3H), 7.29 – 7.19 (m, 1H), 5.69 (d, J = 8.1 Hz, 1H), 4.52 (q, J = 8.2 Hz, 1H), 3.11 (d, J = 10.0 Hz, 1H), 2.39 (d, J = 9.3 Hz, 3H), 2.20 – 2.10 (m, 2H), 1.51 (d, J = 14.9 Hz, 3H), 1.33 (dd, J = 25.5, 12.8 Hz, 3H), 1.28 – 1.17 (m, 4H).	600.1	C	
I-2610			612.2	B	A
I-2611			564.2	B	A

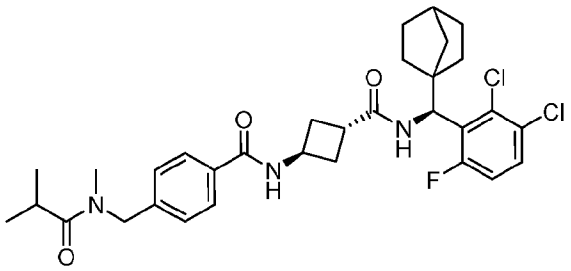
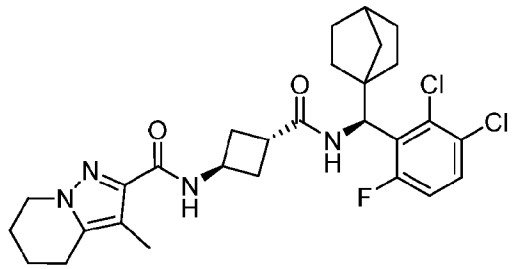
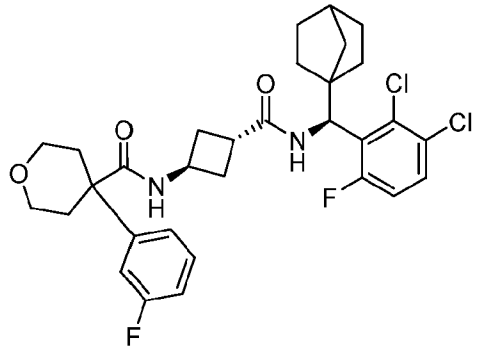
I-2612			596	B	B
I-2613			561.2	B	A
I-2614			557.2	D	
I-2615			567.2	B	B

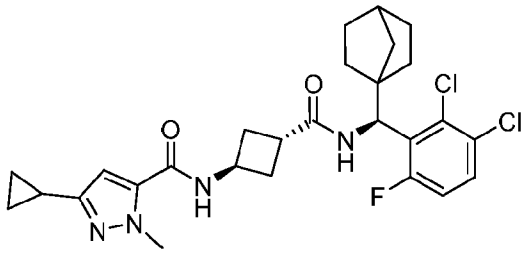
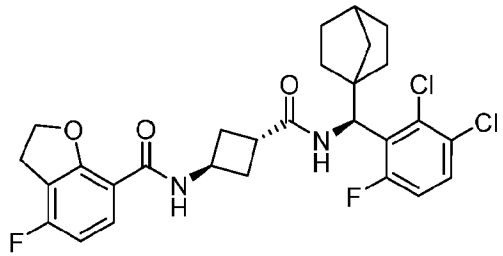
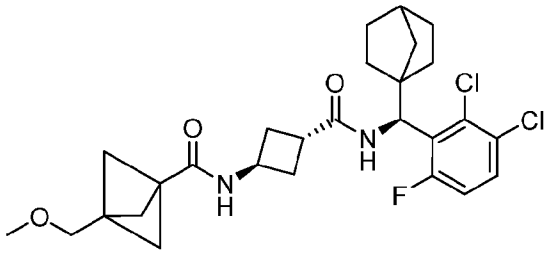
I-2616		633.2	B	A
I-2617		587	D	
I-2618		585.2	B	A
I-2619		576	D	

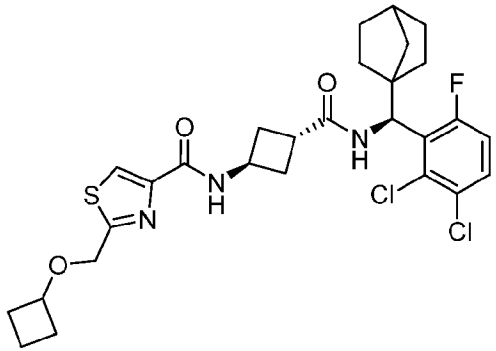
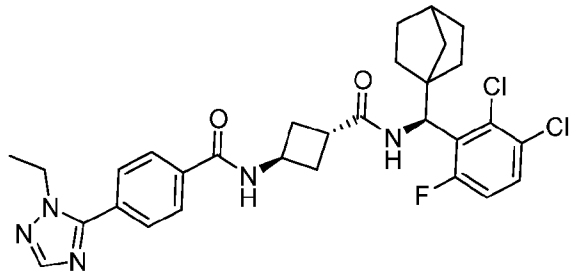
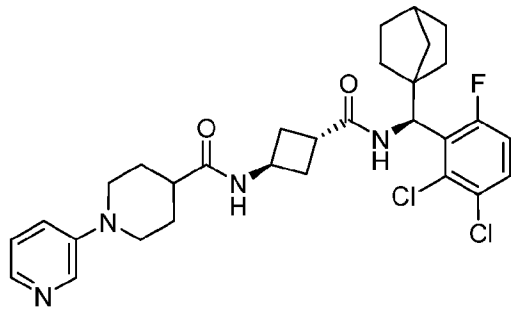
I-2620			588	B	B
I-2621		1H NMR (500 MHz, DMSO-d6) ? 8.36 (d, J = 7.6 Hz, 1H), 8.04 (d, J = 8.3 Hz, 1H), 7.58 (dd, J = 8.9, 5.0 Hz, 1H), 7.49 (d, J = 8.4 Hz, 1H), 7.40 (d, J = 2.2 Hz, 1H), 7.21 (t, J = 9.7 Hz, 1H), 7.12 (dd, J = 8.4, 2.1 Hz, 1H), 5.65 (d, J = 8.1 Hz, 1H), 4.25 (q, J = 8.0 Hz, 1H), 3.04 (s, 1H), 2.24 (ddd, J = 14.0, 10.2, 4.6 Hz, 3H), 2.11 (s, 2H), 2.07 (d, J = 9.9 Hz, 1H), 2.01 (dd, J = 21.5, 11.7 Hz, 2H), 1.78 (dt, J = 9.4, 4.7 Hz, 1H), 1.49 (d, J = 21.2 Hz, 3H), 1.31 (dd, J = 10.2, 5.4 Hz, 3H), 1.25 – 1.21 (m, 3H), 1.18 (d, J = 10.3 Hz, 1H).	599.6	D	
I-2622		1H NMR (500 MHz, DMSO-d6) ? 8.05 (d, J = 8.2 Hz, 1H), 7.72 (d, J = 8.0 Hz, 1H), 7.58 (dd, J = 9.1, 4.7 Hz, 1H), 7.22 (t, J = 9.7 Hz, 1H), 5.66 (d, J = 8.2 Hz, 1H), 4.42 – 4.04 (m, 2H), 3.15 (d, J = 4.9 Hz, 1H), 3.04 (s, 1H), 2.24 (s, 1H), 2.18 – 2.14 (m, 1H), 2.11 (s, 2H), 1.50 (d, J = 22.2 Hz, 3H), 1.36 – 1.27 (m, 3H), 1.26 – 1.17 (m, 4H), 1.13 (t, J = 6.5 Hz, 2H), 0.41 – 0.32 (m, 2H), 0.27 (t, J = 6.5 Hz, 4H), 0.15 – 0.10 (m, 2H).	524.4	B	A

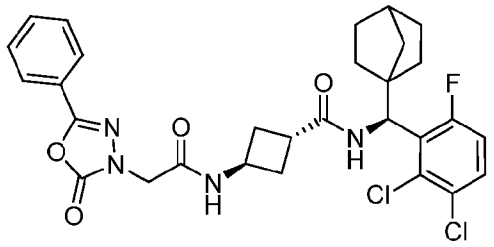
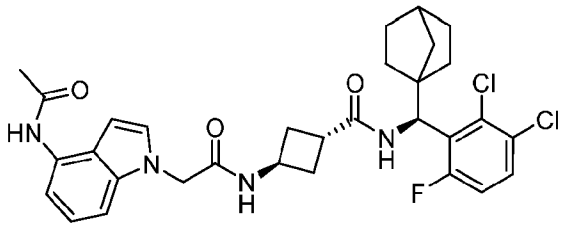
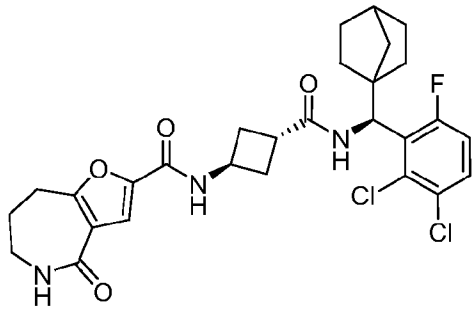
I-2623		1H NMR (500 MHz, DMSO-d6) ? 8.04 (d, J = 8.3 Hz, 1H), 7.91 (d, J = 7.7 Hz, 1H), 7.58 (dd, J = 9.0, 5.0 Hz, 1H), 7.21 (dd, J = 10.6, 8.9 Hz, 1H), 5.65 (d, J = 8.1 Hz, 1H), 4.21 (p, J = 8.0 Hz, 1H), 3.07 – 2.97 (m, 1H), 2.56 (s, 2H), 2.27 – 2.21 (m, 1H), 2.17 (q, J = 7.2 Hz, 2H), 2.11 (d, J = 4.5 Hz, 1H), 2.07 – 2.00 (m, 4H), 1.97 (d, J = 10.5 Hz, 1H), 1.93 (s, 3H), 1.83 (dd, J = 17.8, 8.8 Hz, 2H), 1.49 (d, J = 21.4 Hz, 3H), 1.30 (dd, J = 20.5, 8.1 Hz, 3H), 1.20 (dd, J = 24.7, 9.0 Hz, 4H), 0.91 (t, J = 7.1 Hz, 3H).	526.2	B	B
I-2624		1H NMR (500 MHz, DMSO-d6) ? 8.12 (d, J = 7.5 Hz, 1H), 8.07 – 7.92 (m, 2H), 7.57 (dd, J = 9.0, 5.0 Hz, 1H), 7.46 (td, J = 8.5, 6.5 Hz, 1H), 7.36 (td, J = 9.7, 2.5 Hz, 1H), 7.26 – 7.13 (m, 2H), 5.65 (d, J = 8.2 Hz, 1H), 4.29 (p, J = 7.8 Hz, 1H), 3.59 (s, 3H), 3.10 – 3.02 (m, 1H), 2.25 (s, 1H), 2.16 (d, J = 9.3 Hz, 1H), 2.10 (d, J = 8.2 Hz, 3H), 1.49 (d, J = 21.9 Hz, 3H), 1.30 (dd, J = 21.1, 8.2 Hz, 3H), 1.20 (dd, J = 24.0, 9.3 Hz, 4H).	607.2	B	B
I-2625		1H NMR (500 MHz, DMSO-d6) ? 8.72 (d, J = 1.7 Hz, 1H), 8.00 (dd, J = 21.6, 7.8 Hz, 2H), 7.57 (dd, J = 8.9, 5.0 Hz, 1H), 7.21 (dd, J = 10.6, 9.0 Hz, 1H), 6.45 (d, J = 1.7 Hz, 1H), 5.64 (d, J = 8.1 Hz, 1H), 4.11 (q, J = 7.8 Hz, 1H), 3.01 (t, J = 9.7 Hz, 1H), 2.54 (s, 3H), 2.28 (t, J = 8.2 Hz, 4H), 2.24 – 2.20 (m, 1H), 2.11 (s, 1H), 2.08 – 2.01 (m, 1H), 2.00 – 1.90 (m, 3H), 1.88 – 1.81 (m, 1H), 1.49 (d, J = 21.4 Hz, 3H), 1.30 (dd, J = 21.3, 8.3 Hz, 3H), 1.25 – 1.15 (m, 4H).	548.2	B	A

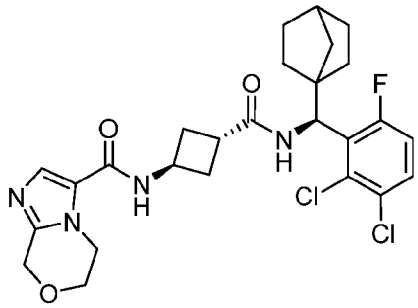
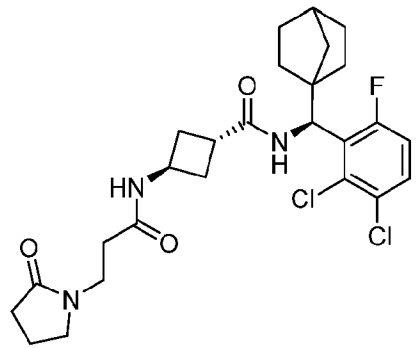
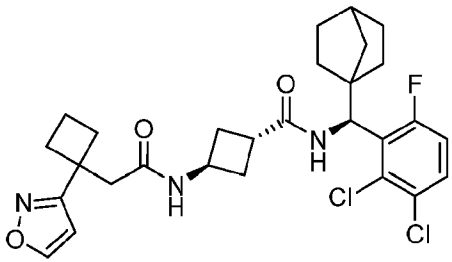
I-2626		1H NMR (500 MHz, DMSO-d6) ? 8.68 (d, J = 8.2 Hz, 1H), 8.11 (d, J = 8.2 Hz, 1H), 7.83 (d, J = 9.7 Hz, 1H), 7.59 (dd, J = 9.0, 5.0 Hz, 1H), 7.33 (d, J = 5.6 Hz, 4H), 7.31 – 7.25 (m, 1H), 7.23 (dd, J = 10.6, 8.9 Hz, 1H), 7.01 (d, J = 9.7 Hz, 1H), 5.67 (d, J = 8.1 Hz, 1H), 5.29 (s, 2H), 4.50 (q, J − 8.2 Hz, 1H), 3.14 – 3.02 (m, 1H), 2.40 – 2.37 (m, 1H), 2.30 (dd, J = 12.9, 6.9 Hz, 2H), 2.12 (d, J = 4.5 Hz, 2H), 1.57 – 1.47 (m, 3H), 1.32 (dd, J = 20.7, 8.2 Hz, 3H), 1.21 (dd, J = 22.4, 9.7 Hz, 4H).	597	B	A
I-2627		1H NMR (500 MHz, DMSO-d6) ? 8.53 (d, J = 7.6 Hz, 1H), 8.08 (d, J = 8.3 Hz, 1H), 7.80 – 7.70 (m, 2H), 7.61 – 7.52 (m, 2H), 7.29 – 7.14 (m, 4H), 5.67 (d, J = 8.1 Hz, 1H), 5.27 (s, 2H), 4.46 (q, J = 8.0 Hz, 1H), 3.07 (d, J = 9.5 Hz, 1H), 2.26 (s, 2H), 2.22 (s, 1H), 2.19 – 2.15 (m, 1H), 2.12 (s, 1H), 1.98 (s, 3H), 1.57 – 1.47 (m, 3H), 1.32 (dd, J = 20.7, 8.5 Hz, 3H), 1.27 – 1.18 (m, 4H).	583.2	B	B
I-2628		1H NMR (500 MHz, DMSO-d6) ? 8.52 (d, J = 7.8 Hz, 1H), 8.08 (d, J = 8.2 Hz, 1H), 7.88 (t, J = 5.2 Hz, 1H), 7.59 (dd, J = 8.9, 5.0 Hz, 1H), 7.29 – 7.19 (m, 2H), 5.67 (d, J = 8.1 Hz, 1H), 4.41 (q, J = 7.9 Hz, 1H), 3.22 – 3.15 (m, 2H), 3.06 (d, J = 9.5 Hz, 1H), 2.98 (t, J = 6.6 Hz, 2H), 2.30 – 2.25 (m, 2H), 2.22 – 2.17 (m, 1H), 2.12 (h, J = 4.9, 4.4 Hz, 2H), 1.93 (q, J = 7.1 Hz, 2H), 1.50 (d, J = 24.3 Hz, 3H), 1.32 (dd, J = 24.6, 12.1 Hz, 3H), 1.21 (dd, J = 23.0, 9.5 Hz, 4H).	562	C	
I-2629		1H NMR (500 MHz, DMSO-d6) ? 8.06 (d, J = 8.3 Hz, 1H), 7.76 (d, J = 8.2 Hz, 1H), 7.58 (dd, J = 8.9, 5.0 Hz, 1H), 7.22 (dd, J − 10.6, 8.9 Hz, 1H), 5.65 (d, J − 8.1 Hz, 1H), 4.29 (h, J = 8.2 Hz, 1H), 3.07 – 2.99 (m, 1H), 2.92 (s, 2H), 2.58 (d, J = 7.0 Hz, 2H), 2.27 (s, 2H), 2.23 (dd, J = 7.6, 3.7 Hz, 1H), 2.17 – 2.13 (m, 1H), 2.11 (s, 1H), 2.10 – 2.07 (m, 1H), 1.84 (s, 1H), 1.50 (p, J = 6.8, 5.1	524.2	B	B

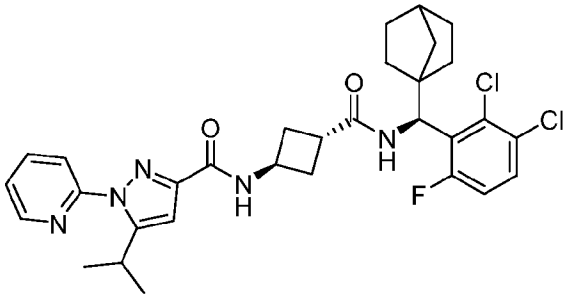
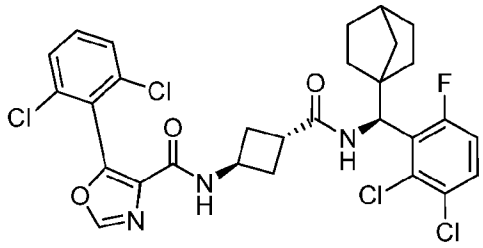
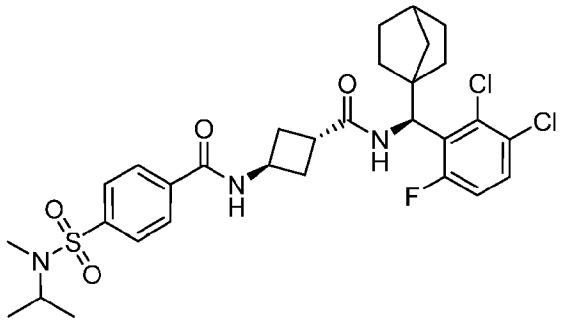
		Hz, 5H), 1.31 (dd, J = 21.1, 8.0 Hz, 3H), 1.20 (dd, J = 23.6, 9.5 IIz, 4II), 1.03 (s, 6II).			
I-2630		1H NMR (500 MHz, DMSO-d6) ? 8.02 (d, J = 8.3 Hz, 1H), 7.75 (d, J = 7.2 Hz, 1H), 7.57 (dd, J = 9.0, 5.0 Hz, 1H), 7.36 (q, J = 7.7 Hz, 1H), 7.21 (t, J = 9.7 Hz, 1H), 7.12 (dd, J = 13.5, 8.4 Hz, 2H), 7.05 (td, J = 8.5, 2.6 Hz, 1H), 5.64 (d, J = 8.2 Hz, 1H), 4.22 (q, J = 7.7 Hz, 1H), 3.71 (dt, J = 12.0, 3.7 Hz, 2H), 3.38 (t, J = 11.2 Hz, 2H), 3.03 – 2.97 (m, 1H), 2.39 (d, J = 13.6 Hz, 3H), 2.23 – 2.18 (m, 1H), 2.10 (s, 1H), 2.05 – 2.01 (m, 2H), 1.82 – 1.77 (m, 2H), 1.49 (d, J = 20.9 Hz, 3H), 1.29 (dd, J = 21.6, 8.3 Hz, 3H), 1.24 – 1.15 (m, 4H).	591	B	A
I-2631		1H NMR (500 MHz, DMSO-d6) ? 8.73 (d, J = 7.4 Hz, 1H), 8.57 (d, J = 1.7 Hz, 1H), 8.30 (d, J = 2.8 Hz, 1H), 8.10 (d, J = 8.3 Hz, 1H), 7.65 – 7.51 (m, 2H), 7.23 (dd, J = 10.6, 8.9 Hz, 1H), 5.68 (d, J = 8.1 Hz, 1H), 4.81 (p, J = 7.1 Hz, 1H), 4.48 (p, J = 8.0 Hz, 1H), 3.15 – 3.07 (m, 1H), 2.44 – 2.39 (m, 3H), 2.28 (d, J = 9.2 Hz, 1H), 2.23 (d, J = 10.6 Hz, 1H), 2.21 – 2.15 (m, 1H), 2.12 (d, J = 4.5 Hz, 1H), 2.08 – 2.01 (m, 2H), 1.79 (q, J = 10.1 Hz, 1H), 1.70 – 1.61 (m, 1H), 1.57 – 1.46 (m, 3H), 1.32 (dd, J = 25.5, 12.4 Hz, 3H), 1.22 (dd, J = 22.0, 9.5 Hz, 4H).	560.2	D	
I-2632		1H NMR (500 MHz, DMSO-d6) ? 8.85 (d, J = 7.5 Hz, 1H), 8.45 (d, J = 1.8 Hz, 1H), 8.10 (dd, J = 8.2, 4.6 Hz, 2H), 8.02 (d, J = 7.8 Hz, 1H), 7.70 – 7.55 (m, 2H), 7.23 (dd, J = 10.6, 8.9 Hz, 1H), 5.69 (d, J = 8.2 Hz, 1H), 4.52 (p, J = 7.8 Hz, 1H), 3.16 – 3.10 (m, 1H), 2.67 (s, 3H), 2.33 – 2.28 (m, 2H), 2.25 (t, J = 10.2 Hz, 1H), 2.21 – 2.17 (m, 1H), 2.12 (d, J = 4.4 Hz, 1H), 1.58 – 1.47 (m, 3H), 1.32 (dd, J = 20.9, 8.2 Hz, 3H), 1.22 (dd, J = 21.7, 10.0 Hz, 4H).	571.2	B	A

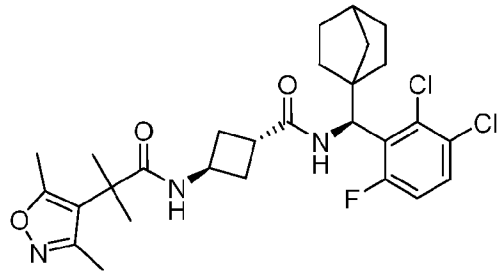
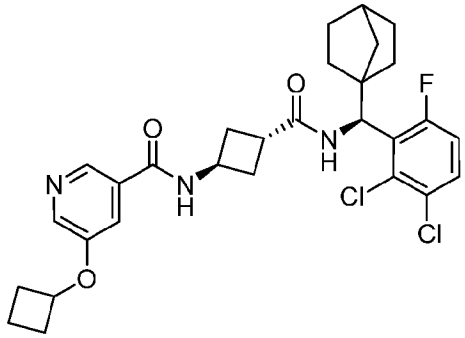
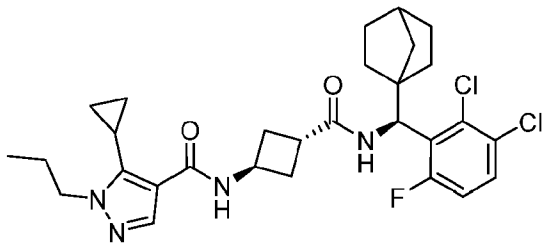
I-2633		1H NMR (500 MHz, DMSO-d6) ? 8.72 (s, 1H), 8.61 (d, J = 8.1 Hz, 1H), 8.05 (d, J = 8.3 Hz, 1H), 7.62 – 7.53 (m, 4H), 7.21 (dd, J = 10.5, 9.0 Hz, 1H), 5.65 (d, J = 8.1 Hz, 1H), 4.36 (p, J = 8.1 Hz, 1H), 3.04 (d, J = 9.9 Hz, 1H), 2.33 – 2.23 (m, 3H), 2.09 (d, J = 13.4 Hz, 2H), 1.49 (d, J = 22.6 Hz, 3H), 1.36 – 1.27 (m, 3H), 1.20 (dd, J = 24.2, 9.2 Hz, 4H).	628	B	B
I-2634		1H NMR (500 MHz, DMSO-d6) ? 8.54 (dd, J = 17.7, 7.6 Hz, 1H), 8.08 (d, J = 8.3 Hz, 1H), 7.89 – 7.77 (m, 1H), 7.59 (dd, J = 9.0, 5.0 Hz, 1H), 7.23 (t, J = 9.2 Hz, 3H), 5.68 (d, J = 8.2 Hz, 1H), 4.65 (s, 1H), 4.52 (s, 1H), 4.47 (q, J = 8.1 Hz, 1H), 3.09 (s, 1H), 2.97 – 2.86 (m, 3H), 2.80 (s, 1H), 2.32 (s, 1H), 2.24 (dd, J = 21.7, 10.0 Hz, 2H), 2.16 (dd, J = 7.7, 3.6 Hz, 1H), 2.12 (s, 1H), 1.57 – 1.46 (m, 3H), 1.37 – 1.28 (m, 3H), 1.21 (dd, J = 22.1, 9.9 Hz, 4H), 0.99 (dd, J = 33.2, 6.7 Hz, 6H).	602.2	C	
I-2635		1H NMR (500 MHz, DMSO-d6) ? 8.06 (d, J = 8.2 Hz, 1H), 7.83 (d, J = 8.0 Hz, 1H), 7.58 (dd, J = 9.0, 5.0 Hz, 1H), 7.21 (dd, J − 10.5, 8.9 Hz, 1H), 5.64 (d, J − 8.1 Hz, 1H), 4.25 (h, J = 8.2 Hz, 1H), 3.21 (s, 3H), 3.02 (d, J = 9.0 Hz, 1H), 2.23 – 2.00 (m, 6H), 1.77 (s, 7H), 1.49 (d, J = 22.2 Hz, 3H), 1.30 (dd, J = 18.7, 8.3 Hz, 3H), 1.20 (dd, J = 25.0, 8.9 Hz, 4H).	525.2	B	A

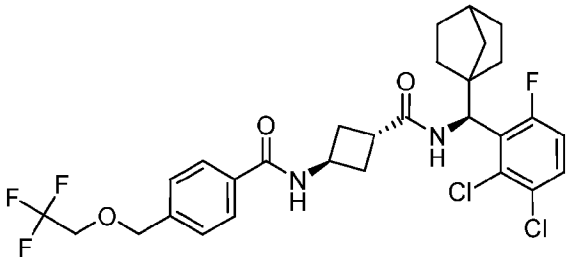
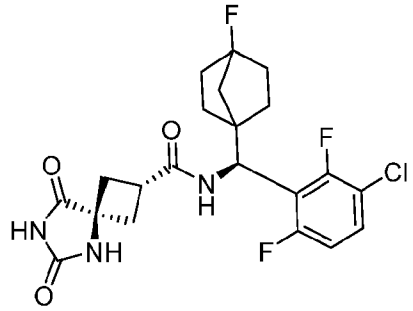
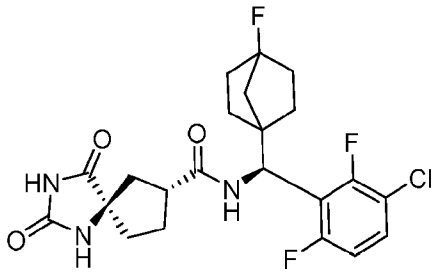
I-2636		1H NMR (500 MHz, DMSO-d6) ? 8.37 (d, J = 7.5 Hz, 1H), 8.09 (d, J = 8.2 Hz, 1H), 7.89 – 7.79 (m, 2H), 7.59 (dd, J = 9.0, 5.0 Hz, 1H), 7.23 (dd, J = 10.6, 8.9 Hz, 1H), 7.08 – 6.97 (m, 2H), 5.67 (d, J = 8.2 Hz, 1H), 4.42 (q, J = 7.9 Hz, 1H), 3.81 (s, 3H), 3.13 – 3.05 (m, 1H), 2.55 (s, 3H), 2.31 (dd, J = 11.8, 3.8 Hz, 1H), 2.25 (d, J = 3.3 Hz, 1H), 2.20 – 2.15 (m, 1H), 2.12 (d, J = 4.4 Hz, 2H), 1.59 – 1.47 (m, 3H), 1.32 (dd, J = 25.6, 11.6 Hz, 3H), 1.21 (dd, J = 22.4, 10.0 Hz, 4H).	616.2	C	
I-2637		1H NMR (500 MHz, DMSO-d6) ? 8.05 (d, J = 8.2 Hz, 1H), 7.62 – 7.56 (m, 2H), 7.22 (dd, J = 10.6, 8.9 Hz, 1H), 5.65 (d, J = 8.1 Hz, 1H), 4.29 (p, J = 7.9 Hz, 1H), 2.99 (d, J = 8.4 Hz, 1H), 2.31 (s, 3H), 2.24 – 2.18 (m, 1H), 2.12 – 2.07 (m, 2H), 2.05 (d, J = 8.4 Hz, 2H), 2.01 (s, 3H), 1.49 (d, J = 20.7 Hz, 3H), 1.33 (s, 9H), 1.20 (dd, J = 24.0, 8.8 Hz, 4H).	550.2	A	A
I-2638		1H NMR (500 MHz, DMSO-d6) ? 8.26 (d, J = 3.0 Hz, 1H), 8.03 (t, J = 7.6 Hz, 2H), 7.98 – 7.89 (m, 1H), 7.58 (dd, J = 8.9, 5.0 Hz, 1H), 7.28 (dd, J = 8.5, 3.0 Hz, 1H), 7.23 (d, J = 9.8 Hz, 1H), 7.20 – 7.11 (m, 1H), 5.65 (d, J = 8.1 Hz, 1H), 4.21 (p, J = 7.7 Hz, 1H), 3.75 (dd, J = 9.9, 6.2 Hz, 2H), 3.04 (dd, J = 8.9, 4.8 Hz, 1H), 2.68 (td, J = 12.4, 2.7 Hz, 2H), 2.25 (d, J = 3.6 Hz, 1H), 2.20 (t, J = 3.8 Hz, 1H), 2.12 – 2.02 (m, 4H), 1.73 – 1.68 (m, 2H), 1.60 (td, J = 12.2, 11.7, 3.8 Hz, 2H), 1.50 (t, J = 11.7 Hz, 3H), 1.31 (dd, J = 20.8, 8.3 Hz, 3H), 1.20 (dd, J = 24.1, 9.2 Hz, 4H).	573.2	A	A

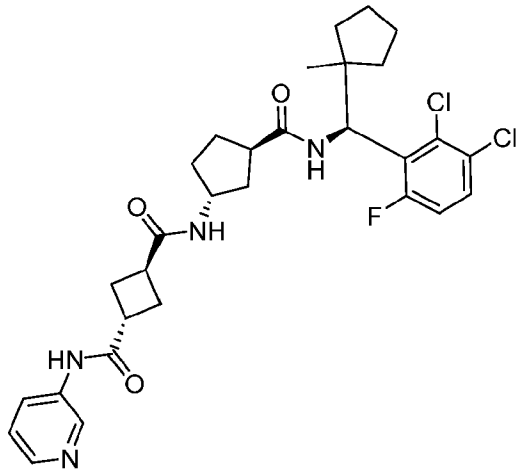
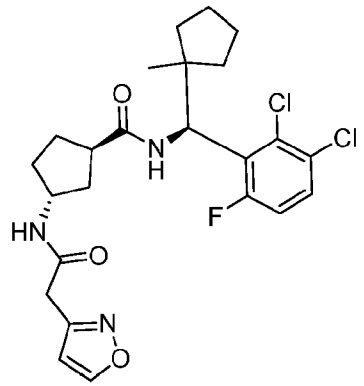
I-2639		1H NMR (500 MHz, DMSO-d6) ? 8.11 (d, J = 8.2 Hz, 1H), 7.82 (d, J = 7.5 Hz, 1H), 7.59 (ddd, J = 9.0, 5.5, 3.4 Hz, 2H), 7.23 (dd, J = 10.5, 8.9 Hz, 1H), 6.76 (t, J = 8.5 Hz, 1H), 5.67 (d, J = 8.1 Hz, 1H), 4.78 (t, J = 8.7 Hz, 2H), 4.46 (q, J = 7.8 Hz, 1H), 3.25 (t, J = 8.7 Hz, 3H), 3.10 (s, 1H), 2.18 (dd, J = 15.7, 8.6 Hz, 2H), 2.12 (s, 1H), 1.57 – 1.46 (m, 3H), 1.32 (dd, J = 20.6, 7.9 Hz, 3H), 1.21 (dd, J = 22.7, 9.6 Hz, 4H).	549	B	B
I-2640		1H NMR (500 MHz, DMSO-d6) ? 8.58 (d, J = 7.5 Hz, 1H), 8.08 (d, J = 8.2 Hz, 1H), 7.82 (d, J = 8.0 Hz, 2H), 7.59 (dd, J = 9.0, 5.0 Hz, 1H), 7.39 (d, J = 8.0 Hz, 2H), 7.23 (dd, J = 10.6, 8.9 Hz, 1H), 5.68 (d, J = 8.1 Hz, 1H), 4.69 (s, 2H), 4.48 (q, J = 8.0 Hz, 1H), 4.10 (q, J = 9.4 Hz, 2H), 3.14 – 3.07 (m, 1H), 2.27 (d, J = 9.2 Hz, 1H), 2.23 (d, J = 10.8 Hz, 1H), 2.20 – 2.15 (m, 1H), 2.12 (s, 1H), 1.51 (t, J = 14.1 Hz, 3H), 1.33 (dd, J = 25.6, 11.6 Hz, 3H), 1.21 (dd, J = 22.5, 9.8 Hz, 4H).	601	A	A
I-2641		1H NMR (500 MHz, DMSO-d6) ? 8.43 (d, J = 7.7 Hz, 1H), 8.08 (d, J = 8.3 Hz, 1H), 7.59 (dd, J = 9.0, 5.0 Hz, 1H), 7.23 (dd, J = 10.6, 9.0 Hz, 1H), 6.50 (s, 1H), 5.67 (d, J = 8.2 Hz, 1H), 4.39 (p, J − 7.9 Hz, 1H), 3.88 (s, 3H), 3.07 (td, J − 9.4, 8.8, 4.6 Hz, 1H), 2.29 (dd, J = 7.6, 3.8 Hz, 1H), 2.25 – 2.21 (m, 1H), 2.20 – 2.16 (m, 1H), 2.16 – 2.10 (m, 2H), 1.83 (td, J = 8.5, 4.2 Hz, 1H), 1.57 – 1.46 (m, 3H), 1.31 (dd, J = 21.2, 8.3 Hz, 3H), 1.21 (dd, J = 23.0, 9.5 Hz, 4H), 0.88 – 0.81 (m, 2H), 0.61 – 0.54 (m, 2H).	533.2	A	A

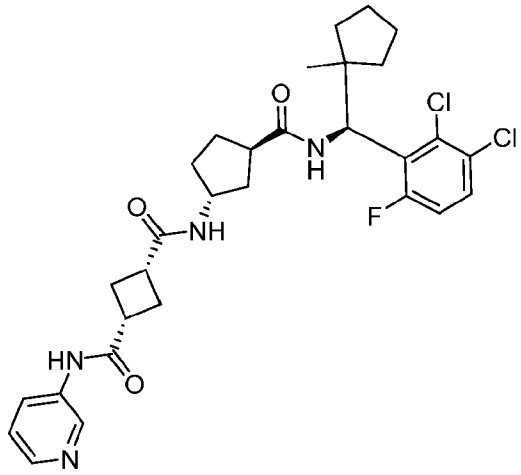
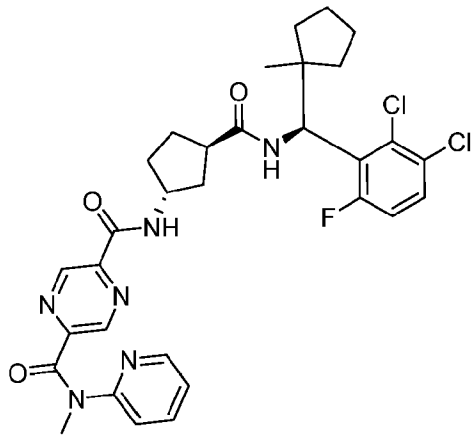
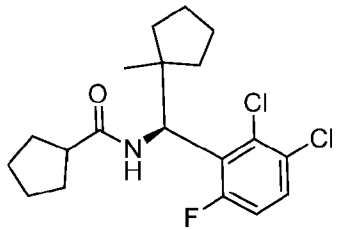
I-2642		1H NMR (500 MHz, DMSO-d6) ? 8.33 (d, J = 7.7 Hz, 1H), 8.09 (d, J = 8.2 Hz, 1H), 7.65 – 7.54 (m, 2H), 7.23 (dd, J = 10.6, 8.9 Hz, 1H), 5.67 (d, J = 8.2 Hz, 1H), 4.71 (s, 2H), 4.42 (p, J = 8.0 Hz, 1H), 4.19 (t, J = 5.2 Hz, 2H), 3.93 (t, J = 5.2 Hz, 2H), 3.12 – 3.05 (m, 1H), 2.33 – 2.27 (m, 1H), 2.26 – 2.20 (m, 1H), 2.14 (dt, J = 19.7, 6.4 Hz, 3H), 1.57 – 1.46 (m, 3H), 1.32 (dd, J = 20.8, 8.3 Hz, 3H), 1.23 (q, J = 13.5, 10.9 Hz, 4H).	535	A	A
I-2643		1H NMR (500 MHz, DMSO-d6) ? 8.83 (d, J = 7.5 Hz, 1H), 8.09 (d, J = 8.2 Hz, 1H), 7.99 (d, J = 8.4 Hz, 2H), 7.92 – 7.79 (m, 2H), 7.59 (dd, J = 9.0, 5.0 Hz, 1H), 7.23 (dd, J = 10.6, 8.9 Hz, 1H), 5.68 (d, J = 8.1 Hz, 1H), 4.48 (q, J = 7.9 Hz, 1H), 4.06 (p, J = 6.8 Hz, 1H), 3.10 (d, J = 10.0 Hz, 1H), 2.63 (s, 3H), 2.52 (s, 1H), 2.35 – 2.16 (m, 4H), 1.50 (d, J = 16.4 Hz, 3H), 1.38 – 1.28 (m, 3H), 1.21 (dd, J = 22.0, 9.9 Hz, 4H), 0.86 (d, J = 6.7 Hz, 6H).	525.7	A	A
I-2644		1H NMR (500 MHz, DMSO-d6) ? 8.04 (dd, J = 17.4, 8.3 Hz, 2H), 7.58 (dd, J = 9.0, 5.0 Hz, 1H), 7.22 (dd, J = 10.6, 9.0 Hz, 1H), 5.66 (d, J = 8.1 Hz, 1H), 4.45 (p, J = 8.1 Hz, 1H), 4.02 (t, J = 6.1 Hz, 2H), 3.07 – 3.00 (m, 1H), 2.59 (t, J = 6.5 Hz, 3H), 2.25 (ddd, J = 11.8, 7.5, 3.1 Hz, 3H), 2.11 (d, J = 5.2 Hz, 1H), 2.04 (s, 3H), 1.93 (qd, J = 7.4, 6.0, 4.1 Hz, 2H), 1.76 (ddt, J = 10.2, 7.3, 4.5 Hz, 2H), 1.57 – 1.46 (m, 3H), 1.31 (dd, J = 19.5, 8.0 Hz, 3H), 1.26 – 1.17 (m, 4H).	547.2	B	A

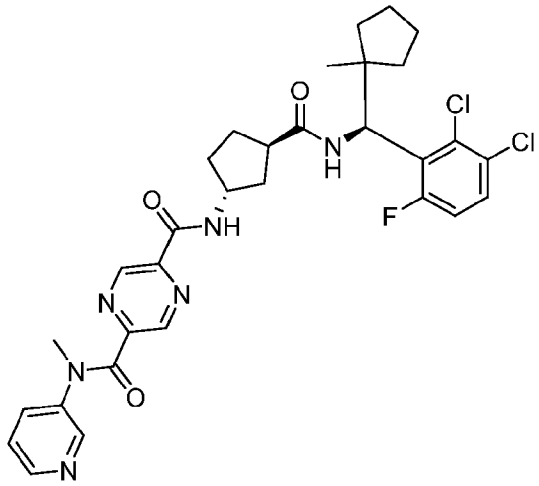
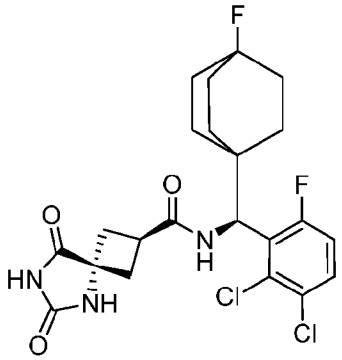
I-2645			587	D	
I-2646		1H NMR (500 MHz, DMSO-d6) ? 8.06 (d, J = 8.3 Hz, 1H), 7.89 (d, J = 7.7 Hz, 1H), 7.63 – 7.54 (m, 2H), 7.23 (dd, J = 10.6, 9.0 Hz, 1H), 5.67 (d, J = 8.1 Hz, 1H), 4.39 (dt, J = 15.6, 7.8 Hz, 1H), 4.08 (t, J = 7.1 Hz, 2H), 3.06 (s, 1H), 2.29 (s, 1H), 2.23 – 2.17 (m, 1H), 2.17 – 2.11 (m, 3H), 1.83 (ddd, J = 8.4, 5.3, 3.0 Hz, 1H), 1.76 (q, J = 7.3 Hz, 2H), 1.57 – 1.47 (m, 3H), 1.32 (dd, J = 21.2, 8.0 Hz, 3H), 1.26 – 1.18 (m, 4H), 0.99 – 0.92 (m, 2H), 0.83 (t, J − 7.4 Hz, 3H), 0.73 – 0.65 (m, 2H).	563.2	D	
I-2647		1H NMR (500 MHz, DMSO-d6) ? 8.52 (d, J = 8.4 Hz, 1H), 8.19 (s, 1H), 8.08 (d, J = 8.3 Hz, 1H), 7.58 (dd, J = 9.0, 4.9 Hz, 1H), 7.22 (t, J = 9.7 Hz, 1H), 5.66 (d, J = 8.1 Hz, 1H), 4.66 (s, 2H), 4.51 (q, J = 8.3 Hz, 1H), 4.09 (p, J = 7.2 Hz, 1H), 3.04 (d, J = 10.7 Hz, 1H), 2.41 – 2.23 (m, 4H), 2.14 (dtd, J = 24.4, 8.5, 5.0 Hz, 4H), 1.95 – 1.84 (m, 2H), 1.64 (q, J = 10.0 Hz, 1H), 1.55 – 1.44 (m, 3H), 1.39 – 1.27 (m, 3H), 1.27 – 1.15 (m, 4H).	625.8	B	A

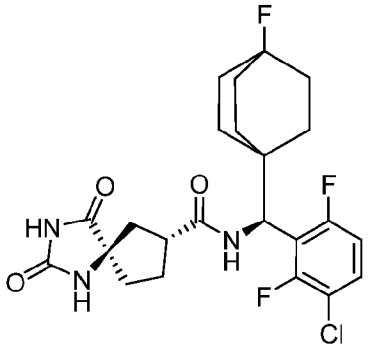
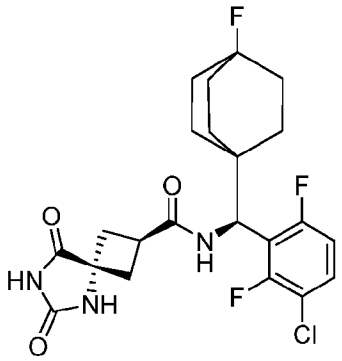
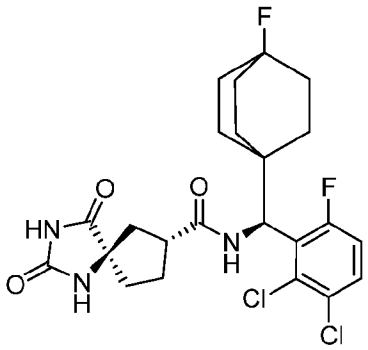
I-2648		1H NMR (500 MHz, DMSO-d6) ? 9.56 (s, 1H), 8.44 (d, J = 7.6 Hz, 1H), 8.06 (d, J = 8.2 Hz, 1H), 7.67 – 7.52 (m, 2H), 7.25 – 7.14 (m, 2H), 7.06 – 6.94 (m, 2H), 6.69 (d, J = 3.3 Hz, 1H), 5.64 (d, J = 8.1 Hz, 1H), 4.71 (s, 2H), 4.24 (p, J = 7.6 Hz, 1H), 3.06 (d, J = 9.4 Hz, 1H), 2.31 – 2.23 (m, 1H), 2.11 (d, J = 5.8 Hz, 6H), 2.09 – 2.04 (m, 1H), 1.49 (d, J = 22.2 Hz, 3H), 1.30 (dd, J = 20.6, 8.0 Hz, 3H), 1.20 (dd, J = 24.6, 9.1 Hz, 4H).	599	B	A
I-2649		1H NMR (500 MHz, DMSO-d6) ? 8.75 (d, J = 7.5 Hz, 1H), 8.09 (d, J = 8.3 Hz, 1H), 8.04 (s, 1H), 7.98 (d, J = 8.3 Hz, 2H), 7.77 (d, J = 8.3 Hz, 2H), 7.60 (dd, J = 8.9, 5.0 Hz, 1H), 7.24 (dd, J = 10.6, 9.0 Hz, 1H), 5.69 (d, J = 8.2 Hz, 1H), 4.50 (q, J = 8.0 Hz, 1H), 4.25 (q, J = 7.3 Hz, 2H), 3.12 (t, J = 9.1 Hz, 1H), 2.33 – 2.28 (m, 2H), 2.25 (d, J = 10.7 Hz, 1H), 2.23 – 2.18 (m, 1H), 2.12 (s, 1H), 2.07 (d, J = 13.6 Hz, 1H), 1.51 (t, J = 14.5 Hz, 3H), 1.36 (t, J = 7.3 Hz, 4H), 1.33 – 1.28 (m, 2H), 1.23 (dt, J = 21.7, 9.7 Hz, 4H).	586	B	B
I-2650		1H NMR (500 MHz, DMSO-d6) ? 8.53 (dd, J = 5.0, 1.7 Hz, 1H), 8.42 (d, J = 8.2 Hz, 1H), 8.13 – 8.01 (m, 2H), 7.91 (d, J = 8.2 Hz, 1H), 7.59 (dd, J = 8.9, 5.0 Hz, 1H), 7.46 (dd, J = 7.5, 4.9 Hz, 1H), 7.23 (dd, J = 10.6, 8.9 Hz, 1H), 6.67 (s, 1H), 5.68 (d, J = 8.1 Hz, 1H), 4.51 (q, J = 8.2 Hz, 1H), 3.79 (p, J = 6.9 Hz, 1H), 3.06 (d, J = 9.6 Hz, 1H), 2.32 – 2.25 (m, 3H), 2.12 (q, J = 5.5, 4.0 Hz, 2H), 1.57 – 1.47 (m, 3H), 1.32 (dd, J = 20.4, 7.9 Hz, 3H), 1.24 (t, J = 9.1 Hz, 4H), 1.17 (d, J = 6.8 Hz, 6H).	598	A	A

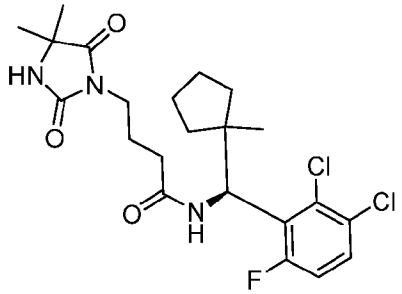
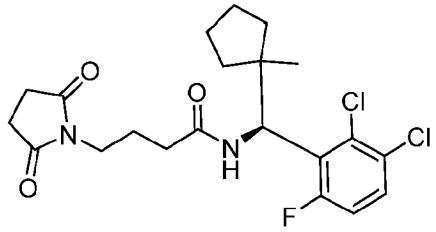
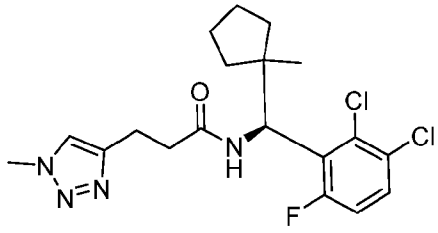
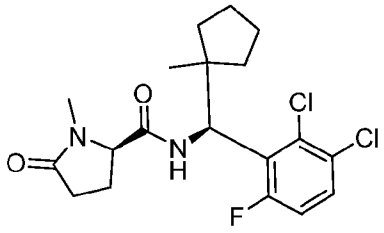
I-2651		1H NMR (500 MHz, DMSO-d6) ? 8.14 (d, J = 7.5 Hz, 1H), 8.05 (d, J = 8.3 Hz, 1H), 7.58 (dd, J = 8.9, 5.0 Hz, 1H), 7.31 – 7.19 (m, 1H), 5.65 (d, J = 8.1 Hz, 1H), 4.20 (q, J = 7.9 Hz, 1H), 3.29 – 3.22 (m, 4H), 3.04 (s, 1H), 2.25 (s, 1H), 2.20 – 2.16 (m, 2H), 2.15 – 2.10 (m, 2H), 2.06 (t, J = 5.0 Hz, 1H), 1.99 (dd, J = 20.6, 10.9 Hz, 2H), 1.85 (p, J = 7.5 Hz, 2H), 1.50 (d, J = 22.8 Hz, 3H), 1.36 – 1.15 (m, 7H).	524.2	B	B
I-2652		1H NMR (400 MHz, DMSO-d6) 10.55 (s, 1H), 8.64 (s, 1H), 8.33 (d, J = 8.2 Hz, 1H), 7.58 (td, J = 8.8, 5.5 Hz, 1H), 7.16 (t, J = 9.3 Hz, 1H), 5.30 (d, J = 8.1 Hz, 1H), 3.24 (p, J = 9.0 Hz, 1H), 2.64 (dt, J = 34.6, 10.7 Hz, 2H), 2.31 - 2.14 (m, 2H), 1.76 (dt, J = 19.8, 11.1 Hz, 7H), 1.61 (d, J = 8.4 Hz, 1H), 1.47 (d, J = 9.7 Hz, 2H).	455	A	A
I-2653		(400 MHz, DMSO-d6) 10.59 (s, 1H), 8.34 (d, J = 8.7 Hz, 2H), 7.58 (q, J − 8.1 Hz, 1H), 7.16 (t, J − 9.4 Hz, 1H), 5.28 (d, J = 8.2 Hz, 1H), 3.03 (t, J = 8.6 Hz, 1H), 2.21 - 2.05 (m, 1H), 1.94 (tt, J = 14.3, 7.0 Hz, 3H), 1.88 - 1.57 (m, 10H), 1.47 (d, J = 10.0 Hz, 2H).	470.05	A	A

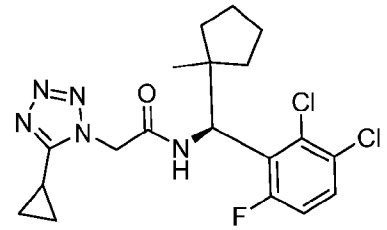
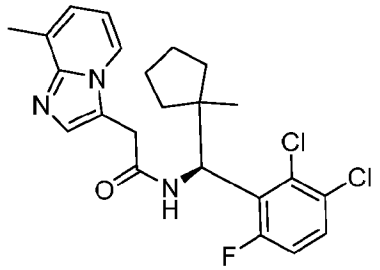
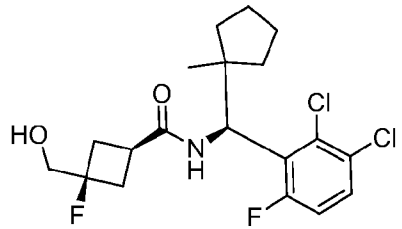
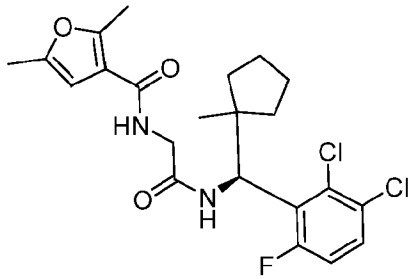
I-2654		1H NMR (400 MHz, DMSO-d6) 10.05 (s, 1H), 8.75 (d, J = 2.5 Hz, 1H), 8.24 (dd, J = 4.7, 1.5 Hz, 1H), 8.05 (d, J = 8.6 Hz, 2H), 7.80 - 7.54 (m, 2H), 7.38 - 7.15 (m, 2H), 5.49 (d, J = 8.5 Hz, 1H), 4.05 (q, J = 6.5 Hz, 1H), 3.27 (d, J = 7.8 Hz, 1H), 2.99 (q, J = 8.2 Hz, 2H), 2.31 (q, J = 9.2, 8.4 Hz, 4H), 1.85 (ddt, J = 27.9, 13.2, 7.5 Hz, 3H), 1.60 (s, 7H), 1.41 (d, J = 23.2 Hz, 3H), 1.26 (d, J = 10.4 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	588	B	B
I-2655		1H NMR (400 MHz, DMSO-d6) 8.80 (d, J = 1.6 Hz, 1H), 8.10 (dd, J = 35.3, 7.7 Hz, 2H), 7.60 (dd, J = 8.9, 5.1 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 6.48 (d, J = 1.7 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.16 - 3.92 (m, 1H), 3.52 (s, 2H), 2.99 (p, J = 7.7 Hz, 1H), 2.02 - 1.73 (m, 3H), 1.72 - 1.51 (m, 7H), 1.50 - 1.33 (m, 3H), 1.31 - 1.17 (m, 1H), 0.96 (d, J = 2.8 Hz, 3H).	496.05	B	A

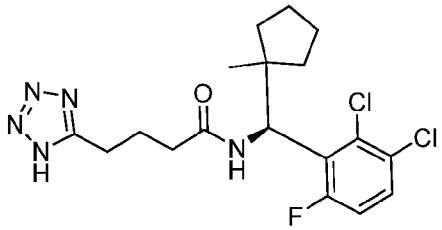
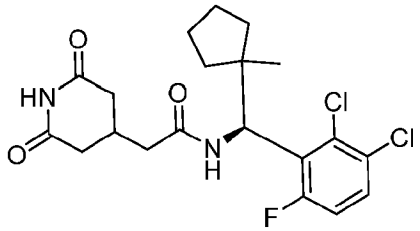
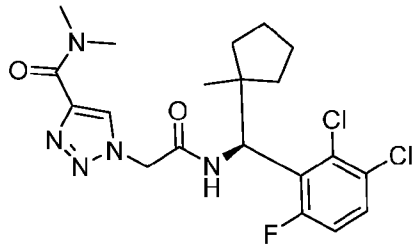
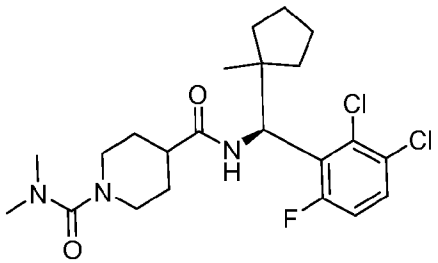
I-2656		1H NMR (400 MHz, DMSO-d6) 10.05 (s, 1H), 8.75 (d, J = 2.5 Hz, 1H), 8.24 (dd, J = 4.7, 1.5 Hz, 1H), 8.05 (d, J = 8.6 Hz, 2H), 7.80 - 7.54 (m, 2H), 7.38 - 7.15 (m, 2H), 5.49 (d, J = 8.5 Hz, 1H), 4.05 (q, J = 6.5 Hz, 1H), 3.27 (d, J = 7.8 Hz, 1H), 2.99 (q, J = 8.2 Hz, 2H), 2.31 (q, J = 9.2, 8.4 Hz, 4H), 1.85 (ddt, J = 27.9, 13.2, 7.5 Hz, 3H), 1.60 (s, 7H), 1.41 (d, J = 23.2 Hz, 3H), 1.26 (d, J = 10.4 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	588	B	B
I-2657		1H NMR (400 MHz, DMSO-d6) 8.90 (d, J = 1.5 Hz, 1H), 8.80 (d, J = 1.5 Hz, 1H), 8.74 (d, J = 7.7 Hz, 1H), 8.12 (dd, J = 5.1, 1.9 Hz, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.78 (td, J = 7.8, 2.0 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.36 (d, J = 8.1 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 7.16 (ddd, J = 7.4, 4.9, 1.0 Hz, 1H), 5.50 (d, J = 8.6 Hz, 1H), 4.31 (p, J = 7.1 Hz, 1H), 3.52 (s, 3H), 3.06 (p, J = 7.9 Hz, 1H), 1.89 (ddt, J = 28.3, 12.6, 7.2 Hz, 3H), 1.60 (s, 8H), 1.53 - 1.42 (m, 1H), 1.38 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	627.3	B	B
I-2658		1H NMR (400 MHz, DMSO-d6) 7.98 (d, J = 8.7 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.50 (d, J = 8.6 Hz, 1H), 2.89 - 2.73 (m, 1H), 1.82 - 1.66 (m, 1H), 1.65 - 1.50 (m, 10H), 1.47 - 1.30 (m, 4H), 1.27 (d, J = 7.6 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	372.05	D	

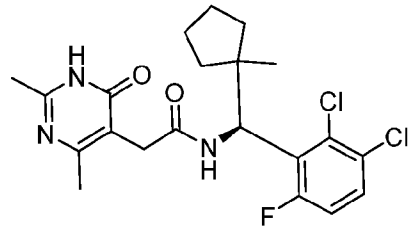
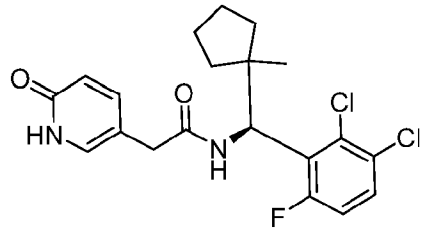
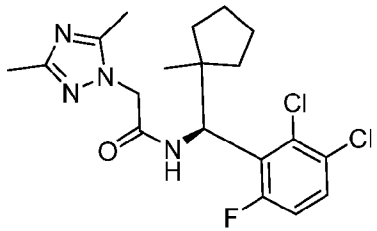
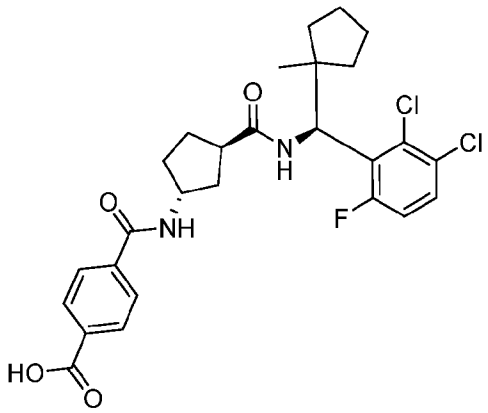
I-2659		1H NMR (400 MHz, DMSO-d6) 8.90 (s, 1H), 8.81 (s, 1H), 8.72 (s, 1H), 8.38 (s, 2H), 8.05 (d, J = 8.6 Hz, 1H), 7.74 (s, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.37 - 7.31 (m, 1H), 7.25 (t, J = 9.9 Hz, 1H), 5.50 (d, J = 8.6 Hz, 1H), 4.28 (d, J = 7.1 Hz, 1H), 3.47 (s, 3H), 3.08 - 3.00 (m, 1H), 1.86 (s, 4H), 1.59 (s, 8H), 1.37 (s, 1H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	627.3	B	A
I-2660		1H NMR (400 MHz, DMSO-d6) 10.54 (s, 1H), 8.63 (s, 1H), 8.19 (d, J = 8.5 Hz, 1H), 7.67-7.59 (m, 1H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 5.33 (d, J = 8.4 Hz, 1H), 3.23 (p, J = 9.1 Hz, 1H), 2.66 (dd, J = 12.1, 8.9 Hz, 1H), 2.57 (dd, J = 12.1, 8.9 Hz, 1H), 2.28-2.18 (m, 1H), 2.21-2.07 (m, 1H), 1.71 (q, J = 6.0, 5.1 Hz, 12H).	486.15	A	B

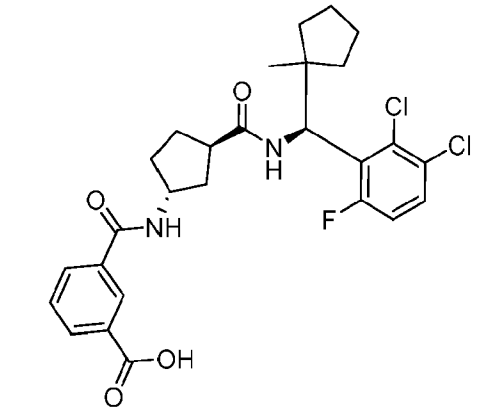
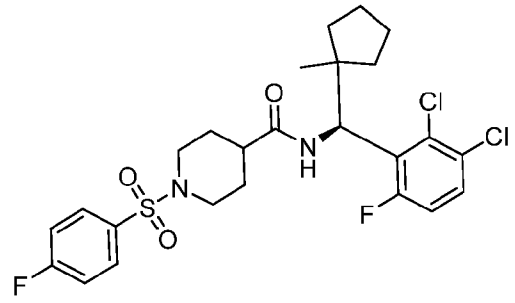
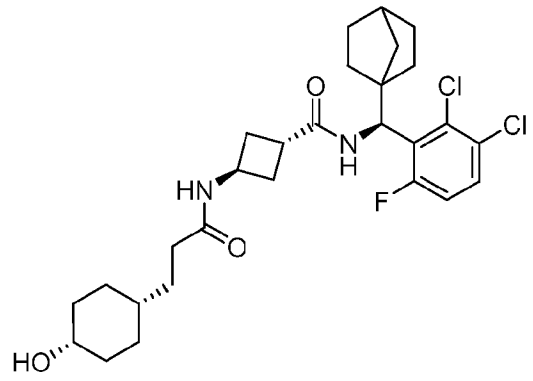
I-2661		1H NMR (400 MHz, DMSO-d6) 10.60 (s, 1H), 8.31 (s, 1H), 8.22 (d, J = 8.6 Hz, 1H), 7.57 (td, J = 8.6, 5.3 Hz, 1H), 7.15 (s, 1H), 5.02 (d, J = 7.3 Hz, 1H), 3.03 (p, J = 7.9 Hz, 1H), 2.09 (dd, J = 13.2, 10.0 Hz, 1H), 2.01 - 1.85 (m, 3H), 1.68 (td, J = 14.2, 12.6, 7.0 Hz, 14H).	484.2	B	B
I-2662		1H NMR (400 MHz, DMSO-d6) 10.53 (s, 1H), 8.63 (s, 1H), 8.21 (d, J = 8.7 Hz, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.15 (s, 1H), 5.04 (d, J = 8.3 Hz, 1H), 3.23 (p, J = 9.1 Hz, 1H), 2.70 - 2.54 (m, 2H), 2.28 - 2.12 (m, 2H), 1.69 (dt, J = 16.6, 9.8 Hz, 12H).	470.15	B	A
I-2663		1H NMR (400 MHz, DMSO-d6) 10.45 (s, 1H), 8.37-8.15 (m, 2H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.31 (d, J = 8.4 Hz, 1H), 3.03 (q, J = 8.7, 8.2 Hz, 1H), 2.10 (dd, J = 13.2, 10.0 Hz, 1H), 2.05-1.81 (m, 2H), 1.82-1.51 (m, 15H).	500.2	B	A

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I-2665			443.05	D	
I-2666			413.1	D	
I-2667			401.15	D	

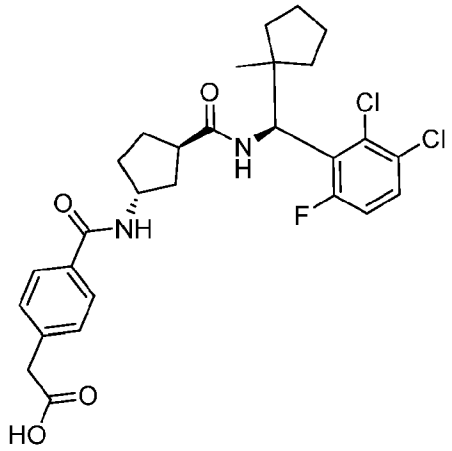
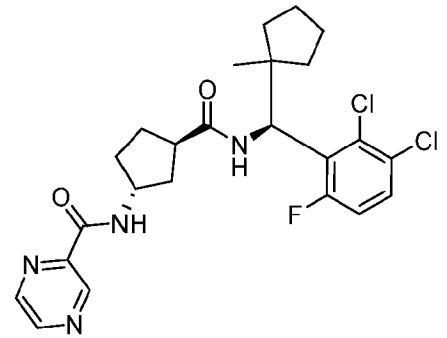
I-2668			426.05	B	B
I-2669			448.05	D	
I-2670			406.05	C	
I-2671			455.1	D	

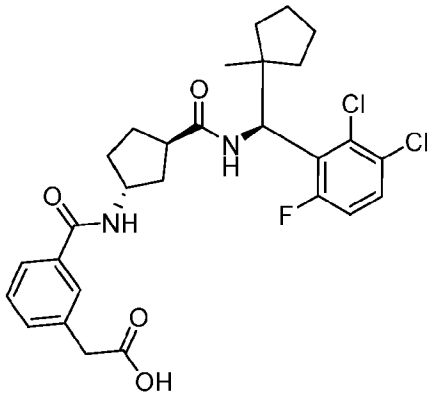
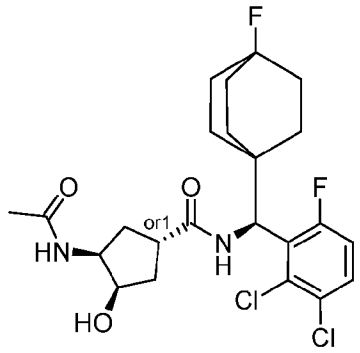
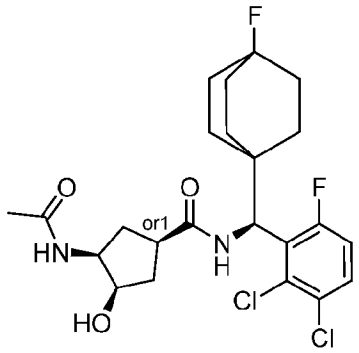
I-2672			414.1	D	
I-2673			429.05	C	
I-2674			456.05	C	
I-2675			458.1	C	

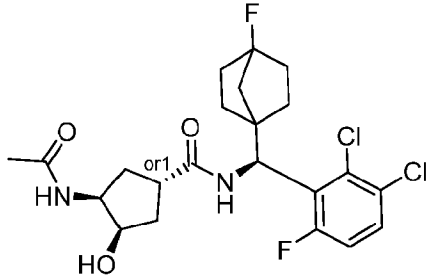
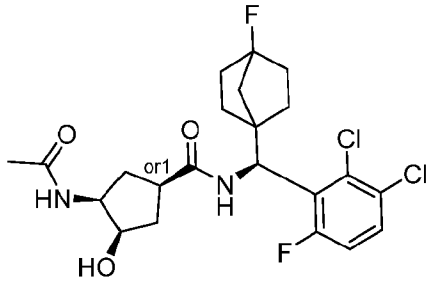
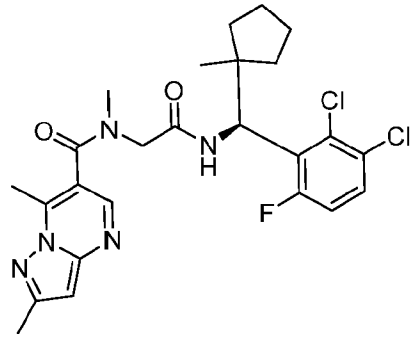
I-2676			440.05	D	
I-2677			411.05	B	
I-2678			413.05	C	
I-2679		1H NMR (400 MHz, DMSO-d6) 13.16 (s, 1H), 8.43 (d, J = 6.8 Hz, 1H), 8.00 (td, J = 27.7, 8.3 Hz, 5H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.34 - 7.11 (m, 1H), 5.51 (d, J = 8.6 Hz, 1H), 4.27 (d, J = 6.9 Hz, 1H), 3.14 - 2.94 (m, 1H), 2.07 - 1.70 (m, 4H), 1.60 (s, 8H), 1.38 (s, 1H), 1.25 (d, J = 13.0 Hz, 1H), 0.97 (s, 3H).	535.1	B	B

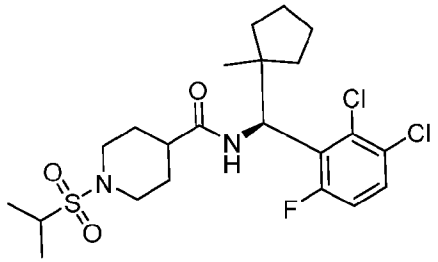
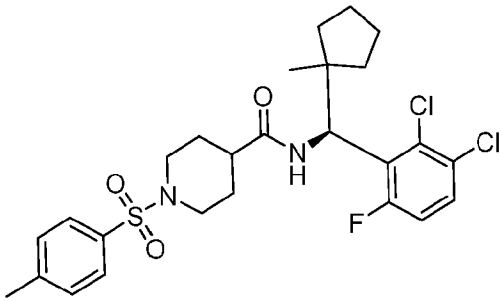
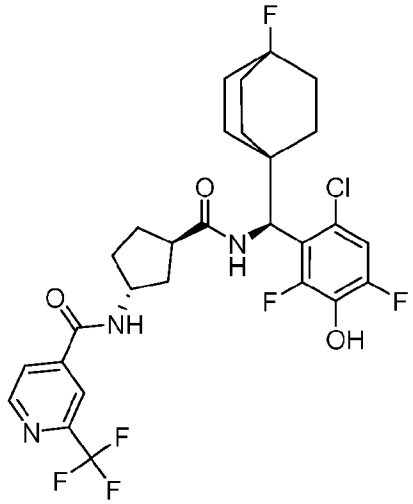
I-2680		1H NMR (400 MHz, DMSO-d6) 13.16 (s, 1H), 8.60 - 8.32 (m, 2H), 8.08 (d, J = 7.6 Hz, 3H), 7.74 - 7.53 (m, 2H), 7.26 (t, J = 9.8 Hz, 1H), 5.51 (d, J = 8.6 Hz, 1H), 4.28 (d, J = 6.7 Hz, 1H), 3.07 (s, 1H), 1.93 (d, J = 21.3 Hz, 4H), 1.60 (s, 7H), 1.50 (s, 1H), 1.38 (s, 1H), 1.27 (s, 1H), 0.97 (s, 3H).	535.15	B	D
I-2681			545.3	D	
I-2682			539.2	B	B

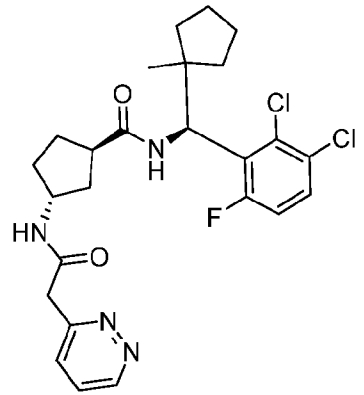
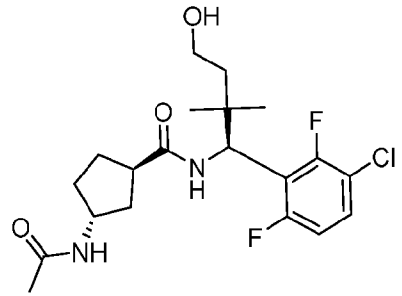
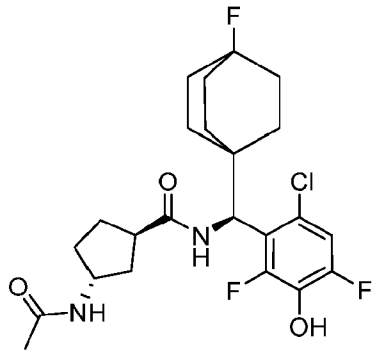
I-2683		587.4	D	
I-2684		551.2	B	B
I-2685			B	A

I-2686		1H NMR (400 MHz, DMSO-d6) 12.39 (s, 1H), 8.16 (dd, J = 64.5, 7.7 Hz, 2H), 7.80 - 7.54 (m, 3H), 7.45 - 7.16 (m, 3H), 5.50 (d, J = 8.5 Hz, 1H), 4.25 (p, J = 6.8 Hz, 1H), 3.62 (s, 2H), 3.04 (p, J = 7.8 Hz, 1H), 1.88 (dddd, J = 48.0, 19.1, 13.5, 8.0 Hz, 4H), 1.70 - 1.10 (m, 10H), 0.97 (d, J = 2.9 Hz, 3H).	549.15	B	B
I-2687		1H NMR (400 MHz, DMSO-d6) 9.17 (d, J = 1.5 Hz, 1H), 8.87 (d, J = 2.5 Hz, 1H), 8.76 - 8.61 (m, 2H), 8.08 (d, J = 8.7 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.33 (q, J = 7.1 Hz, 1H), 3.14 - 2.97 (m, 1H), 2.07 - 1.77 (m, 4H), 1.71 - 1.45 (m, 8H), 1.37 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	493.1	B	A

I-2688		1H NMR (400 MHz, DMSO-d6) 12.39 (s, 1H), 8.21 (d, J = 6.9 Hz, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.84 - 7.69 (m, 2H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.40 - 7.17 (m, 3H), 5.50 (d, J = 8.5 Hz, 1H), 4.25 (p, J = 6.9 Hz, 1H), 3.63 (s, 2H), 3.04 (p, J = 7.9 Hz, 1H), 2.06 - 1.74 (m, 4H), 1.71 - 1.20 (m, 10H), 0.97 (d, J = 2.8 Hz, 3H).	549.15	B	C
I-2689		1H NMR (400 MHz, DMSO-d6) 8.09 (d, J = 8.5 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.47 (d, J = 7.8 Hz, 1H), 7.25 (dd, J = 10.7, 8.9 Hz, 1H), 5.27 (d, J = 8.4 Hz, 1H), 4.77 (d, J = 3.6 Hz, 1H), 3.98 - 3.92 (m, 1H), 3.86 (dd, J = 10.8, 7.2 Hz, 1H), 3.12 - 3.03 (m, 1H), 1.84 - 1.75 (m, 6H), 1.74 - 1.56 (m, 12H), 1.56 - 1.51 (m, 1H).	489.15	D	
I-2690		1H NMR (400 MHz, DMSO-d6) 8.20 - 8.04 (m, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.49 (d, J = 7.4 Hz, 1H), 7.31 - 7.20 (m, 1H), 5.33 - 5.11 (m, 1H), 4.76 (d, J = 3.2 Hz, 1H), 3.95 - 3.85 (m, 2H), 3.12 - 2.89 (m, 1H), 2.03 - 1.39 (m, 19H).	489.1	B	B

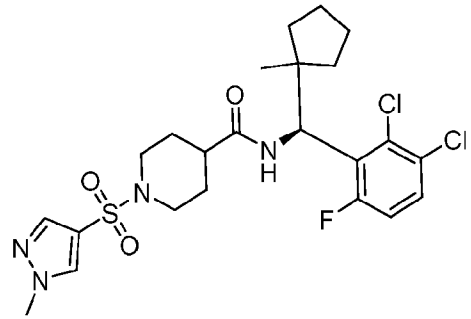
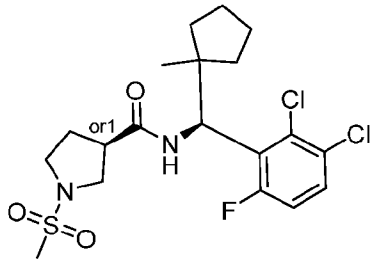
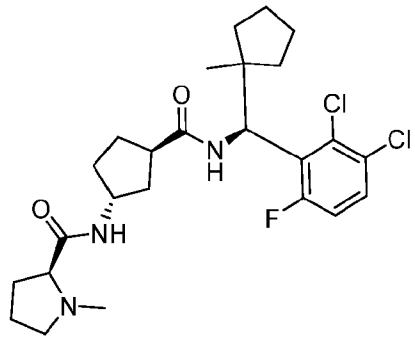
I-2691		1H NMR (400 MHz, DMSO-d6) 8.20 (d, J = 8.2 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.49 (d, J = 7.8 Hz, 1H), 7.27 (dd, J = 10.7, 8.9 Hz, 1H), 5.52 - 5.31 (m, 1H), 4.79 (d, J = 3.6 Hz, 1H), 4.00 - 3.81 (m, 2H), 3.13 - 3.03 (m, 1H), 1.96 - 1.38 (m, 17H).	475.15	C	
I-2692		1H NMR (400 MHz, DMSO-d6) 8.19 (d, J = 8.2 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.49 (d, J = 7.5 Hz, 1H), 7.26 (dd, J = 10.6, 9.0 Hz, 1H), 5.50 (d, J = 8.1 Hz, 1H), 4.77 (d, J = 3.3 Hz, 1H), 3.98 - 3.85 (m, 2H), 3.13 - 2.89 (m, 1H), 2.03 - 1.83 (m, 2H), 1.80 (s, 6H), 1.74 - 1.64 (m, 4H), 1.64 - 1.44 (m, 5H).	475.05	B	A
I-2693			520.1	D	

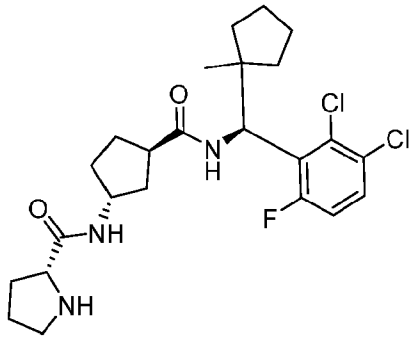
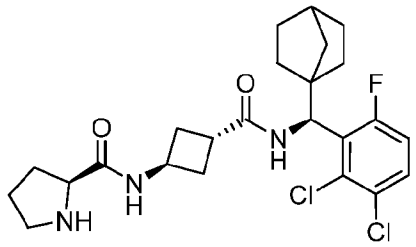
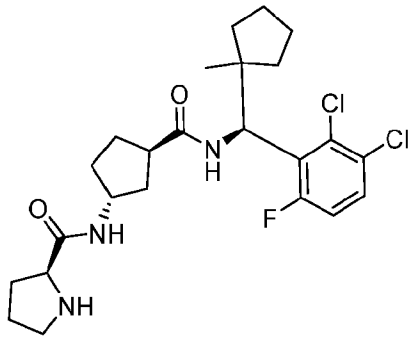
I-2694			493.1	C	B
I-2695			541.2	D	
I-2696		1H NMR (400 MHz, DMSO-d6) 10.41 (s, 1H), 8.93 (d, J = 5.0 Hz, 1H), 8.80 (d, J = 6.8 Hz, 1H), 8.26 (s, 1H), 8.09 (dd, J = 5.0, 1.5 Hz, 1H), 7.95 (d, J = 9.0 Hz, 1H), 7.24 (d, J = 10.3 IIz, 1II), 5.22 (d, J = 8.9 IIz, 1II), 4.29 (q, J = 6.8 IIz, 1H), 3.00 (q, J = 7.9 Hz, 1H), 2.07 - 1.78 (m, 4H), 1.78 - 1.37 (m, 14H).	604.05	E	

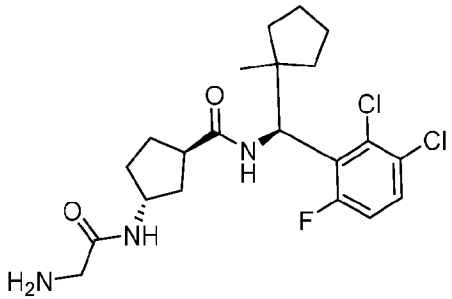
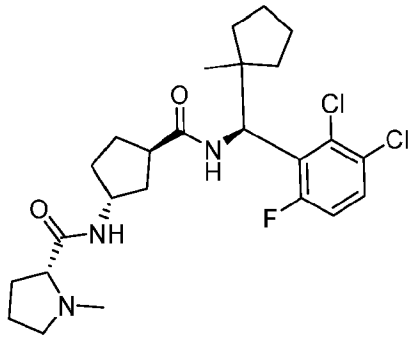
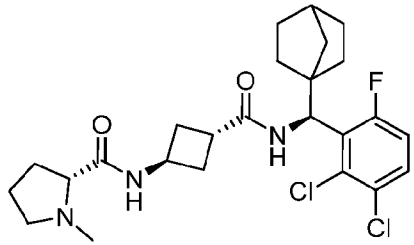
I-2697		1H NMR (400 MHz, DMSO-d6) 9.10 (dd, J = 3.9, 2.7 Hz, 1H), 8.22 (d, J = 6.8 Hz, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.63 (m, 3H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.03 (q, J = 6.5, 6.5, 6.5 Hz, 1H), 3.80 (s, 2H), 3.00 (m, 1H), 1.90 (dt, J = 13.9, 7.3, 7.3 Hz, 1H), 1.83 (q, J = 7.1, 6.5, 6.5 Hz, 1H), 1.67 (dt, J = 9.9, 5.3, 5.3 Hz, 1H), 1.59 (m, 7H), 1.44 (m, 1H), 1.38 (s, 2H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	507.15	B	A
I-2698		1H NMR (400 MHz, DMSO-d6) 8.14 (d, J = 8.9 Hz, 1H), 7.77 (d, J = 6.9 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.15 (d, J = 9.9 Hz, 1H), 5.09 (d, J = 8.6 Hz, 1H), 4.37 (s, 1H), 4.01 (p, J = 6.4 Hz, 1H), 3.45 (s, 2H), 2.96 (p, J = 7.7 Hz, 1H), 1.95 - 1.70 (m, 6H), 1.60 (ddd, J = 14.7, 9.0, 6.0 Hz, 2H), 1.37 (tq, J = 15.6, 8.0, 7.3 Hz, 3H), 0.90 (d, J = 23.2 Hz, 6H).	417.15	E	
I-2699		1H NMR (400 MHz, DMSO-d6) 10.38 (s, 1H), 8.08 - 7.88 (m, 1H), 7.77 (d, J = 6.9 Hz, 1H), 7.42 - 7.05 (m, 1H), 5.20 (d, J = 8.8 Hz, 1H), 3.99 (p, J = 6.6 Hz, 1H), 2.92 (q, J = 7.7 Hz, 1H), 2.03 - 1.75 (m, 7H), 1.75 - 1.55 (m, 12H), 1.46 (dq, J = 12.4, 8.7, 7.8 Hz, 1H), 1.35 (dq, J = 16.1, 9.3, 8.1 Hz, 1H).	473.05	E	

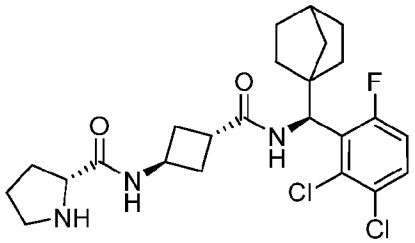
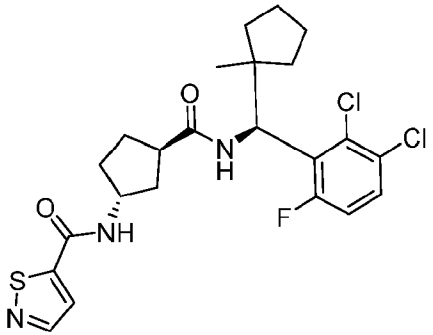
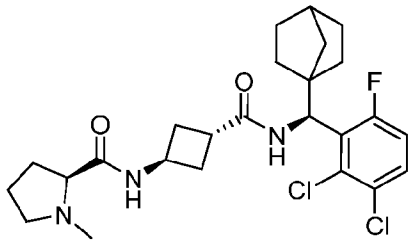
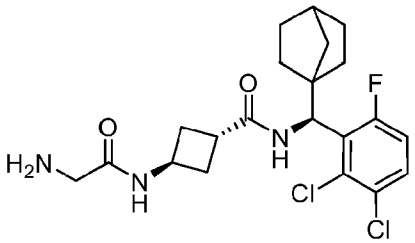
I-2700		429.5	D	
I-2701			D	
I-2702			D	

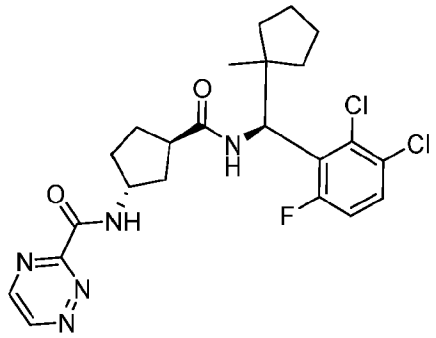
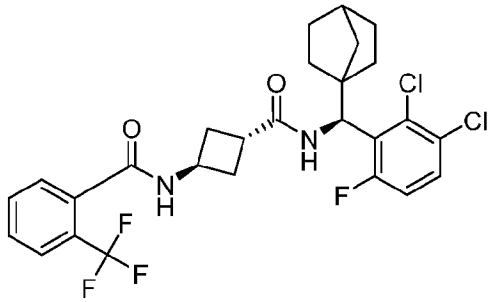
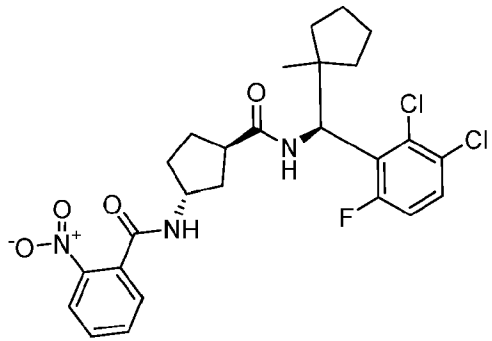
I-2703			C
I-2704			D
I-2705		451.1	A A

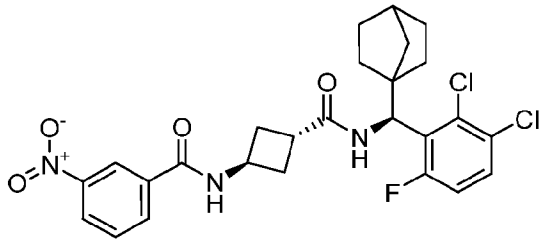
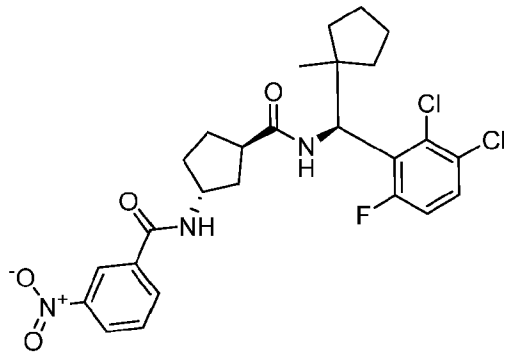
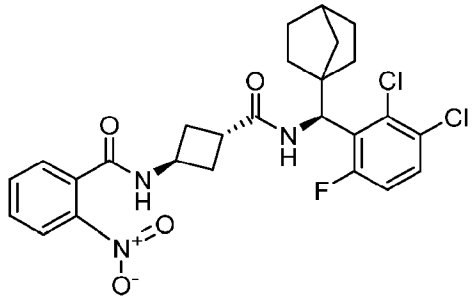
I-2706			531.1	B	B
I-2707			451.1	C	
I-2708		1H NMR (400 MHz, DMSO-d6) 8.04 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.44 (d, J = 7.7 Hz, 1H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 5.49 (d, J = 8.5 Hz, 1H), 4.07 (h, J = 6.7 Hz, 1H), 3.13 - 2.84 (m, 2H), 2.64 (dd, J = 9.4, 6.1 Hz, 1H), 2.23 (s, 4H), 2.10 - 1.97 (m, 1H), 1.94 - 1.74 (m, 3H), 1.73 - 1.50 (m, 10H), 1.43 (qd, J = 11.1, 9.4, 5.1 Hz, 3H), 1.27 (d, J = 7.5 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	498.25	B	B

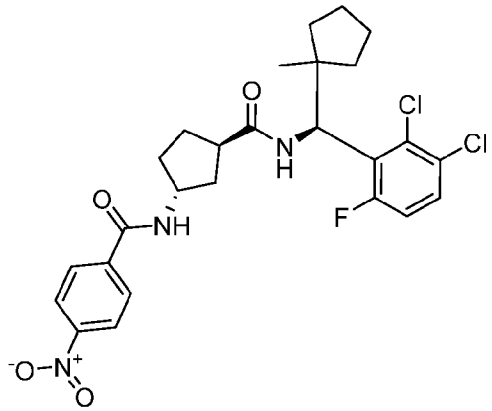
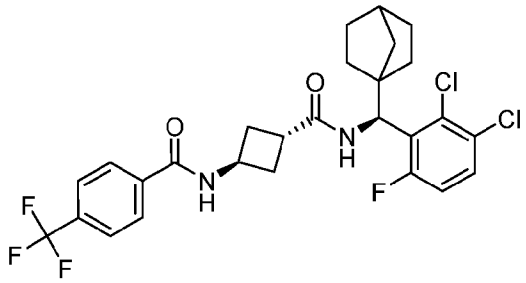
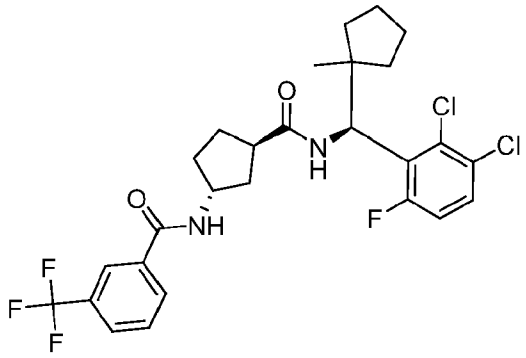
I-2709		1H NMR (400 MHz, DMSO-d6) 8.26 - 8.16 (m, 1H), 8.09 (d, J = 8.6 Hz, 1H), 7.90 (d, J = 8.1 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.04 (h, J = 6.5 Hz, 1H), 3.62 - 3.53 (m, 1H), 3.00 (p, J = 7.6 Hz, 1H), 2.87 (hept, J = 4.4, 4.0 Hz, 2H), 2.04 - 1.72 (m, 4H), 1.72 - 1.45 (m, 10H), 1.45 -1.32 (m, 3H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	484.2	B	B
I-2710		1H NMR (400 MHz, DMSO-d6) 8.14 (d, J = 8.2 Hz, 1H), 8.07 (t, J = 8.5 Hz, 1H), 7.60 (dd, J = 8.9, 5.1 Hz, 1H), 7.23 (dd, J = 10.6, 8.9 Hz, 1H), 5.67 (d, J = 8.1 Hz, 1H), 4.28 (p, J = 8.0 Hz, 1H), 3.50 (dd, J = 8.5, 5.1 Hz, 1H), 3.08 - 3.02 (m, 1H), 2.84 (td, J = 6.5, 2.0 Hz, 2H), 2.26 (t, J = 10.3 Hz, 1H), 2.19 - 2.05 (m, 4H), 2.00 - 1.89 (m, 1H), 1.68 - 1.47 (m, 6H), 1.27 (ddt, J = 27.0, 20.8, 9.6 Hz, 7H).	482.2	B	B
I-2711		1H NMR (400 MHz, DMSO-d6) 8.06 (d, J = 8.7 Hz, 1H), 7.75 (d, J = 7.5 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 4.03 (q, J = 6.7 Hz, 1H), 3.44 (dd, J = 8.6, 5.2 Hz, 1H), 2.99 (p, J = 7.6 Hz, 1H), 2.79 (td, J = 6.5, 2.1 Hz, 2H), 1.95 - 1.76 (m, 4H), 1.68 - 1.52 (m, 10H), 1.41 (ddd, J = 22.9, 11.8, 7.1 Hz, 3H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	484.05	B	B

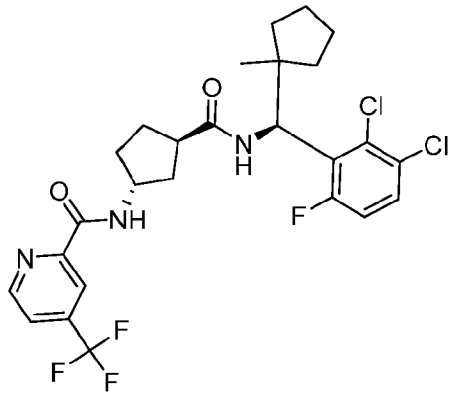
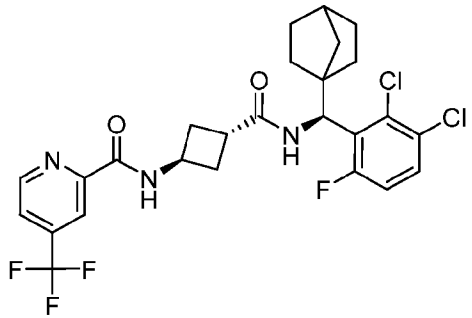
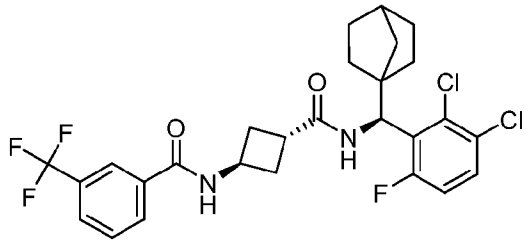
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I-2713		1H NMR (400 MHz, DMSO-d6) 8.04 (d, J = 8.7 Hz, 1H), 7.60 (dt, J = 9.0, 2.2 Hz, 1H), 7.45 (d, J = 7.6 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.49 (d, J = 8.6 Hz, 1H), 4.05 (q, J = 6.8 Hz, 1H), 3.04-2.95 (m, 2H), 2.65 (dd, J = 9.5, 5.7 Hz, 1H), 2.25 (s, 3H), 2.28-2.17 (m, 2H), 2.07-1.96 (m, 1H), 1.95-1.74 (m, 2H), 1.67 (ddt, J = 12.8, 9.7, 4.9 Hz, 4H), 1.59 (s, 6H), 1.42 (td, J = 13.4, 12.9, 7.9 Hz, 3H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	498.15	C	
I-2714		1H NMR (400 MHz, DMSO-d6)8.07 (d, J = 8.2 Hz, 1H), 7.86 (d, J = 8.3 Hz, 1H), 7.59 (dd, J = 9.0, 4.9 Hz, 1H), 7.23 (dd, J = 10.6, 8.9 Hz, 1H), 5.67 (d, J = 8.1 Hz, 1H), 4.28 (p, J = 8.2 Hz, 1H), 3.09-2.96 (m, 2H), 2.63 (dd, J = 9.4, 6.3 Hz, 1H), 2.26-1.95 (m, 10H), 1.74-1.56 (m, 2H), 1.53 (s, 4H), 1.33 (dd, J = 16.7, 9.4 Hz, 2H), 1.23 (d, J = 16.0 Hz, 5H).	496.1	B	B

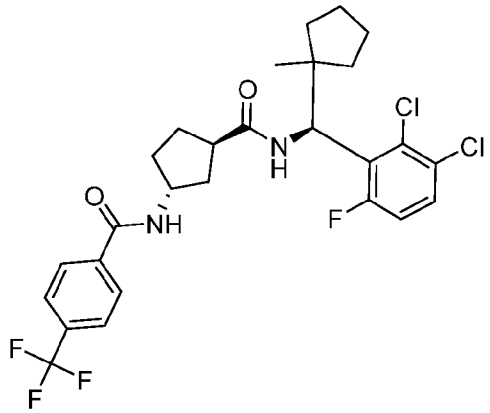
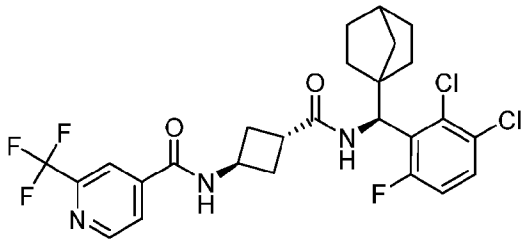
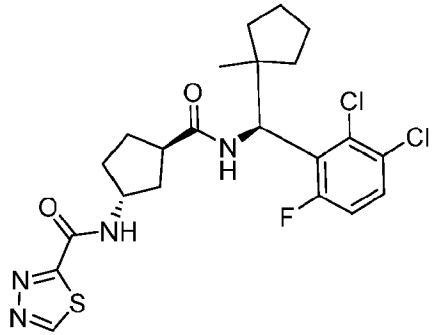
I-2715		1H NMR (400 MHz, DMSO-d6) 8.08 (dd, J = 8.3, 4.5 Hz, 2H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.24 (dd, J = 10.6, 8.9 Hz, 1H), 5.71 - 5.50 (m, 1H), 4.27 (h, J = 8.2 Hz, 1H), 3.42 (dd, J = 8.9, 5.0 Hz, 2H), 3.11 - 3.01 (m, 1H), 2.85 - 2.66 (m, 2H), 2.34 - 2.21 (m, 1H), 2.12 (ddt, J = 15.3, 12.9, 7.6 Hz, 4H), 1.96 - 1.67 (m, 1H), 1.55 (ddt, J = 18.5, 14.0, 8.3 Hz, 6H), 1.27 (ddt, J = 28.0, 21.2, 9.6 Hz, 7H).	482.2	B	B
I-2716		1H NMR (400 MHz, DMSO-d6) 8.72-8.62 (m, 2H), 8.11 (d, J = 8.6 Hz, 1H), 7.93 (d, J = 1.8 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.50 (d, J = 8.5 Hz, 1H), 4.22 (h, J = 6.8 Hz, 1H), 3.05 (p, J = 7.8 Hz, 1H), 2.04-1.84 (m, 2H), 1.80 (ddd, J = 13.7, 8.7, 6.1 Hz, 2H), 1.60 (s, 6H), 1.58-1.42 (m, 1H), 1.48 (s, 1H), 1.38 (s, 1H), 1.27 (d, J = 7.9 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	498.05	A	A
I-2717		1H NMR (400 MHz, DMSO-d6) 8.06 (d, J = 8.2 Hz, 1H), 7.85 (d, J = 8.3 Hz, 1H), 7.60 (dd, J = 9.0, 5.1 Hz, 1H), 7.23 (dd, J = 10.7, 9.0 Hz, 1H), 5.67 (d, J = 8.1 Hz, 1H), 4.29 (h, J = 8.0 Hz, 1H), 3.13 - 2.91 (m, 2H), 2.62 (dd, J = 9.4, 6.2 Hz, 1H), 2.39 - 1.93 (m, 10H), 1.76 - 1.44 (m, 6H), 1.42 - 1.12 (m, 7H).	496.15	B	B
I-2718		1H NMR (400 MHz, DMSO-d6) 8.08 (d, J = 8.2 Hz, 1H), 7.98 (d, J = 8.2 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.24 (dd, J = 10.6, 9.0 Hz, 1H), 5.67 (d, J = 8.1 Hz, 1H), 4.31 (q, J = 7.8 Hz, 1H), 3.00 (s, 3H), 2.21-1.97 (m, 5H), 1.51 (d, J = 18.8 Hz, 3H), 1.42-1.09 (m, 8H).	442.15	A	B

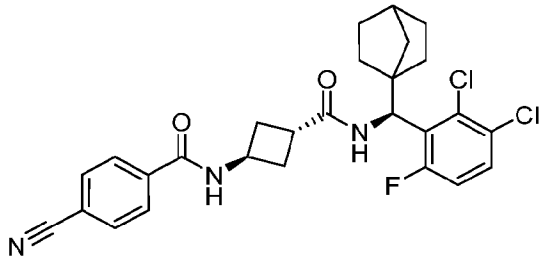
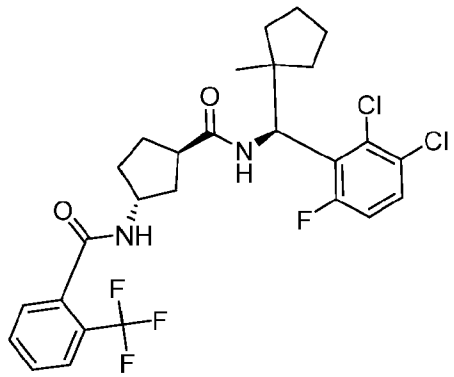
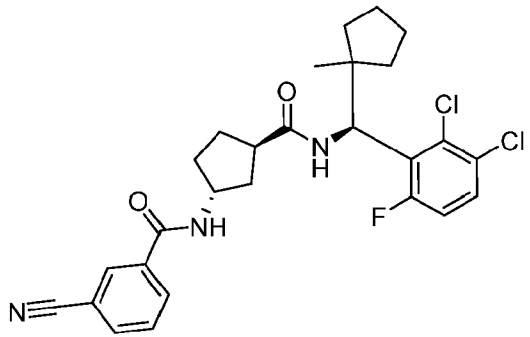
I-2719		1H NMR (400 MHz, DMSO-d6) 9.58 (d, J = 2.5 Hz, 1H), 9.12-8.91 (m, 2H), 8.11 (d, J=8.6 Hz, 1H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.26 (dd, J = 10.7, 9.0 Hz, 1H), 5.51 (d, J = 8.6 Hz, 1H), 4.33 (p, J = 7.2 Hz, 1H), 3.14-3.04 (m, 1H), 2.04-1.81 (m, 4H), 1.80-1.40 (m, 8H), 1.36 (d, J = 19.0 Hz, 2H), 1.24 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	494.1	B	A
I-2720		1H NMR (400 MHz, DMSO-d6) 8.72 (d, J = 7.3 Hz, 1H), 8.11 (d, J = 8.2 Hz, 1H), 7.77 (d, J = 7.8 Hz, 1H), 7.71 (t, J = 7.4 Hz, 1H), 7.67-7.56 (m, 2H), 7.50 (d, J = 7.5 Hz, 1H), 7.25 (dd, J = 10.6, 8.9 Hz, 1H), 5.70 (d, J = 8.1 Hz, 1H), 4.43-4.34 (m, 1H), 3.12 (s, 1H), 2.37 (s, 1H), 2.26-2.15 (m, 3H), 2.14 (s, 1H), 1.55 (s, 2H), 1.49 (s, 1H), 1.37 (s, 2H), 1.32 (s, 1H), 1.37-1.30 (m, 1H), 1.23 (dd, J = 16.8, 8.9 Hz, 3H).	557.05	B	B
I-2721		1H NMR (400 MHz, DMSO-d6) 8.56 (d, J = 6.9 Hz, 1H), 8.04 (dd, J = 8.2, 1.2 Hz, 2H), 7.78 (td, J = 7.5, 1.2 Hz, 1H), 7.68 (td, J = 7.8, 1.5 Hz, 1H), 7.64 - 7.54 (m, 2H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.50 (d, J = 8.5 Hz, 1H), 4.17 (p, J = 6.7 Hz, 1H), 3.02 (p, J = 7.5 Hz, 1H), 2.00 (dt, J = 13.7, 7.2 Hz, 1H), 1.94 - 1.70 (m, 3H), 1.69 - 1.33 (m, 9H), 1.26 (d, J = 16.0 Hz, 1H), 0.98 (d, J = 2.8 Hz, 3H).	536	B	B

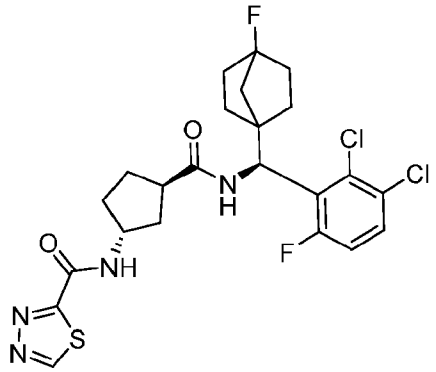
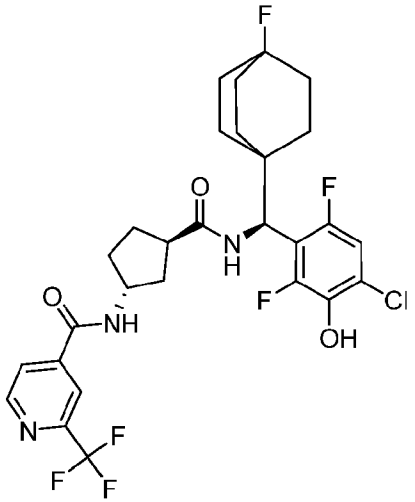
I-2722		1H NMR (400 MHz, DMSO-d6) 9.01 (d, J = 7.3 Hz, 1H), 8.69 (t, J = 2.0 Hz, 1H), 8.45-8.33 (m, 1H), 8.21 (dd, J = 60.4, 8.1 Hz, 2H), 7.77 (t, J = 8.0 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.32-7.18 (m, 1H), 5.70 (d, J = 8.2 Hz, 1H), 4.53 (q, J = 7.8 Hz, 1H), 3.14 (d, J = 10.1 Hz, 1H), 2.40-2.18 (m, 4H), 2.14 (s, 1H), 1.53 (d, J = 19.3 Hz, 3H), 1.46-0.92 (m, 8H)	534.15	A	A
I-2723		1H NMR (400 MHz, DMSO-d6) 8.78 - 8.58 (m, 2H), 8.38 (ddd, J = 8.2, 2.4, 1.0 Hz, 1H), 8.30 (dt, J = 7.8, 1.3 Hz, 1H), 8.07 (d, J = 8.6 Hz, 1H), 7.77 (t, J = 8.0 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.26 (dq, J = 26.4, 6.6 Hz, 1H), 3.07 (p, J = 7.9 Hz, 1H), 2.10 - 1.74 (m, 4H), 1.73 - 1.44 (m, 8H), 1.38 (s, 1H), 1.25 (d, J = 14.8 Hz, 1H), 1.07 - 0.77 (m, 3H).	536.2	A	A
I-2724		1H NMR (400 MHz, DMSO-d6) 8.87 (d, J = 7.3 Hz, 1H), 8.12 (d, J = 8.3 Hz, 1H), 8.04 (dd, J = 8.1, 1.2 Hz, 1H), 7.83-7.72 (m, 1H), 7.68 (td, J = 7.8, 1.5 Hz, 1H), 7.64-7.50 (m, 2H), 7.26 (dd, J = 10.6, 9.0 Hz, 1H), 5.69 (d, J = 8.1 Hz, 1H), 4.35 (q, J = 7.6 Hz, 1H), 2.42-2.32 (m, 1H), 2.28-2.16 (m, 2H), 2.14 (s, 1H), 1.53 (d, J = 18.7 Hz, 3H), 1.46-1.04 (m, 8H)	534.15	A	A

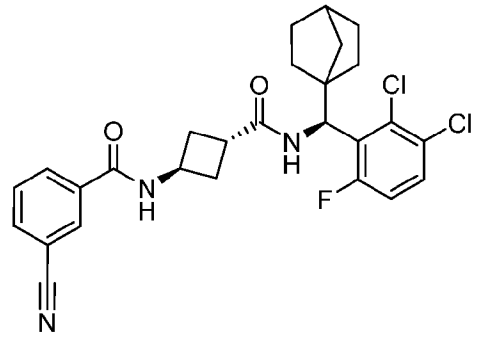
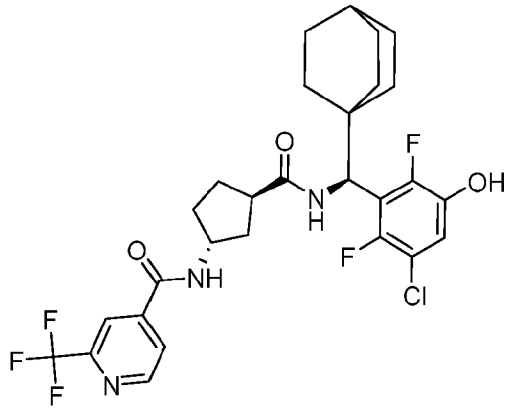
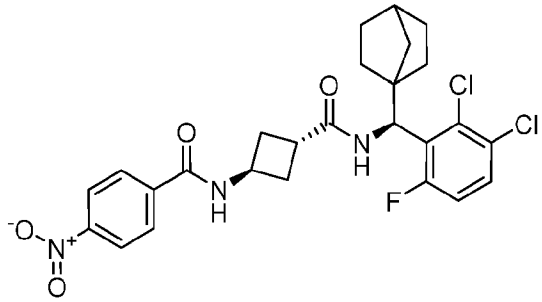
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I-2726		1H NMR (400 MHz, DMSO-d6) 8.84 (d, J = 7.4 Hz, 1H), 8.08 (dd, J = 36.7, 8.2 Hz, 3H), 7.85 (d, J = 8.2 Hz, 2H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.34-7.16 (m, 1H), 5.70 (d, J = 8.2 Hz, 1H), 4.51 (q, J = 7.9 Hz, 1H), 3.13 (s, 1H), 2.28 (ddd, J = 38.4, 18.1, 9.0 Hz, 4H), 2.14 (s, 1H), 1.65-1.08 (m, 11H)	557.15	B	B
I-2727		1H NMR (400 MHz, DMSO-d6) 8.52 (d, J = 6.8 Hz, 1H), 8.21 - 8.12 (m, 2H), 8.07 (d, J = 8.7 Hz, 1H), 7.90 (d, J = 7.8 Hz, 1H), 7.71 (t, J = 7.8 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 5.51 (d, J = 8.6 Hz, 1H), 4.27 (dq, J = 15.0, 7.1 Hz, 1H), 3.06 (p, J = 7.8 Hz, 1H), 2.08 - 1.74 (m, 4H), 1.69 - 1.46 (m, 8H), 1.38 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	559	D	D

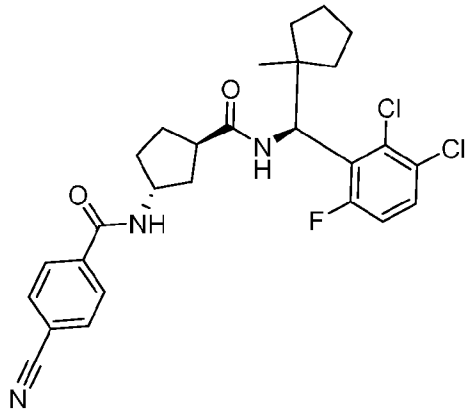
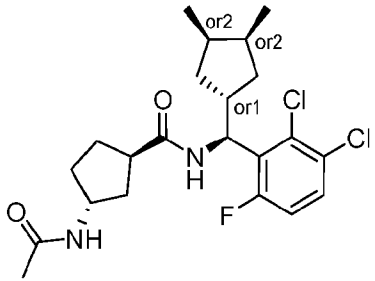
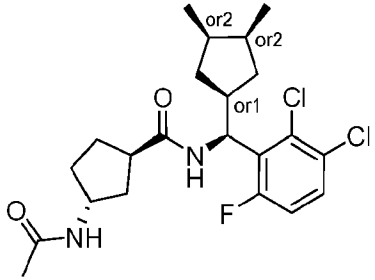
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I-2729		1H NMR (400 MHz, DMSO-d6) 9.19 (d, J = 8.3 Hz, 1H), 8.94 (d, J = 5.1 Hz, 1H), 8.20 (d, J = 1.6 Hz, 1H), 8.13 (d, J = 8.2 Hz, 1H), 8.05 - 7.99 (m, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.30 - 7.20 (m, 1H), 5.69 (d, J = 8.1 Hz, 1H), 4.59 (q, J = 8.2 Hz, 1H), 3.11 (t, J = 9.2 Hz, 1H), 2.47 - 2.27 (m, 3H), 1.55 (s, 2H), 1.50 (s, 3H), 1.39 - 1.20 (m, 7H).	558.15	C	B
I-2730		1H NMR (400 MHz, DMSO-d6) 8.87 (d, J = 7.4 Hz, 1H), 8.15 (dd, J = 17.6, 10.4 Hz, 3H), 7.90 (d, J = 7.8 Hz, 1H), 7.72 (t, J = 7.8 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.25 (dd, J = 10.6, 9.0 Hz, 1H), 5.70 (d, J = 8.2 Hz, 1H), 4.52 (h, J = 7.8 Hz, 1H), 3.15 (s, 1H), 2.42-2.16 (m, 4H), 2.14 (s, 1H), 1.55 (s, 2H), 1.50 (s, 1H), 1.40-1.32 (m, 2H), 1.29 (d, J = 17.6 Hz, 2H), 1.23 (s, 3H).	557.15	B	B

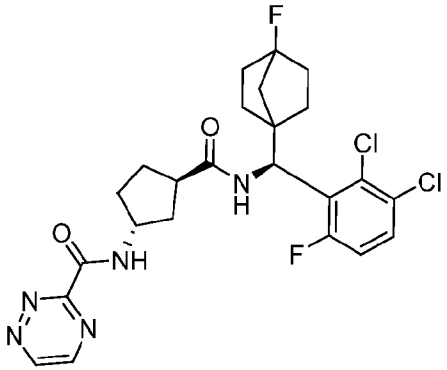
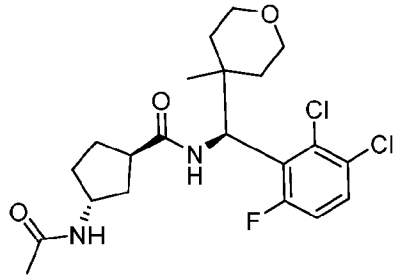
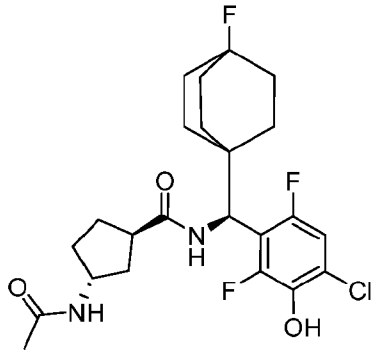
I-2731		1H NMR (400 MHz, DMSO-d6) 8.50 (d, J = 6.9 Hz, 1H), 8.09 - 8.00 (m, 3H), 7.84 (d, J = 8.2 Hz, 2H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.27 (p, J = 6.8 Hz, 1H), 3.05 (p, J = 7.8 Hz, 1H), 2.14 - 1.74 (m, 4H), 1.72 - 1.47 (m, 8H), 1.38 (s, 1H), 1.25 (d, J = 13.9 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	559	D	B
I-2732		1H NMR (400 MHz, DMSO-d6) 9.12 (d, J = 7.3 Hz, 1H), 8.93 (d, J = 5.0 Hz, 1H), 8.25 (t, J = 1.1 Hz, 1H), 8.14 (d, J = 8.2 Hz, 1H), 8.07 (dd, J = 4.9, 1.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.25 (dd, J = 10.6, 9.0 Hz, 1H), 5.70 (d, J = 8.1 Hz, 1H), 4.52 (h, J = 7.8 Hz, 1H), 3.20 - 3.11 (m, 1H), 2.43 - 2.17 (m, 4H), 2.14 (s, 1H), 1.55 (s, 3H), 1.34 (dd, J = 17.3, 9.3 Hz, 3H), 1.29 - 1.20 (m, 4H).	558.15	B	B
I-2733		1H NMR (400 MHz, DMSO-d6) 9.78 (s, 1H), 9.19 (d, J = 7.5 Hz, 1H), 8.10 (d, J = 8.6 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 5.49 (d, J = 8.5 Hz, 1H), 4.29 (h, J = 7.1 Hz, 1H), 3.06 (p, J = 7.8 Hz, 1H), 2.01 -1.82 (m, 4H), 1.72 - 1.43 (m, 8H), 1.38 (s, 1H), 1.25 (d, J = 12.7 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	499.1	A	A

I-2734		1H NMR (400 MHz, DMSO-d6) 8.86 (d, J = 7.4 Hz, 1H), 8.11 (d, J = 8.3 Hz, 1H), 7.97 (q, J = 8.5 Hz, 4H), 7.61 (dd, J = 9.1, 4.8 Hz, 1H), 7.25 (dd, J = 10.7, 8.9 Hz, 1H), 5.71 (d, J = 8.2 Hz, 1H), 4.50 (q, J = 7.8 Hz, 1H), 3.18-3.09 (m, 1H), 2.42-2.33 (m, 2H), 2.33-2.18 (m, 2H), 2.14 (s, 1H), 1.58-1.48 (m, 4H), 1.40-1.21 (m, 6H).	514.1	A	A
I-2735		1H NMR (400 MHz, DMSO-d6) 8.41 (d, J = 7.0 Hz, 1H), 8.04 (d, J = 8.7 Hz, 1H), 7.76 (d, J = 7.8 Hz, 1H), 7.71 (t, J = 7.5 Hz, 1H), 7.67 - 7.57 (m, 2H), 7.48 (d, J = 7.5 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.50 (d, J = 8.5 Hz, 1H), 4.20 (q, J = 6.7 Hz, 1H), 3.03 (q, J = 7.8 Hz, 1H), 2.00 (dt, J = 13.6, 7.1 Hz, 1H), 1.87 (s, 2H), 1.72 (ddd, J = 13.9, 9.0, 5.7 Hz, 1H), 1.60 (s, 6H), 1.49 (dd, J = 13.4, 6.2 Hz, 3H), 1.40 (s, 1H), 0.97 (d, J = 2.7 Hz, 3H).	559	B	B
I-2736		1H NMR (400 MHz, DMSO-d6) 8.46 (d, J = 6.8 Hz, 1H), 8.29 (t, J = 1.7 Hz, 1H), 8.15 (dt, J = 8.0, 1.5 Hz, 1H), 8.06 (d, J − 8.6 Hz, 1H), 8.00 (dt, J − 7.7, 1.4 Hz, 1H), 7.69 (t, J = 7.8 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.27 (h, J = 6.7 Hz, 1H), 3.06 (p, J = 7.9 Hz, 1H), 2.08 - 1.74 (m, 4H), 1.71 - 1.44 (m, 8H), 1.38 (d, J = 7.9 Hz, 1H), 1.32 - 1.19 (m, 1H), 0.97 (d, J = 2.8 Hz, 3H).	516.15	A	A

I-2737		1H NMR (400 MHz, DMSO-d6) 9.78 (s, 1H), 9.21 (d, J = 7.5 Hz, 1H), 8.20 (d, J = 8.3 Hz, 1H), 7.69 - 7.59 (m, 1H), 7.27 (dd, J = 10.7, 8.9 Hz, 1H), 5.52 (d, J = 8.1 Hz, 1H), 4.28 (p, J = 7.2 Hz, 1H), 3.02 (p, J = 8.3, 7.7 Hz, 1H), 2.13 - 1.78 (m, 8H), 1.79 - 1.64 (m, 4H), 1.64 - 1.41 (m, 4H).	529.3	A	A
I-2738		1H NMR (400 MHz, DMSO-d6) 10.25 (s, 1H), 8.93 (d, J = 5.0 Hz, 1H), 8.80 (d, J = 6.8 Hz, 1H), 8.26 (d, J = 1.5 Hz, 1H), 8.09 (dd, J = 4.9, 1.6 Hz, 1H), 8.00 (s, 1H), 7.20 (s, 1H), 4.99 (d, J = 8.8 Hz, 1H), 4.28 (p, J = 6.6 Hz, 1H), 3.01 (p, J = 7.8 Hz, 1H), 2.05 - 1.76 (m, 4H), 1.76 - 1.42 (m, 14H).	604.05	D	D

I-2739		1H NMR (400 MHz, DMSO-d6) 8.82 (d, J = 7.4 Hz, 1H), 8.27 (t, J = 1.7 Hz, 1H), 8.14 (ddd, J = 7.3, 4.1, 2.7 Hz, 2H), 8.00 (dt, J = 7.7, 1.4 Hz, 1H), 7.69 (t, J = 7.8 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.25 (dd, J = 10.6, 9.0 Hz, 1H), 5.70 (d, J = 8.2 Hz, 1H), 4.50 (q, J = 7.8 Hz, 1H), 3.14 (dt, J = 9.2, 5.4 Hz, 1H), 2.41-2.16 (m, 4H), 2.14 (s, 1H), 1.55 (s, 2H), 1.50 (s, 1H), 1.40-1.29 (m, 2H), 1.27 (s, 1H), 1.23 (d, J = 9.2 Hz, 4H).	514.1	A	A
I-2740		1H NMR (400 MHz, DMSO-d6) 9.95 (s, 1H), 8.93 (d, J = 5.0 Hz, 1H), 8.79 (d, J = 6.8 Hz, 1H), 8.33 - 8.20 (m, 1H), 8.09 (dd, J = 5.0, 1.6 Hz, 1H), 8.01 - 7.87 (m, 1H), 6.98 (dd, J = 8.5, 7.2 Hz, 1H), 4.97 (dd, J = 20.5, 8.7 Hz, 1H), 4.29 (h, J = 6.7 Hz, 1H), 3.04 (p, J = 7.8 Hz, 1H), 2.15 - 1.75 (m, 4H), 1.70 - 1.29 (m, 15H).	586.25	B	B
I-2741		1H NMR (400 MHz, DMSO-d6) 8.96 (d, J = 7.3 Hz, 1H), 8.44-8.23 (m, 2H), 8.13 (d, J = 8.2 Hz, 1H), 8.11-7.99 (m, 2H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.25 (dd, J = 10.6, 9.0 Hz, 1H), 5.70 (d, J = 8.1 Hz, 1H), 4.50 (p, J = 7.9 Hz, 1H), 3.15 (d, J = 9.4 Hz, 1H), 2.39-2.20 (m, 3H), 2.14 (s, 1H), 1.53 (d, J = 20.1 Hz, 3H), 1.46-1.06 (m, 7H)	534.15	A	A

I-2742		1H NMR (400 MHz, DMSO-d6) 8.51 (d, J = 6.9 Hz, 1H), 8.18 - 7.89 (m, 5H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 5.50 (d, J = 8.6 Hz, 1H), 4.26 (q, J = 6.8 Hz, 1H), 3.05 (p, J = 7.7 Hz, 1H), 2.09 - 1.72 (m, 4H), 1.68 - 1.44 (m, 8H), 1.38 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	516.15	A	A
I-2743		1H NMR (400 MHz, Chloroform-d) 7.33 (dd, J = 8.9, 5.3 Hz, 1H), 6.93 (t, J = 9.5, 9.5 Hz, 1H), 6.10 (s, 1H), 5.47 (d, J = 43.0 Hz, 2H), 4.29 (s, 1H), 2.71 (s, 1H), 2.10 (dt, J = 20.8, 6.4, 6.4 Hz, 4H), 1.67 (m, 6H), 1.47 (m, 4H), 1.14 (dq, J = 13.8, 7.2, 6.5, 6.5 Hz, 1H), 0.84 (d, J = 6.6 Hz, 3H), 0.78 (d, J = 6.7 Hz, 3H).	443.15	C	
I-2744		1H NMR (400 MHz, Chloroform-d) 7.33 (dd, J = 8.9, 5.3 Hz, 1H), 6.93 (t, J = 9.5, 9.5 Hz, 1H), 6.10 (s, 1H), 5.43 (d, J = 7.3 Hz, 2H), 4.27 (dt, J = 12.5, 6.3, 6.3 Hz, 1H), 2.71 (p, J = 8.4, 8.4, 8.3, 8.3 Hz, 1H), 2.48 (s, 1H), 2.16 (m, 2H), 2.05 (s, 1H), 1.71 (d, J = 52.9 Hz, 6H), 1.47 (m, 4H), 1.17 (m, 1H), 0.87 (dt, J = 16.2, 4.5, 4.5 Hz, 3H), 0.78 (d, J = 6.7 Hz, 3H).	443.15	D	

I-2745		1H NMR (400 MHz, DMSO-d6) 9.58 (d, J = 2.5 Hz, 1H), 9.07 - 9.00 (m, 2H), 8.22 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 8.9, 5.1 Hz, 1H), 7.28 (dd, J = 10.6, 8.9 Hz, 1H), 5.53 (d, J = 8.0 Hz, 1H), 4.34 (h, J = 7.0 Hz, 1H), 3.04 (p, J = 7.7 Hz, 1H), 2.04 - 1.77 (m, 7H), 1.77 - 1.44 (m, 9H).	524.15	B	A
I-2746		1H NMR (400 MHz, DMSO-d6) 8.25 - 8.08 (m, 1H), 7.77 (d, J = 7.0 Hz, 1H), 7.68 - 7.61 (m, 1H), 7.28 (dd, J = 10.8, 9.0 Hz, 1H), 5.41 (d, J = 8.8 Hz, 1H), 4.00 (h, J = 6.6 Hz, 1H), 3.66 (d, J = 11.9 Hz, 2H), 3.54 - 3.39 (m, 2H), 2.97 (p, J = 7.8 Hz, 1H), 1.94 - 1.70 (m, 6H), 1.70 - 1.53 (m, 3H), 1.49 - 1.27 (m, 3H), 1.20 (d, J = 13.3 Hz, 1H), 1.08 (d, J = 2.3 Hz, 3H).	445.15	D	
I-2747		1H NMR (400 MHz, DMSO-d6) 10.18 (d, J = 31.4 Hz, 1H), 7.98 (s, 1H), 7.77 (d, J = 6.9 Hz, 1H), 7.18 (d, J = 10.0 Hz, 1H), 4.96 (d, J = 8.8 Hz, 1H), 3.99 (h, J = 6.5 Hz, 1H), 2.91 (p, J = 7.8 Hz, 1H), 1.89 - 1.74 (m, 6H), 1.74 - 1.52 (m, 13H), 1.52 - 1.27 (m, 2H).	473.05	D	D

I-2748			B	
I-2749			B	
I-2750			B	B
I-2751			B	B

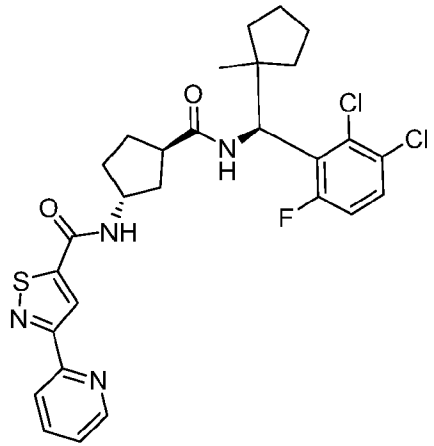
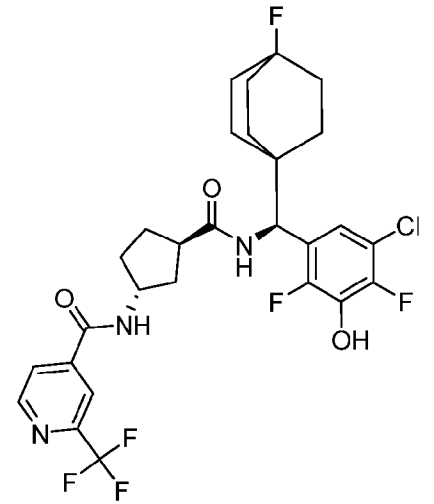
I-2752			D	
I-2753			D	
I-2754			D	
I-2755			B	B

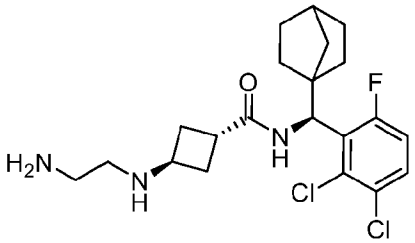
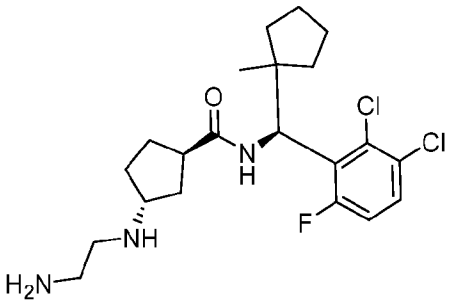
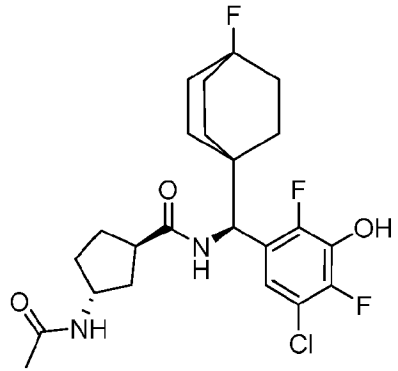
I-2756			D	
I-2757			C	
I-2758			E	
I-2759			D	

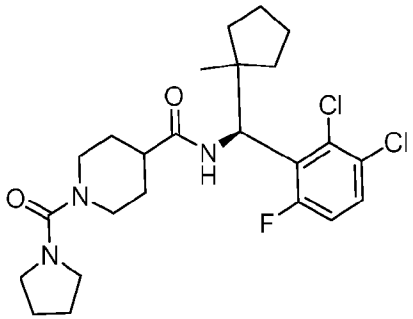
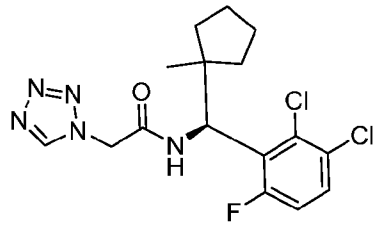
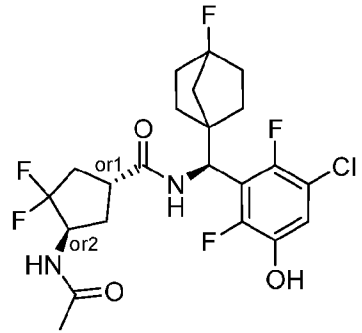
I-2760			D	
I-2761			C	
I-2762			C	
I-2763			B	B

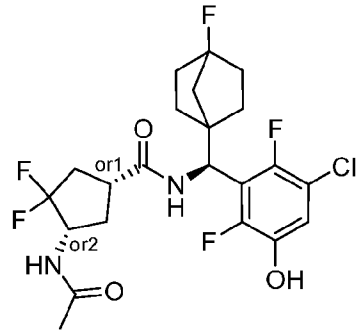
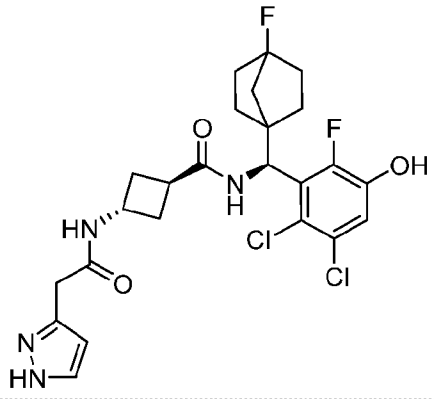
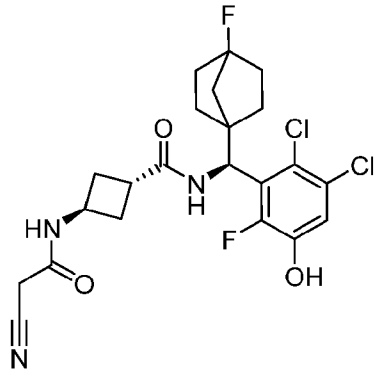
I-2764			D
I-2765			C
I-2766		517.1	B

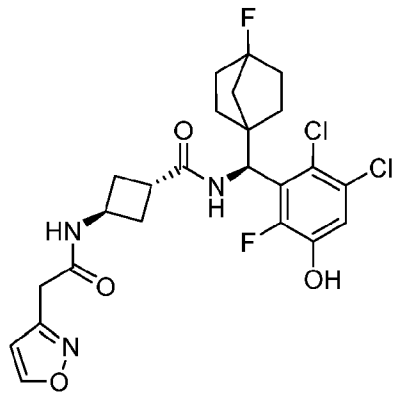
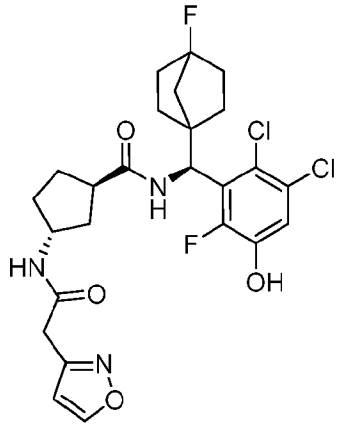
I-2767		598.1	C	
I-2768			D	
I-2769			B	B
I-2770			D	

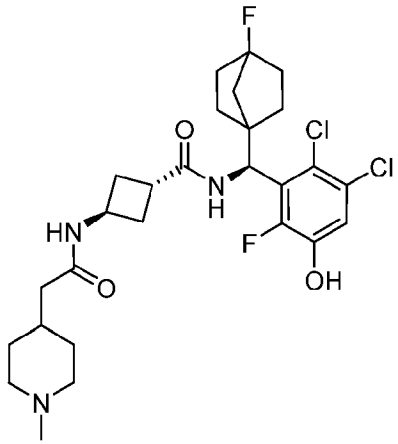
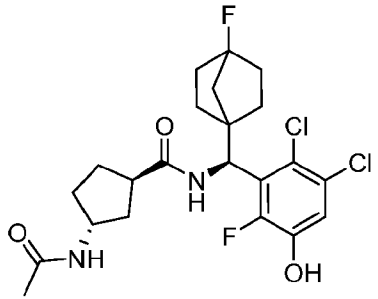
I-2771		1H NMR (400 MHz, DMSO-d6) 8.88 (d, J = 6.9 Hz, 1H), 8.75 (s, 1H), 8.70 (dd, J = 4.7, 1.4 Hz, 1H), 8.20 (dd, J = 7.9, 1.3 Hz, 1H), 8.10 (d, J = 8.6 Hz, 1H), 7.98 (tt, J = 7.7, 1.9 Hz, 1H), 7.61 (ddd, J = 8.9, 5.1, 2.4 Hz, 1H), 7.50 (ddt, J = 7.6, 4.9, 1.6 Hz, 1H), 7.26 (ddd, J = 10.7, 8.8, 1.7 Hz, 1H), 5.52 (d, J = 8.5 Hz, 1H), 4.26 (q, J = 6.6 Hz, 1H), 3.08 (p, J = 7.9 Hz, 1H), 2.06-1.80 (m, 4H), 1.60 (s, 8H), 1.39 (d, J = 8.2 Hz, 1H), 1.27 (t, J = 6.0 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	575.15	D	B
I-2772		1H NMR (400 MHz, DMSO-d6) 8.93 (d, J = 5.0 Hz, 1H), 8.86 (s, 1H), 8.37 (s, 1H), 8.27 (s, 1H), 8.10 (s, 3H), 6.71 (s, 2H), 5.01 (d, J = 9.7 Hz, 1H), 4.31 (d, J = 7.7 Hz, 1H), 3.08 (s, 1H), 2.94 (s, 4H), 1.66 (s, 6H), 1.55 (d, J = 9.2 Hz, 8H), 1.23 (s, 1H).	604.15	D	

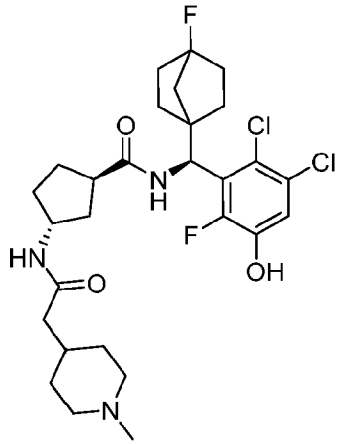
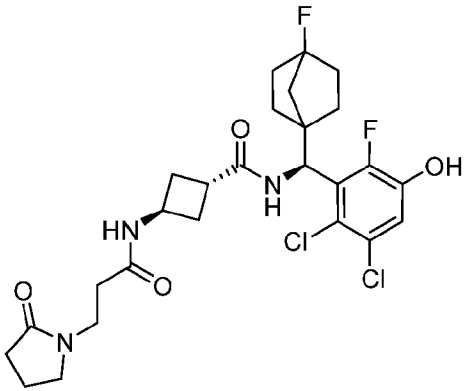
I-2773		1H NMR (400 MHz, DMSO-d6) 8.42 (s, 1H), 8.07 (d, J = 8.2 Hz, 1H), 7.60 (dd, J = 8.9, 5.0 Hz, 1H), 7.25 (q, J = 9.7, 9.1 Hz, 1H), 5.66 (d, J = 8.2 Hz, 1H), 3.26 (p, J = 7.2 Hz, 1H), 3.06 (tt, J = 9.1, 4.0 Hz, 1H), 2.73 (t, J = 6.0 Hz, 2H), 2.55 (t, J = 6.0 Hz, 2H), 2.50 (d, J = 1.8 Hz, 1H), 2.30 - 1.97 (m, 3H), 1.94 - 1.78 (m, 2H), 1.70 - 1.09 (m, 10H).	428	B	B
I-2774		1H NMR (400 MHz, DMSO-d6) 8.41 (s, 1H), 8.11 (d, J = 8.6 Hz, 1H), 7.60 (dd, J = 8.9, 5.0 Hz, 1H), 7.30 - 7.20 (m, 1H), 5.48 (d, J = 8.5 Hz, 1H), 3.10 (t, J = 6.1 Hz, 1H), 3.04 - 2.96 (m, 1H), 2.80 (t, J = 6.0 Hz, 2H), 2.68 (t, J = 5.9 Hz, 2H), 1.79 (td, J = 10.2, 7.8, 4.9 Hz, 3H), 1.59 (s, 7H), 1.46 - 1.21 (m, 4H), 0.96 (d, J = 2.7 Hz, 3H).	430	C	
I-2775		1H NMR (400 MHz, DMSO-d6) 8.09 (d, J = 9.7 Hz, 1H), 7.82 (d, J = 6.6 Hz, 1H), 6.86 (s, 1H), 4.99 (d, J = 9.6 Hz, 1H), 4.01 (q, J = 6.4 Hz, 1H), 2.87-2.79 (m, 1H), 1.88-1.74 (m, 2H), 1.77 (s, 3H), 1.67 (q, J = 7.1 Hz, 8H), 1.55 (s, 2H), 1.53 (s, 6H), 1.38 (dt, J = 13.2, 7.2 Hz, 1H).	473.1	D	

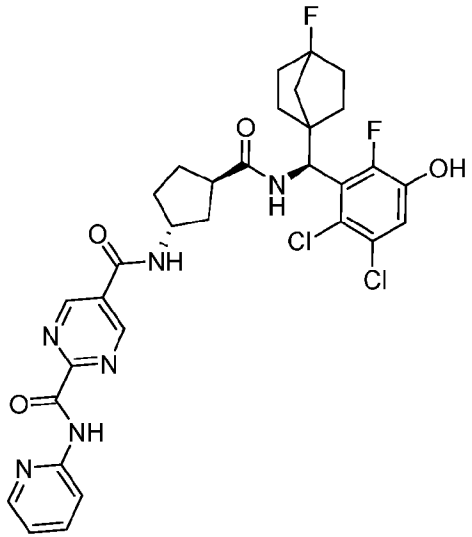
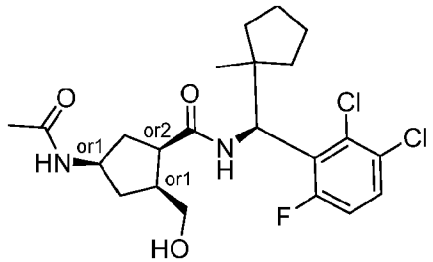
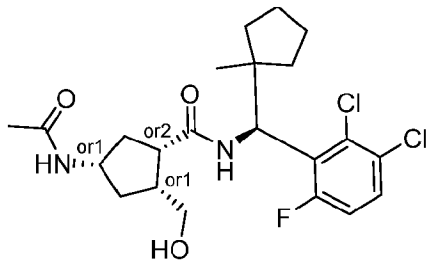
I-2776				C	
I-2777				C	
I-2778		1H NMR (400 MHz, DMSO-d6) 8.32 (d, J = 8.4 Hz, 1H), 8.05 (d, J = 8.8 Hz, 1H), 6.99 (t, J = 8.0 Hz, 1H), 5.29 (d, J = 8.4 Hz, 1H), 4.47 (dt, J = 18.1, 9.1 Hz, 1H), 3.11 (ddt, J = 12.8, 9.0, 4.8 Hz, 1H), 2.28 (dd, J − 8.9, 4.5 Hz, 1H), 2.22 (td, J − 11.3, 9.8, 5.8 Hz, 1H), 1.98 (ddt, J = 12.5, 8.3, 3.9 Hz, 1H), 1.92-1.87 (m, 4H), 1.86-1.76 (m, 3H), 1.72 (d, J = 9.4 Hz, 4H), 1.59 (d, J = 8.4 Hz, 1H), 1.46 (d, J = 9.3 Hz, 1H), 1.37 (s, 1H)	495.3	B	A

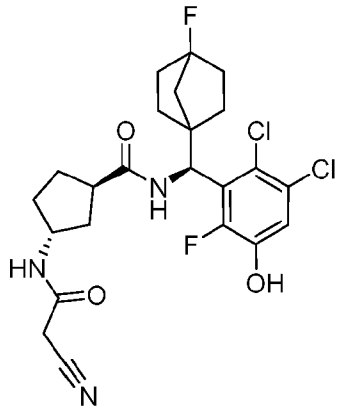
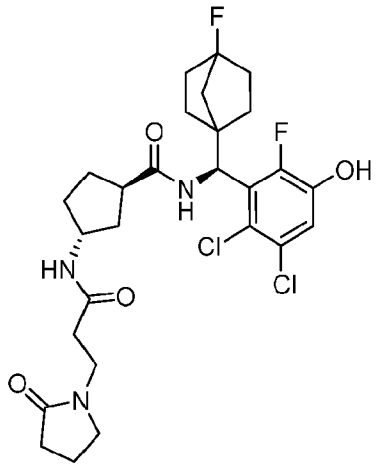
I-2779		1H NMR (400 MHz, DMSO-d6) 8.32 (d, J = 8.3 Hz, 1H), 8.03 (d, J = 8.8 Hz, 1H), 7.00 (t, J = 7.9 Hz, 1H), 5.26 (d, J = 8.2 Hz, 1H), 4.41 (dt, J = 17.4, 8.6 Hz, 1H), 3.12 (dt, J = 13.7, 8.5 Hz, 1H), 2.39-2.30 (m, 1H), 2.27 (dd, J = 17.8, 6.6 Hz, 1H), 1.84 (s, 3H), 1.87-1.66 (m, 9H), 1.59 (d, J = 8.3 Hz, 1H), 1.54-1.42 (m, 2H).	495.25	B	A
I-2780		1H NMR (400 MHz, DMSO-d6) 12.95 - 12.13 (m, 1H), 11.13 - 10.32 (m, 1H), 8.32 - 8.17 (m, 1H), 8.08 (d, J = 8.4 Hz, 1H), 7.50 (s, 1H), 7.10 (d, J = 8.0 Hz, 1H), 6.08 (d, J = 2.0 Hz, 1H), 5.50 (d, J = 8.2 Hz, 1H), 4.23 (h, J = 8.0 Hz, 1H), 3.36 - 3.33 (m,2H), 3.06 (td, J = 9.2, 4.4 Hz, 1H), 2.28 (td, J = 8.7, 8.2, 4.7 Hz, 1H), 2.22 - 1.96 (m, 3H), 1.92 - 1.64 (m, 6H), 1.64 - 1.43 (m, 4H).	527.25	B	B
I-2781		1H NMR (400 MHz, DMSO-d6) 8.49 (d, J = 7.3 Hz, 1H), 8.09 (d, J = 8.4 Hz, 1H), 7.07 (d, J = 8.1 Hz, 1H), 5.50 (d, J = 8.3 Hz, 1H), 4.23 (q, J = 7.8 Hz, 1H), 3.57 (s, 2H), 3.12 - 3.02 (m, 1H), 2.29 (dt, J = 8.0, 4.0 Hz, 1H), 2.10 (dp, J = 30.2, 10.0, 9.0 Hz, 3H), 1.94 - 1.61 (m, 6H), 1.61 - 1.41 (m, 4H).	486.1	B	B

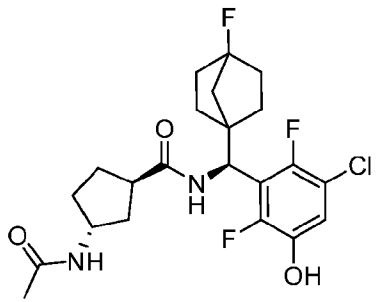
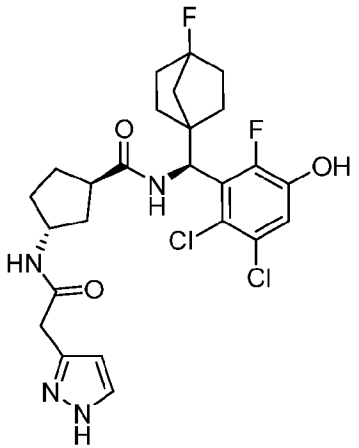
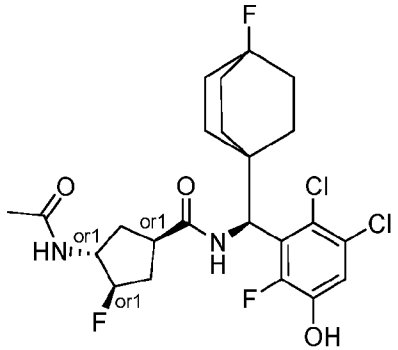
I-2782		1H NMR (400 MHz, DMSO-d6) 8.80 (d, J = 1.7 Hz, 1H), 8.45 (d, J = 7.4 Hz, 1H), 8.08 (d, J = 8.5 Hz, 1H), 7.08 (d, J = 8.1 Hz, 1H), 5.50 (d, J = 8.3 Hz, 1H), 4.24 (h, J = 7.9 Hz, 1H), 3.50 (s, 2H), 3.12 - 3.00 (m, 1H), 2.29 (td, J = 8.1, 4.1 Hz, 1H), 2.24 - 1.95 (m, 3H), 1.92 - 1.63 (m, 6H), 1.63 - 1.40 (m, 4H).	528.2	B	A
I-2783		1H NMR (400 MHz, DMSO-d6) 8.81 (d, J = 1.7 Hz, 1H), 8.13 (dd, J = 28.0, 7.6 Hz, 2H), 7.07 (d, J = 8.1 Hz, 1H), 6.49 (d, J = 1.7 Hz, 1H), 5.50 - 5.34 (m, 1H), 4.03 (h, J = 6.3 Hz, 1H), 3.52 (s, 2H), 2.95 (p, J = 7.6 Hz, 1H), 1.93- 1.60 (m, 11H), 1.59 - 1.37 (m, 5H).	542.15	B	A

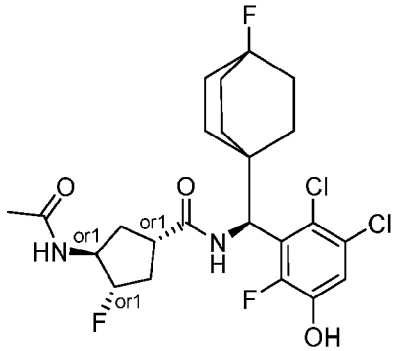
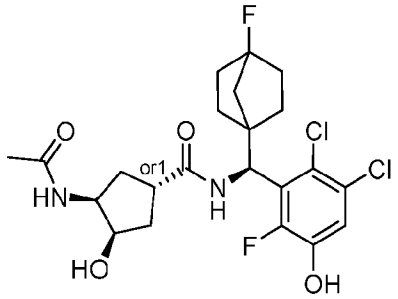
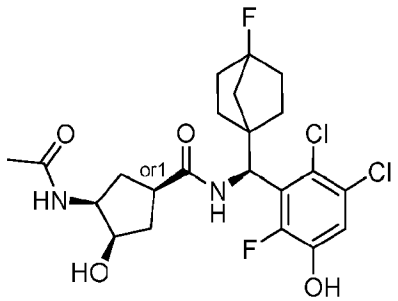
I-2784		1H NMR (400 MHz, DMSO-d6) 8.04 (t, J = 6.9 Hz, 2H), 7.08 (d, J = 8.0 Hz, 1H), 5.62 - 5.36 (m, 1H), 4.21 (q, J = 7.8 Hz, 1H), 3.10 - 2.93 (m, 1H), 2.69 (d, J = 11.4 Hz, 2H), 2.27 (td, J = 8.2, 4.4 Hz, 1H), 2.15 - 1.98 (m, 4H), 1.92 (d, J = 6.8 Hz, 2H), 1.87 - 1.63 (m, 10H), 1.63 - 1.39 (m, 7H), 1.19 - 1.05 (m, 2H).	558.05	B	D
I-2785		1H NMR (400 MHz, DMSO-d6) 10.10 (s,1H), 8.07 (d, J = 8.4 Hz, 1H), 7.76 (d, J = 6.9 Hz, 1H), 7.07 (d, J = 8.1 Hz, 1H), 5.60 - 5.30 (m, 1H), 4.00 (h, J = 6.5 Hz, 1H), 2.92 (p, J = 7.7 Hz, 1H), 1.98 - 1.29 (m, 19H).	475.1	B	A

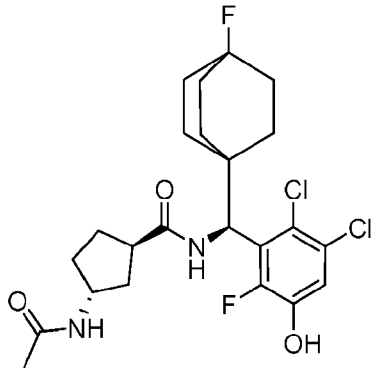
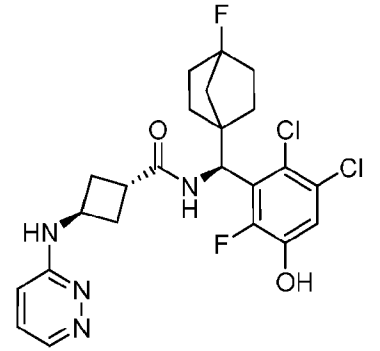
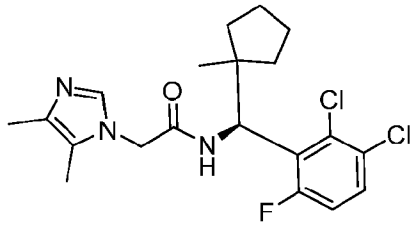
I-2786		1H NMR (400 MHz, DMSO-d6) 8.07 (d, J = 8.4 Hz, 1H), 7.74 (d, J = 6.9 Hz, 1H), 7.07 (d, J = 8.1 Hz, 1H), 5.49 - 5.34 (m, 1H), 4.01 (h, J = 6.6 Hz, 1H), 2.93 (p, J = 7.8 Hz, 1H), 2.72 (d, J = 10.5 Hz, 2H), 2.14 (s, 3H), 1.94 (d, J = 6.8 Hz, 2H), 1.90 - 1.66 (m, 10H), 1.66 - 1.28 (m, 11H), 1.14 (qd, J = 11.5, 6.3 Hz, 2H).	572.25	B	D
I-2787		1H NMR (400 MHz, DMSO-d6) 8.17 (d, J = 7.4 Hz, 1H), 8.06 (d, J = 8.5 Hz, 1H), 7.07 (d, J = 8.1 Hz, 1H), 5.50 (d, J = 8.3 Hz, 1H), 4.23 (h, J = 8.0 Hz, 1H), 3.32 - 3.21 (m, 4H), 3.11 - 2.97 (m, 1H), 2.28 (tt, J = 8.1, 3.9 Hz, 1H), 2.19 (dt, J = 15.9, 7.6 Hz, 3H), 2.14 - 1.95 (m, 3H), 1.95 - 1.35 (m, 13H).	558.2	B	B

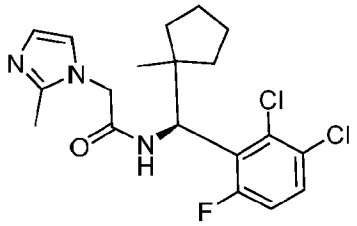
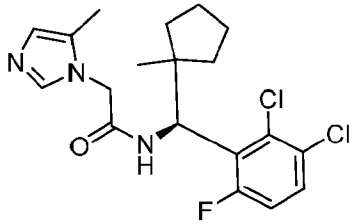
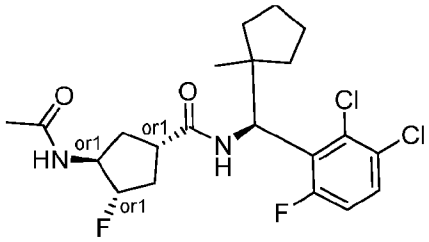
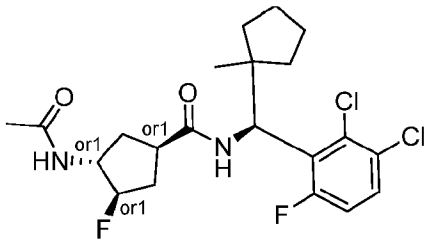
I-2788		1H NMR (400 MHz, DMSO-d6) 10.60 (s, 1H), 9.36 (s, 2H), 8.84 (d, J = 6.7 Hz, 1H), 8.45 - 8.39 (m, 1H), 8.26 (d, J = 8.4 Hz, 1H), 8.14 (d, J = 8.4 Hz, 1H), 7.93 (td, J = 7.8, 1.9 Hz, 1H), 7.24 (dd, J = 7.5, 4.9 Hz, 1H), 7.11 (d, J = 8.1 Hz, 1H), 5.52 - 5.37 (m, 1H), 4.32 (q, J = 6.8 Hz, 1H), 3.05 (p, J = 7.9 Hz, 1H), 2.11 - 1.77 (m, 7H), 1.77 - 1.38 (m, 9H).	659.2	B	A
I-2789		1H NMR (400 MHz, DMSO-d6) 8.11 (d, J = 8.5 Hz, 1H), 7.80 (d, J = 7.0 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (t, J = 9.9 Hz, 1H), 5.46 (d, J = 8.4 Hz, 1H), 4.50 (t, J = 5.2 Hz, 1H), 4.14 (s, 1H), 3.44 - 3.36 (m, 1H), 3.21 (td, J = 9.6, 5.6 Hz, 1H), 3.03 (q, J = 8.0, 7.5 Hz, 1H), 2.42 - 2.32 (m, 1H), 1.93 (dd, J = 13.1, 6.9 Hz, 1H), 1.74 (s, 3H), 1.61 (s, 6H), 1.53 (d, J = 8.9 Hz, 2H), 1.40 (t, J = 6.8 Hz, 2H), 1.24 (s, 1H), 1.00 - 0.91 (m, 3H).	459.15	D	
I-2790		1H NMR (400 MHz, DMSO-d6) 8.08 (d, J = 8.7 Hz, 1H), 7.79 (d, J = 7.1 Hz, 1H), 7.61 (dd, J = 9.0, 4.9 Hz, 1H), 7.24 (t, J = 9.9 Hz, 1H), 5.49 (d, J = 8.5 Hz, 1H), 4.22 (t, J = 5.1 Hz, 1H), 4.17 (s, 1H), 3.10 (d, J = 7.4 Hz, 1H), 3.06 - 2.99 (m, 1H), 2.77 (q, J = 6.7, 4.7 Hz, 1H), 2.29 (q, J = 9.5, 8.7 Hz, 1H), 2.07 (dt, J = 13.8, 6.7 Hz, 1H), 1.75 (s, 3H), 1.71 (t, J = 7.0 Hz, 1H), 1.59 (s, 6H), 1.54 - 1.44 (m, 2H), 1.36 (s, 1H), 1.25 (s, 1H), 0.95 (s, 3H).	459	D	

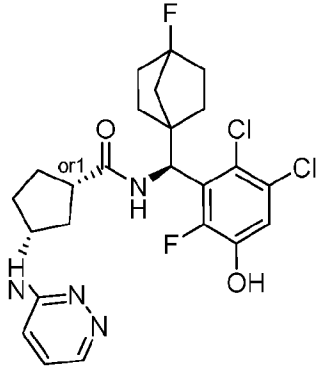
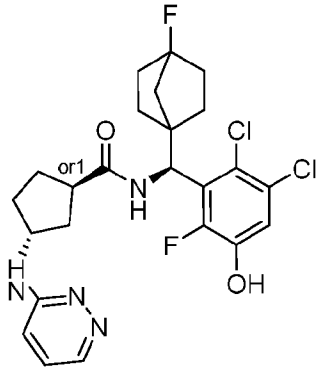
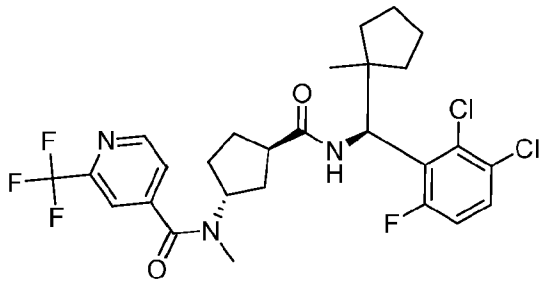
I-2791		1H NMR (400 MHz, DMSO-d6) 8.14 (dd, J = 53.5, 7.6 Hz, 2H), 7.04 (d, J = 8.0 Hz, 1H), 5.47 (d, J = 8.3 Hz, 1H), 4.01 (p, J = 6.6 Hz, 1H), 3.56 (d, J = 3.3 Hz, 2H), 2.94 (p, J = 7.8 Hz, 1H), 2.02 - 1.32 (m, 16H).	500.15	B	A
I-2792		1H NMR (400 MHz, DMSO-d6) 8.20 - 8.06 (m, 1H), 7.88 (d, J = 6.9 Hz, 1H), 7.08 (d, J = 8.1 Hz, 1H), 5.47 (d, J = 8.3 Hz, 1H), 4.01 (h, J = 6.3 Hz, 1H), 3.35 - 3.26 (m, 4H), 2.92 (p, J = 7.7 Hz, 1H), 2.21 (dt, J = 18.7, 7.6 Hz, 4H), 1.94 - 1.76 (m, 8H), 1.75 - 1.65 (m, 3H), 1.64 - 1.51 (m, 4H), 1.51 - 1.41 (m, 2H), 1.36 (dq, J = 16.3, 9.7, 8.2 Hz, 1H).	572.2	B	B

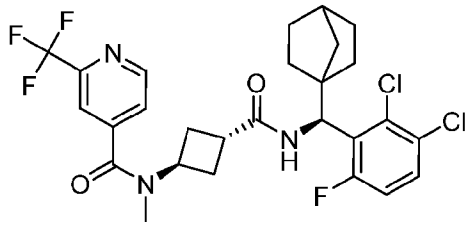
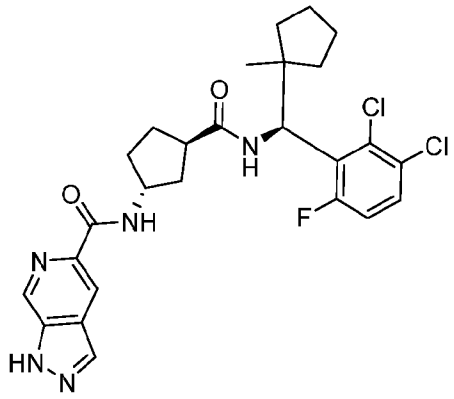
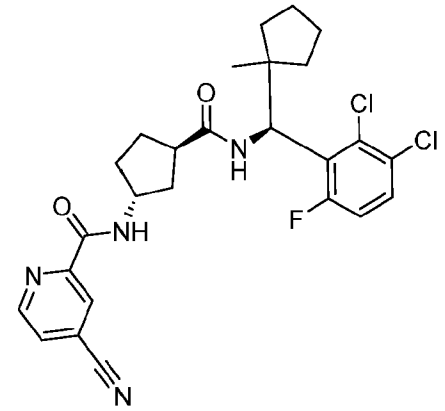
I-2793		1H NMR (400 MHz, DMSO-d6) 10.37 (s, 1H), 8.11 (d, J = 8.5 Hz, 1H), 7.77 (d, J = 6.9 Hz, 1H), 6.99 (t, J = 7.9 Hz, 1H), 5.26 (d, J = 8.4 Hz, 1H), 4.00 (h, J = 6.6 Hz, 1H), 2.92 (p, J = 7.8 Hz, 1H), 1.82 (dtd, J = 16.1, 7.6, 5.1 Hz, 4H), 1.77 (s, 3H), 1.74 (s, 5H), 1.74 - 1.56 (m, 2H), 1.57 (d, J = 8.2 Hz, 1H), 1.53 - 1.29 (m, 3H), 1.41 (s, 1H).	459.15	B	A
I-2794		1H NMR (400 MHz, Methanol-d4) 7.58 (s, 1H), 7.09 (d, J = 8.4 Hz, 1H), 6.26 (d, J = 2.2 Hz, 1H), 5.71 (s, 1H), 4.22 (p, J = 6.3 Hz, 1H), 3.56 (s, 2H), 3.03 (p, J = 8.2 Hz, 1H), 2.36 - 1.42 (m, 16H).	541.15	B	B
I-2795		1H NMR (400 MHz, DMSO-d6) 10.55 (s, 1H), 8.03 (d, J = 8.8 Hz, 1H), 7.90 (d, J = 6.7 Hz, 1H), 7.10 (d, J = 8.1 Hz, 1H), 5.28 (d, J = 8.7 Hz, 1H), 4.92 - 4.78 (q, 1H), 4.03 (dd, J = 14.7, 8.0 Hz, 1H), 3.01 (h, J = 8.5 Hz, 1H), 2.40 - 2.23 (m, 1H), 1.86 (dt, J = 22.8, 8.6 Hz, 2H), 1.80 (s, 3H), 1.71 - 1.56 (m, 13H).	487.1	B	A

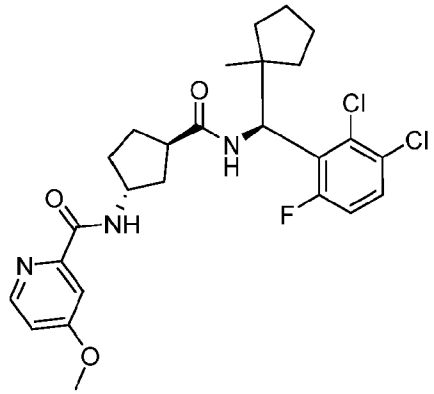
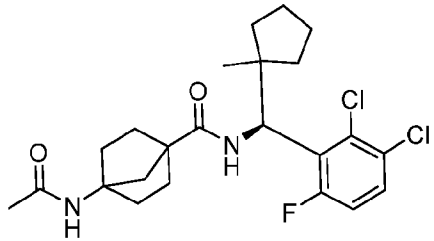
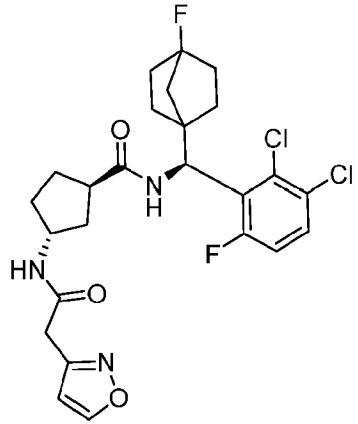
I-2796		1H NMR (400 MHz, DMSO-d6) 10.54 (s, 1H), 8.01 (d, J = 8.7 Hz, 1H), 7.90 (d, J = 7.0 Hz, 1H), 7.10 (d, J = 8.1 Hz, 1H), 5.28 (d, J = 8.6 Hz, 1H), 4.89 - 4.76 (q, 1H), 4.06 (dd, J = 14.7, 8.0 Hz, 1H), 2.99 (p, J = 8.2 Hz, 1H), 2.29 - 2.12 (m, 1H), 1.97 (dt, J = 14.2, 7.6 Hz, 1H), 1.81 (s, 3H), 1.77 -1.66 (m, 14H).	487.1	B	A
I-2797		1H NMR (400 MHz, DMSO-d6) 10.59 (s, 1H), 8.15 (d, J = 8.3 Hz, 1H), 7.51 (d, J = 7.9 Hz, 1H), 7.10 (d, J = 8.1 Hz, 1H), 5.47 - 5.30 (m, 1H), 4.80 (d, J = 3.5 Hz, 1H), 4.01 - 3.82 (m, 2H), 3.08 (qd, J = 8.7, 4.4 Hz, 1H), 1.80 (d, J = 3.3 Hz, 8H), 1.75 - 1.64 (m, 4H), 1.64 - 1.45 (m, 5H).	491.1	C	
I-2798		1H NMR (400 MHz, DMSO-d6) 10.59 (s, 1H), 8.15 (d, J = 8.4 Hz, 1H), 7.52 (d, J = 7.5 Hz, 1H), 7.10 (d, J = 8.1 Hz, 1H), 5.51 - 5.32 (m, 1H), 4.79 (d, J = 3.3 Hz, 1H), 4.01 - 3.85 (m, 2H), 3.15 - 3.02 (m, 1H), 1.81 (s, 8H), 1.75 - 1.66 (m, 4H), 1.66 - 1.60 (m, 2H), 1.60 - 1.46 (m, 3H).	471.1	B	B

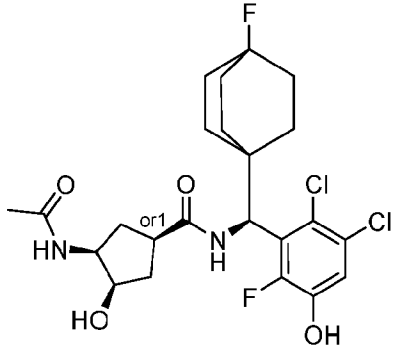
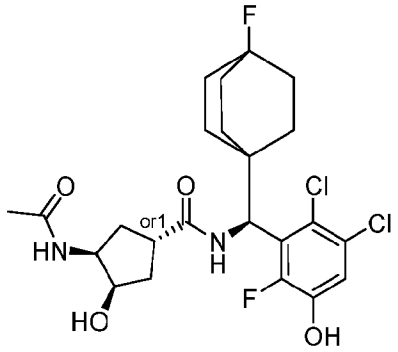
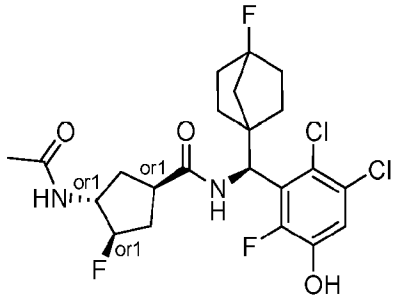
I-2799		1H NMR (400 MHz, DMSO-d6) 10.74 (s, 1H), 7.96 (d, J = 8.8 Hz, 1H), 7.75 (d, J = 6.9 Hz, 1H), 7.08 (d, J = 7.9 Hz, 1H), 5.28 (d, J = 8.6 Hz, 1H), 3.99 (p, J = 6.7 Hz, 1H), 2.92 (p, J = 8.0 Hz, 1H), 1.82 - 1.57 (m, 19H), 1.40 (ddt, J = 32.0, 13.3, 7.3 Hz, 2H).	489.15	B	B
I-2800		1H NMR (400 MHz, DMSO-d6) 10.62 (s, 1H), 8.40 (dd, J = 4.4, 1.4 Hz, 1H), 8.07 (d, J = 8.5 Hz, 1H), 7.27 - 7.17 (m, 1H), 7.14 - 7.04 (m, 2H),6.69 (dd, J = 9.1, 1.4 Hz, 1H), 5.66 - 5.37 (m, 1H), 4.39 (dp, J = 14.5, 7.2, 6.7 Hz, 1H), 3.16 (dt, J = 9.5, 5.1 Hz, 1H), 2.45 (td, J = 7.8, 3.9 Hz, 1H), 2.30 (dt, J = 8.0, 4.1 Hz, 1H), 2.09 (dq, J = 19.9, 10.2 Hz, 2H), 1.97 - 1.37 (m, 10H).	497.15	B	A
I-2801				D	

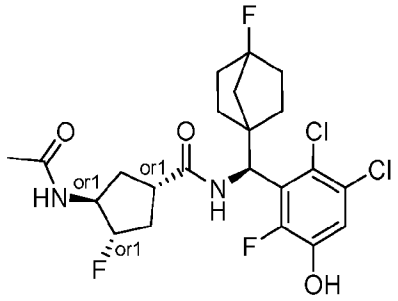
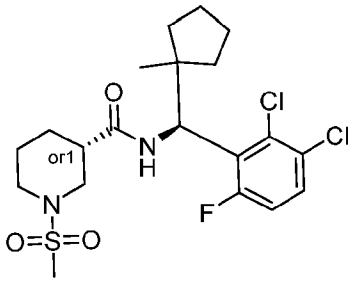
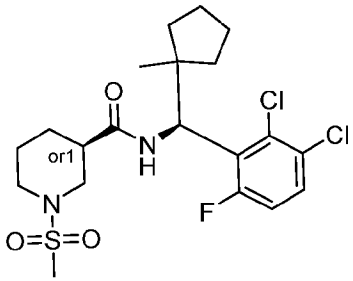
I-2802				B	
I-2803				C	
I-2804		1H NMR (400 MHz, Chloroform-d) 7.35 (dd, J = 8.9, 5.3 Hz, 1H), 6.94 (dd, J = 11.0, 8.9 Hz, 1H), 6.56 (d, J = 9.8 Hz, 1H), 5.98 (d, J = 6.4 Hz, 1H), 5.77 (d, J = 9.7 Hz, 1H), 5.16-5.03 (q, J = 4.2, 4.1, 4.1 Hz, 1H), 4.25 (ddt, J = 14.4, 6.8, 3.6, 3.6 Hz, 1H), 2.97 (m, 1H), 2.32 (ttd, J = 18.0, 18.0, 9.5, 9.4, 5.6 Hz, 2H), 2.16 (m, 1H), 2.09 (m, 1H), 2.01 (m, 2H), 1.97 (s,2H), 1.67 (d, J = 5.5 Hz, 3H), 1.54 (d, J = 13.0 Hz, 1H), 1.43 (dd, J = 11.4, 5.7 Hz,1H), 1.27 (m, 2H), 0.98 (d, J = 2.8 Hz,3H).	447.1	A	A
I-2805		1H NMR (400 MHz, Chloroform-d) 7.36 (dd, J = 8.9, 5.3 Hz, 1H), 6.94 (dd, J = 11.0, 8.9 Hz, 1H), 6.57 (d, J = 9.8 Hz, 1H), 5.78 (d, J = 9.9 Hz, 2H), 5.22 (m, 1H), 5.09 (m, 1H), 3.00 (dt, J = 16.2, 8.4, 8.4 Hz, 1H), 2.36 (ddt, J = 29.3, 14.4, 6.7, 6.7 Hz, 2H), 2.18 (dd, J = 7.1, 3.4 Hz, 1H), 2.03 (m, 1H), 1.98 (s, 2H), 1.67 (d, J = 5.7 Hz, 3H), 1.53 (m, 1H), 1.41 (dd, J = 13.3, 6.2 Hz, 1H), 1.27 (m, 2H), 0.98 (d, J = 2.9 Hz, 3H).	447.1	A	A

I-2806		1H NMR (400 MHz, DMSO-d6) 10.59 (s, 1H), 8.40 (dd, J = 4.4, 1.4 Hz, 1H), 8.26 - 8.07 (m, 1H), 7.25 (dd, J = 9.1, 4.4 Hz, 1H), 7.11 (d, J = 8.1 Hz, 1H), 7.00 (s, 1H), 6.81 (dd, J = 9.1, 1.4 Hz, 1H), 5.53 - 5.29 (m, 1H), 4.23 (h, J = 5.9 Hz, 1H), 2.96 (dp, J = 21.4, 7.4, 6.7 Hz, 1H), 2.08 - 1.93 (m, 2H), 1.93 - 1.61 (m, 8H), 1.61 - 1.38 (m, 6H).	511.15	A	A
I-2807		1H NMR (400 MHz, DMSO-d6) 10.66 - 10.49 (m, 1H), 8.39 (dd, J = 4.3, 1.4 Hz, 1H), 8.13 (d, J = 8.3 Hz, 1H), 7.21 (dd, J = 9.0, 4.4 Hz, 1H), 7.10 (d, J = 8.1 Hz, 1H), 6.84 (d, J = 6.2 Hz, 1H), 6.75 (dd, J = 9.1, 1.4 Hz, 1H), 5.51 - 5.34 (m, 1H), 4.20 (h, J = 6.1 Hz, 1H), 2.99 (p, J = 8.2 Hz, 1H), 2.08 - 1.90 (m, 2H), 1.90 - 1.77 (m, 4H), 1.76 - 1.59 (m, 6H), 1.59 - 1.40 (m, 4H).	511.15	B	A
I-2808		1H NMR (400 MHz, DMSO-d6) 8.79 (d, J = 4.9 Hz, 1H), 7.76 (s, 1H), 7.61 (d, J = 4.9 Hz, 2H), 7.51 (ddd, J = 9.0, 5.2, 1.4 Hz, 1H), 7.16 (ddd, J = 10.6, 8.9, 1.4 Hz, 1H), 5.51 (d, J = 8.4 Hz, 1H), 4.30 (s, 1H), 3.03 (q, J = 7.7 Hz, 1H), 2.82 (s, 3H), 1.89 (t, J = 7.9 Hz, 2H), 1.78 (dt, J = 23.6, 12.4 Hz, 2H), 1.71 - 1.62 (m, 1H), 1.65 - 1.52 (m, 5H), 1.42 - 1.36 (d, J = 8.8 Hz, 2H), 1.24 (d, J = 13.1 Hz, 1H), 1.23 (s, 1H), 0.95 (d, J = 2.4 Hz, 3H).	574.2	C	B

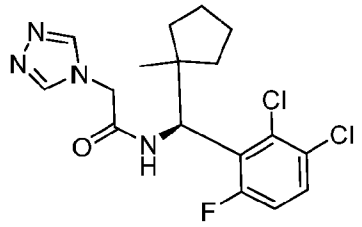
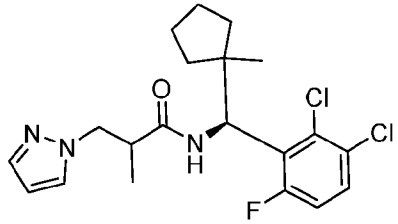
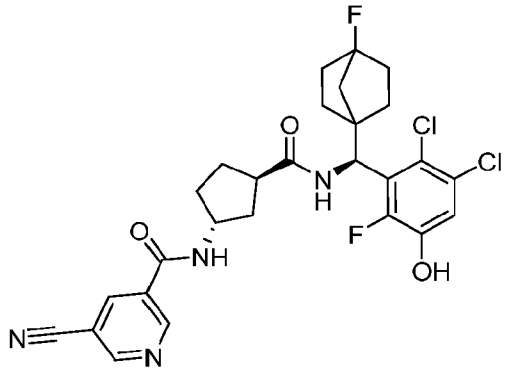
I-2809		1H NMR (400 MHz, DMSO-d6) 8.78 (d, J = 4.9 Hz, 1H), 7.73 (s, 1H), 7.65 (d, J = 4.9 Hz, 1H), 7.58 (d, J = 4.9 Hz, 1H), 7.50 (dd, J = 8.9, 5.2 Hz, 1H), 7.13 (dd, J = 10.6, 8.9 Hz, 1H), 5.69 (d, J = 8.4 Hz, 1H), 4.47 (s, 1H), 3.05 (s, 1H), 2.93 (d, J = 2.4 Hz, 3H), 2.46 - 2.36 (m, 2H), 2.20 (s, 1H), 2.12 (q, J = 5.3, 4.2 Hz, 2H), 1.55 - 1.43 (m, 3H), 1.35 (dd, J = 29.5, 11.6 Hz, 2H), 1.23 (t, J = 7.7 Hz, 5H).	572.2	D	
I-2810		1H NMR (400 MHz, DMSO-d6) 13.83 (s, 1H), 9.04 (s, 1H), 8.49 - 8.35 (m, 3H), 8.10 (d, J = 8.6 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.52 (d, J = 8.6 Hz, 1H), 4.36 (q, J = 6.9 Hz, 1H), 3.09 (p, J = 7.8 Hz, 1H), 1.98 - 1.83 (m, 4H), 1.60 (s, 8H), 1.38 (s, 1H), 1.25 (d, J = 13.7 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	532.15	B	B
I-2811		1H NMR (400 MHz, DMSO-d6) 8.90 (dd, J = 5.0, 0.9 Hz, 1H), 8.71 (d, J = 7.8 Hz, 1H), 8.34 (t, J = 1.2 Hz, 1H), 8.21 - 8.07 (m, 2H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 5.50 (d, J = 8.5 Hz, 1H), 4.33 (h, J = 7.0 Hz, 1H), 3.07 (p, J = 7.9 Hz, 1H), 2.01 - 1.80 (m, 4H), 1.69 - 1.46 (m, 8H), 1.37 (s, 1H), 1.27 (d, J = 8.0 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	517.1	B	A

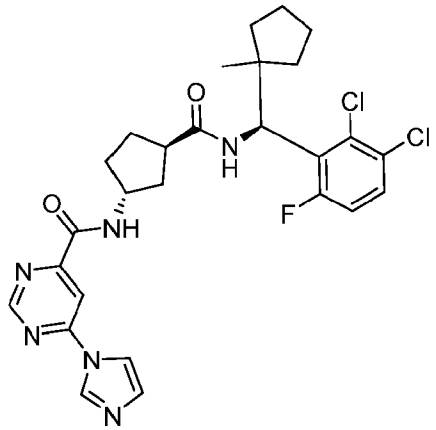
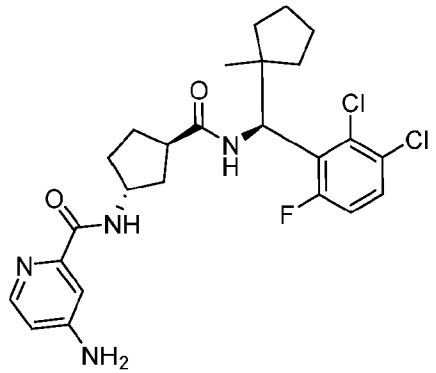
I-2812		1H NMR (400 MHz, DMSO-d6) 8.46 (dd, J = 17.1, 6.7 Hz, 2H), 8.11 (d, J = 8.7 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.54 (d, J = 2.6 Hz, 1H), 7.31 - 7.22 (m, 1H), 7.16 (dd, J = 5.7, 2.7 Hz, 1H), 5.50 (d, J = 8.6 Hz, 1H), 4.30 (q, J = 7.0 Hz, 1H), 3.90 (s, 3H), 3.07 (p, J = 7.9 Hz, 1H), 2.00 - 1.80 (m, 4H), 1.60 (s, 8H), 1.61 - 1.43 (m, 1H), 1.25 (d, J = 12.7 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	522.2	C	B
I-2813		1H NMR (400 MHz, DMSO-d6) 7.98 (s, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.28 (dd, J = 11.0, 9.0 Hz, 1H), 7.15 (d, J = 9.0 Hz, 1H), 5.56 (d, J = 9.0 Hz, 1H), 1.80 (d, J = 28.8 Hz, 9H), 1.72 - 1.48 (m, 10H), 1.33 (dd, J = 35.2, 8.3 Hz, 2H), 0.97 (d, J = 2.7 Hz, 3H).	455.15	E	
I-2814		1H NMR (400 MHz, Methanol-d4) 8.58 (d, J = 1.7 Hz, 1H), 7.50 (dd, J = 9.0, 5.2 Hz, 1H), 7.11 (dd, J = 10.7, 9.0 Hz, 1H), 6.47 (d, J = 1.7 Hz, 1H), 5.73 (s, 1H), 4.33 - 4.09 (m, 1H), 3.60 (s, 2H), 3.01 (p, J = 7.9 Hz, 1H), 2.17 - 1.89 (m, 4H), 1.89 - 1.44 (m, 12H).	526.15	B	A

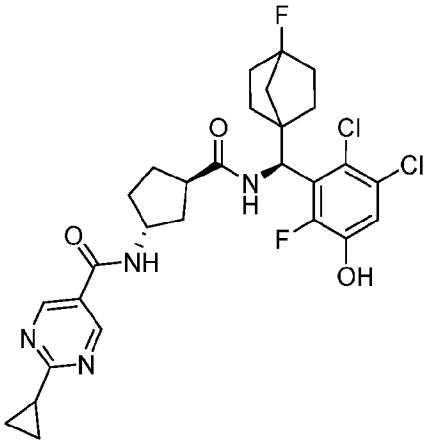
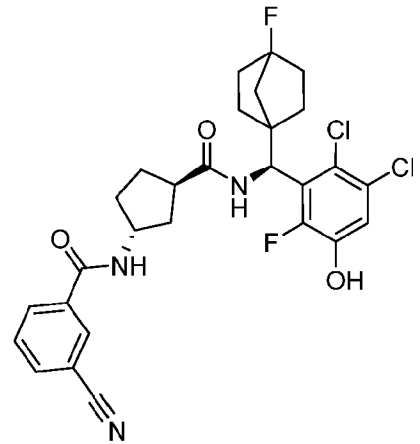
I-2815		1H NMR (400 MHz, Methanol-d4) 6.97 (d, J = 8.5 Hz, 1H), 5.49 (s, 1H), 4.68 - 4.52 (m, 1H), 4.14 (dd, J = 14.4, 5.2 Hz, 2H), 3.23 - 3.07 (m, 1H), 2.07 (ddt, J = 13.3, 8.9, 5.4 Hz, 1H), 1.95 (s, 3H), 1.93 - 1.65 (m, 15H).	505.15	D	C
I-2816		1H NMR (400 MHz, Methanol-d4) 7.08 - 6.92 (m, 1H), 5.48 (s, 1H), 4.58 (s, 1H), 4.21 (q, J = 3.6 Hz, 1H), 4.11 (td, J = 9.0, 4.0 Hz, 1H), 3.23 - 3.08 (m, 1H), 2.08 - 1.91 (m, 5H), 1.91 - 1.66 (m, 14H).	505.15	D	
I-2817		1H NMR (400 MHz, DMSO-d6) 10.60 (s, 1H), 8.36 - 8.11 (m, 1H), 7.93 (d, J = 6.7 Hz, 1H), 7.11 (d, J = 8.2 Hz, 1H), 5.51 - 5.29 (m, 1H), 4.86 (dq, J = 53.2, 4.6 Hz, 1H), 4.28 - 3.97 (m, 1H), 3.08 - 2.89 (m, 1H), 2.39 - 2.24 (m, 1H), 2.04 - 1.83 (m, 4H), 1.80 (s, 5H), 1.74 - 1.60 (m, 4H), 1.54 (dq, J = 21.6, 10.1, 9.0 Hz, 3H).	493.1	B	A

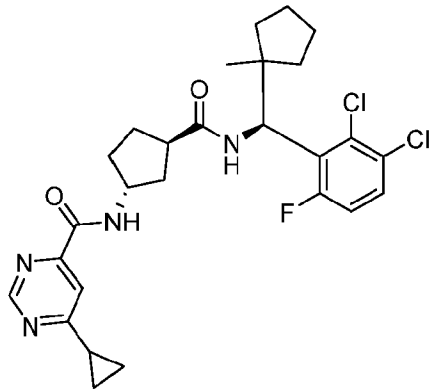
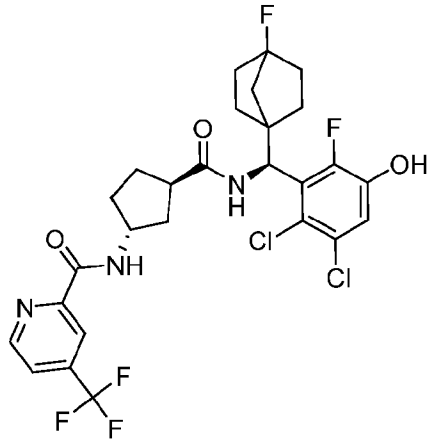
I-2818		1H NMR (400 MHz, DMSO-d6) 8.14 (d, J = 8.4 Hz, 1H), 7.93 (d, J = 6.9 Hz, 1H), 7.08 (d, J = 8.2 Hz, 1H), 5.51 - 5.35 (m, 1H), 4.83 (dq, J = 53.3, 5.0 Hz, 1H), 4.07 (d, J = 11.8 Hz, 1H), 3.00 (p, J = 7.9 Hz, 1H), 2.34 - 2.15 (m, 1H), 1.99 (dt, J = 14.0, 7.7 Hz, 1H), 1.80 (d, J = 4.6 Hz, 6H), 1.75 - 1.61 (m, 5H), 1.60 - 1.35 (m, 4H).	493.05	B	A
I-2819				D	
I-2820				D	

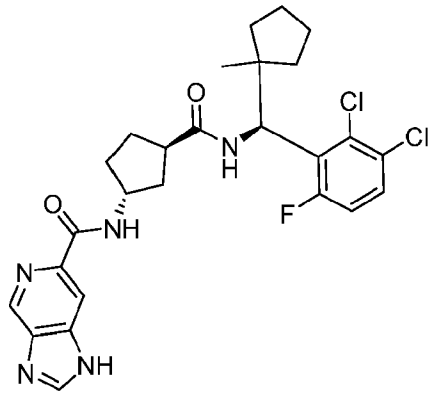
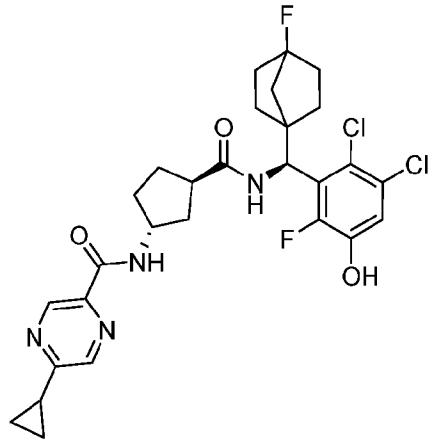
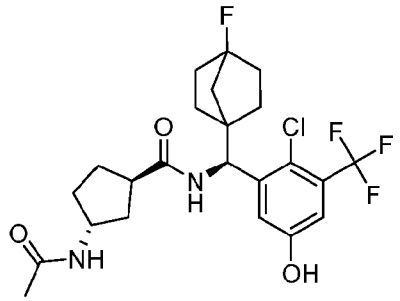
I-2821			B	B
I-2822			C	B
I-2823			D	
I-2824			B	B

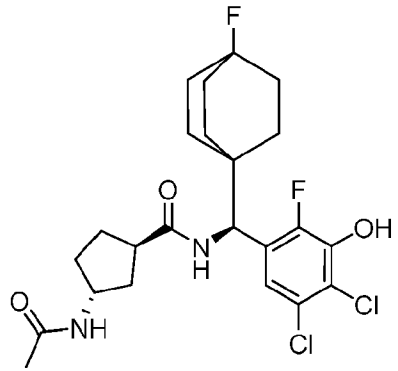
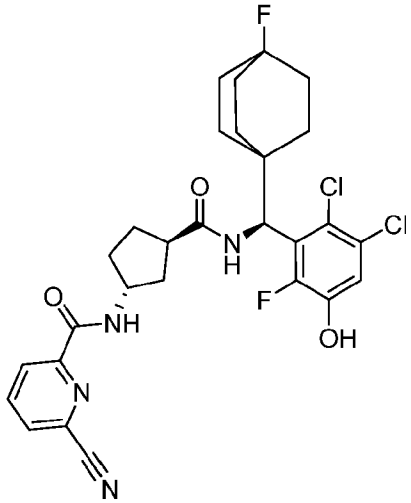
I-2825				C	
I-2826				E	
I-2827		1H NMR (400 MHz, DMSO-d6) 9.18 (dd, J = 20.3, 2.1 Hz, 2H), 8.72 - 8.51 (m, 2H), 8.09 (d, J = 8.5 Hz, 1H), 7.08 (d, J = 8.1 Hz, 1H), 5.50 (d, J = 8.3 Hz, 1H), 4.28 (q, J = 6.8 Hz, 1H), 3.03 (q, J = 7.8 Hz, 1H), 2.12 - 1.42 (m, 16H).	563.15	B	A

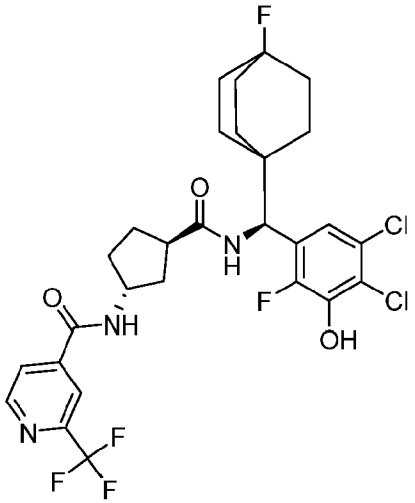
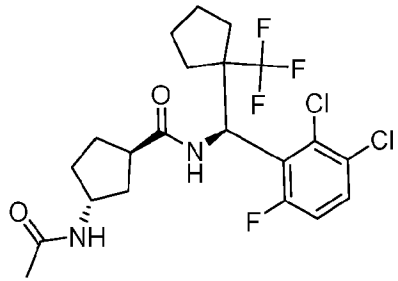
I-2828		1H NMR (400 MHz, DMSO-d6) 9.19 (d, J = 1.2 Hz, 1H), 8.92 - 8.79 (m, 2H), 8.39 (d, J = 1.2 Hz, 1H), 8.20 (t, J = 1.5 Hz, 1H), 8.10 (d, J = 8.7 Hz, 1H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.43 - 7.13 (m, 2H), 5.51 (d, J = 8.5 Hz, 1H), 4.34 (p, J = 7.2 Hz, 1H), 3.16 - 2.99 (m, 1H), 2.05 - 1.81 (m, 4H), 1.78 - 1.45 (m, 8H), 1.38 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	559.2	B	A
I-2829		1H NMR (400 MHz, DMSO-d6) 8.29 (d, J = 7.8 Hz, 1H), 8.12 (d, J = 8.6 Hz, 1H), 8.00 (d, J = 5.6 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (t, J = 9.8 Hz, 1H), 7.20 (d, J = 2.3 Hz, 1H), 6.58 (dd, J = 5.6, 2.4 Hz, 1H), 6.34 (s, 2H), 5.50 (d, J = 8.5 Hz, 1H), 4.26 (q, J = 6.8 Hz, 1H), 3.07 (q, J = 8.0 Hz, 1H), 1.96 - 1.76 (m, 4H), 1.60 (t, J = 4.4 Hz, 7H), 1.51 (dd, J = 18.5, 7.3 Hz, 1H), 1.37 (s, 1H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	507.2	B	A

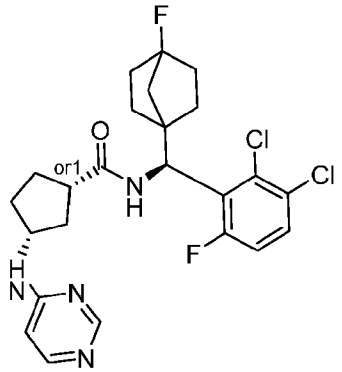
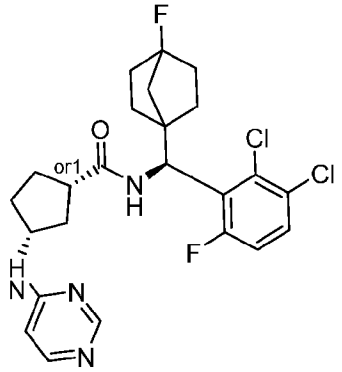
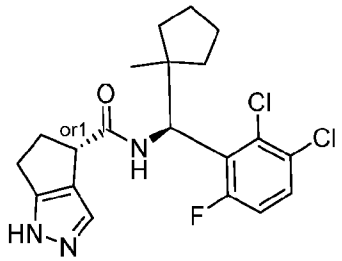
I-2830		1H NMR (400 MHz, DMSO-d6) 8.96 (s, 2H), 8.49 (d, J = 6.8 Hz, 1H), 8.09 (d, J = 8.5 Hz, 1H), 7.08 (d, J = 8.1 Hz, 1H), 5.49 (d, J = 8.4 Hz, 1H), 4.26 (q, J = 6.7 Hz, 1H), 3.01 (t, J = 7.9 Hz, 1H), 2.31 - 2.22 (m, 1H), 2.03 - 1.65 (m, 10H), 1.54 (dd, J = 19.3, 11.3 Hz, 6H), 1.11 (dt, J = 8.0, 2.9 Hz, 2H), 1.05 (dt, J = 5.1, 2.8 Hz, 2H).	579.2	B	A
I-2831		1H NMR (400 MHz, DMSO-d6) 8.47 (d, J = 6.8 Hz, 1H), 8.29 (t, J = 1.8 Hz, 1H), 8.21 - 8.05 (m, 2H), 8.00 (dt, J = 7.7, 1.5 Hz, 1H), 7.69 (t, J = 7.8 Hz, 1H), 7.08 (d, J = 8.2 Hz, 1H), 5.54 - 5.35 (m, 1H), 4.26 (p, J = 6.7 Hz, 1H), 3.02 (p, J = 7.9 Hz, 1H), 2.06 - 1.65 (m, 10H), 1.64 - 1.45 (m, 6H).	562.15	B	A

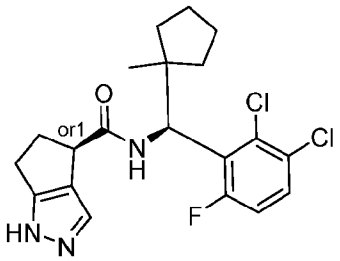
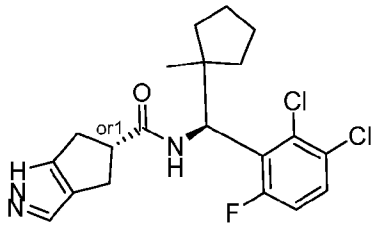
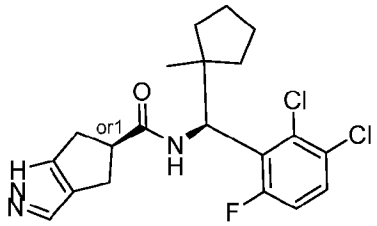
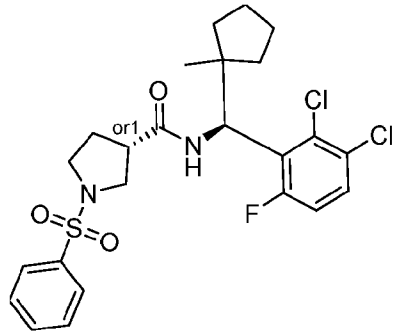
I-2832		1H NMR (400 MHz, DMSO-d6) 9.05 (d, J = 1.3 Hz, 1H), 8.67 (d, J = 7.8 Hz, 1H), 8.08 (d, J = 8.6 Hz, 1H), 7.94 (d, J = 1.3 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 8.9 Hz, 1H), 5.50 (d, J = 8.5 Hz, 1H), 4.31 (q, J = 7.0 Hz, 1H), 3.07 (p, J = 7.8 Hz, 1H), 2.30 (dd, J = 8.5, 4.0 Hz, 1H), 2.01 - 1.87 (s, 4H), 1.60 (s, 7H), 1.54 - 1.37 (d, J = 8.0 Hz, 1H), 1.26 (s, 2H), 1.24 (s, 2H), 1.19 - 1.04 (m, 2H), 0.99 - 0.81 (m, 3H).	533.2	C	A
I-2833		1H NMR (400 MHz, DMSO-d6) 8.94 (d, J = 5.0 Hz, 1H), 8.74 (d, J = 7.8 Hz, 1H), 8.23 (d, J = 1.8 Hz, 1H), 8.11 (d, J = 8.5 Hz, 1H), 8.02 (dd, J = 5.1, 1.8 Hz, 1H), 7.09 (d, J = 8.1 Hz, 1H), 5.57 - 5.35 (m, 1H), 4.35 (h, J = 7.1 Hz, 1H), 3.03 (q, J = 7.8 Hz, 1H), 2.09 - 1.83 (m, 5H), 1.83 - 1.62 (m, 7H), 1.61 - 1.44 (m, 4H).	606.2	B	A

I-2834		1H NMR (400 MHz, DMSO-d6) 8.96 (s, 1H), 8.50 (d, J = 14.6 Hz, 2H), 8.24 (s, 1H), 8.12 (d, J = 8.7 Hz, 1H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.31 - 7.22 (m, 1H), 5.52 (d, J = 8.5 Hz, 1H), 4.35 (q, J = 6.9 Hz, 1H), 3.14 - 3.06 (m, 1H), 2.02 - 1.80 (m, 4H), 1.78 - 1.12 (dd, J = 13.1, 8.1 Hz, 10H), 0.97 (d, J = 2.9 Hz, 3H).	532.15	B	A
I-2835		1H NMR (400 MHz, DMSO-d6) 8.96 (d, J = 1.4 Hz, 1H), 8.66 (d, J = 1.5 Hz, 1H), 8.53 (d, J = 7.7 Hz, 1H), 7.96 (s, 1H), 6.85 (s, 1H), 5.51 (d, J = 8.8 Hz, 1H), 4.32 (q, J = 7.0 Hz, 1H), 3.03 (q, J = 8.0 Hz, 1H), 2.33 (ddd, J = 13.8, 9.0, 5.3 Hz, 1H), 2.00 - 1.82 (m, 5H), 1.78 - 1.65 (q, J = 12.7, 11.8 Hz, 7H), 1.56 (s, 4H), 1.13 (dt, J = 7.9, 3.1 Hz, 2H), 1.04 (dt, J = 4.9, 3.0 Hz, 2H).	579.15	B	A
I-2836		1H NMR (400 MHz, DMSO-d6) 10.01 (s, 1H), 8.23 (d, J = 8.5 Hz, 1H), 7.79 (d, J = 6.8 Hz, 1H), 7.20 - 6.96 (m, 2H), 5.56 - 5.48 (m, 1H), 4.01 (q, J = 6.4 Hz, 1H), 2.88 (p, J = 7.7 Hz, 1H), 1.94 - 1.74 (m, 9H), 1.72 - 1.54 (m, 6H), 1.54 - 1.31 (m, 4H).	489.1	B	A

I-2837		1H NMR (400 MHz, DMSO-d6) 10.86 (s, 1H), 8.12 (d, J = 9.5 Hz, 1H), 7.79 (d, J = 6.7 Hz, 1H), 7.09 (d, J = 6.2 Hz, 1H), 5.00 (d, J = 9.4 Hz, 1H), 4.01 (p, J = 6.5 Hz, 1H), 2.84 (p, J = 8.0 Hz, 1H), 1.89-1.82 (m, 1H), 1.85-1.44 (m, 19H), 1.38 (dt, J = 13.0, 6.9 Hz, 1H).	489.15	D	D
I-2838		1H NMR (400 MHz, DMSO-d6) 8.66 (d, J = 7.7 Hz, 1H), 8.41 -8.19 (m, 3H), 8.01 (d, J = 8.8 Hz, 1H), 7.07 (d, J = 7.9 Hz, 1H), 5.41 C 5.13 (m, 1H), 4.33 (q, J = 7.1 Hz, 1H), 3.11-2.89 (m, 1H), 2.07 C 1.79 (m, 4H), 1.78 - 1.43 (m, 14H).	577.25	C	B

I-2839		1H NMR (400 MHz, DMSO-d6) 10.89 (s, 1H), 8.93 (d, J = 5.0 Hz, 1H), 8.81 (d, J = 6.7 Hz, 1H), 8.26 (s, 1H), 8.16 (d, J = 9.5 Hz, 1H), 8.09 (dd, J = 5.0, 1.5 Hz, 1H), 7.09 (d, J = 6.1 Hz, 1H), 5.02 (d, J = 9.4 Hz, 1H), 4.30 (q, J = 6.7 Hz, 1H), 3.36 (s, 1H), 2.95 (p, J = 7.7 Hz, 1H), 2.10 -1.92 (m, 2H), 1.96-1.82 (m, 2H), 1.73-1.51 (m, 14H).	620.2	D	D
I-2840		1H NMR (400 MHz, DMSO-d6) 8.23 (d, J = 9.3 Hz, 1H), 7.81 - 7.66 (m, 2H), 7.34 (dd, J = 10.8, 9.0 Hz, 1H), 6.10 (d, J = 9.2 Hz, 1H), 4.00 (h, J = 6.6 Hz, 1H), 2.98 (p, J = 7.8 Hz, 1H), 2.18 (dt, J = 13.9, 6.8 Hz, 1H), 1.95 - 1.58 (m, 11H), 1.58 - 1.30 (m, 5H).	683.15	B	B

I-2841		1H NMR (400 MHz, DMSO-d6) 8.36 (s, 1H), 8.19 (d, J = 8.2 Hz, 1H), 7.99 (s, 1H), 7.62 (dd, J = 8.8, 5.1 Hz, 1H), 7.34 (d, J = 6.6 Hz, 1H), 7.27 (t, J = 9.8 Hz, 1H), 6.40 (d, J = 6.0 Hz, 1H), 5.51 (d, J = 8.1 Hz, 1H), 4.18 (s, 1H), 2.98 (p, J = 7.9 Hz, 1H), 2.01 - 1.83 (m, 3H), 1.83 - 1.73 (m, 3H), 1.68 (d, J = 8.2 Hz, 5H), 1.58 - 1.24 (s, 5H).	495.15	A	A
I-2842		1H NMR (400 MHz, DMSO-d6) 8.42 (s, 1H), 8.19 (d, J = 8.3 Hz, 1H), 8.02 (s, 1H), 7.63 (dd, J = 8.9, 5.0 Hz, 2H), 7.27 (dd, J = 10.6, 9.0 Hz, 1H), 6.46 (d, J = 6.1 Hz, 1H), 5.52 (d, J = 8.1 Hz, 1H), 4.18 (s, 1H), 2.98 (p, J = 7.8 Hz, 1H), 2.00 - 1.86 (m, 5H), 1.82 - 1.66 (m, 5H), 1.65 - 1.33 (m, 6H).	495.2	A	A
I-2843		1H NMR (400 MHz, DMSO-d6) 12.32 (s, 1H), 8.10 (d, J = 8.8 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.32 - 7.23 (m, 2H), 5.49 (d, J = 8.7 Hz, 1H), 3.85 (dd, J = 7.8, 5.1 Hz, 1H), 2.66 (ddd, J = 14.7, 9.4, 5.7 Hz, 1H), 2.60 - 2.51 (m, 1H), 2.47 - 2.32 (m, 1H), 1.60 (t, J = 5.2 Hz, 6H), 1.43 - 1.35 (m, 1H), 1.28 - 1.21 (m, 1H), 0.97 (d, J = 2.9 Hz, 3H).	409.95	B	B

I-2844		1H NMR (400 MHz, DMSO-d6) 12.26 (s, 1H), 8.15 (d, J = 8.8 Hz, 1H), 7.59 (dd, J = 9.0, 5.0 Hz, 1H), 7.28 (dd, J = 10.9, 9.0 Hz, 1H), 7.10 (s, 1H), 5.51 (d, J = 8.7 Hz, 1H), 3.92 (dd, J = 8.1, 4.6 Hz, 1H), 2.69 - 2.52 (m, 3H), 1.61 (t, J = 4.3 Hz, 6H), 1.40 (d, J = 8.6 Hz, 1H), 1.28 (t, J = 5.9 Hz, 1H), 0.99 (d, J = 2.7 Hz, 3H).	409.95	B	C
I-2845		1H NMR (400 MHz, DMSO-d6) 12.21 (s, 1H), 8.18 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.38 - 7.10 (m, 2H), 5.54 (d, J = 8.5 Hz, 1H), 3.78 (p, J = 8.2 Hz, 1H), 2.88 - 2.69 (m, 3H), 2.47 (dd, J = 14.4, 6.7 Hz, 1H), 1.62 (s, 6H), 1.41 (d, J = 8.5 Hz, 1H), 1.30 (q, J = 6.6, 4.7 Hz, 1H), 1.00 (d, J = 2.9 Hz, 3H).	410	C	B
I-2846		1H NMR (400 MHz, DMSO-d6) 12.21 (s, 1H), 8.19 (d, J = 8.7 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.33 - 7.22 (m, 2H), 5.54 (d, J = 8.6 Hz, 1H), 3.77 (p, J = 8.1 Hz, 1H), 2.85 (dd, J = 14.6, 8.9 Hz, 1H), 2.80 - 2.54 (m, 3H), 1.62 (s, 6H), 1.41 (d, J = 8.5 Hz, 1H), 1.33 - 1.21 (m, 1H), 0.99 (d, J = 2.8 Hz, 3H).	410.05	B	A
I-2847			513.1	C	

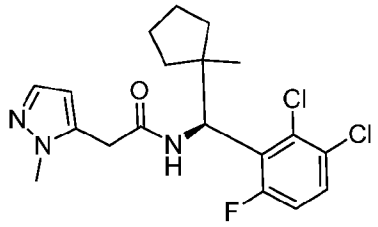
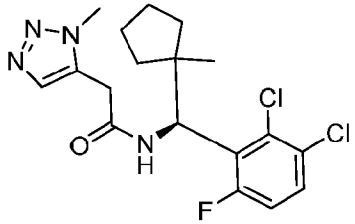
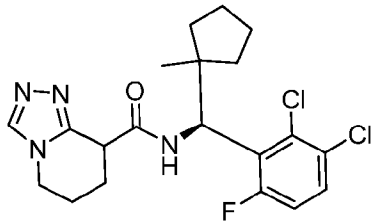
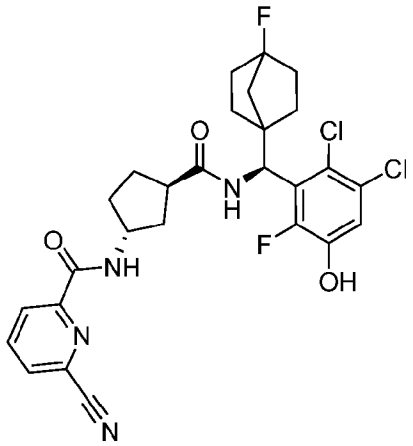
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I-2849		514.1	C	
I-2850		503.05	B	

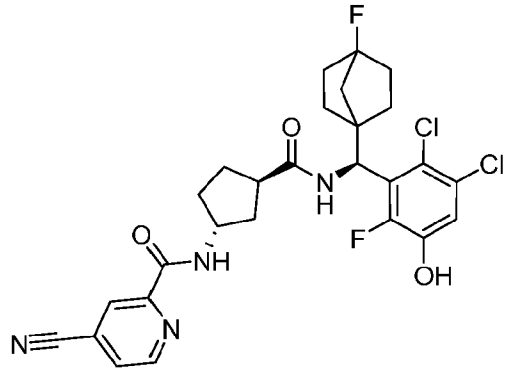
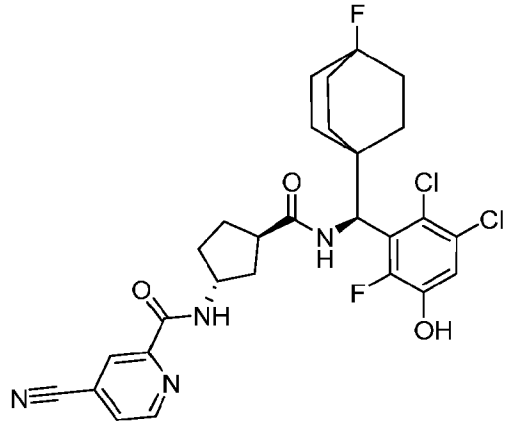
I-2851		492.1	C	
I-2852		517.1	B	A
I-2853		517.05	B	

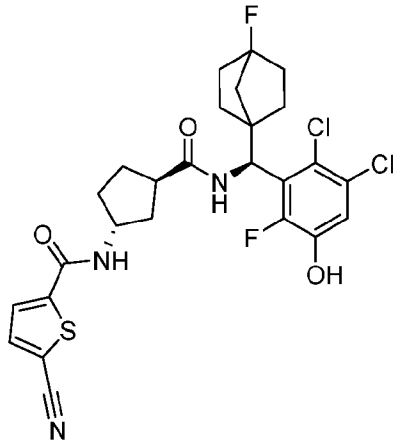
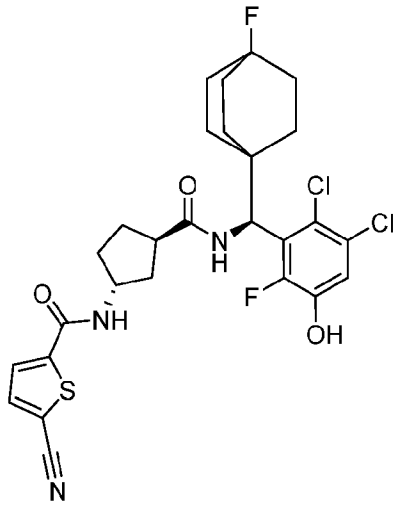
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I-2855		503.1	A	A
I-2856		479.1	B	

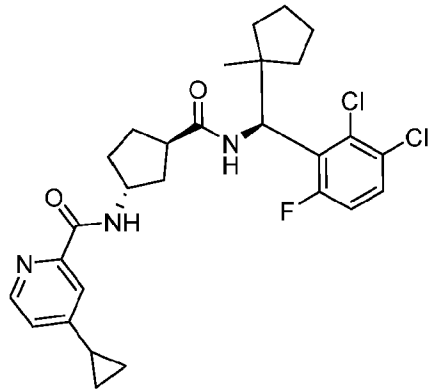
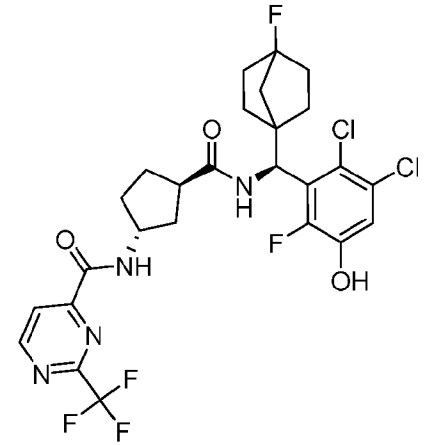
I-2857				B
I-2858				B
I-2859				D
I-2860				B

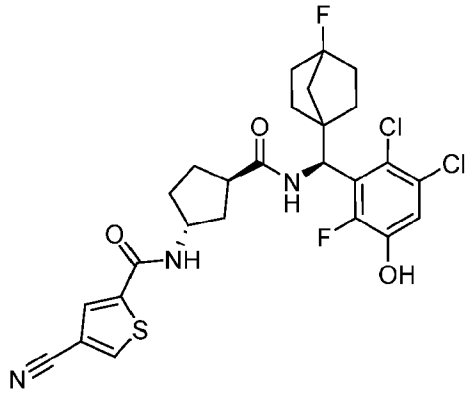
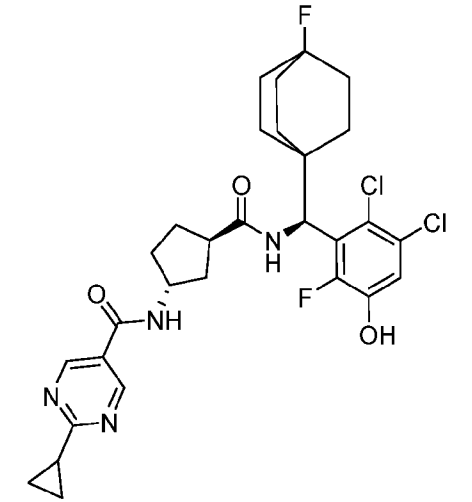
I-2861			D	
I-2862			B	
I-2863			B	
I-2864			B	

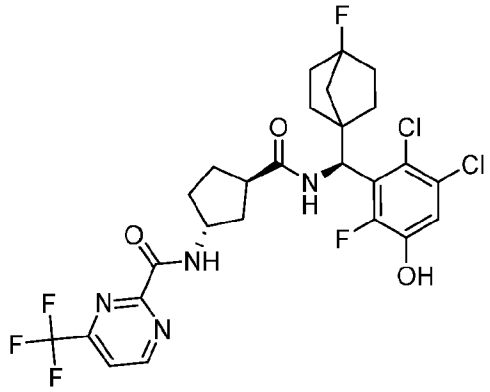
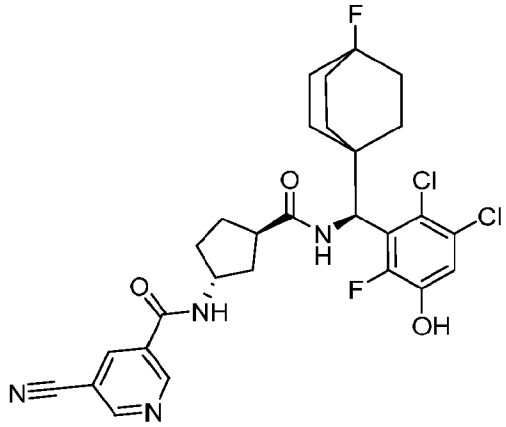
I-2865				B	
I-2866				B	
I-2867				D	
I-2868		1H NMR (400 MHz, DMSO-d6) 8.65 (d, J = 7.8 Hz, 1H), 8.25 (dtd, J = 16.9, 10.1, 8.4, 4.1 Hz, 3H), 8.11 (d, J = 8.4 Hz, 1H), 7.08 (d, J = 8.0 Hz, 1H), 5.49 (d, J = 8.3 Hz, 1H), 4.33 (h, J = 7.2 Hz, 1H), 3.05 (q, J = 7.9 Hz, 1H), 2.10 - 1.41 (m, 16H).	563.15	B	A

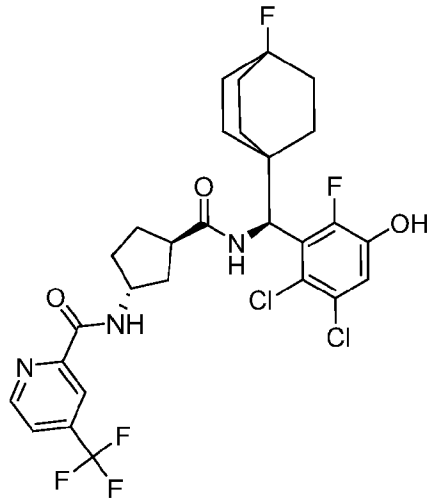
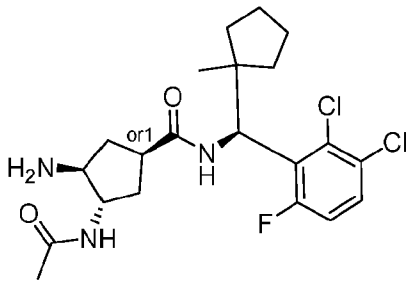
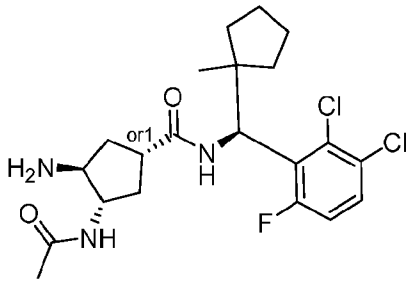
I-2869		1H NMR (400 MHz, DMSO-d6) 8.90 (t, J = 4.3 Hz, 1H), 8.70 (s, 1H), 8.34 (s, 1H), 8.13 - 8.06 (m, 2H), 7.11 (s, 1H), 5.50 (d, J = 8.2 Hz, 1H), 4.33 (s, 1H), 3.04 (s, 1H), 2.06 - 1.45 (m, 16H).	561.05	B	A
I-2870		1H NMR (400 MHz, DMSO-d6) 8.89 (d, J = 4.9 Hz, 1H), 8.69 (d, J = 7.7 Hz, 1H), 8.39 - 8.24 (m, 1H), 8.09 (dd, J = 4.9, 1.7 Hz, 1H), 7.99 (d, J = 8.8 Hz, 1H), 7.09 (d, J = 8.2 Hz, 1H), 5.30 (d, J = 8.8 Hz, 1H), 4.32 (q, J = 7.1 Hz, 1H), 3.03 (p, J = 7.5 Hz, 1H), 2.06 - 1.80 (m, 5H), 1.80 - 1.60 (m, 12H), 1.59 - 1.41 (m, 1H).	575.05	B	

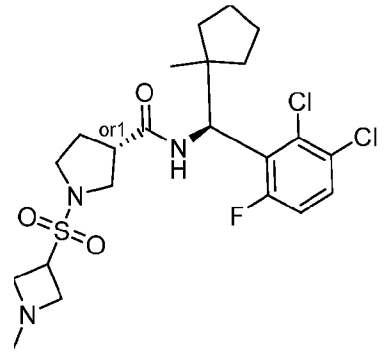
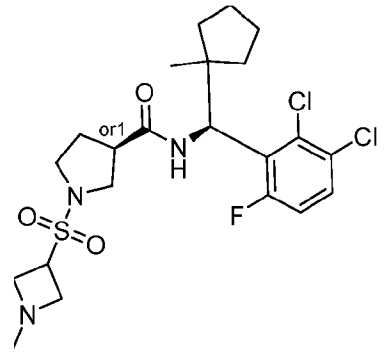
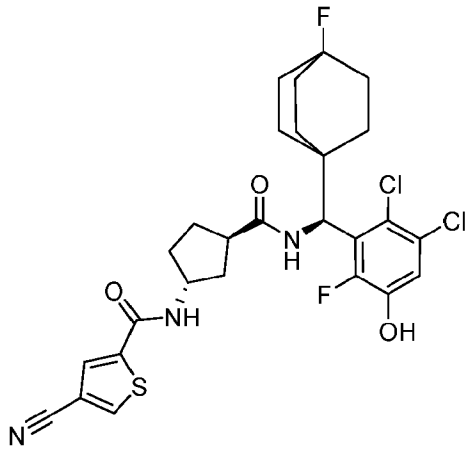
I-2871		1H NMR (400 MHz, Methanol-d4) 7.73 (s, 2H), 7.05 (d, J = 8.3 Hz, 1H), 5.71 (s, 1H), 4.42-4.34 (m, 1H), 3.08 (p, J = 8.3, 7.7 Hz, 1H), 2.19 (dt, J = 14.3, 7.5 Hz, 1H), 2.10 (dd, J = 11.5, 6.4 Hz, 1H), 2.05-1.83 (m, 2H), 1.81 (s, 3H), 1.76 (dd, J = 17.4, 8.6 Hz, 3H), 1.67 (s, 4H), 1.65 (d, J = 4.2 Hz, 1H), 1.57 (d, J = 10.6 Hz, 1H).	568.1	B	A
I-2872		1H NMR (400 MHz, DMSO-d6) 8.67 (d, J = 6.8 Hz, 1H), 8.04- 7.96 (m, 2H), 7.89 (d, J = 4.1 Hz, 1H), 7.10 (d, J = 8.1 Hz, 1H), 5.29 (d, J = 8.7 Hz, 1H), 4.21 (q, J = 6.8 Hz, 1H), 3.04 - 2.96 (m, 1H), 1.95 (dt, J = 13.4, 7.1 Hz, 2H), 1.70 (s, 14H), 1.55 (dd, J = 11.6, 6.5 Hz, 2H), 1.24 (s, 1H).	582.2	B	

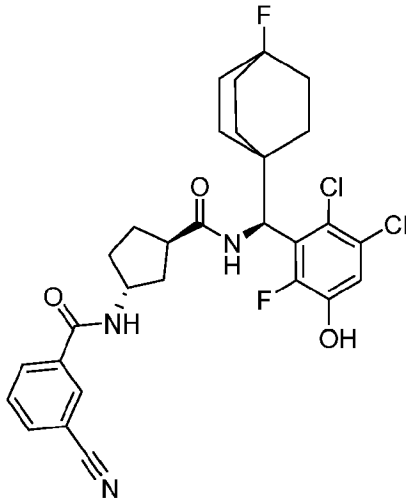
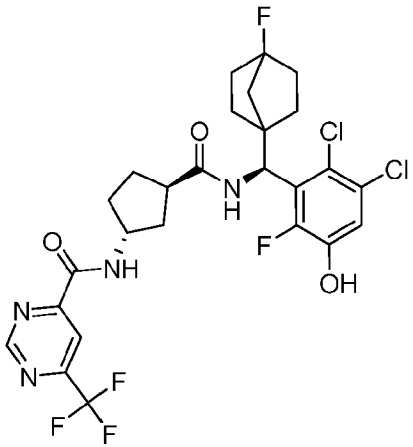
I-2873		1H NMR (400 MHz, DMSO-d6) 8.44 (t, J = 8.3 Hz, 2H), 8.10 (d, J = 8.7 Hz, 1H), 7.72 (s, 1H), 7.62 (t, J = 6.8 Hz, 1H), 7.27 (dd, J = 15.9, 7.3 Hz, 2H), 5.51 (d, J = 8.5 Hz, 1H), 4.31 (q, J = 7.2 Hz, 1H), 3.11 - 3.03 (m, 1H), 2.07 (s, 1H), 1.97 - 1.79 (m, 4H), 1.60 (s, 8H), 1.52 (s, 1H), 1.37 (s, 1H), 1.27 (s, 1H), 1.12 (d, J = 7.9 Hz, 1H), 0.97 (s, 3H), 0.88 - 0.82 (m, 2H).	532.2	D	
I-2874		1II NMR (400 MIIz, DMSO-d6) 10.56 (s, 1II), 9.32-9.26 (m, 1H), 8.75 (d, J = 7.9 Hz, 1H),8.26 (d, J = 5.1 Hz, 1H), 8.14 (d, J − 8.4 Hz, 1H), 7.11 (d, J − 8.1 Hz, 1H), 5.49 (d, J = 8.4 Hz, 1H), 4.36 (s, 1H), 3.09-3.01 (m, 1H), 1.92 (s, 3H), 1.73-1.66 (m, 9H), 1.61-1.49 (m, 4H).	607.1	B	

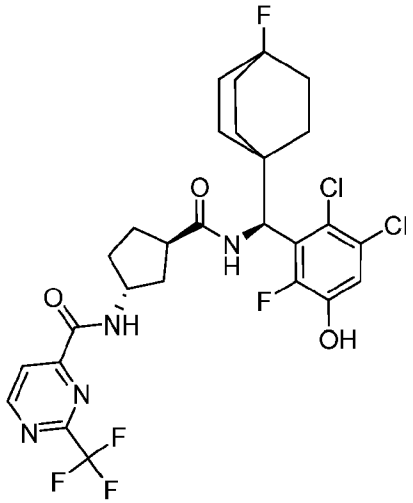
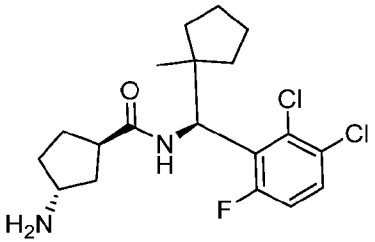
I-2875		1H NMR (400 MHz, Methanol-d4) 8.40 (d, J = 1.3 Hz, 1H), 7.93 (d, J = 1.3 Hz, 1H), 7.05 (d, J = 8.4 Hz, 1H), 5.71 (s, 1H), 4.42 -4.34 (m, 1H), 3.09 (q, J = 8.0 Hz, 1H), 2.25-1.83 (m, 4H), 1.83-1.68 (m, 2H), 1.74 (s, 6H), 1.66 (dt, J = 9.9, 3.5 Hz, 3H), 1.57 (d, J = 10.4 Hz, 1H).	568.1	B	A
I-2876		1H NMR (400 MHz, DMSO-d6) 8.97 (s, 2H), 8.49 (d, J = 6.8 Hz, 1H), 8.10 - 7.96 (m, 1H), 7.09 (d, J = 8.2 Hz, 1H), 5.34 - 5.12 (m, 1H), 4.25 (q, J = 6.7 Hz, 1H), 2.99 (q, J = 7.7 Hz, 1H), 2.35 - 2.22 (m, 1H), 2.07 - 1.34 (m, 18H), 1.15 - 1.02 (m, 4H).	591.1	B	

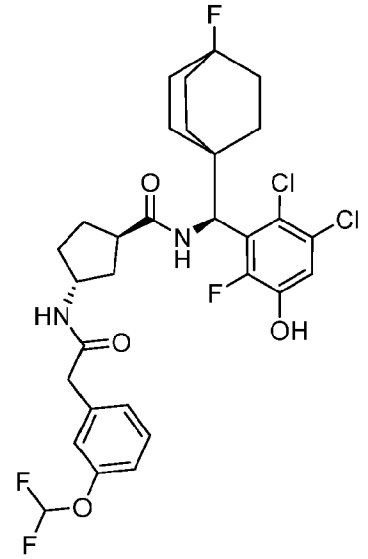
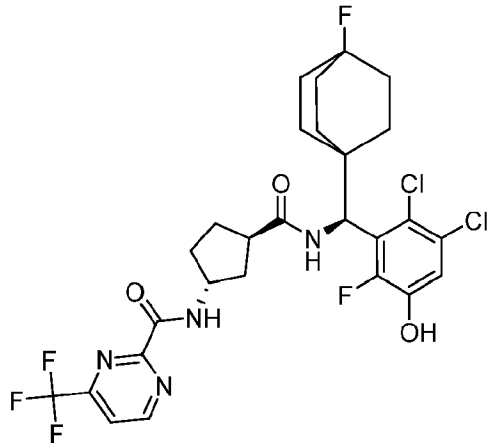
I-2877		1H NMR (400 MHz, DMSO-d6)9.31 (d, J = 5.0 Hz, 1H), 8.79 (d, J = 7.7 Hz, 1H), 8.20 (d, J = 5.1 Hz, 1H), 8.11 (s, 1H), 7.09 (s, 1H), 5.49 (d, J = 8.2 Hz, 1H), 4.32 (d, J = 7.4 Hz, 1H), 3.07-2.99 (m, 1H), 1.87 (s, 4H), 1.81 (d, J = 7.6 Hz, 3H), 1.69 (d, J = 13.6 Hz, 5H), 1.56 (s, 4H).	607.1	B	
I-2878		1H NMR (400 MHz, DMSO-d6)9.27- 9.12 (m, 2H), 8.65 (d, J = 18.9 Hz, 2H), 8.11 - 7.54 (m, 1H), 7.15 - 7.03 (m, 1H), 5.38 -5.13 (m, 1H), 4.26 (d, J = 11.5 Hz, 1H), 3.02 (t, J = 8.2 Hz, 1H), 2.09- 1.43 (m, 18H).	577.15	C	

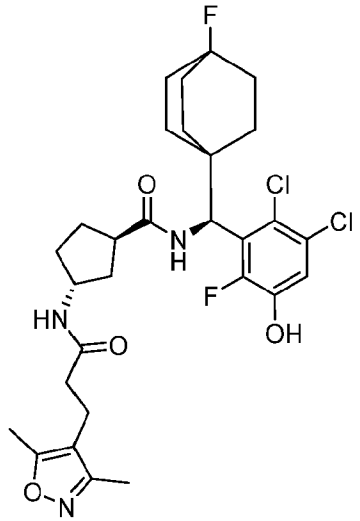
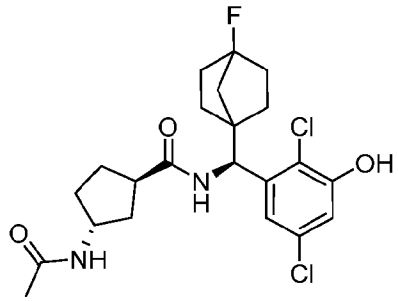
I-2879		1H NMR (400 MHz, DMSO-d6) 8.95 (d, J = 5.0 Hz, 1H), 8.74 (d, J = 7.6 Hz, 1H), 8.25 - 7.98 (m, 3H), 7.08 (d, J = 8.2 Hz, 1H), 5.35 - 5.13 (m, 1H), 4.41 - 4.28 (m, 1H), 3.04 (p, J = 7.9 Hz, 1H), 2.01 - 1.80 (m, 4H), 1.72 (td, J = 13.6, 11.9, 6.7 Hz, 13H), 1.51 (ddd, J = 16.7, 10.3, 6.2 Hz, 1H).	618.05	C	
I-2880		1H NMR (400 MHz, DMSO-d6) 8.11 (d, J = 8.7 Hz, 1H), 7.88 (d, J = 7.3 Hz, 1H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.31-7.21 (m, 1H), 5.49 (d, J = 8.6 Hz, 1H), 3.97 (s, 1H), 3.89 (s, 1H), 3.75-3.62 (m, 1H), 2.99 (q, J = 7.4 Hz, 2H), 2.16 (dt, J = 12.5, 7.7 Hz, 1H), 1.86-1.74 (m, 1H), 1.80 (s, 3H), 1.59 (s, 5H), 1.54 (s, 1H), 1.47 (qd, J = 9.6, 4.7 Hz, 2H), 1.40-1.32 (m, 1H), 1.25 (dd, J = 9.7, 5.2 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H).	444.15	B	
I-2881		1H NMR (400 MHz, DMSO-d6) 8.18 (dd, J = 8.8, 4.2 Hz, 1H), 8.00 (q, J = 7.3 Hz, 1H), 7.61 (ddd, J = 7.9, 5.0, 2.7 Hz, 1H), 7.26 (dd, J = 11.0, 8.9 Hz, 1H), 6.43 (s, 1H), 5.47 (d, J = 8.4 Hz, 1H), 3.93-3.81 (m, 1H), 3.16-3.03 (m, 2H), 2.07 (ddd, J = 11.2, 7.5, 4.0 Hz, 2H), 1.78 (s, 3H), 1.59 (s, 6H), 1.54 (s, 1H), 1.41-1.24 (m, 3H), 0.97 (d, J = 3.0 Hz, 3H).	444.1	B	

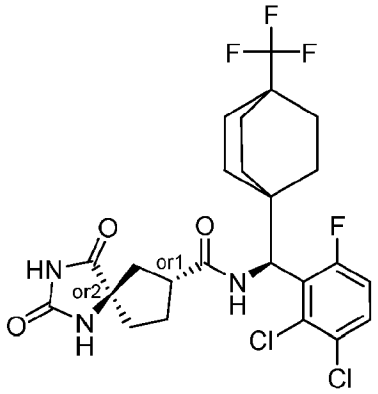
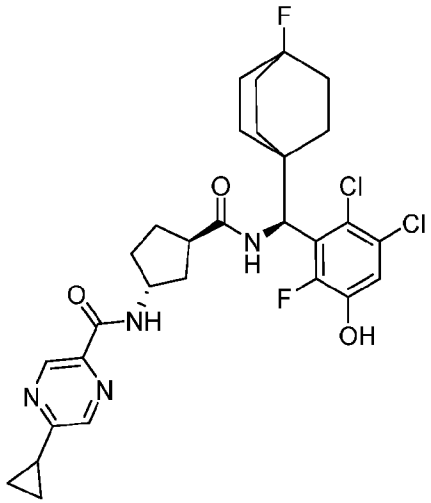
I-2882			506.05	B	
I-2883			506.05	B	
I-2884		1H NMR (400 MHz, DMSO-d6) 10.56 (s, 1H), 8.71 (d, J = 1.3 Hz, 1H), 8.48 (d, J = 6.8 Hz, 1H), 8.13 (d, J = 1.3 Hz, 1H), 8.01 (d, J = 8.8 Hz, 1H), 7.10 (d, J = 8.2 Hz, 1H), 5.30 (d, J = 8.7 Hz, 1H), 4.20 (q, J = 6.6 Hz, 1H), 3.00 (p, J = 7.8 Hz, 1H), 1.95 - 1.80 (m, 4H), 1.83 - 1.66 (m, 12H), 1.56 - 1.44 (m, 2H).	582.2	B	B

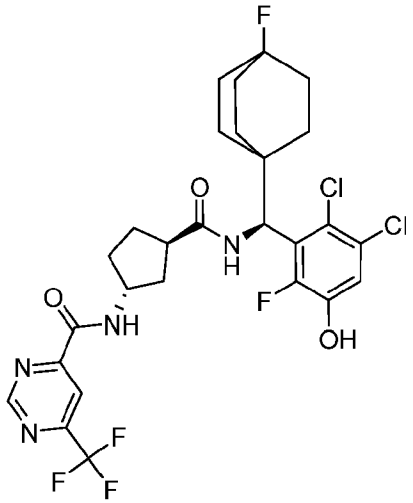
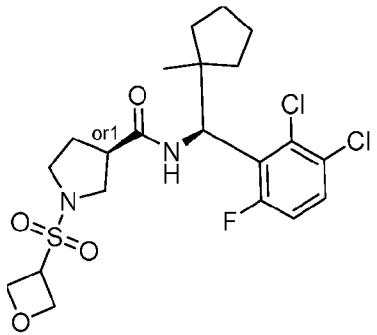
I-2885		1H NMR (400 MHz, DMSO-d6) 10.55 (s, 1H), 8.47 (d, J = 6.8 Hz, 1H), 8.29 (d, J = 1.8 Hz, 1H), 8.15 (dd, J = 8.0, 1.7 Hz, 1H), 8.12 - 7.96 (m, 2H), 7.69 (t, J = 7.8 Hz, 1H), 7.10 (d, J = 7.9 Hz, 1H), 5.30 (d, J = 8.6 Hz, 1H), 4.27 (q, J = 6.6 Hz, 1H), 3.07 - 2.97 (m, 1H), 1.95 (dq, J = 11.7, 5.9, 4.7 Hz, 2H), 1.89 - 1.81 (m, 2H), 1.81 - 1.55 (m, 12H), 1.56 - 1.43 (m, 2H).	576.05	B	B
I-2886		1H NMR (400 MHz, DMSO-d6) 9.59 (s, 1H), 9.04 (d, J = 7.7 Hz, 1H), 8.35 (s, 1H), 8.11 (d, J = 8.5 Hz, 1H), 7.08 (d, J = 8.0 Hz, 1H), 5.50 (d, J = 8.3 Hz, 1H), 4.35 (q, J = 7.1 Hz, 1H), 3.04 (q, J = 7.9 Hz, 1H), 2.03 - 1.46 (m, 16H).	607.05	B	A

I-2887		1H NMR (400 MHz, DMSO-d6) 10.54 (s, 1H), 9.29 (d, J = 5.0 Hz, 1H), 8.74 (d, J = 7.8 Hz, 1H), 8.26 (d, J = 5.1 Hz, 1H), 8.02 (d, J = 8.7 Hz, 1H), 7.14 - 7.06 (m, 1H), 5.29 (d, J = 8.6 Hz, 1H), 4.33 (p, J = 7.4 Hz, 1H), 3.04 (p, J = 7.8 Hz, 1H), 2.04 - 1.81 (m, 4H), 1.79 - 1.61 (m, 13H), 1.49 (dq, J = 12.4, 8.3 Hz, 1H).	621.15	C	
I-2888		1H NMR (400 MHz, DMSO-d6) 8.01 (d, J = 8.7 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 5.48 (d, J = 8.6 Hz, 1H), 3.31 (q, J = 5.7 Hz, 1H), 3.03 (p, J = 8.1 Hz, 1H), 1.85 - 1.64 (m, 3H), 1.59 (s, 6H), 1.56 - 1.33 (m, 3H), 1.27 (d, J = 7.4 Hz, 1H), 1.27 - 1.16 (m, 1H), 0.96 (d, J = 2.8 Hz, 3H).	387.1	C	

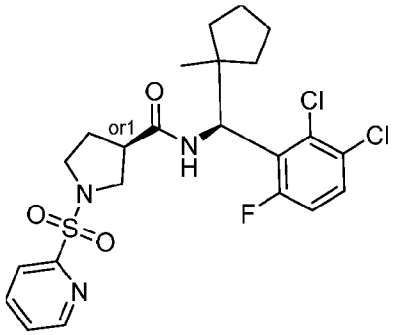
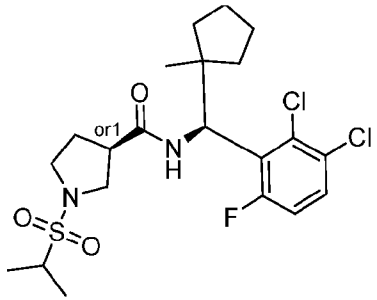
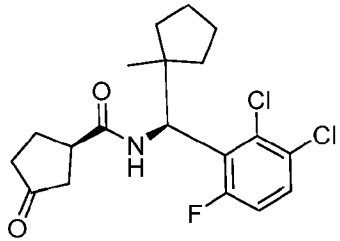
I-2889		1H NMR (400 MHz, DMSO-d6) 10.53 (s, 1H), 8.05 (d, J = 6.8 Hz, 1H), 7.97 (d, J = 8.7 Hz, 1H), 7.36 (dd, J = 15.8, 8.0 Hz, 1H), 7.20 (s, 1H), 7.15 - 6.99 (m, 4H), 5.27 (d, J = 8.6 Hz, 1H), 4.00-3.35 (q, J = 6.6 Hz, 3H), 2.94 (q, J = 7.6 Hz, 1H), 1.95 - 1.57 (m, 16H), 1.41 (ddt, J = 24.1, 13.0, 7.4 Hz, 2H).	631.15	B	
I-2890		1II NMR (400 MIIz, DMSO-d6) 10.54 (s, 1II), 9.31 (d, J = 5.1 Hz, 1H), 8.78 (d, J = 7.4 Hz, 1H), 8.20 (d, J = 5.0 Hz, 1H), 8.02 (d, J = 8.8 Hz, 1H), 7.10 (d, J = 8.1 Hz, 1H), 5.30 (d, J = 8.7 Hz, 1H), 4.31 (q, J = 7.0 Hz, 1H), 3.03 (p, J = 7.7 Hz, 1H), 2.02 - 1.79 (m, 4H), 1.78 - 1.58 (m, 13H), 1.52 (dt, J = 12.5, 7.9 Hz, 1H).	621.1	B	B

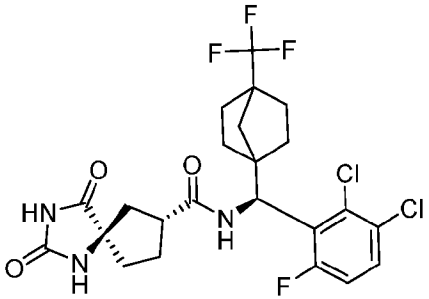
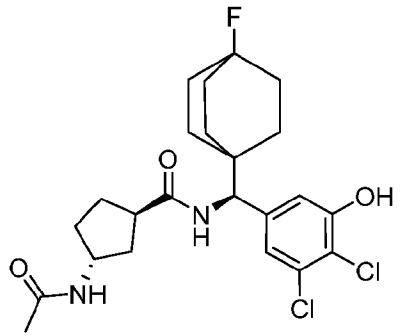
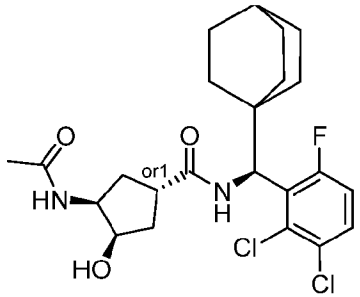
I-2891		1H NMR (400 MHz, DMSO-d6) 10.55 (s, 1H), 7.93 (d, J = 8.7 Hz, 1H), 7.72 (d, J = 6.8 Hz, 1H), 7.10 (d, J = 8.0 Hz, 1H), 5.28 (d, J = 8.6 Hz, 1H), 3.97 (q, J = 6.7 Hz, 1H), 2.90 - 2.81 (m, 1H), 2.26 (s, 3H), 2.16 (d, J = 14.8 Hz, 5H), 1.74 (s, 2H), 1.88 - 1.65 (m, 14H), 1.57 - 1.37 (m, 2H), 1.32 - 1.21 (m, 2H).	598.2	C	
I-2892		1H NMR (400 MHz, DMSO-d6) 10.21 (s, 1H), 8.16 (d, J = 9.2 Hz, 1H), 7.78 (d, J = 6.9 Hz, 1H), 6.90 (dd, J = 33.0, 2.4 Hz, 2H), 5.52 (d, J = 9.1 Hz, 1H), 4.02 (h, J = 6.5 Hz, 1H), 2.85 (p, J = 7.9 Hz, 1H), 1.95 - 1.63 (m, 13H), 1.62 -1.48 (m, 3H), 1.47 - 1.28 (m, 3H).	457.2	D	

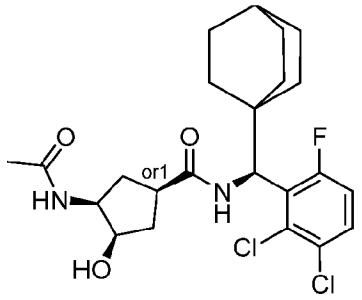
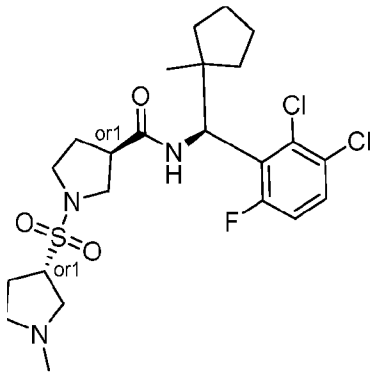
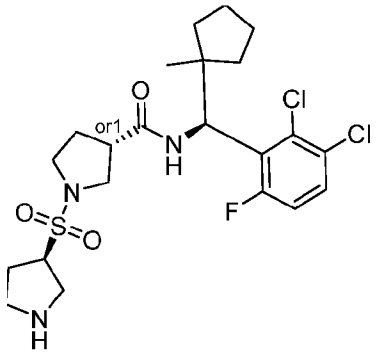
I-2893		1H NMR (400 MHz, DMSO-d6) 10.63 (s, 1H), 8.30 (s, 1H), 8.20 (d, J = 8.5 Hz, 1H), 7.63 (dd, J = 8.9, 5.0 Hz, 1H), 7.37 - 7.19 (m, 1H), 5.34 (d, J = 8.5 Hz, 1H), 3.02 (p, J = 8.4 Hz, 1H), 2.09 (dd, J = 13.1, 10.1 Hz, 1H), 1.93 (dddd, J = 21.9, 15.9, 13.9, 9.4 Hz, 3H), 1.59 (p, J = 9.7 Hz, 14H).	550.2	D	
I-2894		1H NMR (400 MHz, DMSO-d6) 10.54 (s, 1H), 8.96 (d, J = 1.4 Hz, 1H), 8.67 (d, J = 1.4 Hz, 1H), 8.53 (d, J = 7.6 Hz, 1H), 8.12 - 7.95 (m, 1H), 7.10 (d, J = 8.1 Hz, 1H), 5.36 - 5.13 (m, 1H), 4.31 (h, J = 7.2 Hz, 1H), 3.02 (p, J = 7.9 Hz, 1H), 2.34 (ddd, J = 12.8, 8.1, 4.7 Hz, 1H), 2.02 - 1.80 (m, 4H), 1.68 (th, J = 16.0, 7.6 Hz, 13H), 1.50 (dq, J = 12.4, 8.0 Hz, 1H), 1.13 (dt, J = 7.9, 3.2 Hz, 2H), 1.04 (dt, J = 5.0, 3.0 Hz, 2H).	593.15	B	A

I-2895		1H NMR (400 MHz, DMSO-d6) 10.55 (d, J = 3.6 Hz, 1H), 9.60 (s, 1H), 9.03 (d, J = 7.7 Hz, 1H), 8.35 (s, 1H), 8.14 - 7.97 (m, 1H), 7.11 (dd, J = 8.1, 1.9 Hz, 1H), 5.35 - 5.14 (m, 1H), 4.34 (q, J = 7.3 Hz, 1H), 3.05 (q, J = 7.8 Hz, 1H), 1.93 (ddt, J = 33.5, 13.2, 6.7 Hz, 5H), 1.69 (dd, J = 16.5, 9.8 Hz, 12H), 1.50 (dq, J = 17.0, 9.2 Hz, 1H).	621.1	B	
I-2896			493.1	B	B

I-2897		493.1	D	
I-2898		513.1	B	
I-2899		492.1	B	B

I-2900			514.1	B	B
I-2901			479.1	B	B
I-2902		1H NMR (400 MHz, DMSO-d6) 8.32 (d, J = 8.5 Hz, 1H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 5.46 (d, J = 8.3 Hz, 1H), 3.24 (d, J = 14.3 Hz, 1H), 2.33 - 2.16 (m, 2H), 2.15-1.99 (m, 3H), 1.76 - 1.52 (m, 7H), 1.38 (d, J = 8.6 Hz, 1H), 1.27 (s, 1H), 0.98 (d, J = 2.8 Hz, 3H).	386.1	D	

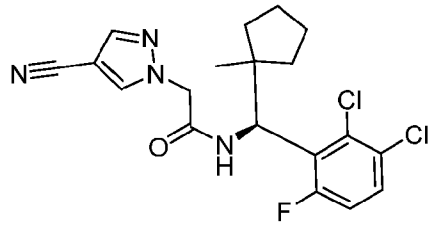
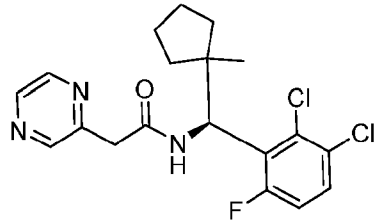
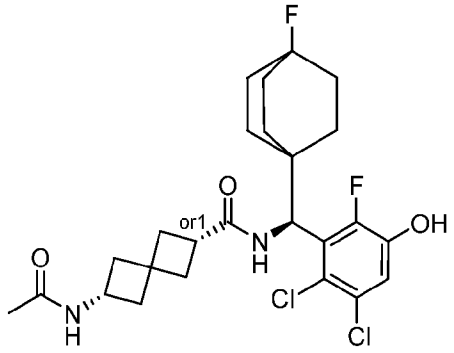
I-2903		1H NMR (400 MHz, DMSO-d6)10.42 (s, 1H), 8.35 (d, J = 8.2 Hz, 1H), 8.30 (s, 1H), 7.63 (dd, J = 8.9, 5.1 Hz, 1H), 7.32-7.21 (m, 1H), 5.61 (d, J = 8.0 Hz, 1H), 3.01 (s, 1H), 2.17-2.05 (m, 1H), 2.04-1.85 (m, 1H), 1.82 (s, 2H), 1.76 (s, 1H), 1.74-1.47 (m, 10H), 1.45-1.38 (m, 1H).	536.1	D	
I-2904		1H NMR (400 MHz, DMSO-d6) 8.09 (d, J = 9.2 Hz, 1H), 7.80 (d, J = 6.8 Hz, 1H), 6.97 (d, J = 3.4 Hz, 1H), 6.73 (d, J = 1.9 Hz, 1H), 4.51 (d, J = 9.2 Hz, 1H), 4.05-3.96 (m, 1H), 2.91-2.82 (m, 1H), 1.86-1.78 (m, 1H), 1.77 (s, 2H), 1.70-1.63 (m, 12H), 1.54 (t, J = 8.2 Hz, 5H), 1.38 (dt, J = 13.2, 6.9 Hz, 1H).	471.2	B	C
I-2905		1H NMR (400 MHz, DMSO-d6) 7.98 (d, J = 8.5 Hz, 1H), 7.59 (dd, J = 9.0, 5.0 Hz, 1H), 7.45 (d, J = 7.9 Hz, 1H), 7.22 (dd, J = 10.7, 8.9 Hz, 1H), 5.21 (d, J = 8.4 Hz, 1H), 4.74 (d, J = 3.5 Hz, 1H), 3.98- 3.92 (m, 1H), 3.86 (d, J = 9.0 Hz, 1H), 1.79 (d, J = 2.6 Hz, 5H), 1.72-1.52 (m, 1H), 1.49 (s, 11H), 1.43 (d, J = 9.8 Hz, 4H).	471.1	B	B

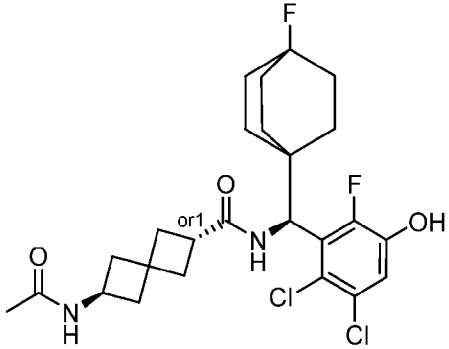
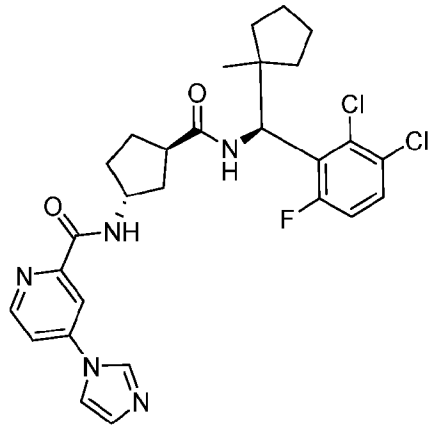
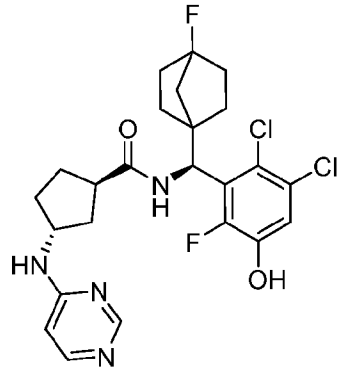
I-2906		1H NMR (400 MHz, DMSO-d6) 7.98 (d, J = 8.5 Hz, 1H), 7.59 (dd, J = 9.0, 5.0 Hz, 1H), 7.47 (d, J = 7.4 Hz, 1H), 7.27-7.17 (m, 1H), 5.24 (d, J = 8.4 Hz, 1H), 4.74 (d, J = 3.2 Hz, 1H), 3.91 (s, 2H), 3.09 (s, 2H), 1.80 (s, 4H), 1.47 (d, J = 17.0 Hz, 15H).	471.15	B	A
I-2907			520.1	B	B
I-2908			506.1	B	

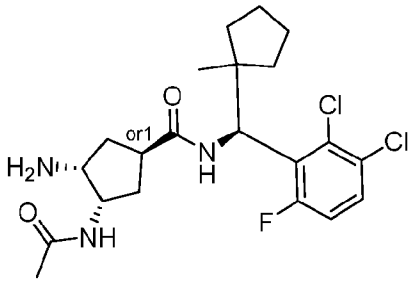
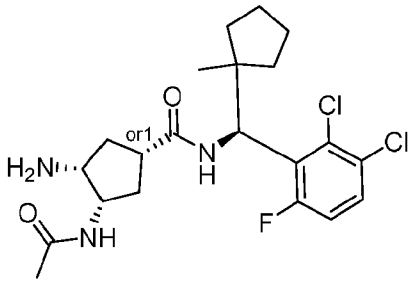
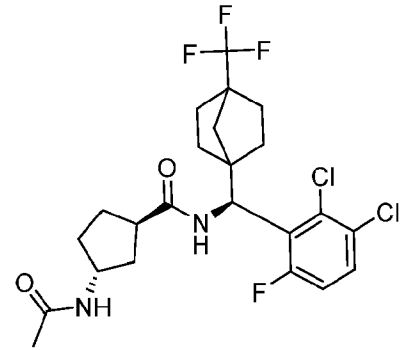
I-2909		506.1	B	B
I-2910		506.05	B	
I-2911		520.1	B	

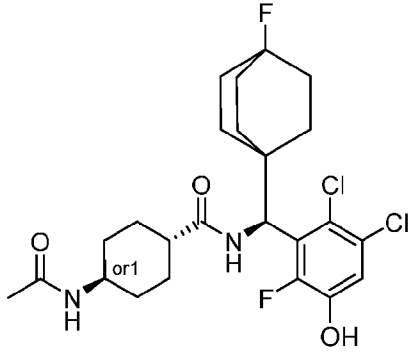
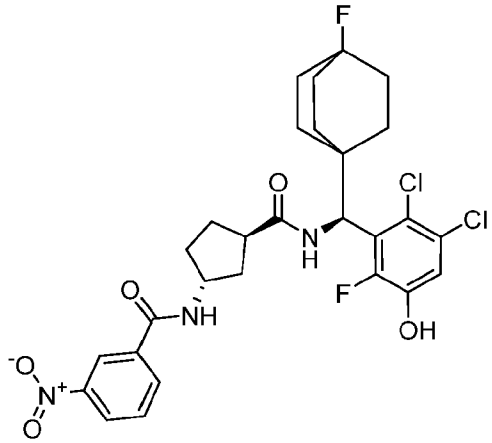
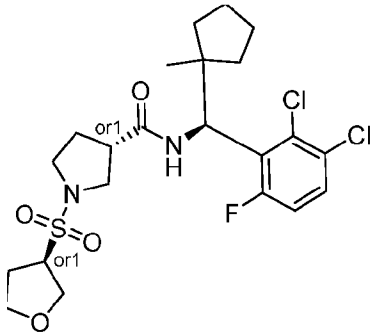
I-2912		520.1	C	
I-2913		520.1	C	
I-2914		506.1	B	B

I-2915			C	
I-2916			C	
I-2917			C	
I-2918				

I-2919				D	
I-2920				D	
I-2921		1H NMR (400 MHz, DMSO-d6) 10.52 (s, 1H), 7.97 (d, J = 7.6 Hz, 1H), 7.84 (d, J = 8.8 Hz, 1H), 7.09 (d, J = 8.2 Hz, 1H), 5.27 (d, J = 8.8 Hz, 1H), 3.97 (p, J = 8.1 Hz, 1H), 3.06 (q, J = 8.5 Hz, 1H), 2.11 - 1.92 (m, 5H), 1.96 - 1.82 (m, 1H), 1.86 - 1.62 (m, 16H), 1.24 (s, 1H).	515.2	D	

I-2922		1H NMR (400 MHz, DMSO-d6) 10.52 (s, 1H), 7.97 (d, J = 7.6 Hz, 1H), 7.83 (d, J = 8.8 Hz, 1H), 7.09 (d, J = 8.2 Hz, 1H), 5.28 (d, J = 8.8 Hz, 1H), 4.00 (h, J = 8.0 Hz, 1H), 3.06 (q, J = 8.4 Hz, 1H), 2.18 - 2.03 (m, 3H), 1.95 (dd, J = 11.2, 8.5 Hz, 1H), 1.85 (td, J = 8.1, 7.4, 3.1 Hz, 2H), 1.84 - 1.66 (m, 16H), 1.24 (s, 1H).	515.15	D	
I-2923		1H NMR (400 MHz, DMSO-d6) 9.29 (s, 1H), 8.81 (d, J = 5.5 Hz, 1H), 8.69 (d, J = 7.8 Hz, 1H), 8.39 (d, J = 2.3 Hz, 1H), 8.32 (d, J = 1.8 Hz, 1H), 8.13 (d, J = 8.7 Hz, 1H), 8.04 (dd, J = 5.5, 2.4 Hz, 1H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.56 (s, 1H), 7.27 (dd, J = 10.8, 8.9 Hz, 1H), 5.50 (d, J = 8.5 Hz, 1H), 4.35 (p, J = 7.0 Hz, 1H), 3.09 (p, J = 7.8 Hz, 1H), 2.04-1.82 (m, 3H), 1.60 (s, 7H), 1.55-1.44 (m, 1H), 1.38 (s, 1H), 1.27 (s, 1H), 0.97 (d, J = 2.8 Hz, 3H).	558.2	B	B
I-2924		1H NMR (400 MHz, DMSO-d6) 10.55 (s, 1H), 8.38 (s, 1H), 8.10 (d, J = 8.4 Hz, 1H), 8.00 (s, 1H), 7.35 (d, J = 6.6 Hz, 1H), 7.08 (d, J = 7.9 Hz, 1H), 6.42 (d, J = 6.0 Hz, 1H), 5.49 (d, J = 8.2 Hz, 1H), 4.22 (s, 1H), 2.97 (q, J = 8.2 Hz, 1H), 2.03 (s, 1H), 1.97 (dt, J = 14.1, 7.8 Hz, 2H), 1.86 - 1.65 (m, 8H), 1.56 (d, J = 8.8 Hz, 1H), 1.52 (s, 3H), 1.50 (s, 1H).	511.1	B	A

I-2925		1H NMR (400 MHz, DMSO-d6) 8.08 (d, J = 8.9 Hz, 1H), 7.59 (s, 2H), 7.25 (t, J = 9.9 Hz, 1H), 5.47 (d, J = 8.5 Hz, 1H), 3.90 (s, 1H), 3.31 (s, 1H), 3.12-3.04 (m, 2H), 2.31 (s, 1H), 1.82 (d, J = 6.8 Hz, 3H), 1.59 (s, 9H), 1.37 (s, 1H), 1.23 (s, 3H), 0.96 (s, 3H).	444.15	B	B
I-2926		1H NMR (400 MHz, DMSO-d6) 8.10 (s, 1H), 7.61 (dd, J = 9.0, 4.9 Hz, 2H), 7.25 (t, J = 9.9 Hz, 1H), 5.46 (d, J = 8.4 Hz, 1H), 3.89 (s, 1H), 1.82 (s, 3H), 1.70 (d, J = 9.6 Hz, 4H), 1.59 (s, 9H), 1.36 (d, J = 10.6 Hz, 1H), 1.25 (d, J = 11.8 Hz, 2H), 0.99-0.93 (m, 3H)	444.15	B	B
I-2927		1H NMR (400 MHz, DMSO-d6) 8.21 (d, J = 8.2 Hz, 1H), 7.76 (d, J = 6.9 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.7, 9.0 Hz, 1H), 5.61 (d, J = 8.1 Hz, 1H), 4.00 (q, J − 6.4 Hz, 1H), 2.91 (p, J − 7.9 Hz, 1H), 1.85 (dt, J = 18.5, 6.8 Hz, 2H), 1.78 (s, 2H), 1.76 (s, 6H), 1.67-1.57 (m, 4H), 1.55 (d, J = 9.4 Hz, 4H), 1.49-1.34 (m, 1H).	509.1	D	

I-2928		1H NMR (400 MHz, DMSO-d6) 10.54 (s, 1H), 7.94 (d, J = 8.8 Hz, 1H), 7.71 (d, J = 7.8 Hz, 1H), 7.15 - 7.04 (m, 1H), 5.31 - 5.09 (m, 1H), 366 - 3.42 (m, 1H), 2.28 (td, J = 11.4, 10.7, 4.8 Hz, 1H), 1.76 (s, 6H), 1.70 (d, J = 6.1 Hz, 12H), 1.55 (d, J = 12.6 Hz, 1H), 1.41 - 1.20 (m, 2H), 1.20 - 1.05 (m, 2H).	503.1	D	
I-2929		1H NMR (400 MHz, DMSO-d6) 10.52 (s, 1H),8.73 - 8.66 (m, 2H), 8.39 (ddd, J = 8.2, 2.4, 1.0 Hz, 1H), 8.30 (dt, J = 7.9, 1.3 Hz, 1H), 8.03 (d, J = 8.8 Hz, 1H), 7.78 (t, J = 8.0 Hz, 1H), 7.10 (d, J = 8.2 Hz, 1H), 5.30 (d, J = 8.7 Hz, 1H), 4.30 (q, J = 6.7 Hz, 1H), 3.02 (p, J = 7.9 Hz, 1H), 1.98 (dd, J = 13.4, 7.0 Hz, 2H), 1.96 - 1.73 (m, 2H), 1.73 - 1.44 (m, 14H).	596.2	B	B
I-2930			507.1	B	B

I-2931		507.1	B	B
I-2932		507.1	C	
I-2933		507.1	B	

I-2934		517.1	D	
I-2935		503.05	C	
I-2936		503.05	A	B

I-2937			517	B	B
I-2938			504	D	
I-2939			517.05	B	B

I-2940		504.05	B	B
I-2941		517	C	B
I-2942			E	

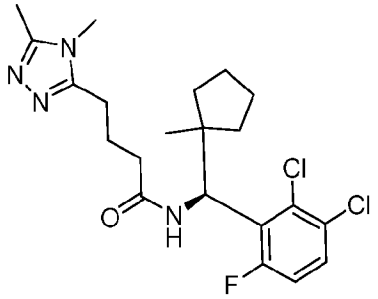
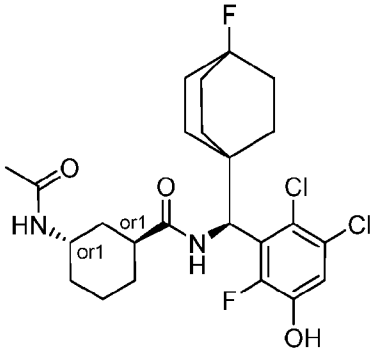
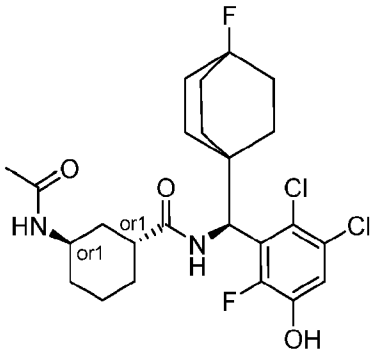
I-2943				D
I-2944				D
I-2945				D
I-2946				D

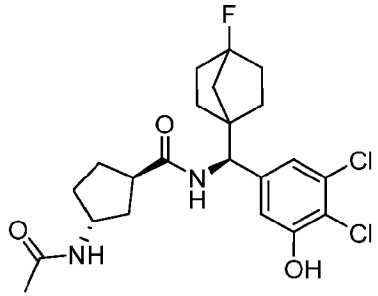
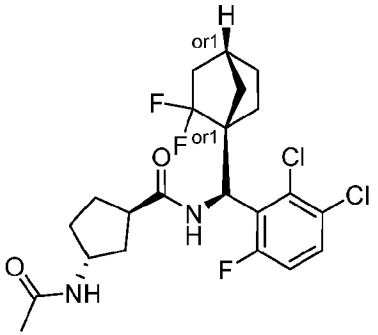
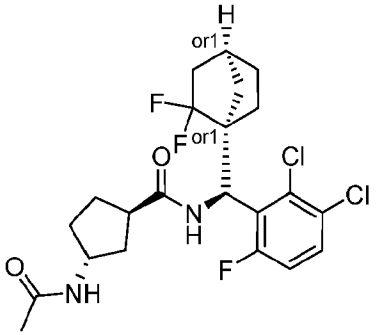
I-2947			B	B
I-2948			C	C
I-2949			C	B
I-2950			B	B

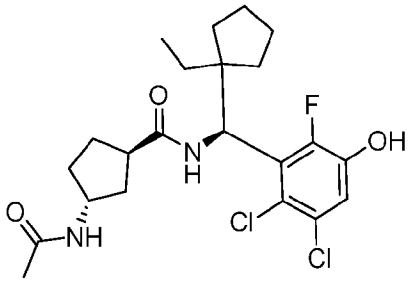
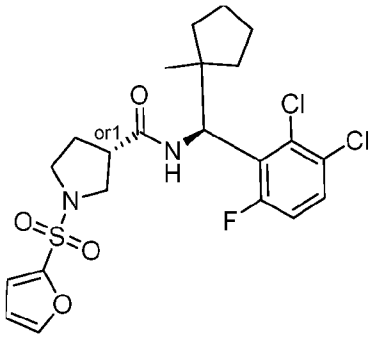
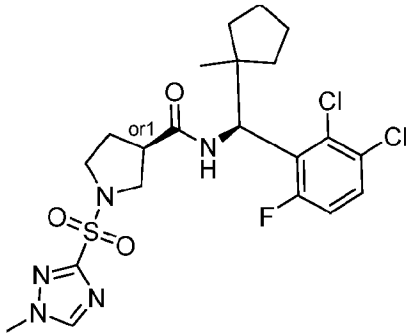
I-2951				B
I-2952				B
I-2953				B

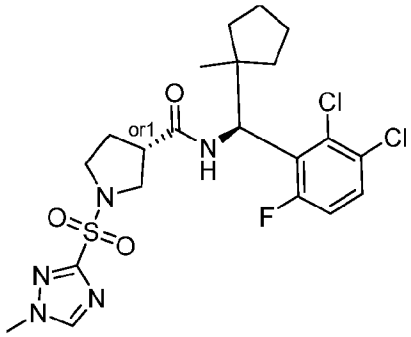
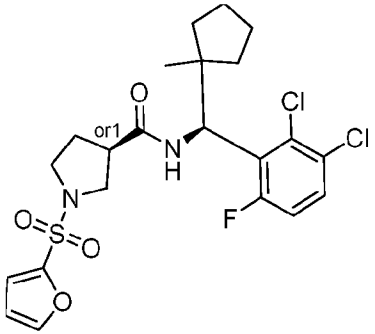
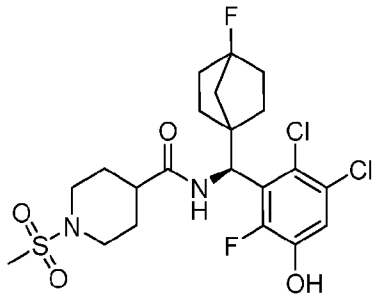
I-2954			D
I-2955			C
I-2956			C

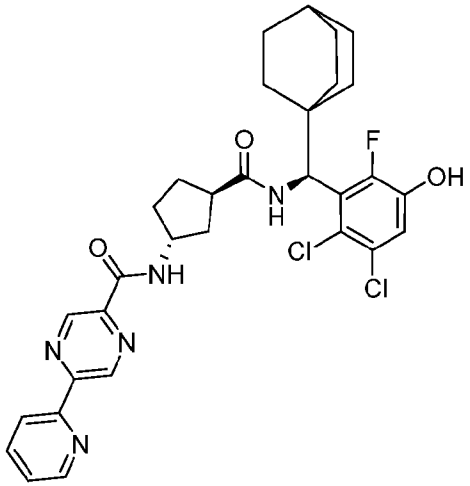
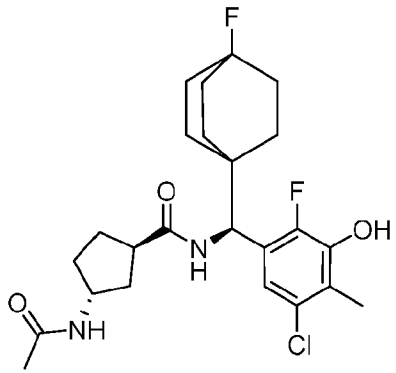
I-2957		B		D
I-2958		C		D
I-2959		D		D
I-2960		D		

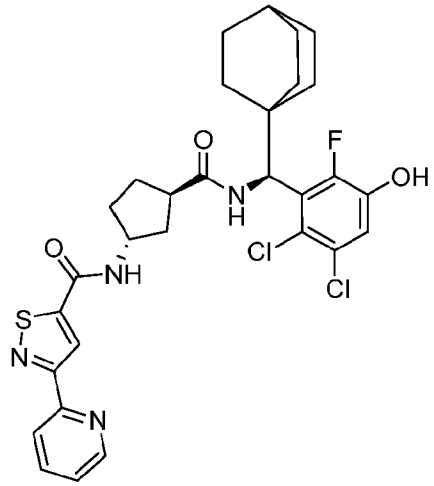
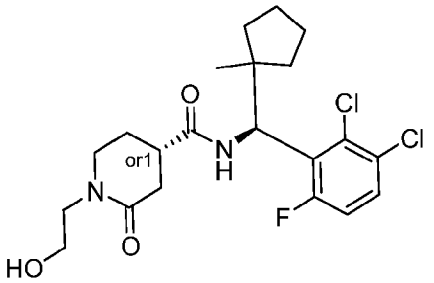
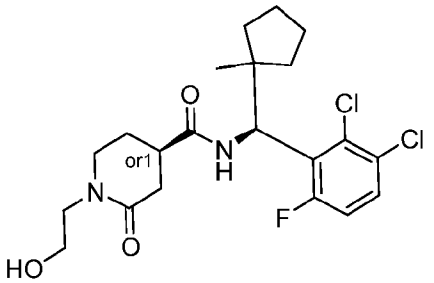
I-2961				B	B
I-2962		1H NMR (400 MHz, DMSO-d6) 10.56 (s, 1H), 7.78 (d, J = 8.8 Hz, 1H), 7.56 (d, J = 6.6 Hz, 1H), 7.08 (d, J = 8.0 Hz, 1H), 5.34 - 5.14 (m, 1H), 3.88 (d, J = 5.8 Hz, 1H), 2.59 (d, J = 5.9 Hz, 1H), 1.81 (s, 3H), 1.78-1.56 (m, 13H), 1.55 - 1.28 (m, 7H).	503.15	D	
I-2963		1H NMR (400 MHz, DMSO-d6) 10.63 - 10.50 (m, 1H), 7.91 - 7.72 (m, 1H), 7.56 (d, J = 6.8 Hz, 1H), 7.14 - 7.06 (m, 1H), 5.33 - 5.14 (m, 1H), 3.94 - 3.84 (m, 1H), 2.59 (tq, J = 8.9, 5.4, 4.7 Hz, 1H), 1.83 (s, 3H), 1.79 - 1.52 (m, 12H), 1.52 - 1.14 (m,8H).	503.1	D	

I-2964		1H NMR (400 MHz, DMSO-d6) 10.26 (s, 1H), 8.14 (d, J = 8.8 Hz, 1H), 7.79 (d, J = 6.8 Hz, 1H), 6.95 (d, J = 2.0 Hz, 1H), 6.76 (d, J = 2.0 Hz, 1H), 4.82 (d, J = 8.7 Hz, 1H), 4.06 - 3.96 (m, 1H), 2.89 (p, J = 7.9 Hz, 1H), 1.89 - 1.70 (m, 8H), 1.70 - 1.58 (m, 5H), 1.53 (dt, J = 11.5, 8.1 Hz, 2H), 1.44 - 1.15 (m, 4H).	457.05	B	A
I-2965		1H NMR (400 MHz, DMSO-d6) 8.07 (t, J = 8.8 Hz, 1H), 7.74 (d, J = 6.9 Hz, 1H), 7.62 (dt, J = 9.0, 4.8 Hz, 1H), 7.27 (ddd, J = 10.6, 9.0, 3.8 Hz, 1H), 6.13 - 5.88 (m, 1H), 3.98 (dt, J = 12.8, 6.4 Hz, 1H), 2.92 (p, J = 7.7 Hz, 1H), 2.38 - 2.18 (m, 1H), 2.04 (d, J = 30.7 Hz, 1H), 1.91 (d, J = 10.3 Hz, 1H), 1.87 - 1.68 (m, 7H), 1.68 - 1.41 (m, 6H), 1.35 (dt, J = 12.6, 7.5 Hz, 2H).	477.1	B	B
I-2966		1H NMR (400 MHz, DMSO-d6) 8.05 (d, J = 8.6 Hz, 1H), 7.75 (d, J = 6.9 Hz, 1H), 7.63 (dd, J = 9.0, 5.0 Hz, 1H), 7.36 - 7.22 (m, 1H), 6.16 - 5.95 (m, 1H), 3.99 (h, J = 6.5 Hz, 1H), 2.93 (p, J = 7.7 Hz, 1H), 2.23 (s, 1H), 2.16 - 1.94 (m, 2H), 1.91 - 1.69 (m, 8H), 1.60 (dq, J = 12.4, 5.7 Hz, 3H), 1.49 - 1.28 (m, 3H), 1.12 (d, J = 10.2 Hz, 1H).	477.1	C	B

I-2967		1H NMR (400 MHz, DMSO-d6)7.95 (d, J = 8.8 Hz, 1H), 7.76 (d, J = 6.9 Hz, 1H), 7.06 (d, J = 8.1 Hz, 1H), 5.60-5.46 (m, 1H), 4.00 (q, J = 6.5 Hz, 1H), 2.95 (p, J = 7.9 Hz, 1H), 1.89-1.70 (m, 6H), 1.69-1.32 (m, 11H), 1.27 (dt, J = 13.7, 6.8 Hz, 1H), 1.15-1.04 (m, 1H), 0.76 (q, J = 8.7, 8.0 Hz, 3H).	459.1	B	B
I-2968			503.05	B	B
I-2969			518.1	B	A

I-2970			518.1	C	
I-2971			503	D	
I-2972		1H NMR (400 MHz, DMSO-d6) 10.57 (s, 1H), 8.18 (d, J = 8.5 Hz, 1H), 7.10 (d, J = 8.2 Hz, 1H), 5.48 (d, J = 8.4 Hz, 1H), 3.56 (t, J = 12.5 Hz, 2H), 2.86 (s, 3H), 2.78 - 2.63(t, J = 12.5 Hz, 2H)2.47 - 2.39 (m, 1H), 1.96 - 1.65 (dd, J = 22.5, 11.5 Hz, 8H), 1.64 (s, 1H), 1.57 - 1.39 (m, 5H).	511.1	B	B

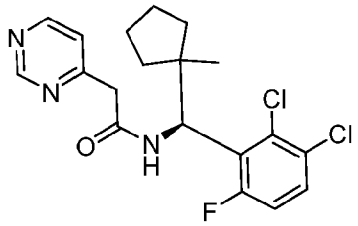
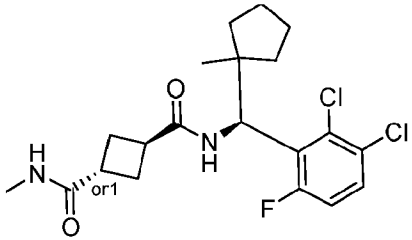
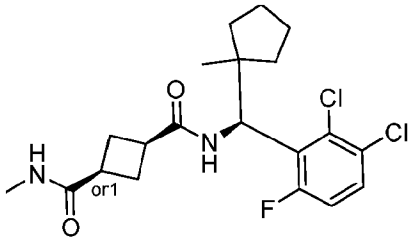
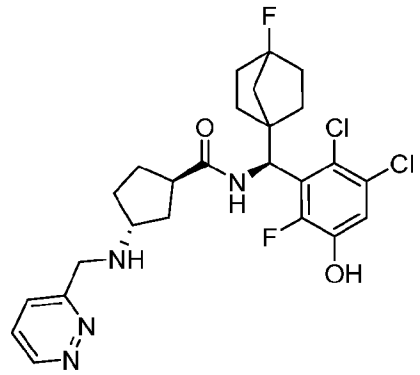
I-2973		.1H NMR (400 MHz, DMSO-d6) 10.30 (s, 1H), 9.57 (d, J = 1.4 Hz, 1H), 9.25 (d, J = 1.4 Hz, 1H), 8.80 (dt, J = 4.9, 2.8 Hz, 2H), 8.43 (d, J = 8.0 Hz, 1H), 8.05 (td, J = 7.8, 1.8 Hz, 1H), 7.92 (d, J = 8.8 IIz, 1II), 7.59 (ddd, J = 7.5, 4.7, 1.2 IIz, 1II), 7.08 (dd, J = 8.3, 2.3 Hz, 1H), 5.28 -5.07 (m, 1H), 4.37 (h, J = 7.1 Hz, 1H), 3.07 (p, J = 7.9 Hz, 1H), 2.00 - 1.81 (m, 4H), 1.67 (dq, J = 11.8, 7.9 Hz, 1H), 1.58 - 1.39 (m, 14H).	612.15	C	
I-2974		1H NMR (400 MHz, DMSO-d6) 9.87 (s, 1H), 8.09 (d, J = 9.6 Hz, 1H), 7.80 (d, J = 6.8 Hz, 1H), 6.90 (d, J = 5.9 Hz, 1H), 5.00 (d, J = 9.6 Hz, 1H), 4.01 (h, J = 6.5 Hz, 1H), 2.84 (p, J = 8.0 Hz, 1H), 2.16 (s, 3H), 1.90 - 1.72 (m, 5H), 1.72 - 1.44 (m, 12H), 1.37 (dq, J = 14.5, 7.7 IIz, 1II).	469.2	D	

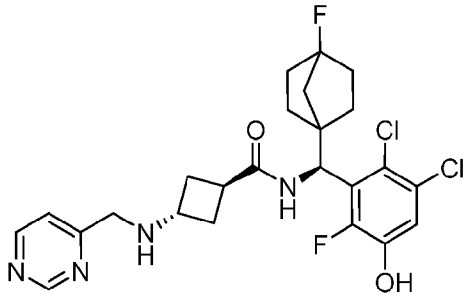
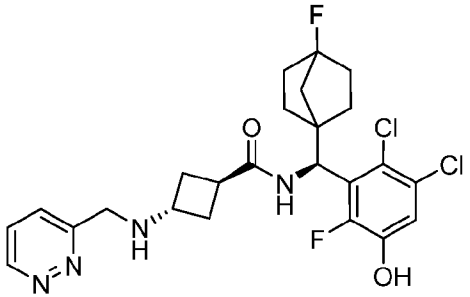
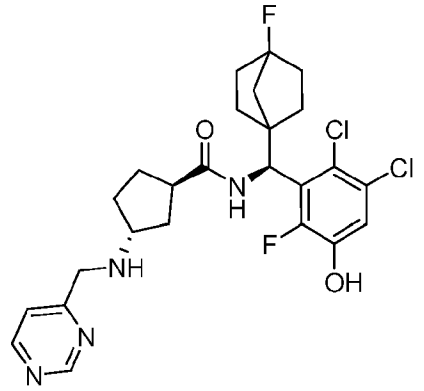
I-2975		1H NMR (400 MHz, DMSO-d6) 10.48 (s, 1H), 8.88 (d, J = 6.7 Hz, 1H), 8.75 (s, 1H), 8.70 (dt, J = 4.9, 1.3 Hz, 1H), 8.25 - 8.14 (m, 1H), 8.06 - 7.88 (m, 2H), 7.51 (ddd, J = 7.6, 4.8, 1.2 Hz, 1H), 7.13 - 7.04 (m, 1H), 5.29 - 5.07 (m, 1H), 4.25 (h, J = 6.6 Hz, 1H), 3.05 (p, J = 7.8 Hz, 1H), 1.95 (ddd, J = 12.4, 9.4, 5.7 Hz, 2H), 1.86 (ddt, J = 13.4, 8.3, 4.9 Hz, 2H), 1.66-1.56 (m, 2H), 1.49 (h, J = 10.8, 9.8 Hz, 13H).	617.1	B	B
I-2976				E	
I-2977				B	B

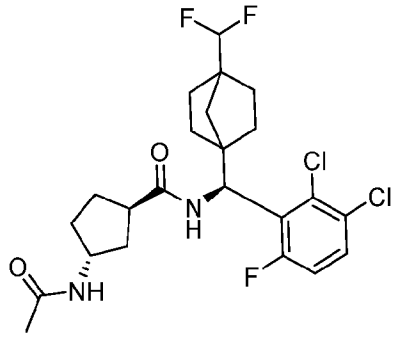
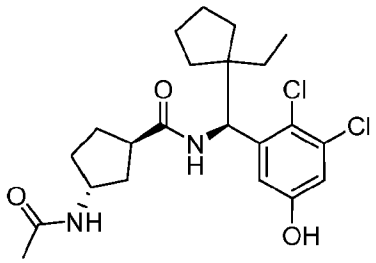
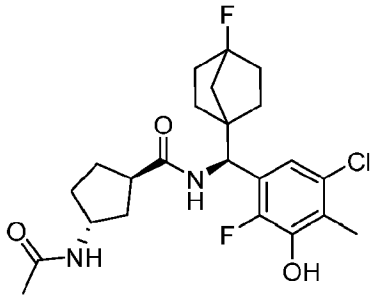
I-2978			B	B
I-2979			D	B
I-2980			B	B
I-2981			B	B

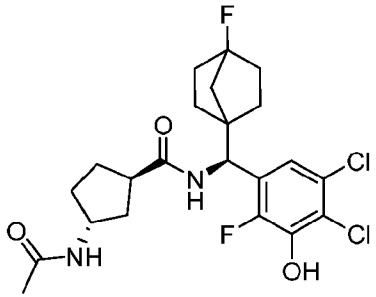
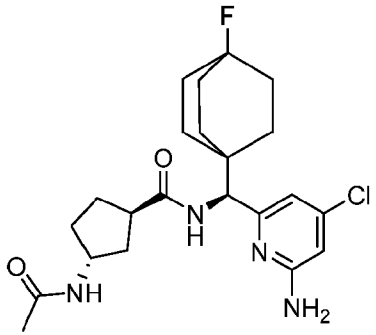
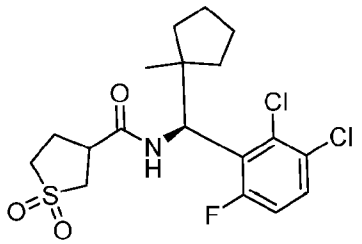
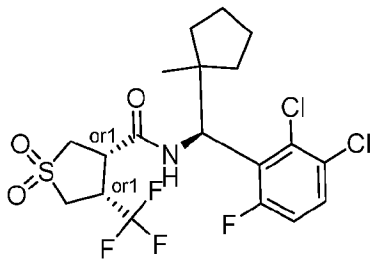
I-2982		B	B	D
I-2983			B	B
I-2984				
I-2985			B	

I-2986		514.05	B	A
I-2987		514.05	C	
I-2988		518	B	B

I-2989				D	
I-2990		1H NMR (400 MHz, DMSO-d6) 7.97 (d, J = 8.7 Hz, 1H), 7.60 (dt, J = 11.6, 5.7 Hz, 2H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.49 (d, J = 8.7 Hz, 1H), 3.06 (p, J = 8.8 Hz, 1H), 2.81 (p, J = 9.0 Hz, 1H), 2.53 (d, J = 4.6 Hz, 3H), 2.23 - 2.01 (m, 4H), 1.58 (d, J = 7.7 Hz, 6H), 1.43 - 1.20 (m, 2H), 0.95 (d, J = 2.8 Hz, 3H).	415.1	B	A
I-2991		1H NMR (400 MHz, DMSO-d6) 8.05 (d, J = 8.6 Hz, 1H), 7.61 (dd, J − 9.0, 5.0 Hz, 2H), 7.24 (dd, J − 10.7, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 3.25 - 3.15 (m, 1H), 2.95 - 2.84 (m, 1H), 2.55 (d, J = 4.6 Hz, 3H), 2.18 (dtd, J = 17.7, 8.9, 3.8 Hz, 3H), 2.00 (dt, J = 11.6, 8.2 Hz, 1H), 1.59 (s, 6H), 1.31 (d, J = 40.9 Hz, 2H), 0.95 (d, J = 2.8 Hz, 3H).	415	B	
I-2992		1H NMR (400 MHz, DMSO-d6) 9.11 (dd, J = 4.8, 1.8 Hz, 1H), 8.09 (d, J = 8.5 Hz, 1H), 7.73 (dd, J = 8.5, 1.8 Hz, 1H), 7.66 (dd, J = 8.5, 4.8 Hz, 1H), 7.09 (d, J = 8.1 Hz, 1H), 5.49 - 5.42 (m, 1H), 3.98 (s, 2H), 3.12 (q, J = 5.6 Hz, 1H), 2.99 (p, J = 7.7 Hz, 1H), 1.93 - 1.68 (m, 11H), 1.67 (dq, J = 7.9, 4.2, 3.7 Hz, 1H), 1.60 - 1.52 (m, 2H), 1.46 - 1.32 (m, 2H).	524.95	D	D

I-2993		1H NMR (400 MHz, DMSO-d6) 9.09 (d, J = 1.4 Hz, 1H), 8.74 (d, J = 5.1 Hz, 1H), 8.06 (d, J = 8.4 Hz, 1H), 7.55 (d, J = 5.2 Hz, 1H), 7.10 (d, J = 8.1 Hz, 1H), 6.53 (s, 1H), 6.30 (s, 1H), 5.48 (d, J = 8.3 Hz, 1H), 3.79 (s, 2H), 3.39 (t, J = 7.4 Hz, 1H), 3.08 (t, J = 8.7 Hz, 1H), 2.25 - 2.16 (m, 1H), 2.10 - 1.93 (m, 3H), 1.81 - 1.59 (m, 6H), 1.52 (dd, J = 23.6, 10.2 Hz, 4H).	511.15	B	B
I-2994		1H NMR (400 MHz, DMSO-d6) 9.11 (dd, J = 4.7, 1.9 Hz, 1H), 8.04 (d, J = 8.4 Hz, 1H), 7.70 (dd, J = 8.5, 1.9 Hz, 1H), 7.65 (dd, J = 8.5, 4.7 Hz, 1H), 7.10 (d, J = 8.1 Hz, 1H), 6.53 (s, 1H), 6.29 (s, 1H), 5.51 - 5.33 (m, 1H), 3.93 (s, 2H), 3.32 (t, J = 7.4 Hz, 1H), 3.11 - 3.02 (m, 1H), 2.18 (dq, J = 7.8, 4.1, 3.2 Hz, 1H), 2.10 - 1.88 (m, 3H), 1.81 - 1.52 (dd, J = 22.7, 10.1 Hz, 10H).	511.15	B	B
I-2995		1H NMR (400 MHz, DMSO-d6) 9.09 (d, J = 1.4 Hz, 1H), 8.74 (d, J = 5.1 Hz, 1H), 8.23 (s, 1H), 8.10 (d, J = 8.4 Hz, 1H), 7.58 (dd, J = 5.2, 1.4 Hz, 1H), 7.09 (d, J = 8.1 Hz, 1H), 5.46 (d, J = 8.2 Hz, 1H), 3.80 (s, 2H), 3.13 (t, J = 5.7 Hz, 1H), 2.99 (p, J = 7.8 Hz, 1H), 1.88 (d, J = 12.8 Hz, 1H), 1.79 (ddt, J = 14.2, 10.1, 4.9 Hz, 9H), 1.67 - 1.52 (td, J = 13.2, 12.4, 8.4 Hz, 6H).	525	C	C

I-2996		1H NMR (400 MHz, DMSO-d6) 8.17 (d, J = 8.2 Hz, 1H), 7.75 (d, J = 6.9 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.6, 9.0 Hz, 1H), 6.10 (t, J = 56.7 Hz, 1H), 5.74 - 5.40 (m, 1H), 3.99 (h, J = 6.5 Hz, 1H), 2.92 (p, J = 7.8 Hz, 1H), 1.95 - 1.58 (m, 10H), 1.55 - 1.10 (m, 9H).	491.2	D	
I-2997		1H NMR (400 MHz, DMSO-d6) 9.90 (s, 1H), 8.01 (d, J = 9.0 Hz, 1H), 7.78 (d, J = 6.8 Hz, 1H), 6.90 (q, J = 2.8 Hz, 2H), 5.51 (d, J = 9.0 Hz, 1H), 4.01 (h, J = 6.6 Hz, 1H), 2.88 (p, J = 8.0 Hz, 1H), 1.83 (ddd, J = 15.5, 7.7, 4.3 Hz, 2H), 1.77 (s, 3H), 1.80-1.71 (m, 1H), 1.65 (ddd, J = 17.1, 8.9, 4.6 Hz, 2H), 1.57-1.46 (m, 5H), 1.50-1.32 (m, 4H), 1.30-1.14 (m, 2H), 0.80 (t, J = 7.3 Hz, 3H).	441.15	B	B
I-2998		1H NMR (400 MHz, DMSO-d6) 9.87 (s, 1H), 8.18 (d, J = 9.2 Hz, 1H), 7.80 (d, J = 6.9 Hz, 1H), 6.91 (d, J = 5.9 Hz, 1H), 5.26 (d, J = 9.2 Hz, 1H), 4.02 (h, J = 6.6 Hz, 1H), 2.87 (p, J = 7.9 Hz, 1H), 2.17 (s, 3H), 1.91 - 1.60 (m, 13H), 1.60 - 1.45 (m, 3H), 1.45 - 1.28 (m, 3H).	455.15	D	D

I-2999		1H NMR (400 MHz, DMSO-d6) 8.18 (d, J = 9.2 Hz, 1H), 7.79 (d, J = 6.9 Hz, 2H), 6.97 (s, 1H), 5.26 (d, J = 9.1 Hz, 1H), 4.01 (p, J = 6.5 Hz, 1H), 2.86 (p, J = 7.9 Hz, 1H), 1.86 (s, 3H), 1.90-1.68 (m, 3H), 1.77 (s, 3H), 1.71-1.62 (m, 3H), 1.61-1.47 (m, 3H), 1.45-1.36 (m, 1H), 1.35 (s, 3H).	475.15	C	
I-3000		1H NMR (400 MHz, DMSO-d6) 7.77 (dd, J = 8.3, 6.0 Hz, 2H), 6.52 (d, J = 1.7 Hz, 1H), 6.34 (d, J = 1.6 Hz, 1H), 6.16 (s, 2H), 4.52 (d, J = 9.7 Hz, 1H), 4.02 (q, J = 6.5 Hz,1H), 2.88 (q, J = 8.0 Hz, 1H), 1.92 - 1.79 (m, 3H), 1.77 (s, 3H), 1.71-1.61 (m, 7H), 1.61-1.51 (m, 7H), 1.38 (dt, J = 12.9, 7.0 Hz, 1H).	437.2	D	
I-3001				B	B
I-3002				D	

I-3003			E	
I-3004			C	
I-3005			A	A
I-3006			B	

I-3007			D	
I-3008			D	
I-3009			D	
I-3010			C	

I-3011			B	B
I-3012			D	
I-3013			B	B
I-3014			B	

I-3015			B	B
I-3016			D	
I-3017			B	
I-3018			C	

I-3019			C	
I-3020			D	
I-3021			B	
I-3022			B	

I-3023			D	
I-3024			C	
I-3025			B	B
I-3026			D	

I-3027			D	
I-3028			D	
I-3029			D	
I-3030		520	B	A

I-3031		582.05	C	
I-3032		503.05	D	
I-3033		520	B	

I-3034		520	C
I-3035		520	B
I-3036		582.05	D
			A

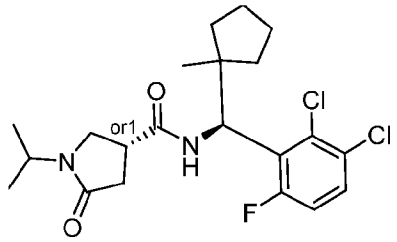
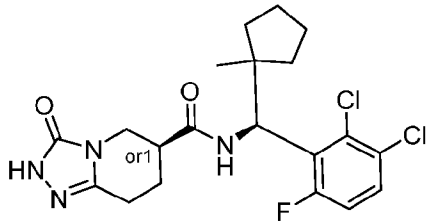
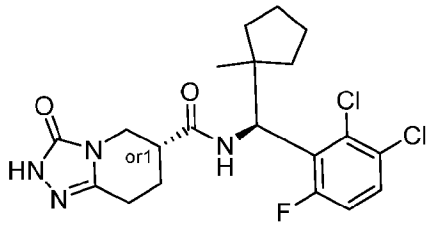
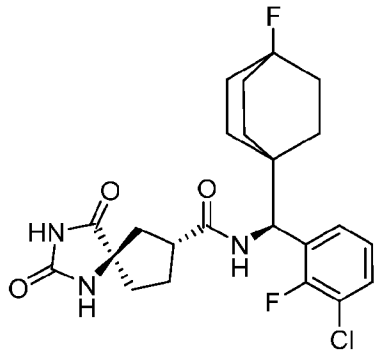
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I-3038		503.05	B	A
I-3039		528.1	B	

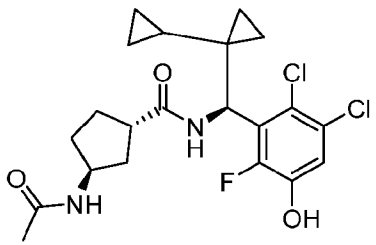
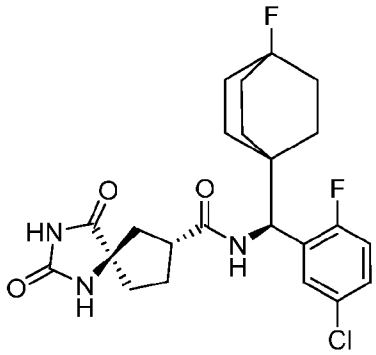
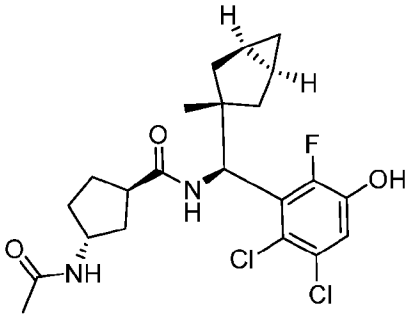
I-3040		528.1	B	A
I-3041		515.05	C	
I-3042		515.05	B	A

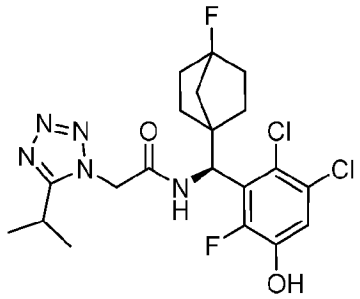
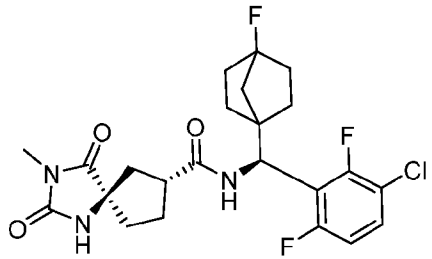
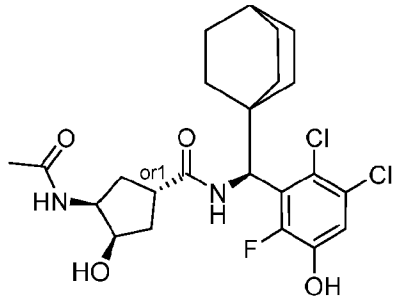
I-3043		515.05	C	
I-3044			D	
I-3045			B	
I-3046			C	

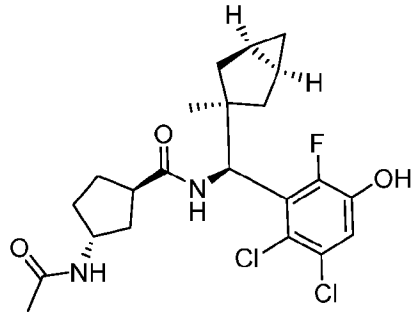
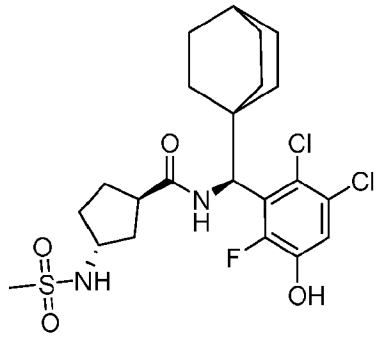
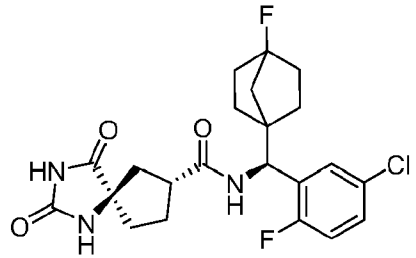
I-3047			D	
I-3048			B	
I-3049			C	
I-3050			A	A

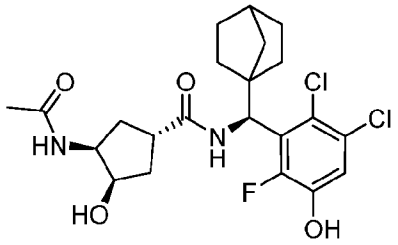
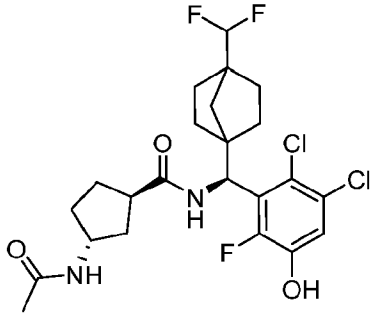
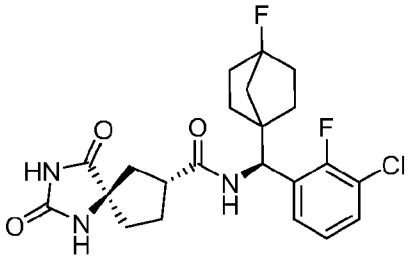
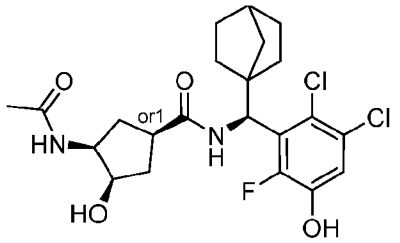
I-3051			A	A
I-3052			D	
I-3053			D	
I-3054			B	A

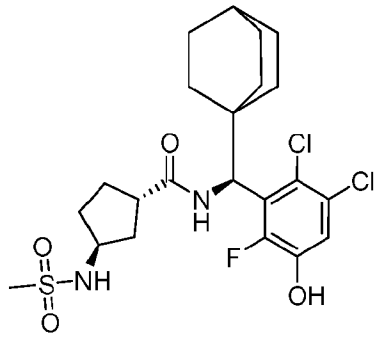
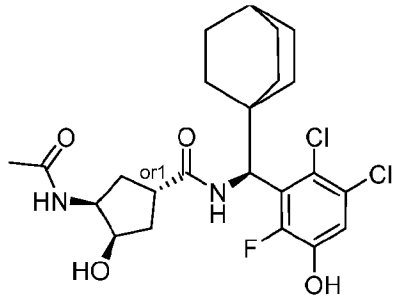
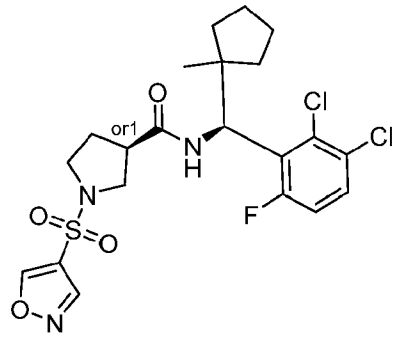
I-3055				D	
I-3056				B	
I-3057				D	
I-3058		1H NMR (400 MHz, DMSO-d6) 10.65 (s, 1H), 8.34 (d, J = 1.7 Hz, 1H), 8.30 (d, J = 9.2 Hz, 1H), 7.52 - 7.43 (m, 1H), 7.35 - 7.26 (m, 1H), 7.21 (t, J = 7.9 Hz, 1H), 5.02 (d, J = 9.1 Hz, 1H), 2.97 (p, J = 8.2 Hz, 1H), 2.11 (dd, J = 13.1, 10.2 Hz, 1H), 2.03 - 1.81 (m, 3H), 1.71 - 1.54 (m, 14H).	466.2	B	B

I-3059		1H NMR (400 MHz, DMSO-d6) 10.18 (s, 1H), 8.10 (d, J = 8.5 Hz, 1H), 7.75 (d, J = 7.0 Hz, 1H), 7.06 (d, J = 8.1 Hz, 1H), 5.62 (d, J = 8.4 Hz, 1H), 4.00 (dt, J = 13.3, 6.7 Hz, 1H), 2.93 (p, J = 7.9 Hz, 1H), 1.96-1.80 (m, 2H), 1.76 (s, 3H), 1.75-1.69 (m, 1H), 1.67-1.49 (m, 2H), 1.44-1.31 (m, 1H), 1.26-1.12 (m, 1H), 0.40 (d, J = 9.6 Hz, 1H), 0.29-0.12 (m, 5H), 0.05 C - 0.08 (m, 1II) ,-0.11 (dq, J = 9.9, 5.1, 4.7 IIz, 1II).	443.1	B	B
I-3060		1H NMR (400 MHz, DMSO-d6) 10.65 (s, 1H), 8.35 (s, 1H), 8.26 (d, J = 9.6 Hz, 1H), 7.48 (dd, J = 6.3, 2.7 Hz, 1H), 7.37 (ddd, J = 8.9, 4.4, 2.7 Hz, 1H), 7.22 (t, J = 9.2 Hz, 1H), 5.04 (d, J = 9.5 Hz, 1H), 2.96 (t, J = 9.1 Hz, 1H), 2.10 (dd, J = 13.1, 10.4 Hz, 1H), 1.97 (tt, J = 11.8, 5.0 Hz, 2H), 1.92 - 1.82 (m, 1H), 1.67 (dh, J = 13.9, 7.3, 6.3 Hz, 8H), 1.55 (d, J = 9.3 Hz, 6H).	466.15	B	B
I-3061		1H NMR (400 MHz, DMSO-d6) 7.90 (d, J = 8.9 Hz, 1H), 7.81 (d, J = 7.7 Hz, 1H), 7.08 (d, J = 8.1 Hz, 1H), 5.39 (d, J = 8.8 Hz, 1H), 4.04 - 3.86 (m, 1H), 2.84 (t, J = 8.0 Hz, 1H), 1.93 (dd, J = 12.9, 6.8 Hz, 1H), 1.73 (s, 6H), 1.58 (s, 1H), 1.51 (d, J = 12.0 Hz, 1H), 1.32 (dt, J = 18.4, 12.8 Hz, 6H), 1.06 (s, 3H), 0.90 - 0.80 (m, 1H), 0.08 (d, J = 4.1 Hz, 1H).	457.25	B	A

I-3062		1H NMR (400 MHz, DMSO-d6) 10.96 (s, 1H), 8.89 (d, J = 8.6 Hz, 1H), 7.10 (d, J = 8.1 Hz, 1H), 5.51 (d, J = 8.3 Hz, 1H), 5.36 (d, J = 16.7 Hz, 1H), 5.23 (d, J − 16.8 Hz, 1H), 3.12 (hept, J − 6.8 Hz, 1H), 1.91 (d, J = 11.9 Hz, 1H), 1.80 (d, J = 9.1 Hz, 1H), 1.75 - 1.70 (d, J = 12.6 Hz, 1H), 1.64 (s, 5H), 1.67 - 1.56 (m, 1H), 1.52 (q, J = 12.8, 10.6 Hz, 1H), 1.24 (d, J = 6.8 Hz, 3H), 1.17 (d, J = 6.8 Hz, 3H).	474.25	B	A
I-3063		1H NMR (400 MHz, DMSO-d6) 8.61 (s, 1H), 8.36 (d, J = 8.2 Hz, 1H), 7.58 (td, J = 8.7, 5.3 Hz, 1H), 7.16 (t, J = 9.1 Hz, 1H), 5.28 (d, J = 8.1 Hz, 1H), 3.11 - 2.95 (m, 1H), 2.82 (d, J = 4.5 Hz, 3H), 2.22 - 1.88 (m, 4H), 1.88 - 1.53 (m, 10H), 1.46 (d, J = 10.0 Hz, 2H).	484.2	B	A
I-3064		1H NMR (400 MHz, DMSO-d6) 7.94 (d, J = 8.6 Hz, 1H), 7.49 (d, J = 7.8 Hz, 1H), 7.08 (d, J = 8.0 Hz, 1H), 5.18 (d, J = 8.6 Hz, 1H), 4.76 (d, J = 3.5 Hz, 1H), 3.95 (s, 1H), 3.88 (dd, J = 10.9, 7.4 Hz, 1H), 3.13 - 3.08 (m, 1H), 1.79 (s, 6H), 1.69 - 1.55 (m, 4H), 1.53 - 1.32 (m, 15H), 1.25 (d, J = 8.6 Hz, 2H).	487.15	B	B

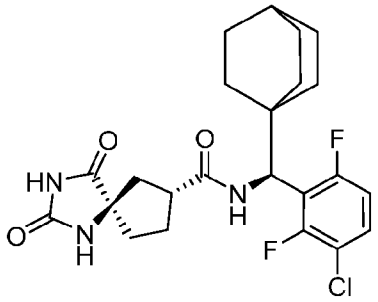
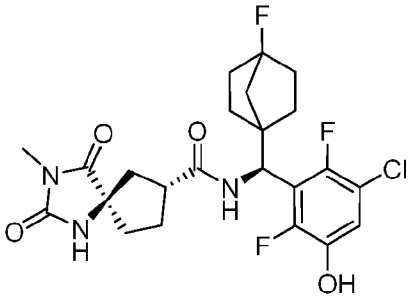
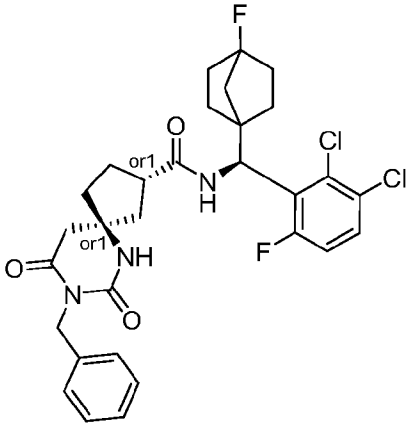
I-3065		1H NMR (400 MHz, DMSO-d6) 7.87 (d, J = 9.0 Hz, 1H), 7.75 (d, J = 6.9 Hz, 1H), 7.08 (d, J = 8.1 Hz, 1H), 5.37 (d, J = 8.8 Hz, 1H), 4.07 - 3.85 (m, 1H), 2.93 (q, J = 12.3, 9.9 Hz, 1H), 2.07 (s, 1H), 1.77 (s, 5H), 1.62 (dt, J = 13.6, 7.5 Hz, 2H), 1.55 - 1.41 (m, 2H), 1.35 (dd, J = 19.9, 8.7 Hz, 5H), 1.06 (s, 3H), 0.88 - 0.70 (m, 1H), 0.14 - 0.04 (m, 1H).	457.2	B	A
I-3066		1H NMR (400 MHz, DMSO-d6) 10.47 (s, 1H), 7.92 (d, J = 8.7 Hz, 1H), 7.08 (d, J = 8.1 Hz, 1H), 6.99 (d, J = 6.7 Hz, 1H), 5.20 (d, J = 8.6 Hz, 1H), 3.57 (s, 1H), 2.98 (q, J = 7.8 Hz, 1H), 2.88 (s, 3H), 1.93 (d, J = 6.4 Hz, 3H), 1.85 - 1.80 (m, 1H), 1.71 - 1.27 (m, 15H).	506.9	B	A
I-3067		1H NMR (400 MHz, DMSO-d6) 10.59 (s, 1H), 8.34 (t, J = 4.6 Hz, 2H), 7.49 (d, J = 6.3 Hz, 1H), 7.37 (d, J = 8.7 Hz, 1H), 7.24 (t, J = 9.2 Hz, 1H), 5.31 (d, J = 9.1 Hz, 1H), 2.98 (p, J = 8.0 Hz, 1H), 2.15 - 2.10 (m, 1H), 2.09 - 1.99 (m, 3H), 1.93 (d, J = 11.0 Hz, 8H), 1.81 - 1.61 (m, 1H), 1.58 (d, J = 8.6 Hz, 1H), 1.50 (d, J = 9.1 Hz, 2H).	452	A	A

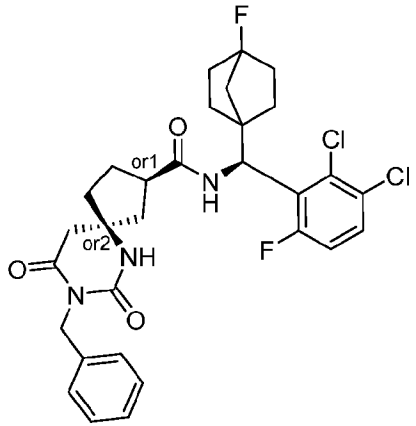
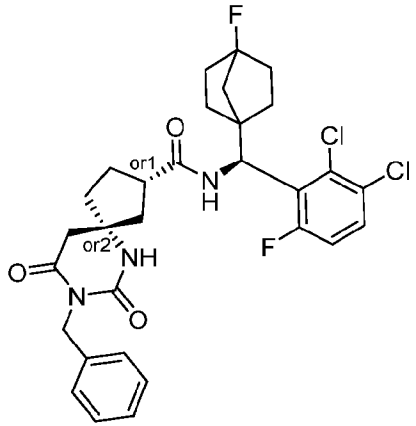
I-3068		1H NMR (400 MHz, DMSO-d6) 10.49 (s, 1H), 8.07 (d, J = 8.3 Hz, 1H), 7.48 (d, J = 7.5 Hz, 1H), 7.07 (d, J = 8.0 Hz, 1H), 5.59 (d, J = 8.3 Hz, 1H), 4.76 (d, J = 3.3 Hz, 1H), 3.93 (s, 2H), 3.13-3.05 (m, 1H), 2.13 (s, 1H), 1.81 (s, 3H), 1.73-1.57 (m, 5H), 1.52 (d, J = 17.8 Hz, 2H), 1.32 (d, J = 10.4 Hz, 2H), 1.21 (dd, J = 24.5, 9.1 Hz, 5H).	473.1	B	A
I-3069		1H NMR (400 MHz, DMSO-d6) 9.87 (s, 1H), 8.12 (d, J = 8.4 Hz, 1H), 7.77 (d, J = 6.9 Hz, 1H), 7.09 (d, J = 8.1 Hz, 1H), 6.11 (t, J = 56.8 Hz, 1H), 5.61 - 5.43 (m, 1H), 4.00 (q, J = 6.5 Hz, 1H), 2.92 (p, J = 7.9 Hz, 1H), 1.90 - 1.72 (m, 6H), 1.72 - 1.57 (m, 4H), 1.57 - 1.33 (m, 8H), 1.30 - 1.21 (m, 1H).	507.05	C	
I-3070		1H NMR (400 MHz, DMSO-d6) 10.65 (s, 1H), 8.42 - 8.33 (m, 2H), 7.53 - 7.44 (m, 1H), 7.37 - 7.28 (m, 1H), 7.23 (t, J = 7.9 Hz, 1H), 5.29 (d, J = 8.6 Hz, 1H), 2.99 (p, J = 8.0 Hz, 1H), 2.13 (dd, J = 13.1, 10.2 Hz, 1H), 2.04 - 1.85 (m, 3H), 1.77 (s, 3H), 1.75 - 1.62 (m, 5H), 1.65 - 1.52 (m, 2H), 1.34 (s, 2H).	452.2	A	A
I-3071		1H NMR (400 MHz, DMSO-d6) 10.50 (s, 1H), 8.06 (d, J = 8.3 Hz, 1H), 7.48 (d, J = 7.8 Hz, 1H), 7.08 (d, J = 8.1 Hz, 1H), 5.56 (d, J = 8.2 Hz, 1H), 4.76 (d, J = 3.5 Hz, 1H), 3.96 (q, J = 3.5 Hz, 1H), 3.92-3.82 (m, 1H), 3.09 (dt, J = 13.1, 6.2 Hz, 1H), 2.12 (s, 1H), 1.82-1.66 (m, 5H), 1.69-1.56 (m, 1H), 1.51 (d, J = 16.6 Hz, 3H), 1.37-1.27 (m, 2H), 1.27-1.13 (m, 6H).	473.05	B	B

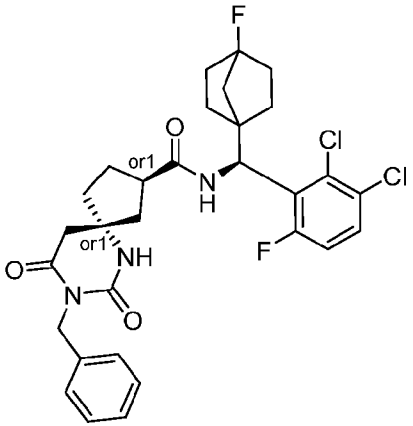
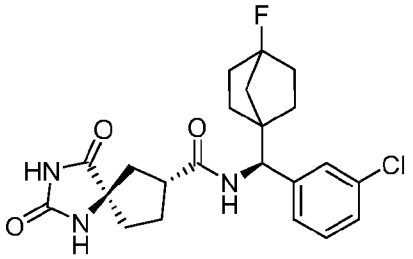
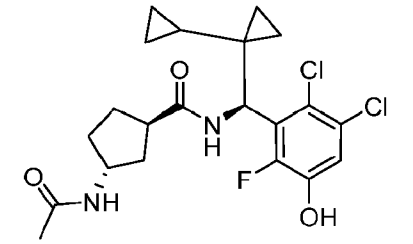
I-3072		1H NMR (400 MHz, DMSO-d6) 10.62 (s, 1H), 7.93 (d, J = 8.7 Hz, 1H), 7.06 (d, J = 8.0 Hz, 1H), 7.00 (d, J = 6.7 Hz, 1H), 5.20 (d, J = 8.7 Hz, 1H), 3.66 (p, J = 6.6 Hz, 1H), 3.01 - 2.92 (m, 1H), 2.85 (s, 3H), 1.90 (qd, J = 9.9, 9.1, 4.9 Hz, 2H), 1.79 (dt, J = 13.3, 6.9 Hz, 1H), 1.59 - 1.38 (m, 16H).	507.05	B	A
I-3073		1H NMR (400 MHz, DMSO-d6) 7.83 (d, J = 9.4 Hz, 1H), 6.78 (dd, J = 8.7, 3.6 Hz, 1H), 5.28 - 5.20 (m, 1H), 3.96 (t, J = 7.7 Hz, 2H), 3.19 - 2.99 (m, 1H), 1.84 (d, J = 20.4 Hz, 6H), 1.74 - 1.62 (m, 2H), 1.45 (dd, J = 28.4, 12.5 Hz, 15H).	487.1	B	A
I-3074			504.05	B	

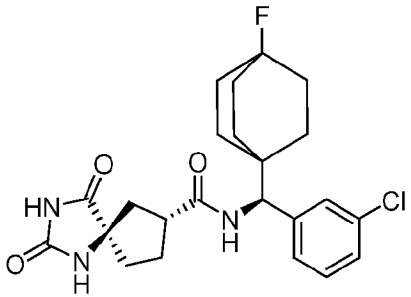
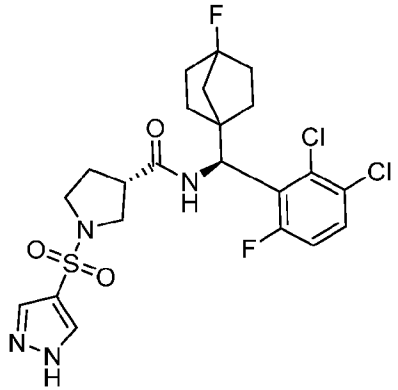
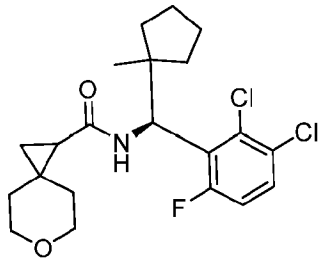
I-3075		520	B	
I-3076		504.05	B	D
I-3077		503.05	B	A

I-3078		503.1	C	
I-3079		520	A	A
I-3080		518.05	C	

I-3081		1H NMR (400 MHz, DMSO-d6) 10.62 (s, 1H), 8.28 (s, 1H), 8.13 (d, J = 8.6 Hz, 1H), 7.54 (td, J = 8.7, 5.4 Hz, 1H), 7.12 (s, 1H), 4.95 (d, J = 8.3 Hz, 1H), 3.04 (t, J = 8.5 Hz, 1H), 2.09 (t, J = 11.6 Hz, 1H), 1.96 - 1.84 (m, 3H), 1.64 (q, J = 7.2, 6.6 Hz, 2H), 1.53 - 1.42 (s, 13H).	466.1	A	A
I-3082		1H NMR (400 MHz, DMSO-d6) 10.09 (s, 1H), 8.59 (s, 1H), 8.27 (d, J = 8.4 Hz, 1H), 7.00 (t, J = 7.9 Hz, 1H), 5.27 (d, J = 8.3 Hz, 1H), 3.04 (t, J = 8.7 Hz, 1H), 2.83 (s, 3H), 2.19 - 2.05 (m, 1H), 2.05 - 1.88 (m, 3H), 1.72 (ddd, J = 33.0, 21.1, 11.3 Hz, 9H), 1.57 (d, J = 8.3 Hz, 1H), 1.45 (d, J = 10.7 Hz, 2H).	500.2	B	A
I-3083		1H NMR (400 MHz, DMSO-d6) 8.30 (d, J = 8.2 Hz, 1H), 8.08 (s, 1H), 7.63 (dd, J = 9.1, 5.1 Hz, 1H), 7.24 (ddd, J = 26.4, 11.0, 5.8 Hz, 6H), 5.54 (d, J = 8.3 Hz, 1H), 4.80 (s, 2H), 3.01 (s, 1H), 2.78 (d, J = 15.5 Hz, 1H), 2.67 (d, J = 16.0 Hz, 1H), 1.96 (dd, J = 12.7, 8.3 Hz, 1H), 1.79 (s, 6H), 1.72 (dd, J = 12.2, 8.0 Hz, 4H), 1.60 (s, 5H).	590.05	B	

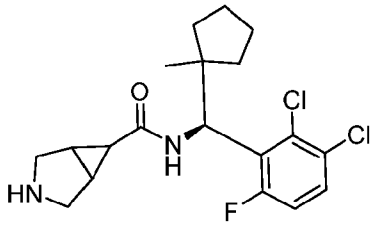
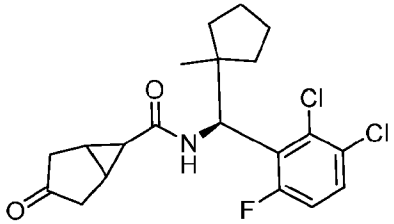
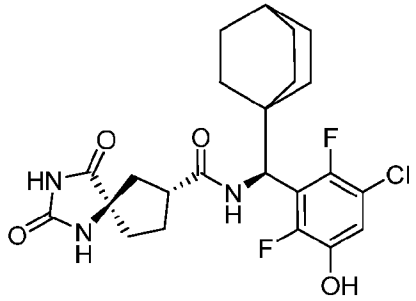
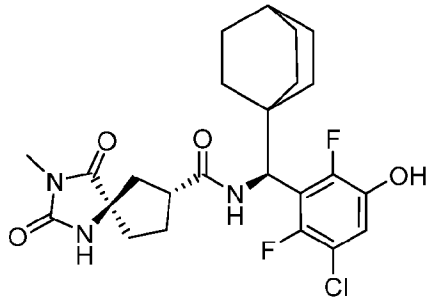
I-3084		1H NMR (400 MHz, DMSO-d6) 8.27 (d, J = 8.5 Hz, 1H), 8.15 (s, 1H), 7.68-7.58 (m, 1H), 7.33-7.27 (m, 2H), 7.31-7.23 (m, 3H), 7.21 (d, J = 8.1 Hz, 1H), 5.51 (d, J = 8.0 Hz, 1H), 4.87-4.77 (m, 2H), 3.05 (s, 1H), 2.76-2.69 (m, 2H), 1.93 (dd, J = 13.1, 9.1 Hz, 1H), 1.83 (s, 3H), 1.81 (d, J = 9.0 Hz, 1H), 1.71 (s, 5H), 1.70-1.62 (m, 2H), 1.61-1.55 (m, 3H), 1.16 (s, 1H).	590.15	C	
I-3085		1H NMR (400 MHz, DMSO-d6) 8.31 (d, J = 8.3 Hz, 1H), 8.05 (s, 1H), 7.64 (dd, J = 9.4, 5.0 Hz, 1H), 7.33-7.15 (m, 6H), 5.52 (d, J = 8.1 Hz, 1H), 4.79 (s, 2H), 3.01 (t, J = 8.3 Hz, 1H), 2.77 (d, J = 16.0 Hz, 1H), 2.65 (d, J = 16.4 Hz, 1H), 1.91 (s, 3H), 1.89-1.76 (m, 4H), 1.70 (d, J = 10.1 Hz, 4H), 1.65-1.51 (m, 5H).	590.05	B	B

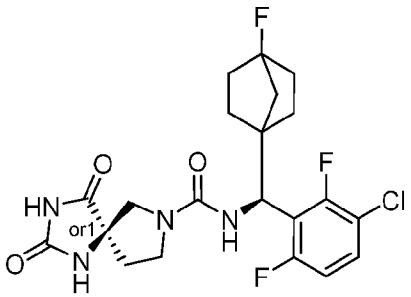
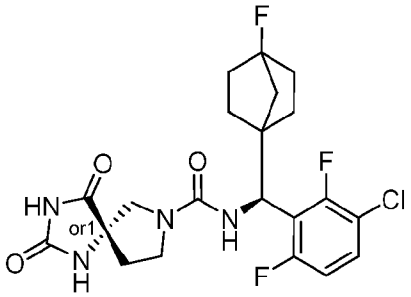
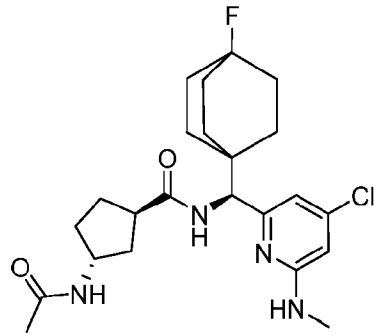
I-3086		1H NMR (400 MHz, DMSO-d6) 8.26 (d, J = 8.2 Hz, 1H), 8.14 (s, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.34-7.15 (m, 6H), 5.49 (d, J = 8.0 Hz, 1H), 4.78 (s, 2H), 3.05 (p, J = 8.1 Hz, 1H), 2.75-2.60 (m, 2H), 1.97 (dd, J = 12.4, 7.9 Hz, 1H), 1.90-1.76 (m, 4H), 1.71 (s, 5H), 1.69 (s, 1H), 1.67 (d, J = 7.3 Hz, 1H), 1.67-1.49 (m, 3H), 1.16 (s, 1H).	590.1	D	
I-3087		1H NMR (400 MHz, DMSO-d6) 10.64 (s, 1H), 8.36 - 8.29 (m, 2H), 7.37 (d, J = 1.8 Hz, 1H), 7.35 -7.28 (m, 2H), 7.22 (dt, J = 7.4, 1.6 Hz, 1H), 5.00 (d, J = 9.1 Hz, 1H), 3.03 - 2.95 (m, 1H), 2.13 (dd, J = 13.1, 10.4 Hz, 1H), 2.04 - 1.88 (m, 3H), 1.82 - 1.59 (m, 9H), 1.47 (d, J = 8.4 Hz, 1H), 1.25 (d, J = 8.9 Hz, 2H).	434.05	B	B
I-3088		1H NMR (400 MHz, DMSO-d6) 10.88 (s, 1H), 8.12 (d, J = 8.5 Hz, 1H), 7.78 (d, J = 7.0 Hz, 1H), 7.04 (d, J = 8.0 Hz, 1H), 5.62 (d, J = 8.4 Hz, 1H), 4.01 (p, J = 6.7 Hz, 1H), 2.93 (p, J = 7.9 Hz, 1H), 1.91-1.73 (m, 3H), 1.77 (s, 3H), 1.62 (ddd, J = 13.5, 8.7, 5.4 Hz, 1H), 1.51 (dq, J = 12.5, 8.6, 7.8 Hz, 1H), 1.36 (dt, J = 13.0, 7.0 Hz, 1H), 1.26-1.12 (m, 1H), 0.40 (d, J = 9.2 Hz, 1H), 0.21 (tt, J = 14.3, 7.2 Hz, 3H), 0.14 (s, 2H), -0.10 (s, 2H).	443.2	B	B

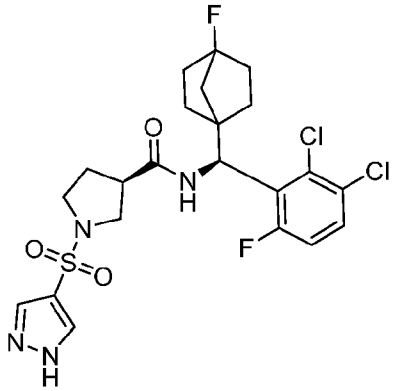
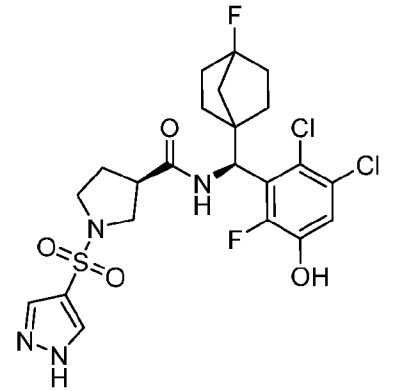
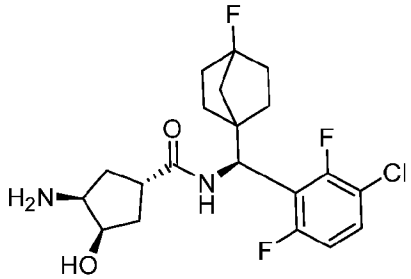
I-3089		1H NMR (400 MHz, DMSO-d6) 10.65 (s, 1H), 8.34 (d, J = 1.7 Hz, 1H), 8.24 (d, J = 9.6 Hz, 1H), 7.42 - 7.28 (m, 3H), 7.19 (dt, J = 7.1, 1.7 Hz, 1H), 4.69 (d, J = 9.5 Hz, 1H), 3.04 - 2.91 (m, 1H), 2.11 (dd, J = 13.0, 10.4 Hz, 1H), 2.03 - 1.79 (m, 3H), 1.74 - 1.43 (m, 14H).	448.1	B	
I-3090		1H NMR (400 MHz, DMSO-d6) 13.63 (s, 1H), 8.32 (d, J = 8.3 Hz, 1H), 8.11 (s, 2H), 7.63 (dd, J = 8.9, 5.1 Hz, 1H), 7.28 (dt, J = 9.8, 7.8 Hz, 1H), 5.48 (d, J = 8.3 Hz, 1H), 3.29 (d, J = 7.7 Hz, 1H), 3.22 - 2.88 (m, 3H), 2.07 (s, 1H), 2.03 - 1.90 (m, 1H), 1.83 - 1.62 (q, J = 7.8, 5.9 Hz, 7H), 1.57 (d, J = 8.4 Hz, 4H).	533.15	A	A
I-3091				D	

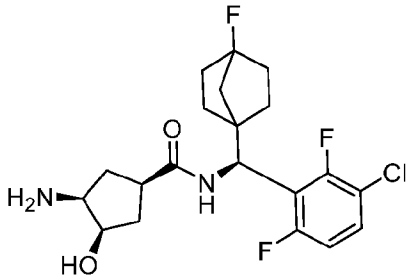
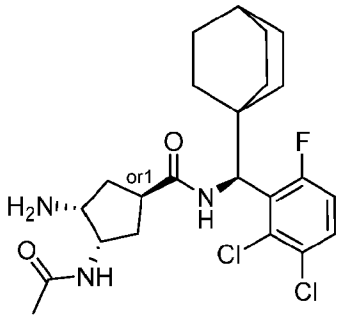
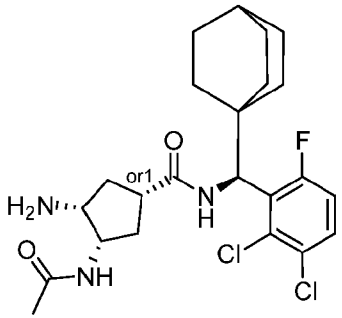
I-3092			C	
I-3093			D	
I-3094			D	
I-3095			D	

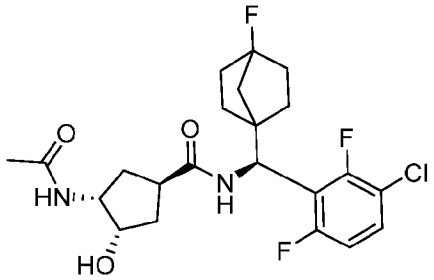
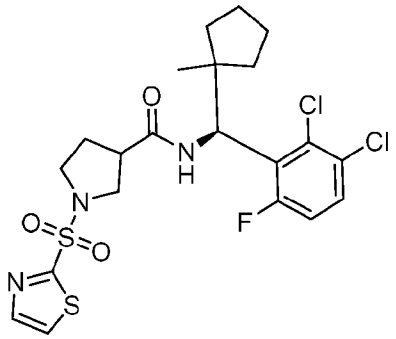
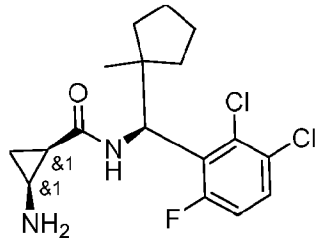
I-3096			A	B
I-3097			D	
I-3098			C	
I-3099			B	B

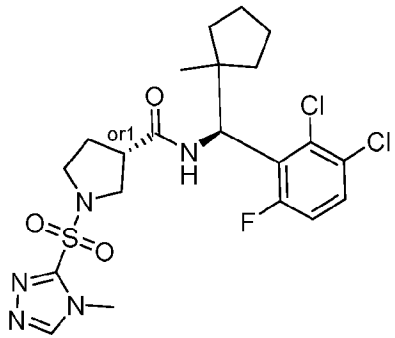
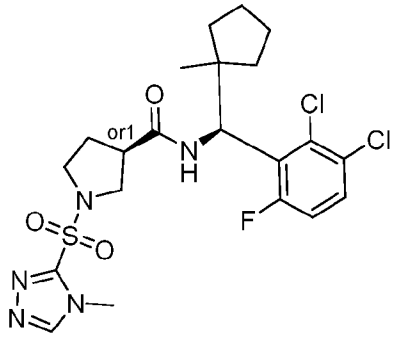
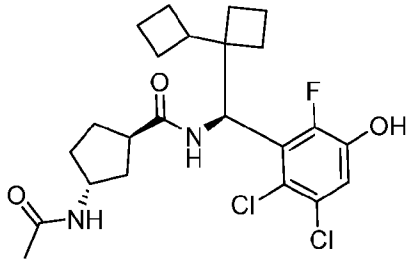
I-3100				B	
I-3101				D	
I-3102		1H NMR (400 MHz, DMSO-d6) 10.29 (s, 2H), 8.28 (s, 1H), 8.06 (s, 1H), 6.98 (dd, J = 8.6, 7.2 Hz, 1H), 4.94 (d, J = 11.9 Hz, 1H), 3.03 (p, J = 8.3 Hz, 1H), 2.14 - 1.81 (m, 4H), 1.65 (dq, J = 17.9, 6.1 Hz, 2H), 1.44 (dd, J = 31.5, 10.4 Hz, 13H).	482.15	A	A
I-3103		1H NMR (400 MHz, DMSO-d6) 8.56 (s, 1H), 8.07 (s, 1H), 6.97 (t, J = 7.8 Hz, 1H), 4.94 (d, J = 13.6 Hz, 1H), 3.05 (q, J = 8.4 Hz, 1H), 2.83 (s, 3H), 2.16 - 2.05 (m, 1H), 2.04 - 1.81 (m, 3H), 1.77 - 1.58 (m, 2H), 1.44 (dd, J = 31.3, 10.6 Hz, 13H).	496.15	B	A

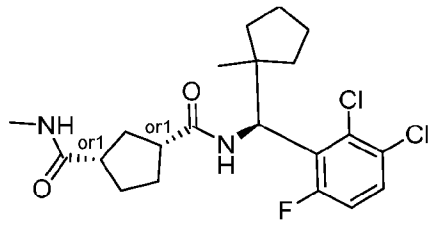
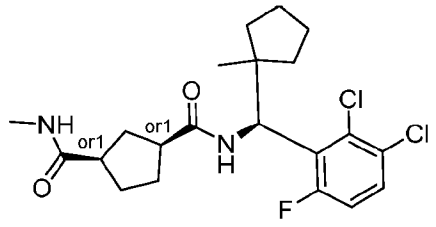
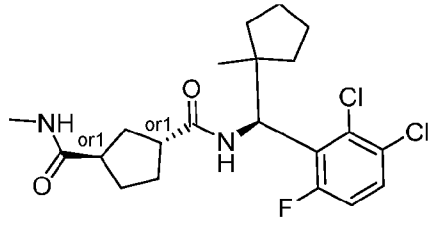
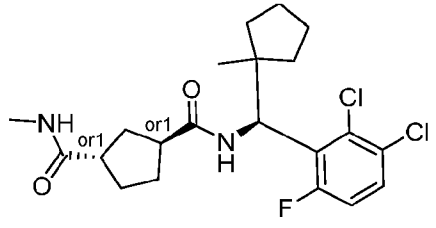
I-3104		1H NMR (400 MHz, DMSO-d6) 10.84 (s, 1H), 8.47 (s, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.20 - 7.11 (m, 1H), 5.89 (d, J = 8.9 Hz, 1H), 5.27 (d, J = 8.9 Hz, 1H), 3.68 - 3.54 (m, 1H), 3.50 (s, 2H), 3.48 - 3.34 (m, 1H), 2.18 (dt, J = 12.7, 8.4 Hz, 1H), 1.97 (ddd, J = 12.2, 7.0, 4.2 Hz, 1H), 1.77 (ddt, J = 32.5, 28.0, 7.4 Hz, 7H), 1.60 (d, J = 8.5 Hz, 1H), 1.46 (q, J = 11.4, 9.9 Hz, 2H).	471.2	D	
I-3105		1H NMR (400 MHz, DMSO-d6) 10.84 (s, 1H), 8.47 (s, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.20 - 7.11 (m, 1H), 5.89 (d, J = 8.9 Hz, 1H), 5.27 (d, J = 8.9 Hz, 1H), 3.68 - 3.54 (m, 1H), 3.50 (s, 2H), 3.48 - 3.34 (m, 1H), 2.18 (dt, J = 12.7, 8.4 Hz, 1H), 1.97 (ddd, J = 12.2, 7.0, 4.2 Hz, 1H), 1.77 (ddt, J = 32.5, 28.0, 7.4 Hz, 7H), 1.60 (d, J = 8.5 Hz, 1H), 1.46 (q, J = 11.4, 9.9 Hz, 2H).	471.2	D	
I-3106		1H NMR (400 MHz, Chloroform-d) 7.13 (d, J = 9.0 Hz, 1H), 6.41 (dd, J = 27.1, 1.6 Hz, 2H), 6.13 (d, J = 29.8 Hz, 1H), 5.69 (d, J = 6.5 Hz, 1H), 4.67 (d, J = 9.0 Hz, 1H), 4.32 (h, J = 6.7 Hz, 1H), 2.84 (m, 4H), 2.24 - 2.06 (m, 2H), 1.97 (m, 6H), 1.89 (ddd, J = 12.7, 8.5, 4.4 Hz, 6H), 1.64 (q, J = 7.2, 6.5 Hz, 6H), 1.48 (dtd, J = 13.6, 8.0, 5.6 Hz, 1H).	451.2	E	

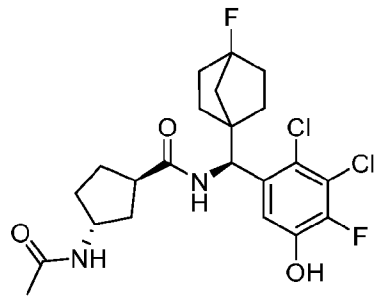
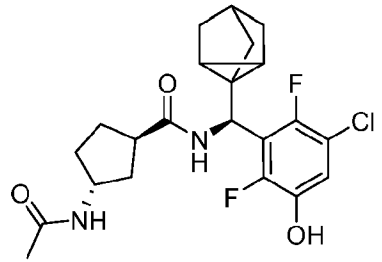
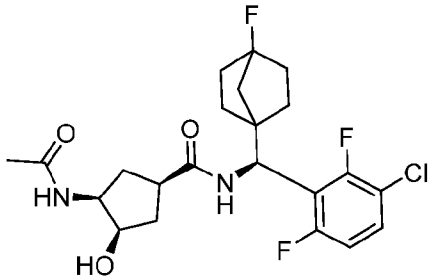
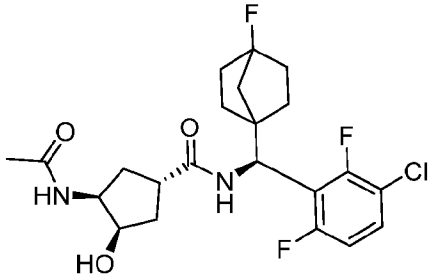
I-3107		1H NMR (400 MHz, DMSO-d6) 13.73 (s, 1H), 8.42 (s, 1H), 8.34 (d, J = 8.2 Hz, 1H), 7.88 (s, 1H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dt, J = 10.6, 7.3 Hz, 1H), 5.45 (d, J = 8.2 Hz, 1H), 3.15 (ddd, J = 9.8, 8.2, 4.5 Hz, 1H), 3.04 (ddt, J = 20.5, 13.3, 7.6 Hz, 4H), 1.91 - 1.67 (m, 8H), 1.67 -1.49 (t, J = 9.4 Hz, 4H).	533.1	B	B
I-3108		1H NMR (400 MHz, DMSO-d6) 8.27 (d, J = 8.4 Hz, 1H), 8.15 (s, 2H), 7.06 (d, J = 8.1 Hz, 1H), 5.42 (d, J = 8.3 Hz, 1H), 3.38 (d, J = 1.8 Hz, 1H), 3.16 (ddd, J = 9.8, 8.2, 4.5 Hz, 1H), 3.11 - 3.03 (m, 1H), 3.02 (t, J = 4.9 Hz, 1H), 3.03 - 2.94 (m, 1H), 1.90 - 1.66 (m, 5H), 1.71 (s, 4H), 1.69 - 1.53 (m, 2H), 1.49 (d, J = 10.9 Hz, 1H)	549.15	B	B
I-3109		1H NMR (400 MHz, DMSO-d6) 8.16 (d, J = 8.2 Hz, 1H), 7.61-7.50 (m, 1H), 7.14 (t, J = 9.3 Hz, 1H), 5.25 (d, J = 8.1 Hz, 1H), 3.76 (s, 1H), 3.07 (d, J = 4.6 Hz,2H), 1.76 (dd, J = 21.4, 10.3 Hz, 7H), 1.68 (s, 2H), 1.62-1.50 (m, 3H), 1.44 (s, 2H).	417.1	C	

I-3110		1H NMR (400 MHz, DMSO-d6) 8.16 (d, J = 8.3 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.14 (t, J = 9.4 Hz, 1H), 5.24 (d, J = 8.1 Hz, 1H), 3.79 (q, J = 4.2 Hz, 1H), 3.04 (qd, J = 8.5, 7.5, 5.1 Hz, 2H), 1.82-1.67 (m, 9H), 1.63-1.53 (m, 2H), 1.53-1.39 (m, 3H).	417.1	B	C
I-3111		1H NMR (400 MHz, DMSO-d6) 7.97 (d, J = 8.6 Hz, 1H), 7.63-7.53 (m, 2H), 7.23 (dt, J = 10.7, 6.8 Hz, 1H), 5.22 (d, J = 8.4 Hz, 1H), 3.87 (dd, J = 7.5, 5.2 Hz, 1H), 3.25 (dd, J = 12.7, 7.5 Hz, 1H), 3.07 (s, 1H), 2.53 (s, 3H), 1.82 (d, J = 5.8 Hz, 4H), 1.77-1.55 (m, 2H), 1.50 (d, J = 8.0 Hz, 9H), 1.47-1.36 (m, 4H).	470.15	B	B
I-3112		1H NMR (400 MHz, DMSO-d6)7.97 (d, J = 8.5 Hz, 1H), 7.66-7.47 (m, 2H), 7.32-7.18 (m, 1H), 5.23 (d, J = 8.5 Hz, 1H), 3.90 (dd, J = 7.6, 5.1 Hz, 1H), 3.29-2.99 (m, 2H), 1.81 (d, J = 13.8 Hz, 5H), 1.61-1.50 (m, 4H), 1.44 (d, J = 10.2 Hz, 12H).	470.15	B	B

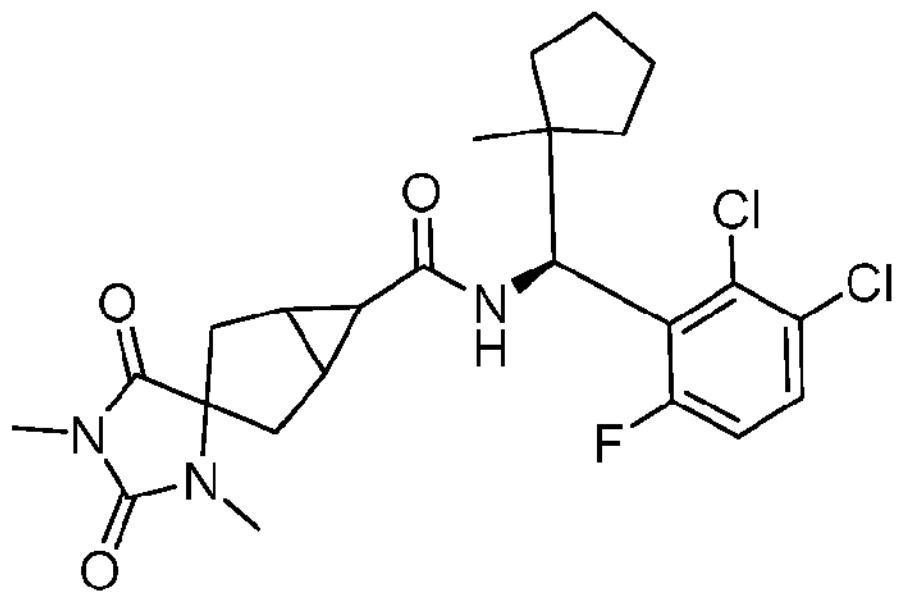
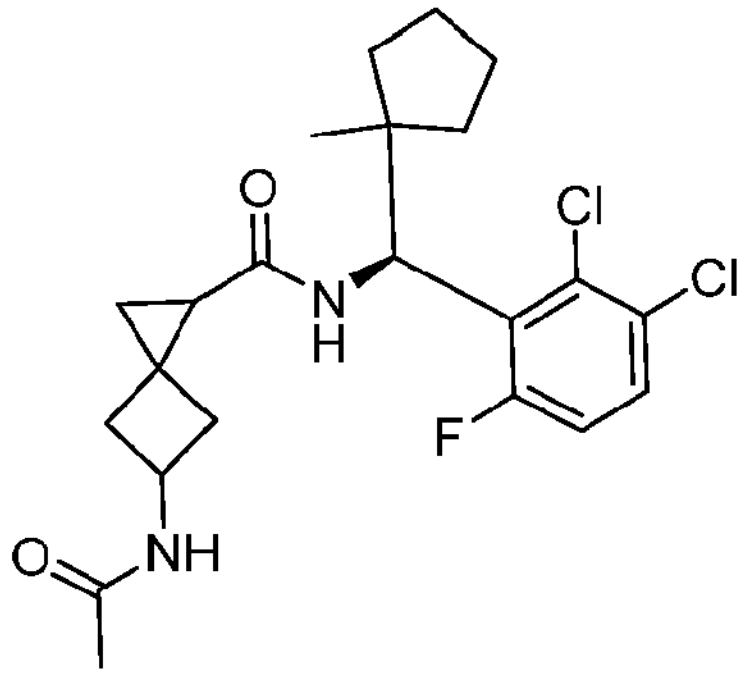
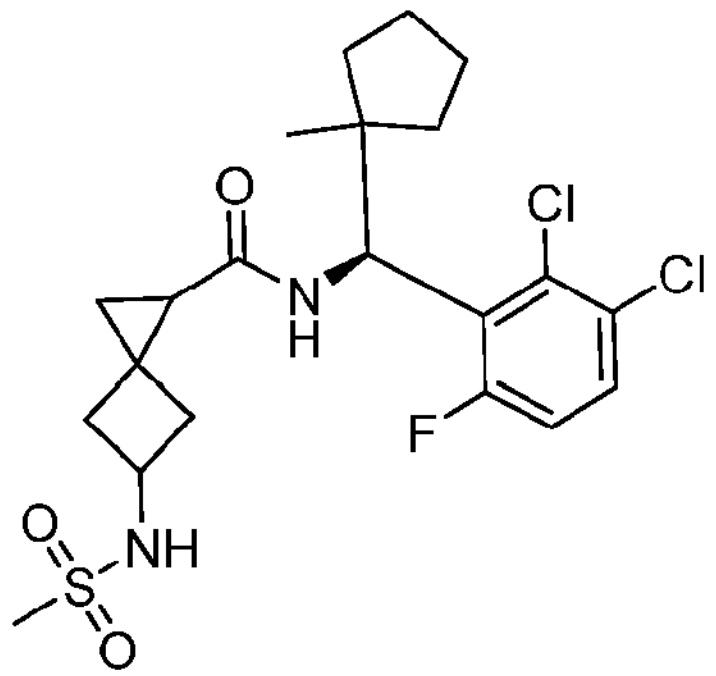
I-3113		1H NMR (300 MHz, DMSO-d6) 8.23 (d, J = 8.2 Hz, 1H), 7.55 (ddd, J = 21.9, 11.0, 6.6 Hz, 2H), 7.20-7.09 (m, 1H), 5.25 (d, J = 8.1 Hz, 1H), 4.79 (d, J = 3.5 Hz, 1H), 3.97 (p, J = 3.4 Hz, 1H), 3.88 (qd, J = 8.6, 3.7 Hz, 1H), 3.09 (dh, J = 8.3, 4.5 Hz, 1H), 2.01-1.56 (m, 15H), 1.46 (d, J = 8.2 Hz, 2H).	459.15	D	
I-3114				B	B
I-3115				D	

I-3116			518.05	B	B
I-3117			518.05	C	
I-3118		1H NMR (400 MHz, DMSO-d6) 10.06 (s, 1H), 7.92 (d, J = 9.0 Hz, 1H), 7.77 (d, J = 6.9 Hz, 1H), 7.09 (d, J = 8.3 Hz, 1H), 5.31 (d, J = 8.8 Hz, 1H), 4.01 (h, J = 6.6 Hz, 1H), 2.96 (p, J = 7.8 Hz, 1H), 2.06 (ddd, J = 12.1, 10.0, 7.2 Hz, 1H), 2.01 - 1.86 (m, 4H), 1.86 - 1.74 (m, 8H), 1.73 (d, J = 3.4 Hz, 1H), 1.70 - 1.59 (m, 3H), 1.59 - 1.44 (m, 4H), 1.42 - 1.29 (m, 1H).	471.1	C	

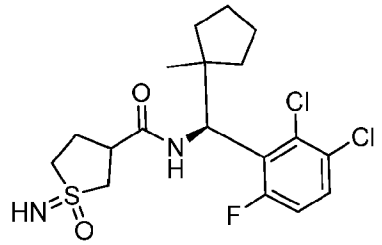
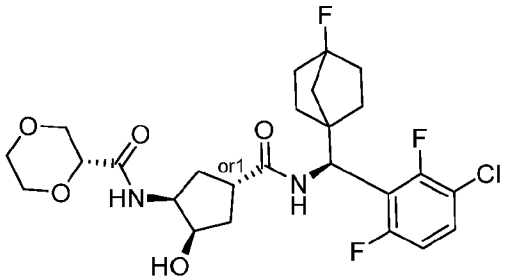
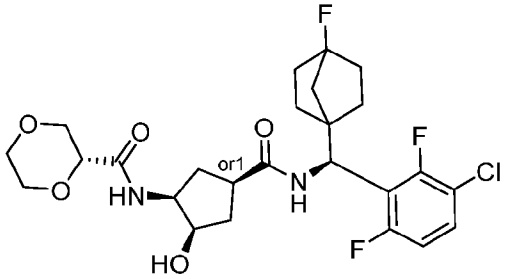
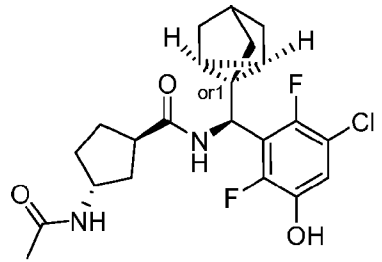
I-3119		1H NMR (400 MHz, DMSO-d6) 8.14 (d, J = 8.7 Hz, 1H), 7.73 (q, J = 4.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.51 (d, J = 8.6 Hz, 1H), 2.87 - 2.77 (m, 1H), 2.57 (d, J = 4.6 Hz, 4H), 1.96 (dt, J = 12.3, 7.5 Hz, 1H), 1.76 (dt, J = 12.5, 9.8 Hz, 1H), 1.69 (dd, J = 8.8, 4.2 Hz, 2H), 1.64 (dd, J = 14.4, 5.6 Hz, 2H), 1.59 (d, J = 3.9 Hz, 5H), 1.56 (d, J = 7.1 Hz, 1H), 1.41 - 1.33 (m, 1H), 1.26 (q, J = 7.8, 7.3 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H).	429.15	B	B
I-3120		1H NMR (400 MHz, DMSO-d6) 8.11 (d, J = 8.6 Hz, 1H), 7.71 (q, J = 4.5 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 5.50 (d, J = 8.5 Hz, 1H), 2.82 (dq, J = 16.0, 8.4, 7.8 Hz, 1H), 2.54 (d, J = 4.6 Hz, 4H), 1.86 (dt, J = 12.3, 7.6 Hz, 1H), 1.72 (dtd, J = 11.0, 6.9, 3.2 Hz, 4H), 1.70 - 1.46 (m, 7H), 1.38 (d, J = 8.7 Hz, 1H), 1.31 - 1.21 (m, 1H), 0.97 (d, J = 2.8 Hz, 3H).	429.15	B	B
I-3121		1H NMR (400 MHz, DMSO-d6) 8.10 (d, J = 8.6 Hz, 1H), 7.71 (q, J = 4.6 Hz, 1H), 7.60 (dd, J = 8.9, 5.1 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.47 (d, J = 8.5 Hz, 1H), 3.02 - 2.90 (m, 1H), 2.69 - 2.59 (m, 1H), 2.55 (d, J = 4.5 Hz, 3H), 1.91 - 1.68 (m, 4H), 1.65 - 1.51 (m, 7H), 1.49 - 1.33 (m, 2H), 1.30 - 1.21 (m, 1H), 0.96 (d, J = 2.8 Hz, 3H).	429.15	B	B
I-3122		1H NMR (400 MHz, DMSO-d6) 8.11 (d, J = 8.6 Hz, 1H), 7.68 (q, J = 4.4 Hz, 1H), 7.60 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.7, 9.0 Hz, 1H), 5.48 (d, J = 8.5 Hz, 1H), 2.97 (q, J = 7.8 Hz, 1H), 2.59 (q, J = 7.9 Hz, 1H), 2.53 (d, J = 4.6 Hz, 3H), 1.93 - 1.70 (m, 3H), 1.68 - 1.46 (m, 9H), 1.37 (s, 1H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	429.15	B	

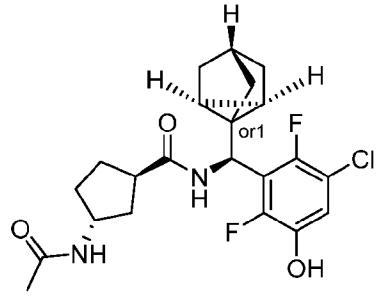
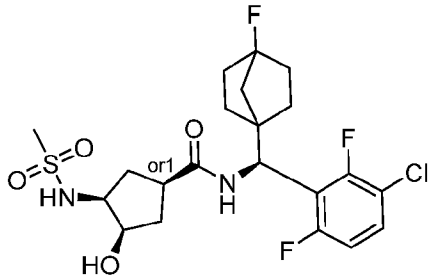
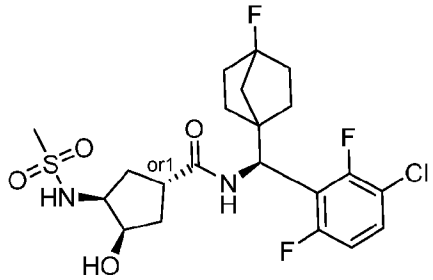
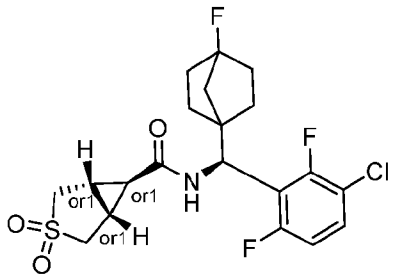
I-3123		1H NMR (400 MHz, DMSO-d6) 8.19 (s, 1H), 7.90 - 7.83 (m, 1H), 6.42 - 6.34 (m, 1H), 5.33 (dd, J = 9.3, 1.4 Hz, 1H), 4.01 (h, J = 6.7 Hz, 1H), 2.90 (p, J = 7.9 Hz, 1H), 1.89 - 1.70 (m, 3H), 1.76 (s, 3H), 1.67 (s, 6H), 1.68 - 1.56 (m, 2H), 1.58 - 1.50 (m, 2H), 1.53 - 1.32 (m, 3H).	475.25	B	A
I-3124		1H NMR (400 MHz, DMSO-d6) 8.16 (d, J = 7.9 Hz, 1H), 7.78 (d, J = 6.9 Hz, 1H), 6.93 (t, J = 8.0 Hz, 1H), 5.28 (d, J = 7.7 Hz, 1H), 4.00 (dt, J = 12.9, 6.5 Hz, 1H), 2.90 (t, J = 7.9 Hz, 1H), 1.95 (s, 1H), 1.86 (t, J = 6.6 Hz, 2H), 1.85 - 1.74 (m, 3H), 1.59 (ddd, J = 13.5, 8.7, 5.3 Hz, 1H), 1.48 - 1.31 (m, 5H), 1.18 (ddd, J = 23.5, 14.8, 7.8 Hz, 4H), 1.10 - 1.03 (m, 2H).	439.15	B	A
I-3125		1H NMR (400 MHz, DMSO-d6) 8.22 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.49 (d, J = 7.8 Hz, 1H), 7.19-7.10 (m, 1H), 5.25 (d, J = 8.1 Hz, 1H), 4.78 (d, J = 3.6 Hz, 1H), 3.96 (p, J = 3.4 Hz, 1H), 3.95-3.81 (m, 1H), 3.08 (dt, J = 13.3, 6.6 Hz, 1H), 1.79 (s, 3H), 1.84-1.66 (m, 10H), 1.66-1.55 (m, 2H), 1.45 (d, J = 9.5 Hz, 2H).	459.15	B	B
I-3126		1H NMR (400 MHz, DMSO-d6) 8.21 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.49 (d, J = 7.5 Hz, 1H), 7.14 (t, J = 9.5 Hz, 1H), 5.27 (d, J = 8.1 Hz, 1H), 4.77 (d, J = 3.4 Hz, 1H), 3.91 (q, J = 8.5, 7.1 Hz, 2H), 3.09 (dd, J = 9.8, 4.4 Hz, 1H), 1.81 (s, 3H), 1.89-1.67 (m, 10H), 1.62 (dd, J = 15.7, 6.6 Hz, 2H), 1.45 (d, J = 9.5 Hz, 2H).	459.1	B	A

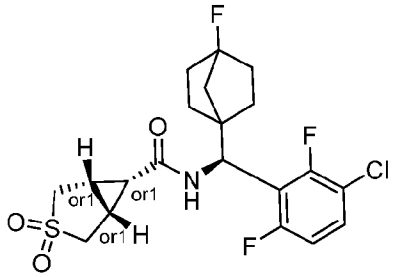
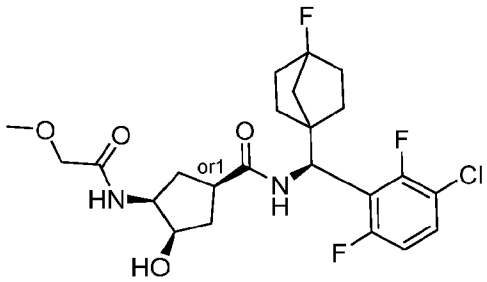
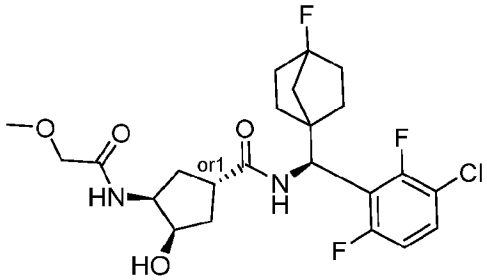
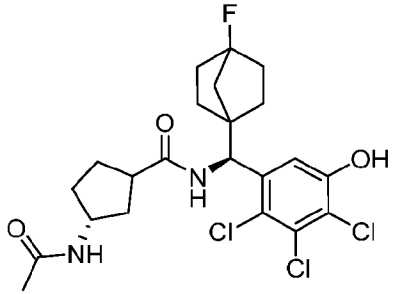
I-3127			C	
I-3128			D	
I-3129			B	B
I-3130			B	B

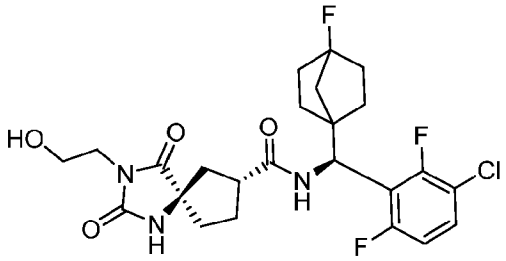
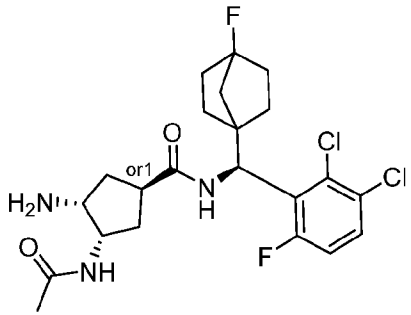
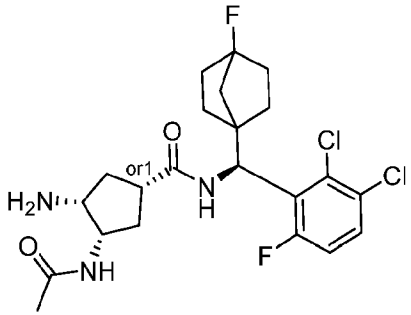
I-3131				B	B
I-3132				C	
I-3133				D	

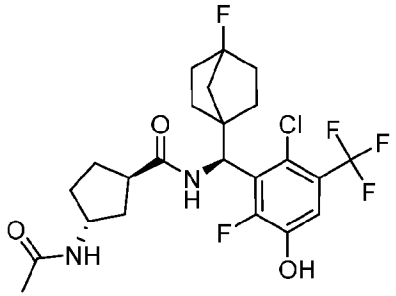
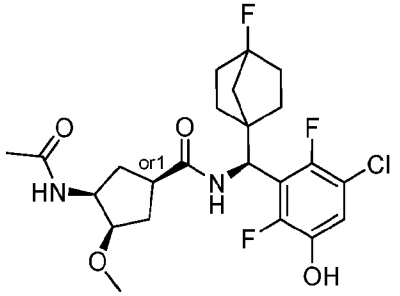
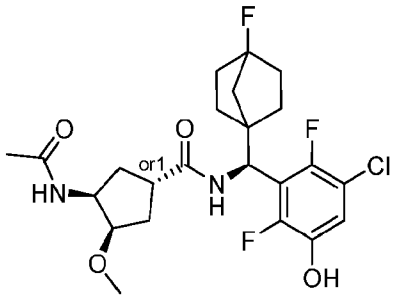
I-3134				D
I-3135		517.05	A	A
I-3136		517.1	C	

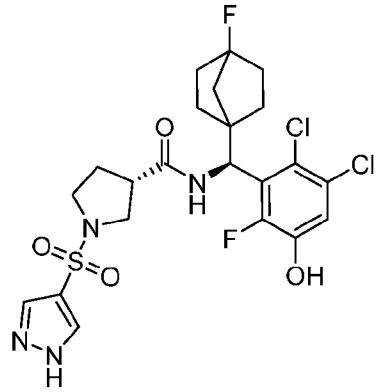
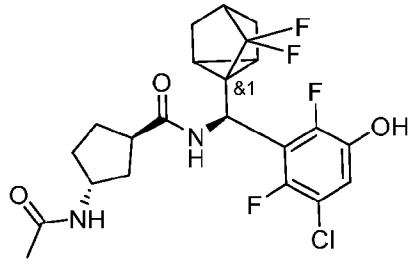
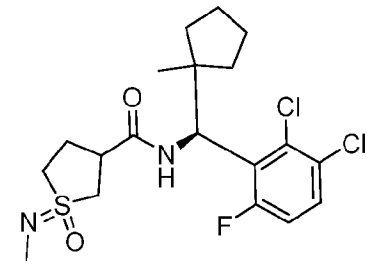
I-3137				B	
I-3138		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.2 Hz, 1H), 7.56 (d, J = 6.7 Hz, 1H), 7.31 - 6.96 (m, 2H), 5.22 (dd, J = 34.1, 5.9 Hz, 2H), 4.13 - 3.76 (m, 5H), 3.65 (t, J = 11.2 Hz, 2H), 3.53 - 3.42 (m, 1H),3.41 - 3.35 (m, 1H), 3.19 - 3.02 (m, 1H), 1.92 (s, 1H), 1.86 - 1.54 (m,11H), 1.54 - 1.37 (m, 2H).	531.35	B	B
I-3139		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.2 Hz, 1H), 7.56 (d, J = 6.7 Hz, 1H), 7.31 - 6.96 (m, 2H), 5.22 (dd, J = 34.1, 5.9 Hz, 2H), 4.13 - 3.76 (m, 5H), 3.65 (t, J = 11.2 Hz, 2H), 3.53 - 3.42 (m, 1H),3.41 - 3.35 (m, 1H), 3.19 - 3.02 (m, 1H), 1.86 - 1.75 (m,5H), 1.75 - 1.67 (m,5H),1.67 - 1.55 (m, 2H),1.52 - 1.35 (m, 2H).	531.3	B	B
I-3140		1H NMR (400 MHz, DMSO-d6) 10.22 (s, 1H), 8.20 (d, J = 7.7 Hz, 1H), 7.77 (d, J = 6.9 Hz, 1H), 6.97 (dd, J = 8.6, 7.2 Hz, 1H), 5.27 (d, J = 7.7 Hz, 1H), 3.98 (q, J = 6.5 Hz, 1H), 2.96 - 2.83 (m, 1H), 1.96 (s, 1H), 1.86 (qd, J = 7.9, 3.6 Hz, 2H), 1.76 (s, 3H), 1.74 - 1.51 (m, 3H), 1.37 (dd, J = 17.0, 8.5 Hz, 3H), 1.27 - 1.10 (m, 4H), 1.10 - 1.02 (m, 2H).	439.15	E	

I-3141		1H NMR (400 MHz, DMSO-d6) 10.18 (s, 1H), 8.19 (d, J = 7.8 Hz, 1H), 7.78 (d, J = 6.9 Hz, 1H), 6.96 (dd, J = 8.6, 7.2 Hz, 1H), 5.27 (d, J = 7.7 Hz, 1H), 4.00 (p, J = 6.4 Hz, 1H), 2.96 - 2.84 (m, 1H), 1.96 (s, 1H), 1.92 - 1.77 (m, 3H), 1.77 (s, 3H), 1.59 (ddd, J = 12.9, 8.8, 5.5 Hz, 1H), 1.53 - 1.39 (m, 1H), 1.35 (d, J = 10.0 Hz, 3H), 1.27 - 0.96 (m, 6H).	439.15	A	A
I-3142		1H NMR (400 MHz, Chloroform-d) 7.32 (td, J = 8.6, 5.6 Hz, 1H), 6.88 (t, J = 8.9 Hz, 1H), 6.32 (d, J = 9.9 Hz, 1H), 5.64 (d, J = 9.9 Hz, 1H), 4.82 (d, J = 7.8 Hz, 1H), 4.52 - 4.29 (m, 1H), 3.86 (dd, J = 8.2, 4.2 Hz, 1H), 2.98 (s, 4H), 2.39 (s, 2H), 2.20 (ddd, J = 13.1, 8.2, 4.7 Hz, 3H), 2.14 - 2.02 (m, 2H), 1.87 (dt, J = 13.7, 9.8 Hz,3H), 1.77 (t, J = 9.5 Hz, 2H), 1.64 (q, J = 9.0 Hz, 2H), 1.56 - 1.38 (m, 1H).	495.15	B	B
I-3143		1H NMR (400 MHz, Chloroform-d) 7.32 (q, J = 7.9 Hz, 1H), 6.88 (t, J = 9.4 Hz, 1H), 6.30 (d, J = 9.9 Hz, 1H), 5.63 (d, J = 9.9 Hz, 1H), 4.86 (d, J = 7.8 Hz, 1H), 4.33 (s, 1H), 3.86 (d, J = 7.5 Hz, 1H), 3.01 (d, J = 1.6 Hz, 4H), 2.30 (d, J = 13.0 Hz, 2H), 2.00 (d, J = 9.3 Hz, 3H), 1.94 - 1.82 (m, 3H), 1.77 (t, J = 10.4 Hz, 3H), 1.64 (q, J = 12.3, 10.7 Hz, 2H), 1.53 (s, 1H), 1.44 (s, 1H).	495.2	B	B
I-3144		1H NMR (400 MHz, DMSO-d6) 8.75 (d, J = 8.3 Hz, 1H), 7.58 (td, J = 8.7, 5.4 Hz, 1H), 7.21-7.09 (m, 1H), 5.30 (d, J = 8.3 Hz, 1H), 3.53 (dddd, J = 23.1, 13.9, 6.7, 1.7 Hz, 2H), 3.02 (ddd, J = 14.0, 5.5, 2.1 Hz, 2H), 2.23 (t, J = 3.9 Hz, 1H), 1.97 (ddtd, J = 28.2, 8.9, 5.2, 4.4, 2.0 Hz, 2H), 1.88-1.65 (m, 7H), 1.62 (d, J = 8.5 Hz, 1H), 1.44 (d, J = 12.7 Hz, 2H).	448.05	B	D

I-3145		1H NMR (400 MHz, DMSO-d6) 8.76 (d, J = 8.3 Hz, 1H), 7.59 (td, J = 8.7, 5.5 Hz, 1H), 7.16 (td, J = 9.4, 1.6 Hz, 1H), 5.33 (d, J = 8.3 Hz, 1H), 3.30-3.25 (m, 1H), 3.22-3.12 (m, 2H), 3.04 (dd, J = 13.4, 3.2 Hz, 1H), 2.27 (dd, J = 8.6, 7.1 Hz, 1H), 2.18 (qd, J = 8.2, 4.2 Hz, 2H), 1.76 (dd, J = 27.2, 10.5 Hz, 7H), 1.61 (d, J = 8.4 Hz, 1H), 1.47 (s, 2H).	465.05	A	A
I-3146		1H NMR (400 MHz, DMSO-d6) Ä 8.24 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (t, J = 8.9 Hz, 2H), 5.25 (d, J = 8.1 Hz, 1H), 5.10 (d, J = 3.9 Hz, 1H), 4.03 - 3.89 (m, 2H), 3.78 (s, 2H), 3.32 (s, 3H), 3.16 - 3.05 (m, 1H), 1.92 - 1.61 (m, 11H), 1.59 (d, J = 8.5 Hz, 1H), 1.45 (d, J − 9.0 Hz, 2H).	489.15	C	
I-3147		1H NMR (400 MHz, DMSO-d6) Ä 8.24 (d, J = 8.3 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.20 - 7.11 (m, 2H), 5.27 (d, J = 8.1 Hz, 1H), 5.10 (d, J = 3.9 Hz, 1H), 4.03 - 3.95 (m, 2H), 3.80 (s, 2H), 3.32 (s, 3H), 3.16 - 3.06 (m, 1H), 1.96 - 1.87 (m, 1H), 1.87 - 1.62 (m, 10H), 1.59 (d, J = 8.8 IIz, 1II), 1.45 (d, J = 9.4 IIz, 2II).	489.15	B	B
I-3148		1H NMR (400 MHz, DMSO-d6) 10.75 (s, 1H), 8.21 (d, J = 7.4 Hz, 1H), 7.77 (d, J = 6.6 Hz, 1H), 6.92 (s, 1H), 5.29 (d, J = 7.2 IIz, 1II), 3.99 (t, J = 6.7 IIz, 1II), 2.90 (s, 1II), 1.79 (d, J = 17.7 Hz, 9H), 1.66 (d, J = 17.9 Hz, 6H), 1.44 (d, J = 22.8 Hz, 4H).	491.15	B	A

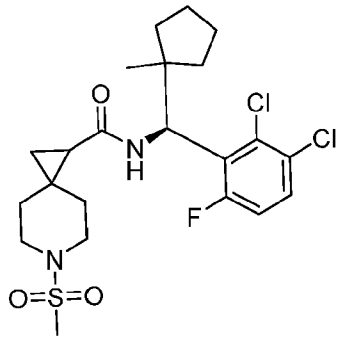
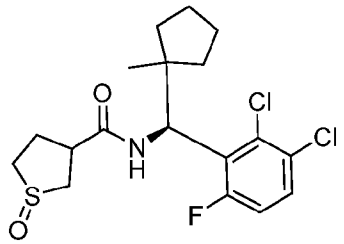
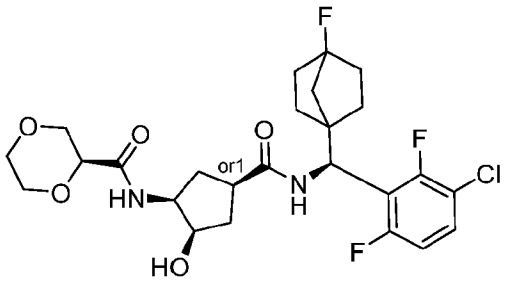
I-3149		1H NMR (400 MHz, DMSO-d6) 8.56 (s, 1H), 8.33 (d, J = 8.3 Hz, 1H), 7.57 (td, J = 8.7, 5.3 Hz, 1H), 7.15 (t, J = 9.3 Hz, 1H), 5.29 (d, J = 8.1 Hz, 1H), 4.78 (s, 1H), 3.49 (t, J = 6.1 Hz, 2H), 3.41 (t, J = 5.9 Hz, 2H), 3.05 (dt, J = 15.5, 7.5 Hz, 1H), 2.20 - 2.06 (m, 1H), 1.97 (tdd, J = 16.4, 8.7, 4.2 Hz, 3H), 1.88 - 1.53 (m, 10H), 1.47 (d, J = 9.7 Hz, 2H).	514.2	B	A
I-3150		1H NMR (400 MHz, DMSO-d6) 8.21 (d, J = 8.4 Hz, 1H), 7.62 (dd, J = 9.0, 5.2 Hz, 2H), 7.38 - 7.20 (m, 1H), 5.48 (d, J = 8.0 Hz, 1H), 3.90 (d, J = 7.4 Hz, 1H), 3.24 (s, 1H), 3.05 (s, 1H), 2.67 (p, J = 1.9 Hz, 7H), 2.46 - 2.30 (m, 5H), 1.88 (d, J = 5.6 Hz, 2H), 1.76 - 1.53 (m, 4H), 1.24 (s, 1H).	474.05	C	
I-3151		1H NMR (400 MHz, DMSO-d6) - 8.24 (d, J = 8.1 Hz, 1H), 7.72 (d, J = 7.0 Hz, 1H), 7.63 (dd, J = 9.0, 5.0 Hz, 1H), 7.27 (dd, J = 10.7, 9.0 Hz, 1H), 5.49 (d, J = 8.0 Hz, 1H), 4.09 - 3.93 (m, 1H), 3.31 (s, 1H), 3.07 (d, J = 6.3 Hz, 1H), 3.05 (s, 2H), 2.67 (p, J = 1.9 Hz, 6H), 2.46 - 2.30 (m, 6H), 1.88 (d, J = 5.6 Hz, 4H), 1.24 (s, 1H).	474.05	A	B

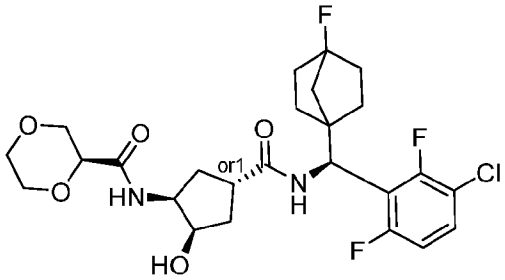
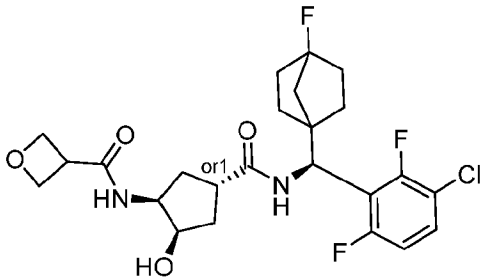
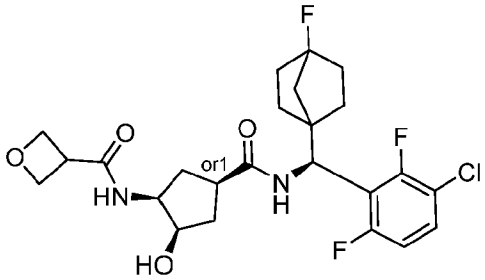
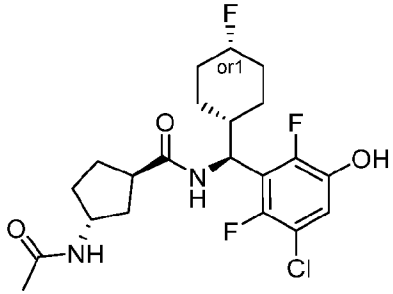
I-3152		1H NMR (400 MHz, DMSO-d6) - 8.14 (d, J = 8.4 Hz, 1H), 7.77 (d, J = 6.9 Hz, 1H), 7.30 (d, J = 8.4 Hz, 1H), 5.55 (d, J = 8.1 Hz, 1H), 4.13 - 3.88 (m, 1H), 2.80 (d, J = 103.4 Hz, 1H) , 1.79 - 1.71 (m, 12H), 1.67 - 1.25 (m, 7H).	509.15	C	A
I-3153		1H NMR (400 MHz, DMSO-d6) 10.24 (s, 1H), 8.16 (d, J = 8.4 Hz, 1H), 7.63 (d, J = 7.9 Hz, 1H), 7.00 (dd, J = 8.6, 7.3 Hz, 1H), 5.26 (d, J = 8.3 Hz, 1H), 4.12 - 4.01 (m, 1H), 3.60 (d, J = 3.3 Hz, 1H), 3.21 (s, 3H), 3.00 (t, J = 7.4 Hz, 1H), 1.93 (ddd, J = 12.1, 8.8, 2.7 Hz, 1H), 1.87 - 1.65 (m, 12H), 1.58 (t, J = 8.5 Hz, 2H), 1.45 (d, J = 10.0 Hz, 2H).	489.15	B	A
I-3154		1H NMR (400 MHz, DMSO-d6) 10.23 (s, 1H), 8.15 (d, J = 8.4 Hz, 1H), 7.62 (d, J = 7.9 Hz, 1H), 6.99 (t, J = 7.9 Hz, 1H), 5.25 (d, J = 8.3 Hz, 1H), 4.17 - 3.84 (m, 1H), 3.63 (q, J = 4.2 Hz, 1H), 3.23 (s, 3H), 3.12 - 2.87 (m, 1H), 2.03 (ddd, J = 13.6, 8.9, 2.7 Hz, 1H), 1.80 (s, 6H), 1.73 - 1.62 (m, 7H), 1.58 (d, J − 8.3 Hz, 1H), 1.39 (dd, J = 41.4, 8.4 Hz, 2H).	489.25	B	B

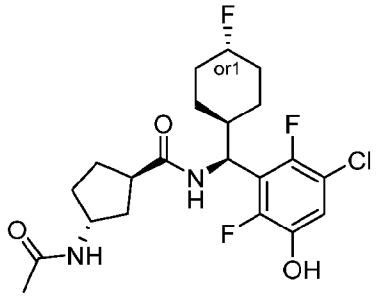
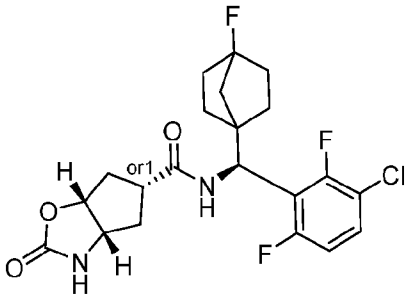
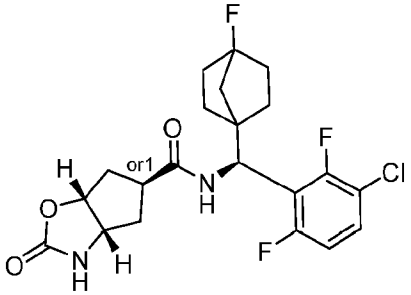
I-3155		1H NMR (400 MHz, DMSO-d6) 8.27 (d, J = 8.5 Hz, 1H), 8.13 (s, 2H), 7.09 (d, J = 8.2 Hz, 1H), 5.45 (d, J = 8.4 Hz, 1H), 3.21 - 2.91 (m, 4H), 2.01 - 1.88 (m, 2H), 1.84 - 1.62 (m, 7H), 1.52 - 1.44 (m, 5H).	549.15	B	B
I-3156		1H NMR (400 MHz, DMSO-d6) 10.63 (s,1H), 8.03 (d, J = 8.7 Hz, 1H), 7.76 (d, J = 6.9 Hz, 1H), 6.96 (d, J = 10.0 Hz, 1H), 5.89 (d, J = 8.6 Hz, 1H), 4.01 (h, J = 6.8 Hz, 1H), 2.86 (p, J = 7.9 Hz, 1H), 2.10 (d, J = 17.3 Hz, 1H), 1.95 - 1.72 (m, 8H), 1.71 - 1.56 (m, 3H), 1.56 - 1.29 (m, 4H).	475.15	C	
I-3157				C	

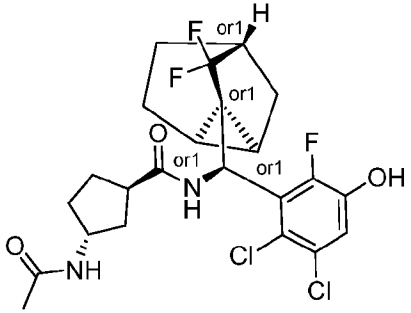
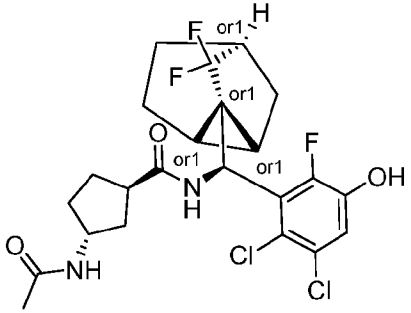
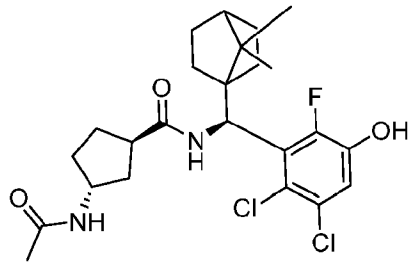
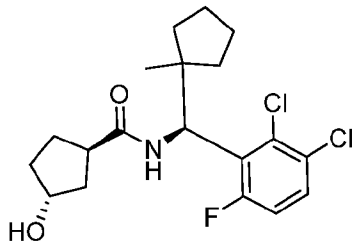
I-3158			D
I-3159			C B
I-3160			D

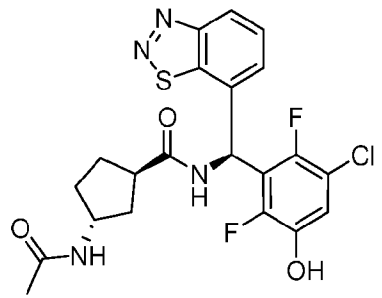
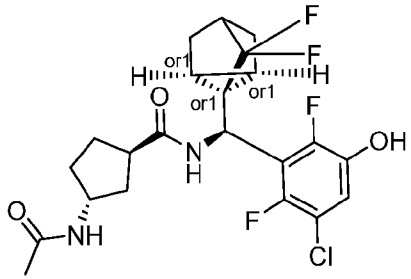
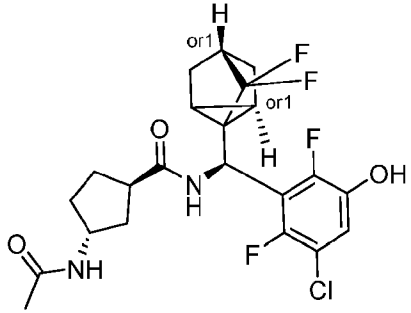
I-3161				D
I-3162				D
I-3163				D
I-3164				C

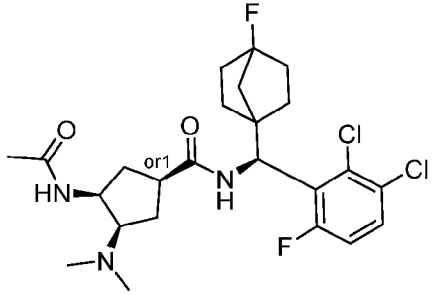
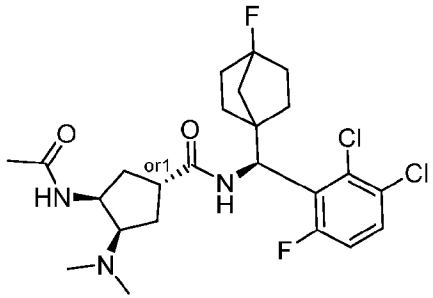
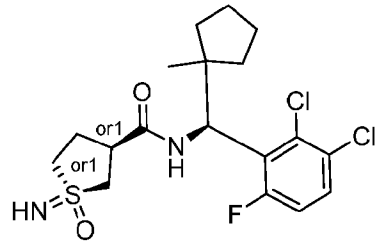
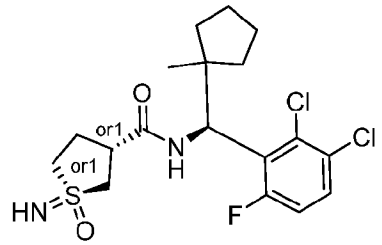
I-3165				D	
I-3166				B	
I-3167		1H NMR (400 MHz, DMSO-d6) 8.23 (d, J = 8.6 Hz, 1H), 7.56 (d, J = 7.9 Hz, 1H), 7.15 (dd, J = 15.2, 8.3 Hz, 2H), 5.27 (d, J = 8.6 Hz, 1H), 5.15 (t, J = 6.3 Hz, 1H), 4.08-3.80 (m, 5H), 3.66 (t, J = 11.5 Hz, 2H), 3.50 (d, J = 10.7 Hz, 1H), 3.12 (s, 2H), 2.37-1.54 (m, 12H), 1.47 (s, 2H).	531.1	B	B

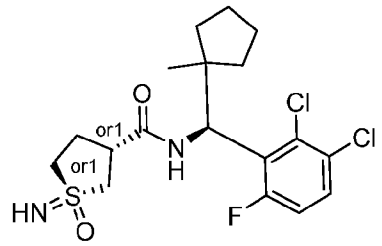
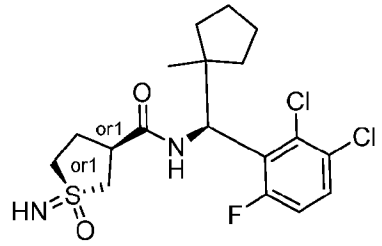
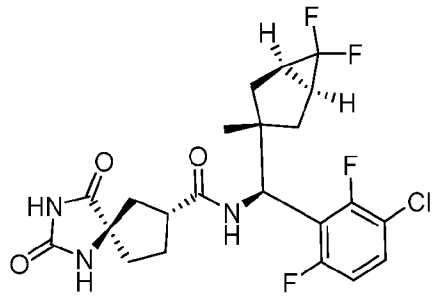
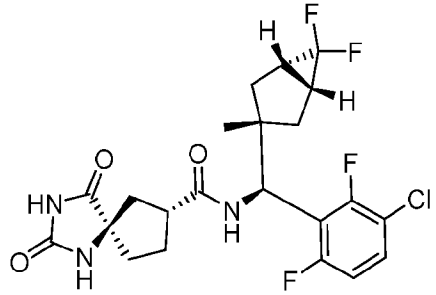
I-3168		1H NMR (400 MHz, DMSO-d6) 8.23 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.14 (t, J = 8.9 Hz, 2H), 5.21 (dd, J = 28.1, 6.1 Hz, 2H), 4.02 (dt, J = 7.3, 2.7 Hz, 2H), 3.95-3.78 (m, 3H), 3.65 (td, J = 12.3, 11.6, 2.6 Hz, 2H), 3.47 (td, J = 11.1, 2.8 Hz, 1H), 3.38-3.33 (m, 1H), 3.10 (dt, J = 13.9, 6.9 Hz, 1H), 2.15-1.53 (m, 12H), 1.45 (d, J = 9.3 Hz, 2H).	531.15	B	B
I-3169		1H NMR (400 MHz, DMSO-d6) 8.22 (d, J = 8.2 Hz, 1H), 7.63-7.49 (m, 2H), 7.21-7.10 (m, 1H), 5.27 (d, J = 8.2 Hz, 1H), 4.80 (d, J = 3.2 Hz, 1H), 4.67-4.46 (m, 4H), 4.02- 3.89 (m, 2H), 3.85-3.73 (m, 1H), 3.09 (dt, J = 13.2, 9.7 Hz, 1H), 1.75 (ddt, J = 23.7, 15.9, 10.2 Hz, 10H), 1.64-1.54 (m, 2H), 1.52-1.37 (m, 2H).	501.1	B	B
I-3170		1H NMR (400 MHz, DMSO-d6) 8.22 (d, J = 8.2 Hz, 1H), 7.56 (tt, J = 8.7, 4.6 Hz, 2H), 7.20-7.07 (m, 1H), 5.25 (d, J = 8.1 Hz, 1H), 4.80 (d, J = 3.5 Hz, 1H), 4.72-4.37 (m, 4H), 3.95 (dtd, J = 29.6, 8.6, 7.7, 3.5 Hz, 2H), 3.84- 3.71 (m, 1H), 3.08 (qd, J = 8.6, 4.5 Hz, 1H), 1.93-1.75 (m, 5H), 1.69 (ddd, J = 25.9, 15.3, 7.2 Hz, 5H), 1.60 (t, J = 8.3 Hz, 2H), 1.53-1.35 (m, 2H).	501.1	C	
I-3171		1H NMR (400 MHz, DMSO-d6) 10.22 (s, 1H), 8.27 (d, J = 8.0 Hz, 1H), 7.76 (d, J = 7.0 Hz, 1H), 6.98 (dd, J = 8.6, 7.3 Hz, 1H), 4.81 (dd, J = 10.5, 7.9 Hz, 1H), 4.45 (s, 1H), 4.01 (dt, J = 13.0, 6.6 Hz, 1H), 2.95-2.71 (m, 1H), 2.04 (d, J = 9.7 Hz, 2H), 1.94 (s, 1H), 1.89-1.77 (m, 3H), 1.80-1.70 (m, 1H), 1.76 (s, 2H), 1.74 (s, 1H), 1.61 (ddd, J = 13.5, 8.8, 5.4 Hz, 1H), 1.51-1.27 (m, 1H), 1.32 (s, 4H), 1.12-1.02 (m, 1H), 0.99 (d, J = 12.4 Hz, 1H).	447.15	D	

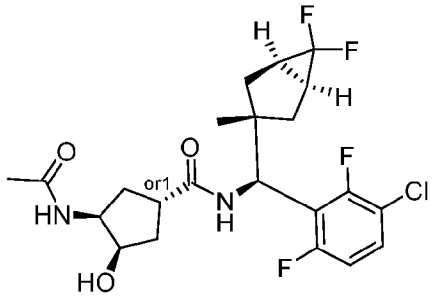
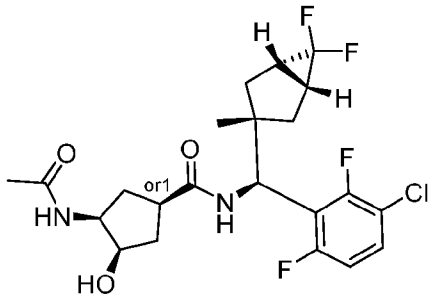
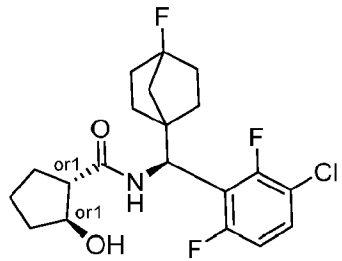
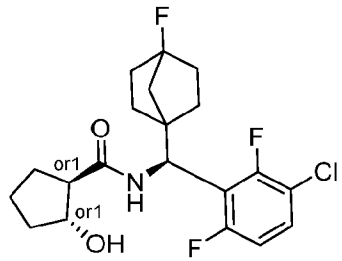
I-3172		1H NMR (400 MHz, DMSO-d6) 10.22 (s, 1H), 8.24 (d, J = 8.0 Hz, 1H), 7.76 (d, J = 7.1 Hz, 1H), 7.02-6.94 (m, 1H), 4.87 (dd, J = 10.1, 7.6 Hz, 1H), 4.73 (s, 1H), 4.00 (p, J = 6.7 Hz, 1H), 2.82 (p, J = 7.8 Hz, 1H), 1.89 (s, 2H), 1.81 (td, J = 10.1, 5.1 Hz, 4H), 1.76 (s, 2H), 1.74 (d, J = 7.8 Hz, 2H), 1.67-1.30 (m, 5H), 1.23 (d, J = 8.1 Hz, 1H), 1.13 (s, 2H).	447.2	D	
I-3173		1H NMR (400 MHz, DMSO-d6) 8.48 (d, J = 8.5 Hz, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 2H), 7.32 - 7.00 (m, 1H), 5.27 (d, J = 8.1 Hz, 1H), 5.14 - 4.81 (m, 1H), 4.19 (t, J = 6.5 Hz, 1H), 3.11 (tt, J = 12.0, 6.1 Hz, 1H), 2.09 - 1.87 (m, 1H), 1.88 - 1.31 (m, 13H).	443.1	D	
I-3174		1H NMR (400 MHz, Chloroform-d) 7.49 - 7.26 (m, 1H), 6.88 (t, J = 9.5 Hz, 1H), 6.74 (d, J = 9.7 Hz, 1H), 5.64 (d, J = 9.8 Hz, 1H), 5.45 (s, 1H), 5.26 - 4.93 (m, 1H), 4.42 (s, 1H), 3.00 (d, J − 12.9 Hz, 1H), 2.38 - 2.16 (m, 1H), 2.10 - 1.31 (m, 13H).	443.1	D	

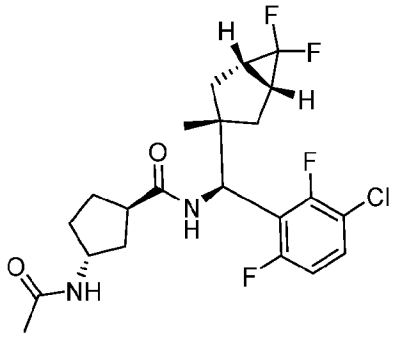
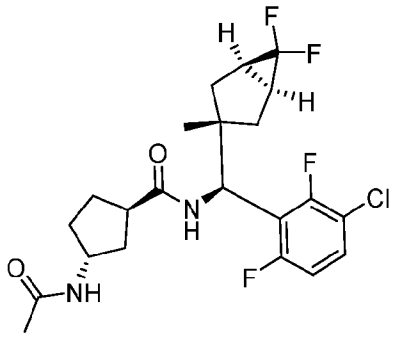
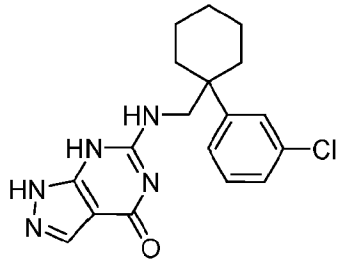
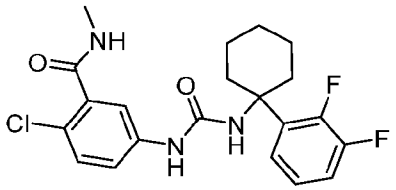
I-3175		1H NMR (400 MHz, DMSO-d6) 8.29 (d, J = 8.3 Hz, 1H), 7.82 (d, J = 6.9 Hz, 1H), 6.99 (d, J = 8.1 Hz, 1H), 6.15 (d, J = 8.1 Hz, 1H), 4.02 (d, J = 6.4 Hz, 1H), 2.93 (p, J = 7.8 Hz, 1H), 2.08 (dd, J = 12.0, 7.3 Hz, 2H), 1.86 (ddt, J = 15.7, 11.5, 6.7 Hz, 5H), 1.78 (s, 2H), 1.73 (s, 1H), 1.71-1.60 (m, 1H), 1.64-1.43 (m, 4H), 1.37 (dt, J = 13.8, 7.2 Hz, 1H), 1.35-1.28 (m, 1H), 0.96 (d, J = 7.9 Hz, 1H).	505.3	D	
I-3176		1H NMR (400 MHz, DMSO-d6)7.93 (d, J = 8.8 Hz, 1H), 7.76 (d, J = 6.9 Hz, 1H), 7.09 (d, J = 8.2 Hz, 1H), 6.24 (d, J = 8.6 Hz, 1H), 4.00 (h, J = 6.5 Hz, 1H), 2.83 (p, J = 7.9 Hz, 1H), 2.01 (d, J = 9.7 Hz, 2H), 1.76 (s, 9H), 1.89-1.45 (m, 6H), 1.42 (s, 1H), 1.34 (dd, J = 12.4, 7.0 Hz, 1H).	522.3	D	
I-3177		1H NMR (400 MHz, DMSO-d6) 7.77 (dd, J = 15.7, 8.1 Hz, 2H), 7.05 (d, J = 8.2 Hz, 1H), 5.83 (d, J = 9.3 Hz, 1H), 4.02 (q, J = 6.5 Hz, 1H), 2.93 (p, J = 7.8 Hz, 1H), 2.33 (d, J = 1.9 Hz, 1H), 1.88 - 1.70 (m, 2H), 1.63 - 1.52(m, 5H), 1.52 - 1.48 (m, 3H), 1.40 - 1.35(m, 2H), 1.35 - 1.30(m, 1H), 1.30 - 1.25 (m, 2H), 1.25 - 1.13(m, 8H), 1.10 - 1.05(m, 1H).	485.2	C	C
I-3178		1H NMR (400 MHz, DMSO-d6) 8.07 (d, J = 8.6 Hz, 1H), 7.60 (dd, J = 8.9, 5.0 Hz, 1H), 7.25 (dd, J = 10.7, 8.9 Hz, 1H), 5.47 (d, J = 8.5 Hz, 1H), 4.43 (d, J = 3.2 Hz, 1H), 4.15 (tq, J = 6.0, 3.2 Hz, 1H), 3.10- 3.00 (m, 1H), 1.86-1.66 (m, 4H), 1.59 (s, 6H), 1.38 (qd, J = 7.7, 7.0, 3.0 Hz, 3H), 1.26 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	388.1	C	

I-3179		1H NMR (400 MHz, DMSO-d6) 10.38 (s, 1H), 9.11 (d, J = 7.4 Hz, 1H), 8.69 (d, J = 8.3 Hz, 1H), 7.85 - 7.73 (m, 2H), 7.54 (d, J = 7.3 Hz, 1H), 7.17 - 7.09 (m, 1H), 6.68 (d, J = 7.3 Hz, 1H), 4.09 (h, J = 6.4 Hz, 1H), 3.03 (p, J = 7.8 Hz, 1H), 2.05 (dt, J = 13.0, 7.4 Hz, 1H), 1.98 - 1.85 (m, 2H), 1.79 (s, 4H), 1.60 (dq, J = 12.2, 7.3 Hz, 1H), 1.41 (dq, J = 12.9, 6.2 Hz, 1H).	481.15	D	
I-3180		1H NMR (400 MHz, DMSO-d6) 8.16 (d, J = 8.6 Hz, 1H), 7.93 (s, 1H), 7.03 (t, J = 7.8 Hz, 1H), 5.87 (t, J = 6.7 Hz, 1H), 4.02 (s, 1H), 2.87 (d, J = 10.3 Hz, 1H), 2.12 (d, J = 3.0 Hz, 1H), 1.97 - 1.82 (m, 3H), 1.75 (d, J = 30.1 Hz, 6H), 1.67 - 1.48 (m, 3H), 1.47 - 1.31 (m, 3H).	475.25	E	
I-3181		1H NMR (400 MHz, DMSO-d6) 8.15 (d, J = 8.6 Hz, 1H), 7.93 (d, J = 7.1 Hz, 1H), 7.01 (dd, J = 8.6, 7.3 Hz, 1H), 5.93 - 5.81 (m, 1H), 4.03 (q, J = 6.5 Hz, 1H), 2.87 (p, J = 7.9 Hz, 1H), 2.13 (s, 1H), 1.97 - 1.69 (m, 9H), 1.68 - 1.57 (m, 2H), 1.55 - 1.30 (m, 4H).	475.3	B	B

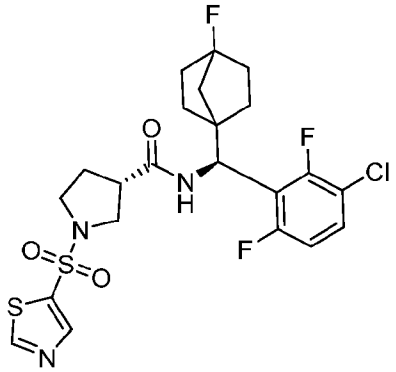
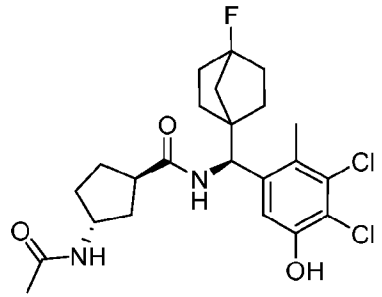
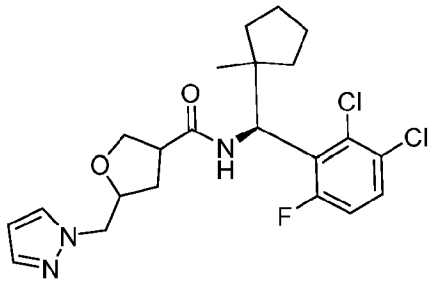
I-3182		1H NMR (400 MHz, DMSO-d6)8.20 (t, J = 8.2 Hz, 1H), 7.62 (dt, J = 9.6, 5.3 Hz, 1H), 7.48 (t, J = 6.3 Hz, 1H), 7.31-7.21 (m, 1H), 5.47 (dd, J = 13.1, 8.0 Hz, 1H), 4.02 (dq, J = 28.7, 5.7 Hz, 1H), 3.08-2.92 (m, 1H), 2.29 (s, 1H), 2.10 (d, J = 8.1 Hz,7H), 2.00 (dd, J = 12.7, 7.6 Hz, 1H), 1.91 (t, J = 6.3 Hz, 1H), 1.85 (s, 5H), 1.84-1.63 (m, 5H), 1.54 (dt, J = 20.9, 9.0 Hz, 4H), 1.24 (s, 1H).	502.15	B	A
I-3183		1H NMR (400 MHz, DMSO-d6)8.42-8.20 (m, 1H), 7.62 (dtt, J = 8.9, 3.6, 1.8 Hz, 1H), 7.26 (tt, J = 9.0, 3.3 Hz, 1H), 5.49 (dd, J = 17.9, 7.8 Hz, 1H), 4.44- 4.24 (m, 1H), 4.22-3.99 (m, 1H), 3.75-3.59 (m, 1H), 3.25-3.16 (m, 1H), 3.04 (dt, J = 11.2, 6.1 IIz, 1II), 2.24 (t, J = 8.2 IIz, 3II), 2.04-1.41 (m, 18H).	500.35	D	
I-3184				B	
I-3185				A	B

I-3186				B	B
I-3187				A	B
I-3188		1H NMR (400 MHz, Chloroform-d) 8.37 (s, 1H), 7.26 (s, 1H), 6.87 (dd, J = 24.3, 15.4 Hz, 2H), 6.67 (d, J = 47.5 Hz, 1H), 5.55 (d, J = 9.9 Hz, 1H), 2.99 (dd, J = 12.9, 7.0 Hz, 1H), 2.52 (t, J = 11.7 Hz, 1H), 2.37 (dd, J = 13.0, 7.7 Hz, 1H), 2.29 - 2.00 (m, 5H), 1.88 (t, J = 14.3 Hz, 3H), 1.61 (s, 2H), 1.04 (s, 3H).	448.15	D	
I-3189		1H NMR (400 MHz, Chloroform-d) 8.12 (s, 1H), 7.39 - 7.27 (m, 1H), 6.97 - 6.61 (m, 2H), 6.38 (s, 1H), 5.52 (d, J = 9.6 Hz, 1H), 3.14 - 2.85 (m, 1H), 2.48 (dd, J = 14.0, 9.3 Hz, 1H), 2.38 (dt, J = 13.9, 7.3 Hz, 1H), 2.25 - 2.02 (m, 5H), 1.86 (d, J = 14.1 Hz, 3H), 1.63 (m, 2H), 1.06 (s, 3H).	488.15	D	

I-3190		1H NMR (400 MHz, Chloroform-d) 7.33 (q, J = 7.9 Hz, 1H), 6.89 (t, J = 9.3 Hz, 1H), 6.54 (d, J = 10.1 Hz, 1H), 6.31 (d, J = 11.4 Hz, 1H), 4.77 - 4.32 (m, 2H), 4.30 - 4.14 (m, 1H), 3.00 (s, 1H), 2.80 (d, J = 7.9 Hz, 1H), 2.55 (q, J = 10.5, 8.9 Hz,2H), 2.41 - 1.98 (m, 6H), 1.87 (dd, J = 23.7, 13.8 Hz, 2H), 1.57 (d, J = 13.9 Hz, 3H), 1.03 (d, J = 7.7 Hz, 3H).	477.15	D	
I-3191		1H NMR (400 MHz, DMSO-d6) 8.16 (d, J = 8.9 Hz, 1H), 7.58 (td, J = 8.6, 5.4 Hz, 1H), 7.49 (d, J = 7.5 Hz,1H), 7.15 (t, J = 9.4 Hz, 1H), 5.22 (d, J = 8.8 Hz, 1H), 4.76 (d, J = 3.2 Hz, 1H), 3.92 (d, J = 8.6 Hz, 2H), 3.09 (dd, J = 9.4, 4.9 Hz, 1H), 2.24 (d, J = 14.0 Hz, 2H), 1.66 (ddd, J = 13.8, 10.3, 4.2 Hz, 6H), 1.53 (d, J = 13.3 Hz, 5H), 1.05 (s, 3H).	477.15	D	
I-3192		1H NMR (400 MHz, DMSO-d6) 8.28 (d, J = 8.7 Hz, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.22 - 7.11 (m, 1H), 5.38 (dd, J = 8.7, 1.3 Hz, 1H), 4.89 (d, J = 3.6 Hz, 1H), 4.29 - 4.22 (m, 1H), 2.56 (td, J = 8.5, 4.8 Hz, 1H), 1.90 - 1.35 (m, 16H).	402.05	C	
I-3193		1H NMR (400 MHz, DMSO-d6) 8.30 (d, J = 9.0 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (td, J = 9.5, 1.7 Hz, 1H), 5.39 (dd, J = 9.0, 1.3 Hz, 1H), 4.84 (d, J = 3.5 Hz, 1H), 4.21 (q, J = 3.7, 3.3 Hz, 1H), 2.56 (ddd, J = 9.9, 8.2, 4.5 Hz, 1H), 1.90 - 1.36 (m, 16H).	402.1	D	

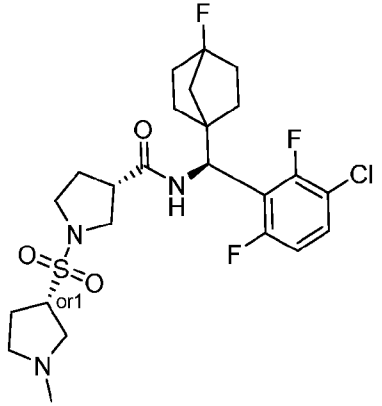
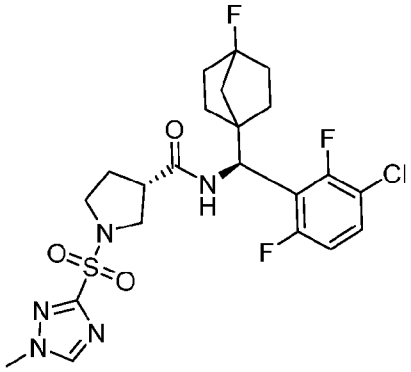
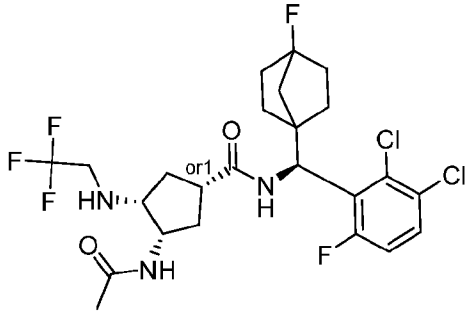
I-3194		1H NMR (400 MHz, DMSO-d6) 8.12 (d, J = 8.8 Hz, 1H), 7.76 (d, J = 6.9 Hz, 1H), 7.58 (td, J = 8.7, 5.4 Hz, 1H), 7.20 - 7.10 (m, 1H), 5.22 (d, J = 8.8 Hz, 1H), 4.00 (h, J = 6.4 Hz, 1H), 2.93 (p, J = 7.8 Hz, 1H), 2.32 - 2.16 (m, 2H), 1.89 - 1.78 (m, 3H), 1.77 (s, 4H), 1.66 - 1.40 (m, 5H), 1.35 (dd, J = 12.6, 6.5 Hz, 1H), 1.05 (s, 3H).	461.05	D	
I-3195		1H NMR (400 MHz, DMSO-d6) 8.17 (dd, J = 13.2, 8.9 Hz, 1H), 7.79 (dd, J = 14.8, 7.2 Hz, 1H), 7.58 (td, J = 8.7, 4.4 Hz, 1H), 7.17 (q, J = 9.3, 8.1 Hz, 1H), 5.28 (dd, J = 38.0, 8.8 Hz, 1H), 3.98 (dq, J = 21.6, 7.7, 7.2 Hz, 1H), 3.02 C 2.85 (m, 1H), 2.25 (d, J = 13.0 Hz, 1H), 2.20 - 2.07 (m, 1H), 1.94 (dq, J = 13.2, 6.7, 6.0 Hz, 1H), 1.89-1.74 (m, 4H), 1.73 (s, 2H), 1.59 (dt, J = 31.6, 16.3 Hz, 2H), 1.49 - 1.14 (m, 4H), 1.05 (s, 3H).	461.1	D	
I-3196					
I-3197					

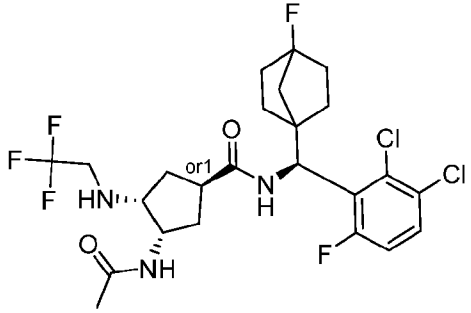
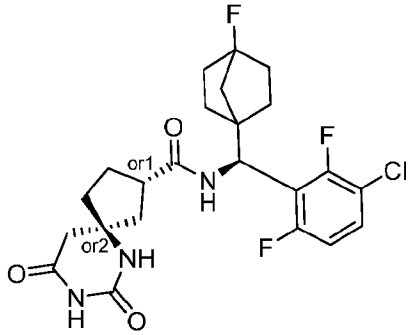
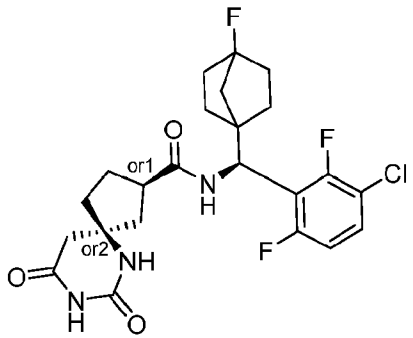
I-3198				
I-3199		493.1	A	A
I-3200		517.05	A	A

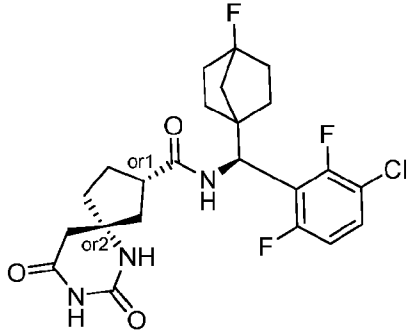
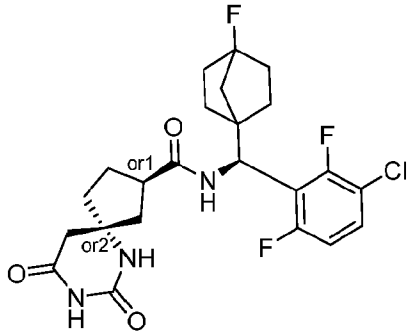
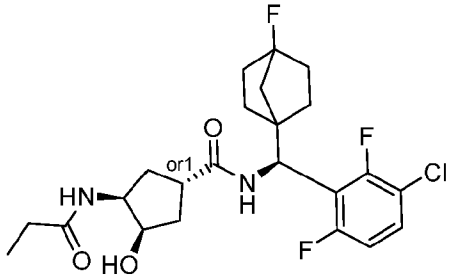
I-3201			534.05	A	A
I-3202		1II NMR (400 MIIz, DMSO-d6) 10.12 (s, 1II), 8.14 (d, J = 7.7 Hz, 1H), 7.74 (d, J = 6.8 Hz, 1H), 6.83 (s, 1H), 5.11 (d, J − 7.6 Hz, 1H), 4.01 (h, J − 6.6 Hz, 1H), 2.89 (p, J − 7.8 Hz, 1H), 2.32 (s, 3H), 1.99 - 1.54 (m, 15H), 1.54 - 1.29 (m, 4H).	471.1	A	A
I-3203				D	

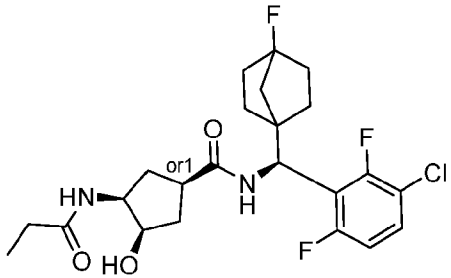
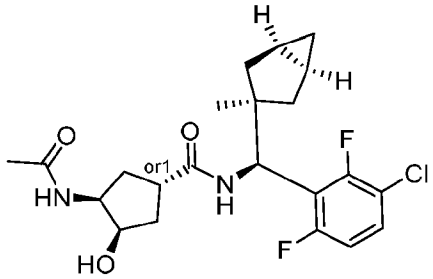
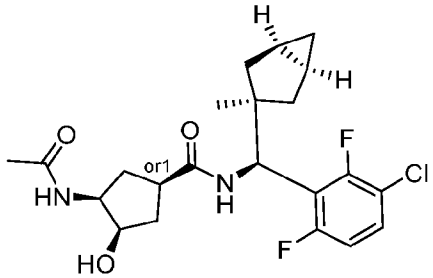
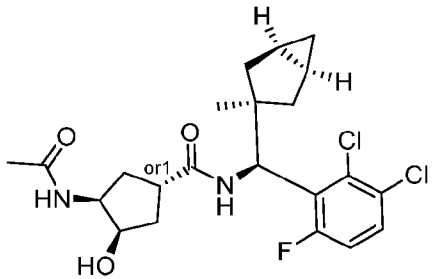
I-3204			D	
I-3205		520.2	B	B
I-3206		520.2	B	B

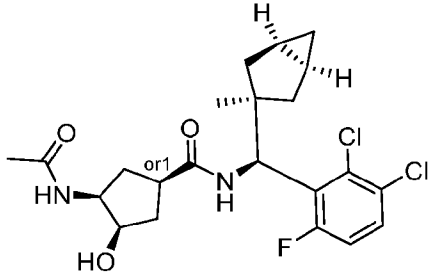
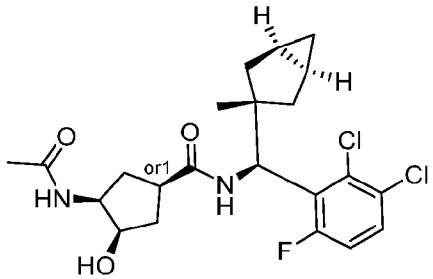
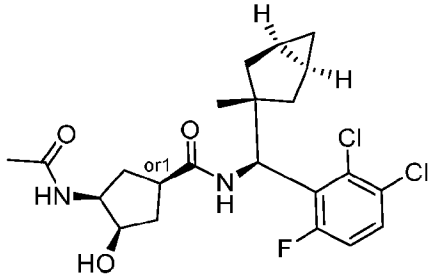
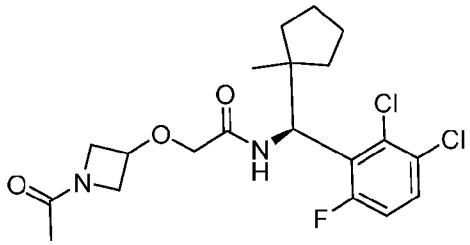
I-3207		534.25	B	A
I-3208		521.2	B	B
I-3209		521.2	B	A

I-3210			534.25	B	A
I-3211			532.2	B	A
I-3212		1H NMR (400 MHz, DMSO-d6)8.13 (d, J = 8.2 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.48 (d, J = 7.4 Hz, 1H), 7.25 (dd, J = 10.7, 9.0 Hz, 1H), 5.48 (d, J = 7.9 Hz, 1H), 4.12-3.84 (m, 1H), 3.28-3.11 (m, 3H), 2.96 (d, J = 6.3 Hz, 1H), 2.11 (q, J = 7.4 Hz, 1H), 1.95 -1.43 (m, 16H).	556.35	C	

I-3213		1H NMR (400 MHz, DMSO-d6) 8.14 (d, J = 8.2 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.49 (d, J = 7.5 Hz, 1H), 7.26 (dd, J = 10.6, 9.0 Hz, 1H), 5.50 (d, J = 8.1 Hz, 1H), 4.06 (p, J = 6.0 Hz, 1H), 3.24-3.04 (m, 1H), 3.00 - 2.92 (m, 3H), 2.09 (q, J = 7.3 Hz, 1H), 1.84 (s, 4H), 1.91-1.75 (m, 4H), 1.68 (qd, J = 18.8, 17.1, 7.3 Hz, 5H), 1.57 (d, J = 8.1 Hz, 2H), -0.06 (s, 2H).	556.35	B	A
I-3214		1H NMR (400 MHz, DMSO-d6) 10.06 (s, 1H), 8.34 (d, J = 8.3 Hz, 1H), 7.67 (s, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.21 - 7.11 (m, 1H), 5.28 (d, J = 8.2 Hz, 1H), 3.00 (p, J = 8.3 Hz, 1H), 2.56 (d, J = 16.2 Hz, 1H), 2.42 (d, J = 16.2 Hz, 1H), 2.09 - 1.65 (m, 11H), 1.64 - 1.51 (m, 3H), 1.46 (s, 2H).	484.15	C	
I-3215		1H NMR (400 MHz, DMSO-d6) 10.03 (s, 1H), 8.27 (d, J = 8.3 Hz, 1H), 7.77 (s, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.20 - 7.10 (m, 1H), 5.27 (d, J = 8.2 Hz, 1H), 3.04 (t, J = 7.8 Hz, 1H), 2.46 (d, J = 6.3 Hz, 2H), 2.01 - 1.84 (m, 2H), 1.85 - 1.55 (m, 12H), 1.49 - 1.42 (m, 2H).	484.2	B	A

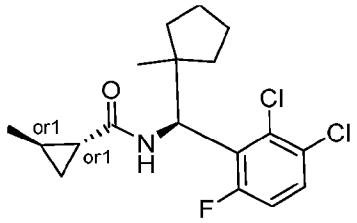
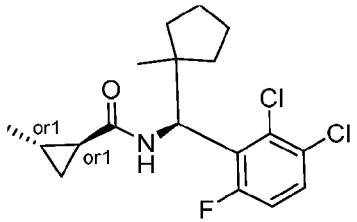
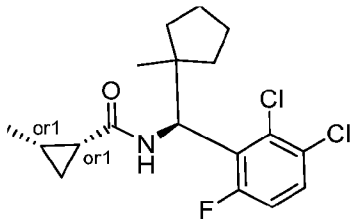
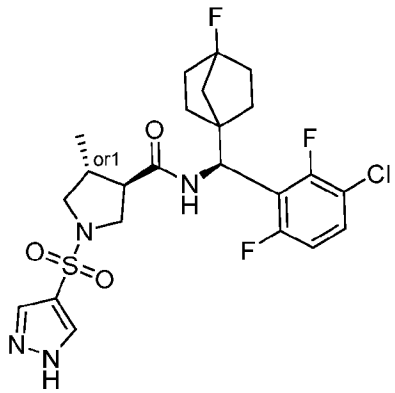
I-3216		1H NMR (400 MHz, DMSO-d6) 10.07 (s, 1H), 8.34 (d, J = 8.4 Hz, 1H), 7.70 (s, 1H), 7.58 (td, J = 8.7, 5.4 Hz, 1H), 7.21 - 7.11 (m, 1H), 5.30 (d, J = 8.2 Hz, 1H), 3.00 (p, J = 8.3 Hz, 1H), 2.57 (d, J = 16.2 Hz, 1H), 2.44 (d, J = 16.2 Hz, 1H), 2.01 - 1.64 (m, 12H), 1.64 - 1.53 (m, 2H), 1.46 (s, 2H).	484.2	B	A
I-3217		1H NMR (400 MHz, DMSO-d6) 10.02 (s, 1H), 8.27 (d, J = 8.2 Hz, 1H), 7.77 (s, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.19 - 7.09 (m, 1H), 5.26 (d, J = 8.1 Hz, 1H), 3.05 (p, J = 8.3 Hz, 1H), 2.49 - 2.39 (m, 2H), 2.03 - 1.92 (m, 1H), 1.70 (dddt, J = 45.2, 37.5, 26.6, 8.5 Hz, 13H), 1.46 (d, J = 10.0 Hz, 2H).	484.2	B	A
I-3218		1H NMR (400 MHz, DMSO-d6) 8.17 (d, J = 8.3 Hz, 1H), 7.55 (td, J = 8.7, 5.5 Hz, 1H), 7.31 (d, J = 7.7 Hz, 1H), 7.18 C 7.09 (m, 1H), 5.26 (d, J = 8.1 Hz, 1H), 4.74 (d, J = 3.6 Hz, 1H), 3.97 (p, J = 3.5 Hz, 1H), 3.89 (qd, J = 8.4, 3.8 Hz, 1H), 3.09 (qd, J = 8.6, 4.6 Hz, 1H), 2.08 (q, J = 7.6 Hz, 2H), 1.87 C 1.56 (m, 12H), 1.45 (d, J = 9.0 Hz, 2H), 0.96 (t, J = 7.6 Hz, 3H).	473.35	C	B

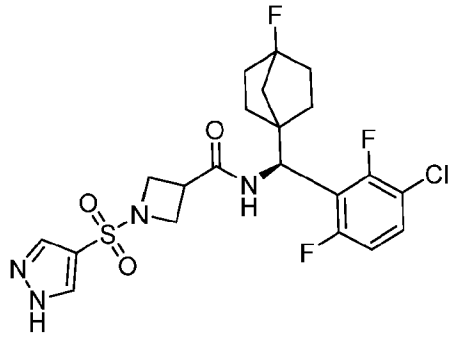
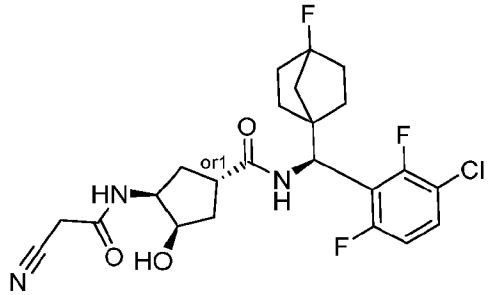
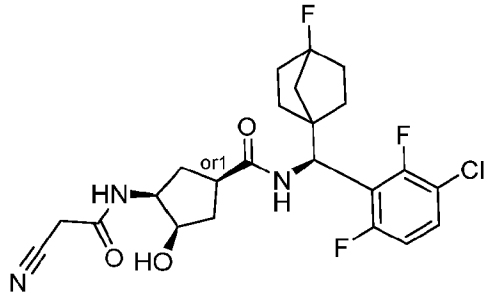
I-3219		1H NMR (400 MHz, DMSO-d6) 8.18 (d, J = 8.3 Hz, 1H), 7.55 (td, J = 8.4, 5.2 Hz, 1H), 7.32 (d, J = 7.0 Hz, 1H), 7.14 (t, J = 9.4 Hz, 1H), 5.28 (d, J = 8.2 Hz, 1H), 4.74 (t, J = 2.4 Hz, 1H), 3.93 (q, J = 8.8, 7.2 Hz, 2H), 3.09 (tt, J = 13.0, 6.8 Hz, 1H), 2.10 (tt, J = 9.3, 7.6, 3.2 Hz, 2H), 1.98 C 1.67 (m, 10H), 1.62 (ddd, J = 12.7, 8.5, 2.9 Hz, 2H), 1.46 (d, J = 9.0 Hz, 2H), 0.97 (td, J = 7.6, 1.6 Hz, 3H).	473.35	B	A
I-3220		1H NMR (400 MHz, DMSO-d6) 8.02 (d, J = 8.7 Hz, 1H), 7.53 (td, J = 8.7, 5.4 Hz, 1H), 7.44 (d, J = 7.5 Hz, 1H), 7.18 - 7.05 (m, 1H), 5.11 (d, J = 8.7 Hz, 1H), 4.72 (d, J = 3.4 Hz, 1H), 4.04 - 3.80 (m, 2H), 3.09 (td, J = 9.1, 5.0 Hz, 1H), 1.85 - 1.73 (m, 5H), 1.73 - 1.57 (m, 3H), 1.50 - 1.41 (m, 1H), 1.39 - 1.21 (m, 4H), 1.05 (s, 3H), 0.85 (td, J − 8.0, 4.1 Hz, 1H), 0.13 (q, J − 3.5 Hz, 1H).	441.2	B	A
I-3221		1H NMR (400 MHz, DMSO-d6) 8.01 (d, J = 8.7 Hz, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.42 (d, J = 7.8 Hz, 1H), 7.18 - 7.05 (m, 1H), 5.09 (d, J = 8.6 Hz, 1H), 4.73 (d, J = 3.7 Hz, 1H), 4.04 - 3.79 (m, 2H), 3.10 (qd, J = 8.7, 4.8 Hz, 1H), 1.80 (d, J = 7.8 Hz, 5H), 1.70 - 1.54 (m, 3H), 1.52 - 1.40 (m, 1H), 1.39 - 1.20 (m, 4H), 1.05 (s, 3H), 0.85 (td, J = 7.9, 4.0 Hz, 1H), 0.13 (q, J = 3.8 Hz, 1H).	441.15	D	B
I-3222		1H NMR (400 MHz, DMSO-d6) 7.99 (d, J = 8.8 Hz, 1H), 7.60 (dd, J = 8.9, 5.0 Hz, 1H), 7.49 (d, J = 7.4 Hz, 1H), 7.29 - 7.20 (m, 1H), 5.40 (d, J = 8.6 Hz, 1H), 4.75 (d, J = 3.2 Hz, 1H), 3.91 (s, 2H), 3.10 (s, 1H), 1.81 (s, 3H), 1.75 (t, J = 9.5 Hz, 2H), 1.71 - 1.58 (m, 3H), 1.51 (d, J = 12.0 Hz, 1H), 1.43 - 1.23 (m, 4H), 1.07 (s, 3H), 0.81 (s, 1H), 0.10 (d, J = 4.0 Hz, 1H).	457.1	B	A

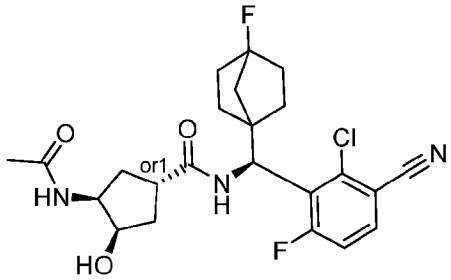
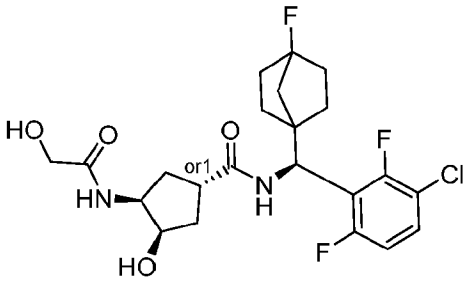
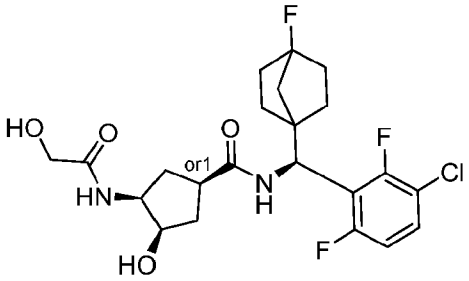
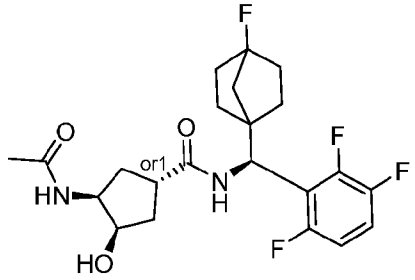
I-3223		1H NMR (400 MHz, DMSO-d6) 7.99 (d, J = 8.6 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.46 (d, J = 7.8 Hz, 1H), 7.29 - 7.20 (m, 1H), 5.38 (d, J = 8.6 Hz, 1H), 4.77 (d, J = 3.6 Hz, 1H), 3.95 (s, 1H), 3.86 (d, J = 10.1 Hz, 1H), 3.12 (s, 1H), 1.78 (s, 5H), 1.60 (dd, J = 11.5, 6.7 Hz, 3H), 1.50 (s, 1H), 1.42 - 1.31 (m, 4H), 1.06 (s, 3H), 0.89 (s, 1H), 0.09 (d, J = 4.2 Hz, 1H).	457.1	B	A
I-3224		1H NMR (400 MHz, DMSO-d6) 8.09 (d, J = 8.8 Hz, 1H), 7.66 - 7.55 (m, 2H), 7.31 - 7.22 (m, 1H), 5.43 (d, J = 8.8 Hz, 1H), 4.94 (d, J = 5.2 Hz, 1H), 3.87 (s, 2H), 2.81 (s, 1H), 2.03 - 1.93 (m, 2H), 1.81 (s, 3H), 1.62 - 1.52 (m, 4H), 1.49 - 1.33 (s, 4H), 1.06 (s, 3H), 0.86 (s, 1H), 0.09 (d, J = 4.2 Hz, 1H).	457.1	B	A
I-3225		1H NMR (400 MHz, DMSO-d6) 8.13 (d, J = 8.7 Hz, 1H), 7.65 - 7.53 (m, 2H), 7.27 (dd, J = 10.8, 9.0 Hz, 1H), 5.39 (d, J = 8.6 Hz, 1H), 5.00 (s, 1H), 3.85 (d, J = 18.9 Hz, 2H), 2.80 (s, 1H), 2.07 - 1.86 (m, 2H), 1.79 (s, 3H), 1.64 (s, 2H), 1.48 - 1.33 (d, J = 11.6 Hz, 3H), 1.26 (s, 3H), 1.08 (s, 3H), 0.86 (d, J = 5.5 Hz, 1H), 0.10 (d, J = 4.2 Hz, 1H).	457.1	C	B
I-3226			432.3	D	

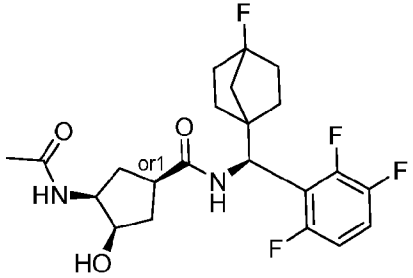
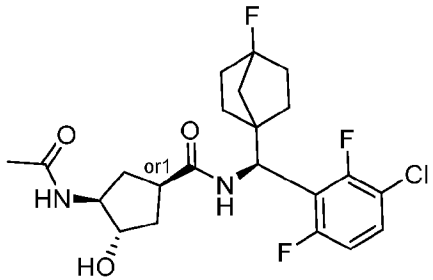
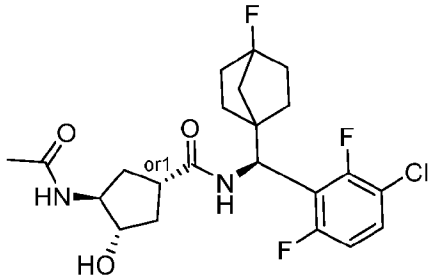
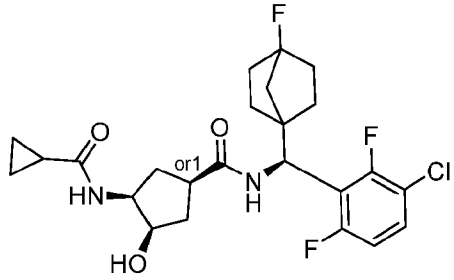
I-3227		442.3	D	
I-3228		416.3	E	
I-3229		507.1	B	A

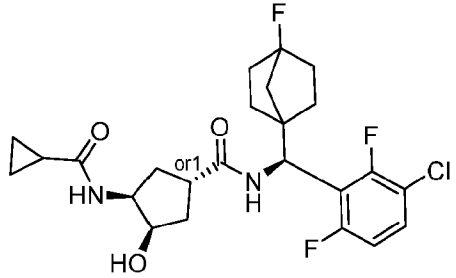
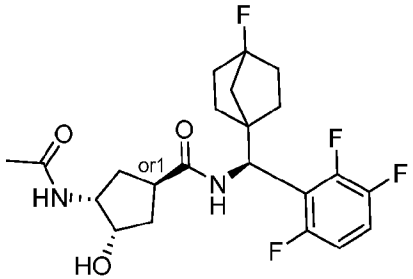
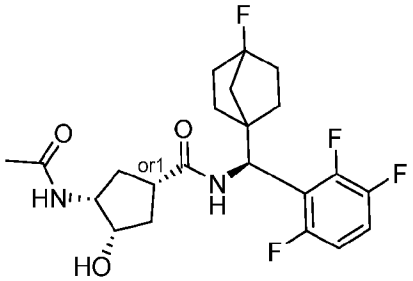
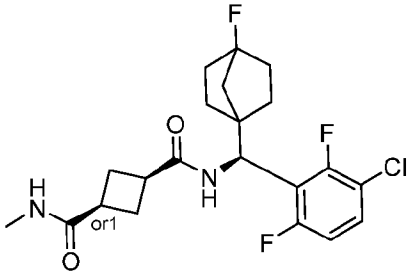
I-3230		542.1	B	A
I-3231		534.1	B	A
I-3232		358.1	D	

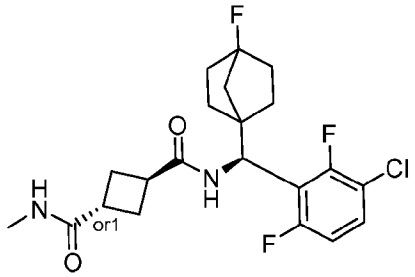
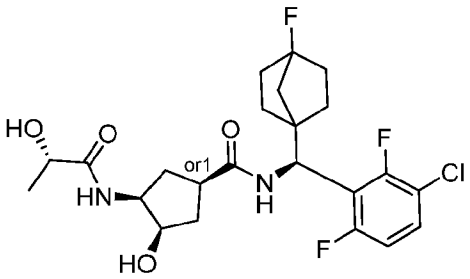
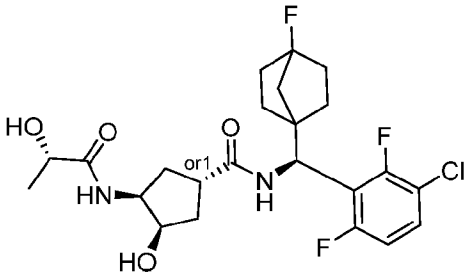
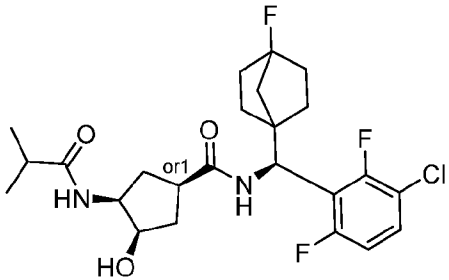
I-3233			358.05	E	
I-3234			358.05	E	
I-3235			358.05	E	
I-3236			531.1	D	

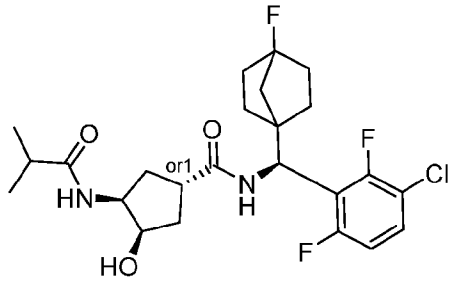
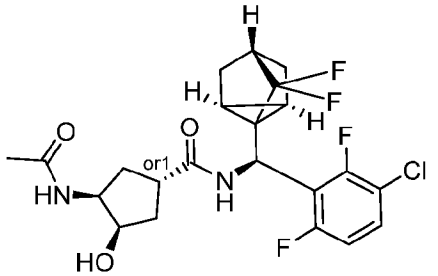
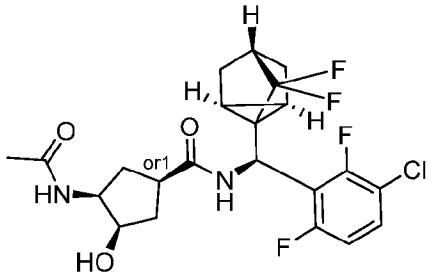
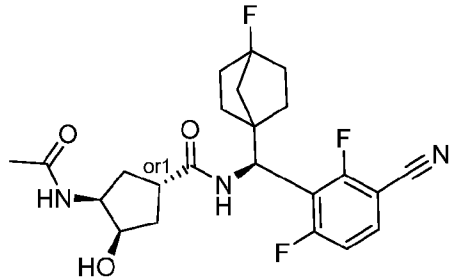
I-3237			503	B	A
I-3238		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.2 Hz, 1H), 8.01 (d, J = 7.7 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.14 (t, J = 9.5 Hz, 1H), 5.27 (d, J = 8.1 Hz, 1H), 4.94 (d, J = 3.5 Hz, 1H), 3.98 (s, 1H), 3.91 (td, J = 12.3, 11.9, 6.3 Hz, 1H), 3.64 (d, J = 7.7 Hz, 2H), 3.11 (dd, J = 9.2, 3.5 Hz, 1H), 1.93 - 1.56 (m, 12H), 1.46 (d, J = 9.5 Hz, 2H).	484.2	B	A
I-3239		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.2 Hz, 1H), 7.98 (d, J = 7.7 Hz, 1H), 7.56 (td, J = 8.6, 5.4 Hz, 1H), 7.20 - 7.10 (m, 1H), 5.25 (d, J = 8.1 Hz, 1H), 4.93 (d, J = 3.5 Hz, 1H), 4.01 (p, J = 3.4 Hz, 1H), 3.87 (qd, J = 8.8, 3.9 Hz, 1H), 3.62 (d, J = 8.5 Hz, 2H), 3.17 - 3.04 (m, 1H), 1.85 - 1.64 (m, 11H), 1.60 (d, J = 8.4 Hz, 1H), 1.45 (d, J = 9.4 Hz, 2H).	484.2	D	C

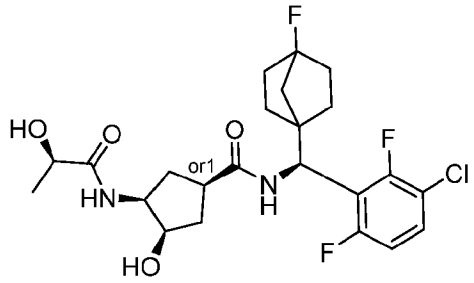
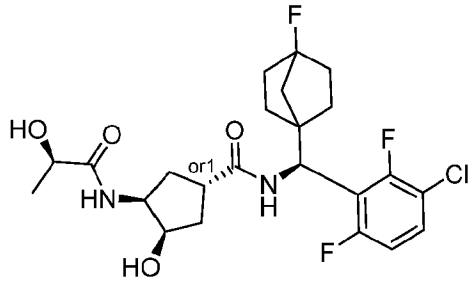
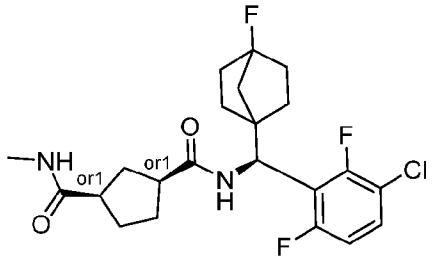
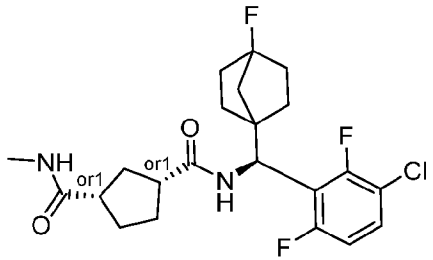
I-3240		1H NMR (400 MHz, DMSO-d6) 8.28 (d, J = 8.0 Hz, 1H), 8.00 (dd, J = 8.7, 5.2 Hz, 1H), 7.61 - 7.38 (m, 2H), 5.44 (d, J = 7.8 Hz, 1H), 4.78 (d, J = 3.3 Hz, 1H), 4.00 - 3.77 (m, 2H), 3.07 (dt, J = 13.0, 9.3 Hz, 1H), 1.84 (d, J = 8.1 Hz, 2H), 1.80 (s, 6H), 1.71 (qt, J = 21.2, 12.6, 9.7 Hz, 5H), 1.62 - 1.46 (m, 4H).	466.1	D	
I-3241		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.6, 5.4 Hz, 1H), 7.31 (d, J = 7.6 Hz, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.59 (t, J = 5.6 Hz, 1H), 5.27 (d, J = 8.2 Hz, 1H), 5.12 (d, J = 3.5 Hz, 1H), 3.98 (d, J = 7.4 Hz, 2H), 3.79 (d, J = 5.5 Hz, 2H), 3.24 - 3.06 (m, 1H), 2.03 - 1.87 (m, 1H), 1.88 - 1.56 (m, 10H), 1.46 (d, J = 9.5 Hz, 3H).	475.15	B	B
I-3242		1H NMR (400 MHz, DMSO-d6) 8.25 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.6, 5.3 Hz, 1H), 7.29 (d, J = 7.9 Hz, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.57 (t, J = 5.6 Hz, 1H), 5.25 (d, J = 8.1 Hz, 1H), 5.12 (d, J = 3.9 Hz, 1H), 3.97 (ddd, J = 20.5, 7.9, 4.0 Hz, 2H), 3.78 (d, J = 5.5 Hz, 2H), 3.22 - 3.00 (m, 1H), 1.91 - 1.56 (m, 10H), 1.45 (d, J = 9.4 Hz, 3H).	475.15	C	B
I-3243		1H NMR (400 MHz, DMSO-d6) 8.16 (d, J = 8.2 Hz, 1H), 7.52 - 7.29 (m, 2H), 7.09 (td, J = 9.7, 9.2, 5.0 Hz, 1H), 5.25 (d, J = 8.0 Hz, 1H), 4.74 (d, J = 3.6 Hz, 1H), 4.05 - 3.79 (m, 2H), 3.09 (qd, J = 8.7, 4.5 Hz, 1H), 1.89 - 1.66 (m, 13H), 1.62 (dd, J = 13.1, 8.5 Hz, 2H), 1.45 (d, J = 8.5 Hz, 2H).	441.2	D	

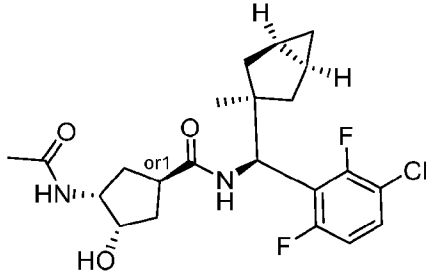
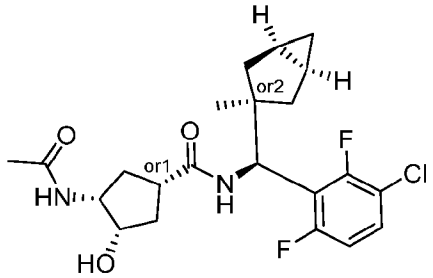
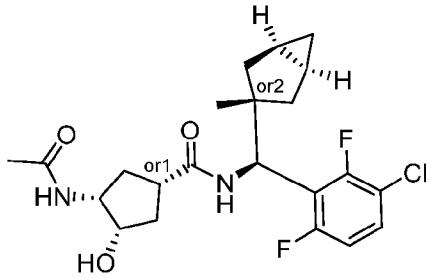
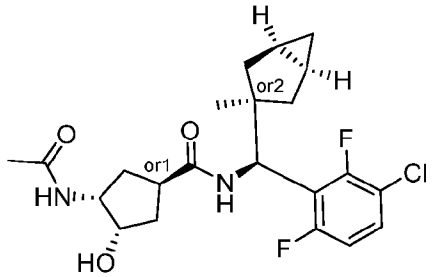
I-3244		1H NMR (400 MHz, DMSO-d6) 8.16 (d, J = 8.2 Hz, 1H), 7.52 - 7.29 (m, 2H), 7.09 (td, J = 9.7, 9.2, 5.0 Hz, 1H), 5.25 (d, J = 8.0 Hz, 1H), 4.74 (d, J = 3.6 Hz, 1H), 4.05 - 3.79 (m, 2H), 3.09 (qd, J = 8.7, 4.5 Hz, 1H), 1.89 - 1.66 (m, 13H), 1.62 (dd, J = 13.1, 8.5 Hz, 2H), 1.45 (d, J = 8.5 Hz, 2H).	441.2	D	
I-3245		1H NMR (400 MHz, DMSO-d6) 8.23 (d, J = 8.3 Hz, 1H), 7.79 (d, J = 6.7 Hz, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.16 (t, J = 9.4 Hz, 1H), 5.26 (d, J = 8.2 Hz, 1H), 5.10 (d, J = 4.7 Hz, 1H), 3.79 (dp, J = 19.7, 5.9 Hz, 2H), 2.88 (p, J = 8.3 Hz, 1H), 2.06 - 1.95 (m, 2H), 1.79 (s, 7H), 1.71 (d, J = 9.3 Hz, 4H), 1.63 - 1.54 (m, 2H), 1.45 (p, J = 6.6 Hz, 3H).	459.35	B	A
I-3246		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.3 Hz, 1H), 7.79 (d, J = 6.9 Hz, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.20 - 7.11 (m, 1H), 5.26 (d, J = 8.3 Hz, 1H), 5.13 (d, J = 4.6 Hz, 1H), 3.89 - 3.70 (m, 2H), 2.88 (p, J = 8.1 Hz, 1H), 2.12 - 2.01 (m, 1H), 1.88 (dt, J = 14.4, 7.6 Hz, 1H), 1.78 (s, 6H), 1.71 (d, J = 13.5 Hz, 4H), 1.56 (ddd, J = 13.7, 11.1, 6.7 Hz, 3H), 1.44 (q, J = 7.4, 5.2 Hz, 2H).	459.35	B	A
I-3247		1H NMR (400 MHz, DMSO-d6) 8.18 (d, J = 8.3 Hz, 1H), 7.69 (d, J = 7.8 Hz, 1H), 7.55 (td, J = 8.7, 5.5 Hz, 1H), 7.13 (td, J = 9.4, 1.6 Hz, 1H), 5.27 (d, J = 8.1 Hz, 1H), 4.83 (d, J = 3.6 Hz, 1H), 3.98 (ddd, J = 14.3, 9.1, 4.8 Hz, 1H), 3.93 (dq, J = 4.0, 2.1 Hz, 1H), 3.10 (qd, J = 8.6, 4.6 Hz, 1H), 1.89 - 1.57 (m, 13H), 1.49 - 1.42 (m, 2H), 0.69 - 0.55 (m, 4H).	485.2	C	B

I-3248		1H NMR (400 MHz, DMSO-d6) 8.18 (d, J = 8.2 Hz, 1H), 7.68 (d, J = 7.6 Hz, 1H), 7.55 (td, J = 8.6, 5.4 Hz, 1H), 7.14 (td, J = 9.4, 1.6 Hz, 1H), 5.26 (d, J = 8.1 Hz, 1H), 4.83 (d, J = 3.5 Hz, 1H), 4.00 - 3.88 (m, 2H), 3.11 (tt, J = 13.2, 6.5 Hz, 1H), 1.75 - 1.56 (m, 13H), 1.45 (d, J = 9.0 Hz, 2H), 0.61 (ddt, J = 18.5, 7.2, 3.4 Hz, 4H).	485.2	D	B
I-3249		1H NMR (400 MHz, DMSO-d6) 8.21 (d, J = 8.2 Hz, 1H), 7.51 (d, J = 7.4 Hz, 1H), 7.41 (qd, J = 9.4, 4.8 Hz, 1H), 7.10 (td, J = 9.6, 8.7, 5.0 Hz, 1H), 5.26 (d, J = 8.1 Hz, 1H), 4.79 (d, J = 3.3 Hz, 1H), 4.00 - 3.84 (m, 2H), 3.08 (td, J = 8.7, 3.8 Hz, 1H), 1.81 (s, 5H), 1.79 (d, J = 3.3 Hz, 2H), 1.73 (dt, J = 15.9, 6.4 Hz, 6H), 1.66 - 1.55 (m, 2H), 1.46 (d, J = 9.9 Hz, 2H).	443.2	D	
I-3250		1H NMR (400 MHz, DMSO-d6) 8.21 (d, J = 8.2 Hz, 1H), 7.49 (d, J = 7.7 Hz, 1H), 7.41 (qd, J = 9.4, 4.8 Hz, 1H), 7.11 (p, J = 6.7, 5.6 Hz, 1H), 5.24 (d, J = 8.0 Hz, 1H), 4.79 (d, J = 3.6 Hz, 1H), 3.95 (dt, J = 10.7, 5.4 Hz, 1H), 3.87 (qd, J = 8.6, 3.8 Hz, 1H), 3.19 - 3.03 (m, 1H), 1.93 - 1.73 (m, 9H), 1.74 - 1.63 (m, 4H), 1.63 - 1.54 (m, 2H), 1.46 (d, J = 9.9 Hz, 2H).	443.15	D	D
I-3251		1H NMR (400 MHz, DMSO-d6) 8.18 (d, J = 8.2 Hz, 1H), 7.67-7.48 (m, 2H), 7.15 (t, J = 9.3 Hz, 1H), 5.28 (d, J = 8.1 Hz, 1H), 3.18 (td, J = 8.7, 4.2 Hz, 1H), 2.96-2.84 (m, 1H), 2.55 (d, J = 4.6 Hz, 3H), 2.19 (tt, J = 11.1, 5.9 Hz, 3H), 2.03 (t, J = 8.3 Hz, 1H), 1.94-1.54 (m, 7H), 1.44 (d, J = 8.6 Hz, 2H).	429.2	B	B

I-3252		1H NMR (400 MHz, DMSO-d6) 8.13 (d, J = 8.3 Hz, 1H), 7.57 (ddd, J = 14.1, 10.0, 5.4 Hz, 2H), 7.22-7.09 (m, 1H), 5.27 (d, J = 8.2 Hz, 1H), 3.02 (p, J = 8.9 Hz, 1H), 2.82 (p, J = 9.0 Hz, 1H), 2.53 (d, J = 4.6 Hz, 3H), 2.35-1.98 (m, 4H), 1.75 (dd, J = 21.2, 10.3 Hz, 7H), 1.59 (d, J = 8.4 Hz, 1H), 1.44 (d, J = 7.7 Hz, 2H).	429.15	B	B
I-3253		1H NMR (400 MHz, Chloroform-d) 7.32 (td, J = 8.6, 5.5 Hz, 1H), 7.04 (d, J = 7.5 Hz, 1H), 6.88 (t, J = 9.2 Hz, 1H), 6.49 (d, J = 9.9 Hz, 1H), 5.64 (d, J = 9.8 Hz, 1H), 4.48 - 4.12 (m, 3H), 3.49 (s, 1H), 3.03 (t, J = 7.9 Hz, 1H), 2.18 (ddd, J = 13.7, 8.5, 5.3 Hz, 4H), 2.05 (td, J = 8.8, 8.1, 3.1 Hz, 7H), 1.94 - 1.68 (m, 2H), 1.68 - 1.22 (m, 5H).	489.25	C	C
I-3254		1H NMR (400 MHz, Chloroform-d) 7.26 (s, 1H), 7.02 (s, 1H), 6.87 (t, J = 9.2 Hz, 1H), 6.40 (d, J = 10.0 Hz, 1H), 5.64 (d, J = 9.9 Hz, 1H), 4.25 (d, J = 26.7 Hz, 3H), 3.60 (s, 1H), 3.16 (s, 1H), 3.00 (d, J = 9.8 Hz, 1H),2.28 (dd, J = 13.3, 6.9 Hz, 1H), 2.25 - 1.79 (m, 10H), 1.42 (d, J = 6.9 Hz, 6H).	489.25	C	B
I-3255		1H NMR (400 MHz, DMSO-d6) 8.18 (d, J = 8.3 Hz, 1H), 7.55 (td, J = 8.7, 5.5 Hz, 1H), 7.24 (d, J = 7.4 Hz, 1H), 7.18 - 7.09 (m, 1H), 5.28 (d, J = 8.2 Hz, 1H), 4.75 (d, J = 3.4 Hz, 1H), 3.98 - 3.86 (m, 2H), 3.13 - 3.03 (m, 1H), 2.41 (h, J = 6.8 Hz, 1H), 1.90 - 1.67 (m, 10H), 1.61 (td, J = 11.2, 9.3, 2.7 Hz, 2H), 1.46 (d, J = 9.2 Hz, 2H), 0.98 (dd, J = 6.8, 2.7 Hz, 6H).	487.2	C	B

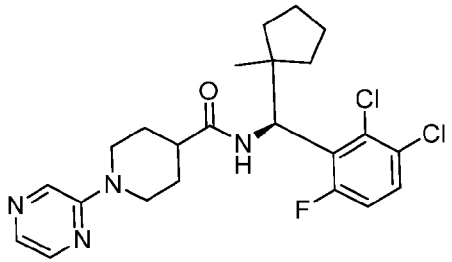
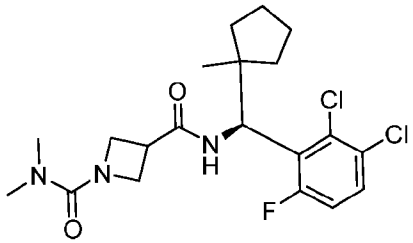
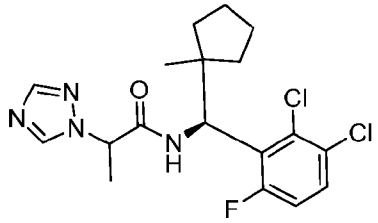
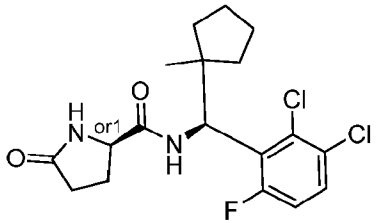
I-3256		1H NMR (400 MHz, DMSO-d6) 8.18 (d, J = 8.3 Hz, 1H), 7.55 (td, J = 8.7, 5.4 Hz, 1H), 7.23 (d, J = 7.7 Hz, 1H), 7.19 - 7.09 (m, 1H), 5.26 (d, J = 8.1 Hz, 1H), 4.76 (d, J = 3.7 Hz, 1H), 3.97 (p, J = 3.4 Hz, 1H), 3.88 (qd, J = 8.6, 3.9 Hz, 1H), 3.08 (td, J = 9.1, 8.6, 4.8 Hz, 1H), 2.40 (h, J = 6.8 Hz, 1H), 1.87 - 1.60 (d, J = 8.6 Hz, 12H), 1.49 - 1.42 (m, 2H), 0.97 (t, J − 6.6 Hz, 6H).	487.25	D	B
I-3257		1H NMR (400 MHz, DMSO-d6) 8.09 (d, J = 8.5 Hz, 1H), 7.56 (td, J = 8.6, 5.5 Hz, 1H), 7.45 (d, J = 7.4 Hz, 1H), 7.14 (td, J = 9.4, 1.7 Hz, 1H), 5.90 (d, J = 8.4 Hz, 1H), 4.73 (d, J = 3.4 Hz, 1H), 3.94 (s, 2H), 3.00 (dt, J = 13.2, 6.3 Hz, 1H), 2.12 (s, 1H), 1.87 (d, J = 10.7 Hz, 1H), 1.78 (d, J = 25.4 Hz, 8H), 1.72 (s, 1H), 1.71-1.60 (m, 2H), 1.42 (t, J − 9.6 Hz, 2H).	475.1	D	D
I-3258		1H NMR (400 MHz, DMSO-d6) 8.09 (d, J = 8.5 Hz, 1H), 7.56 (td, J = 8.8, 5.5 Hz, 1H), 7.43 (d, J = 7.7 Hz, 1H), 7.14 (td, J = 9.4, 1.7 Hz, 1H), 5.89 (d, J = 8.3 Hz, 1H), 4.74 (d, J = 3.6 Hz, 1H), 4.01-3.83 (m, 2H), 3.02 (p, J = 8.0 Hz, 1H), 2.12 (s, 1H), 1.85 (t, J = 9.3 Hz, 1H), 1.79 (s, 3H), 1.83-1.74 (m, 2H), 1.72 (dd, J = 12.9, 5.1 Hz, 3H), 1.70-1.60 (m, 2H), 1.42 (dd, J = 10.6, 8.7 Hz, 2H).	475.2	E	D
I-3259		1H NMR (400 MHz, DMSO-d6)8.29 (d, J = 8.0 Hz, 1H), 7.96 (ddd, J = 8.6, 7.3, 5.7 Hz, 1H), 7.51 (d, J = 7.5 Hz, 1H), 7.34 (t, J = 9.2 Hz, 1H), 5.25 (d, J = 8.0 Hz, 1H), 4.79 (d, J = 3.4 Hz, 1H), 3.97-3.82 (m, 2H), 3.15-3.02 (m, 1H), 1.80 (s, 5H), 1.88-1.66 (m, 7H), 1.65-1.54 (m, 2H), 1.47 (d, J = 9.8 Hz, 2H).	450.35	D	

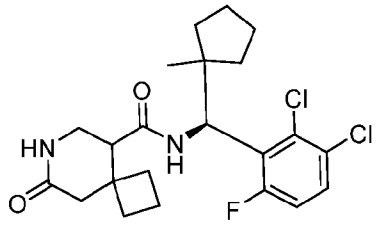
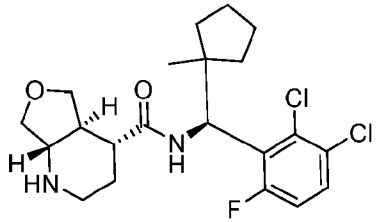
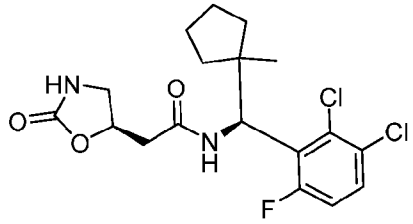
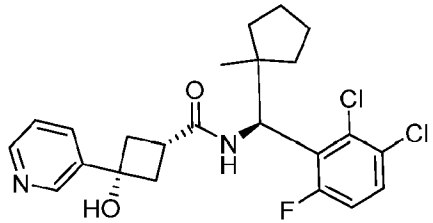
I-3260		1H NMR (400 MHz, DMSO-d6) 8.19 (d, J = 8.2 Hz, 1H), 7.55 (td, J = 8.7, 5.5 Hz, 1H), 7.30 (d, J = 8.0 Hz, 1H), 7.19 - 7.09 (m, 1H), 5.55 (s, 1H), 5.26 (d, J = 8.1 Hz, 1H), 5.06 (s, 1H), 3.99 (t, J = 3.7 Hz, 1H), 3.97 - 3.85 (m, 2H), 3.11 (dt, J = 13.4, 6.7 Hz, 1H), 1.86 - 1.67 (m, 10H), 1.60 (s, 2H), 1.48 - 1.37 (m, 2H), 1.29 - 1.16 (m, 3H).	489.1	D	C
I-3261		1H NMR (400 MHz, DMSO-d6) 8.20 (d, J = 8.3 Hz, 1H), 7.55 (td, J = 8.7, 5.4 Hz, 1H), 7.31 (d, J = 7.8 Hz, 1H), 7.14 (td, J = 9.4, 1.6 Hz, 1H), 5.57 (s, 1H), 5.27 (d, J = 8.0 Hz, 1H), 5.08 (s, 1H), 3.94 (dd, J = 13.2, 5.2 Hz, 3H), 3.11 (dt, J = 13.4, 6.7 Hz, 1H), 1.93 (ddd, J = 12.8, 8.2, 4.7 Hz, 1H), 1.80 (s, 1H), 1.74 (dd, J = 16.1, 7.3 Hz, 6H), 1.69 (s, 3H), 1.60 (d, J = 8.3 Hz, 1H), 1.49 - 1.40 (m, 2H), 1.20 (dd, J = 6.8, 5.3 Hz, 3H).	489.15	D	B
I-3262		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.3 Hz, 1H), 7.70 (q, J = 4.7 Hz, 1H), 7.55 (td, J = 8.6, 5.3 Hz, 1H), 7.14 (t, J = 9.4 Hz, 1H), 5.29 (d, J = 8.2 Hz, 1H), 2.78 (q, J = 8.4 Hz, 1H), 2.55 (d, J = 4.7 Hz, 4H), 1.89 (dt, J = 12.3, 7.6 Hz, 1H), 1.80 - 1.57 (m, 14H), 1.46 (d, J = 8.8 Hz, 2H).	443.2	C	
I-3263		1H NMR (400 MHz, DMSO-d6) 8.26 (dd, J = 17.2, 8.3 Hz, 1H), 7.72 (p, J = 5.8, 5.1 Hz, 1H), 7.56 (td, J = 8.6, 5.4 Hz, 1H), 7.14 (t, J = 9.4 Hz, 1H), 5.30 (d, J = 8.2 Hz, 1H), 2.78 (dq, J = 16.3, 8.2, 7.4 Hz, 1H), 2.65 - 2.57 (m, 4H), 1.96 (dt, J = 12.5, 7.7 Hz, 1H), 1.86 - 1.56 (m, 13H), 1.46 (d, J = 9.2 Hz, 2H).	443.2	C	A

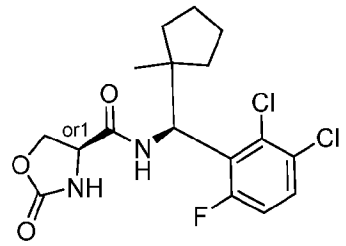
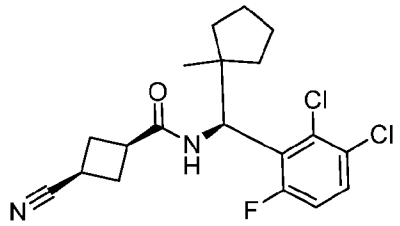
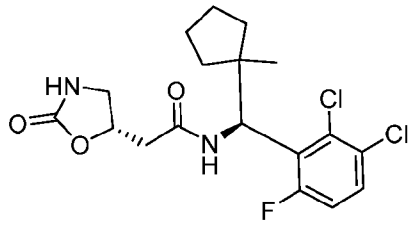
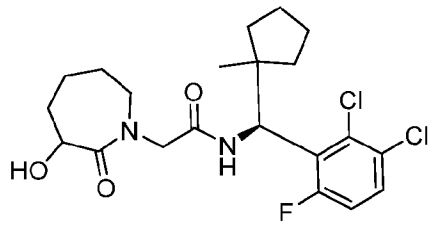
I-3264		1H NMR (400 MHz, DMSO-d6) 8.06 (d, J = 8.8 Hz, 1H), 7.68 - 7.43 (m, 2H), 7.12 (t, J = 9.2 Hz, 1H), 5.11 (d, J = 8.7 Hz, 1H), 4.75 (d, J = 3.3 Hz, 1H), 3.97 - 3.74 (m, 2H), 3.17 - 3.04 (m, 1H), 1.81 (m, 5H), 1.70 - 1.59 (m, 3H), 1.46 (dd, J = 12.4, 5.8 Hz, 1H), 1.42 - 1.24 (m, 4H), 1.05 (s, 3H), 0.86 (dd, J = 8.1, 4.2 Hz, 1H), 0.14 (q, J = 3.8 Hz, 1H).	441.15	B	A
I-3265		1H NMR (400 MHz, Chloroform-d) 6.84 (t, J = 9.4 Hz, 1H), 6.21 (d, J = 10.0 Hz, 1H), 5.86 (s, 1H), 5.41 (d, J = 9.4 Hz, 1H), 4.31 (d, J = 47.9 Hz, 2H), 2.97 (s, 1H), 2.21 (s, 3H), 2.04 (d, J = 32.4 Hz, 4H), 1.80 (s, 1H), 1.66 (d, J = 12.6 Hz, 2H), 1.49 (d, J = 12.6 Hz, 1H), 1.37 (d, J = 15.1 Hz, 4H), 1.08 (s, 3H), 0.93 (s, 1H), 0.09 (d, J = 4.0 Hz, 1H).	441.2	D	C
I-3266		1H NMR (400 MHz, Chloroform-d) 6.84 (t, J = 9.2 Hz, 1H), 6.22 (d, J = 10.0 Hz, 1H), 5.90 (s, 1H), 5.41 (d, J = 9.6 Hz, 1H), 4.31 (d, J = 47.6 Hz, 2H), 2.97 (s, 1H), 2.21 (s, 3H), 2.04 (d, J = 31.0 Hz, 4H), 1.81 (s, 1H), 1.65 (d, J = 11.5 Hz, 2H), 1.49 (d, J = 12.7 Hz, 1H), 1.37 (d, J = 14.9 Hz, 4H), 1.08 (s, 3H), 1.02 - 0.83 (m, 1H), 0.09 (d, J = 4.4 Hz, 1H).	441.2	D	
I-3267		1H NMR (400 MHz, DMSO-d6) 8.06 (d, J = 8.7 Hz, 1H), 7.66 - 7.47 (m, 2H), 7.12 (t, J = 9.4 Hz, 1H), 5.10 (t, J = 7.9 Hz, 1H), 4.76 (dd, J = 5.7, 3.4 Hz, 1H), 4.16 - 3.76 (m, 2H), 3.20 - 2.99 (m, 1H),1.86 - 1.71 (m, 5H), 1.73 - 1.54 (m, 3H), 1.45 (dd, J = 12.6, 5.8 Hz, 1H),1.42 - 1.24 (m, 4H), 0.94 - 0.75 (m, 2H), 0.14 (q, J = 3.6 Hz, 1H).	441.2	D	

I-3268				D	
I-3269				D	
I-3270					
I-3271					
I-3272					

I-3273				
I-3274				
I-3275				
I-3276		401.3	D	

I-3277			466.4	D	
I-3278			431.4	C	
I-3279			400.3	D	
I-3280			388.3	D	

I-3281			442.4	E	
I-3282			430.4	D	
I-3283			404.3	D	
I-3284			452.4	C	

I-3285			390.3	D	
I-3286			384.3	C	
I-3287			404.3	D	
I-3288			446.4	D	

I-3289		384.3	D	
I-3290		390.3	D	
I-3291		388.05	D	
I-3292		388.05	E	

I-3293		388.05	D	
I-3294		388.1	C	
I-3295		531.1	D	
I-3296		451.05	B	A

I-3297		469.1	D	
I-3298		469.15	D	
I-3299		537.5	C	
I-3300		530.5	D	

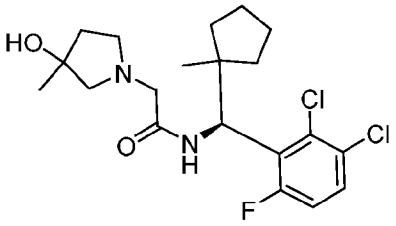
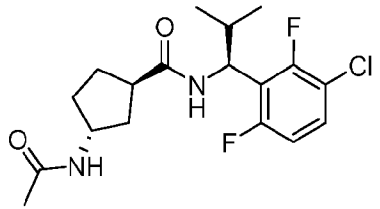
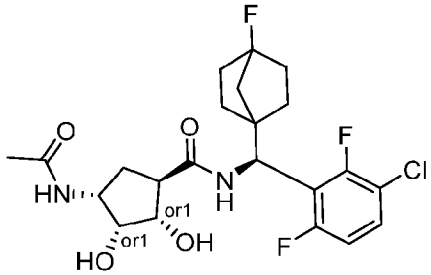
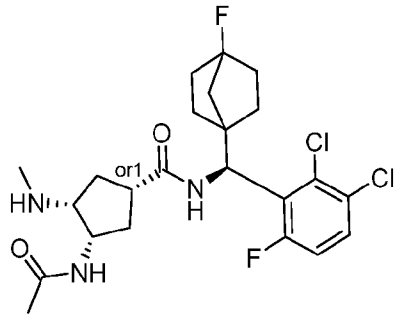
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I-3302		549.5	B
I-3303		549.5	B

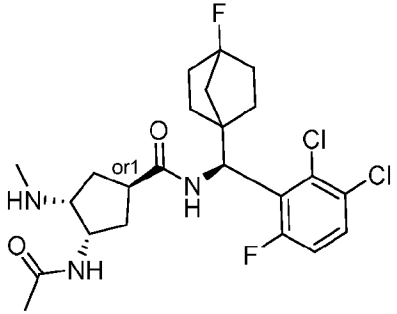
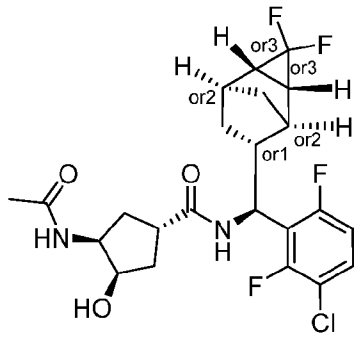
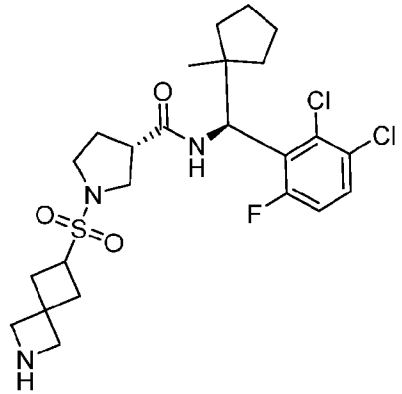
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I-3305		522.5	C	
I-3306		532.5	B	B

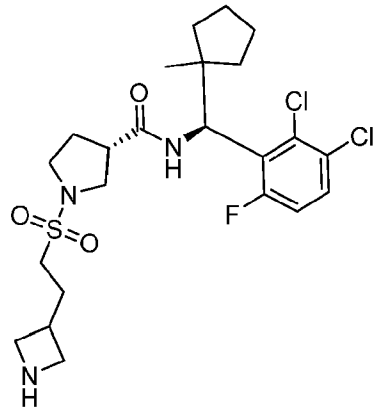
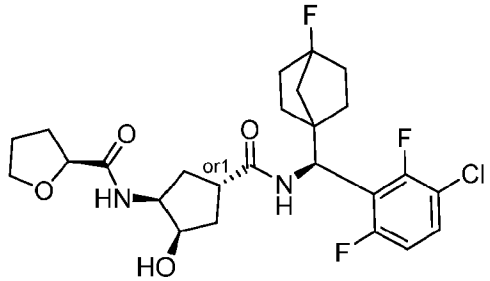
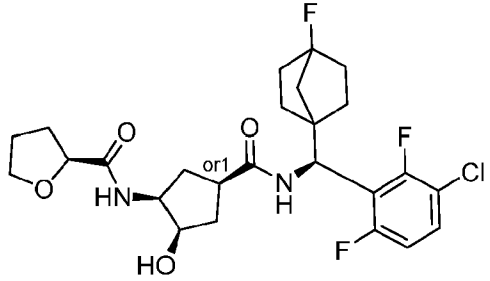
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I-3308		530.5	C
I-3309		517.5	B
			A

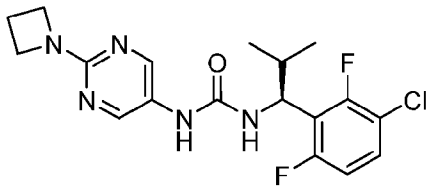
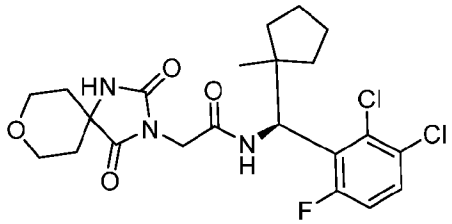
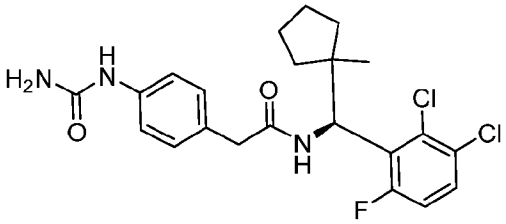
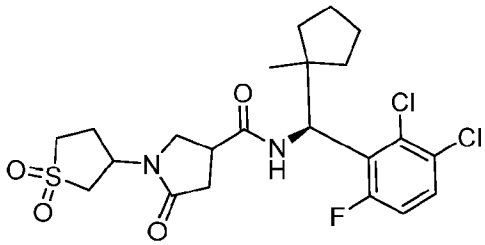
I-3310		535.5	B
I-3311		509.5	B
I-3312		549.5	C

I-3313		517.5	D
I-3314		517.5	B
			A
I-3315		548.5	B

I-3316			418.4	D	
I-3317		1H NMR (400 MHz, DMSO-d6) 8.31 (d, J = 7.9 Hz, 1H), 7.77 (d, J = 7.0 Hz, 1H), 7.54 (td, J = 8.7, 5.5 Hz, 1H), 7.18 - 7.07 (m, 1H), 4.82 - 4.68 (m, 1H), 3.99 (p, J = 6.5 Hz, 1H), 2.83 (p, J = 7.8 Hz, 1H), 2.13 (q, J = 7.4 Hz, 1H), 1.93 - 1.69 (m, 6H), 1.61 (ddd, J = 13.5, 8.9, 5.5 Hz, 1H), 1.43 (dt, J = 12.1, 7.6 Hz, 1H), 1.35 (dt, J = 13.0, 7.0 Hz, 1H), 1.01 (d, J = 6.5 Hz, 3H), 0.71 (d, J = 6.7 Hz, 3H).	372.95	D	
I-3318		1H NMR (400 MHz, DMSO-d6) 8.00 (d, J = 8.6 Hz, 1H), 7.62-7.51 (m, 2H), 7.21-7.11 (m, 1H), 5.34 (d, J = 8.5 Hz, 1H), 4.99 (d, J = 3.6 Hz, 1H), 4.91 (d, J = 7.1 Hz, 1H), 4.00-3.88 (m, 1H), 3.92 (s, 2H), 3.72 (q, J = 3.5 Hz, 1H), 2.95-2.84 (m, 1H), 1.83 (d, J = 7.2 Hz, 2H), 1.79 (s, 3H), 1.78-1.58 (m, 7H), 1.45 (dd, J = 18.3, 9.7 Hz, 2H).	475.3	E	
I-3319		1H NMR (400 MHz, DMSO-d6)8.07 (d, J = 8.3 Hz, 1H), 7.82 (d, J = 7.3 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (t, J = 9.8 Hz, 1H), 5.52 (d, J = 8.2 Hz, 1H), 3.92 (tq, J = 10.6, 5.4 Hz, 1H), 3.57 (p, J = 6.1 Hz, 1H), 3.19 (s, 2H), 2.90 (p, J = 8.4 Hz, 1H), 2.15 (ddt, J = 28.7, 14.6, 7.6 Hz, 1H), 1.98-1.82 (m, 2H), 1.78 (d, J = 3.5 Hz, 5H), 1.72 (s, 2H), 1.70-1.56 (m, 5H), 1.58- 1.40 (m, 1H).	489.3	C	A

I-3320		1H NMR (400 MHz, DMSO-d6)8.07 (d, J = 8.4 Hz, 1H), 7.82 (d, J = 7.2 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (t, J = 9.8 Hz, 1H), 5.52 (d, J = 8.1 Hz, 1H), 3.92 (td, J = 7.4, 3.6 Hz, 1H), 3.57 (p, J = 6.0 Hz, 1H), 3.21 (d, J = 13.8 Hz, 3H), 2.90 (p, J = 8.4 Hz, 1H), 2.25-2.05 (m, 1H), 1.92 (dt, J = 13.6, 8.2 Hz, 1H), 1.78 (d, J = 3.5 Hz, 5H), 1.73 (s, 4H), 1.71 (dd, J = 12.4, 8.7 Hz, 1H), 1.70-1.55 (m, 3H), 1.50 (s, 1H).	489.3	C	B
I-3321		1H NMR (400 MHz, DMSO-d6) 8.44 (d, J = 7.1 Hz, 1H), 7.59 (td, J = 8.7, 5.6 Hz, 1H), 7.50 (d, J = 7.5 Hz, 1H), 7.18 (t, J = 9.2 Hz, 1H), 4.94 (dd, J = 11.9, 7.1 Hz, 1H), 4.75 (d, J = 3.2 Hz, 1H), 3.90 (d, J = 5.9 Hz, 2H), 2.63 (s, 2H), 2.10 (s, 1H), 1.99-1.89 (m, 2H), 1.80 (s, 3H), 1.72 (dd, J = 22.0, 11.2 Hz, 3H), 1.66-1.60 (m, 2H), 1.64-1.55 (m, 1H), 1.39 (d, J = 11.1 Hz, 1H), 1.03 (s, 2H).	489.15	D	
I-3322			533.5	B	

I-3323			521.5	B	B
I-3324		1H NMR (400 MHz, DMSO-d6) 8.23 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.24 - 7.04 (m, 2H), 5.25 (d, J = 8.1 Hz, 1H), 5.10 (d, J = 4.1 Hz, 1H), 4.27 - 4.11 (m, 1H), 4.03 - 3.81 (m, 3H), 3.76 (dt, J = 8.0, 6.5 Hz, 1H), 3.10 (dt, J = 13.9, 6.9 Hz, 1H), 2.16 - 2.01 (m, 1H), 1.93 - 1.54 (m, 15H), 1.45 (d, J = 9.2 Hz, 2H).	515.3	C	
I-3325		1H NMR (400 MHz, DMSO-d6) 8.22 (d, J = 8.1 Hz, 1H), 7.56 (td, J = 8.7, 5.6 Hz, 1H), 7.21 (d, J = 7.6 Hz, 1H), 7.14 (t, J = 9.4 Hz, 1H), 5.27 (d, J = 8.2 Hz, 1H), 5.17 - 5.05 (m, 1H), 4.20 (dd, J = 8.2, 5.0 Hz, 1H), 3.95 (d, J = 8.7 Hz, 2H), 3.84 (q, J = 7.0, 6.5 Hz, 1H), 3.80 - 3.72 (m, 1H), 3.17 - 3.02 (m, 1H), 2.11 (dq, J = 10.5, 7.3 Hz, 1H), 1.99 - 1.55 (m, 15H), 1.53 - 1.30 (m, 2H).	515.3	C	

I-3326		1H NMR (400 MHz, DMSO-d6) 8.31 (d, J = 13.2 Hz, 3H), 7.58 (td, J = 8.7, 5.6 Hz, 1H), 7.19 (td, J = 9.4, 1.7 Hz, 1H), 6.83 (d, J = 9.1 Hz, 1H), 4.84 (t, J = 9.4 Hz, 1H), 3.96 (t, J = 7.5 Hz, 4H), 2.26 (p, J = 7.4 Hz, 2H), 2.05 (q, J = 7.8, 7.4 Hz, 1H), 1.02 (d, J = 6.6 Hz, 3H), 0.76 (d, J = 6.7 Hz, 3H).	396.2	D	
I-3327				C	
I-3328				B	B
I-3329				B	

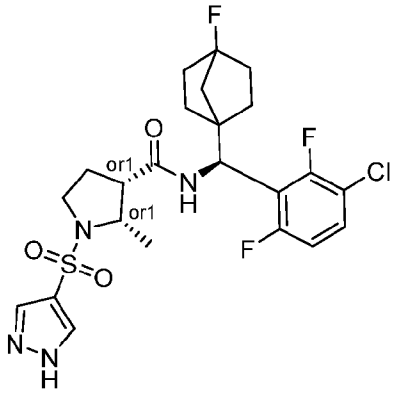
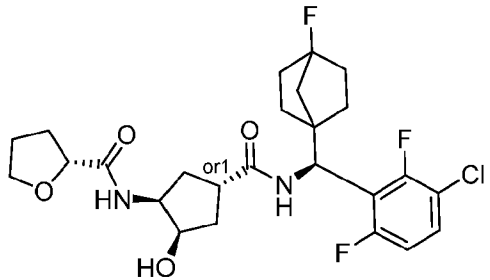
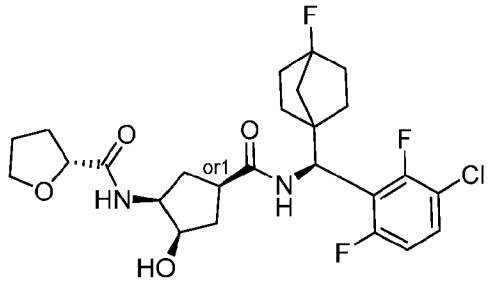
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I-3331			B	
I-3332			A	A
I-3333			B	B

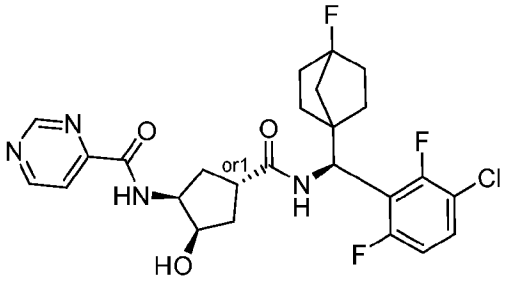
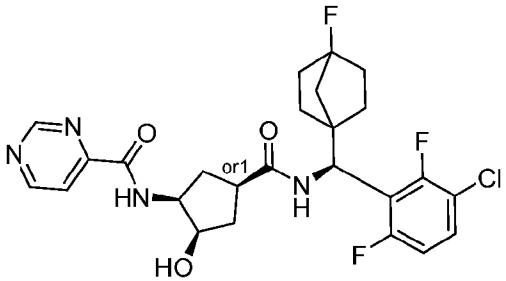
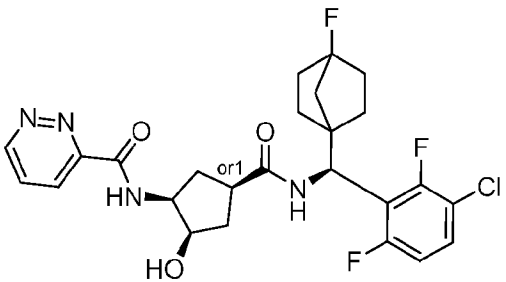
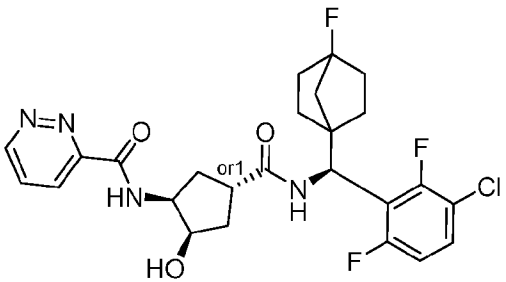
I-3334			B	
I-3335			B	
I-3336		440.1	D	
I-3337		440.05	C	

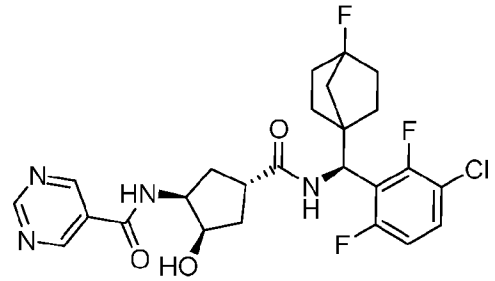
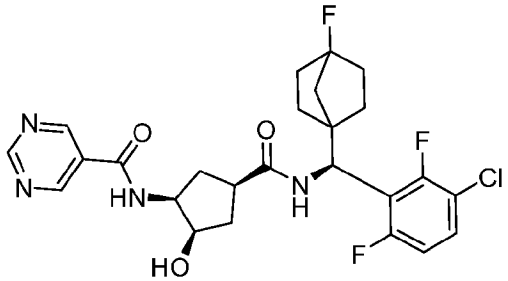
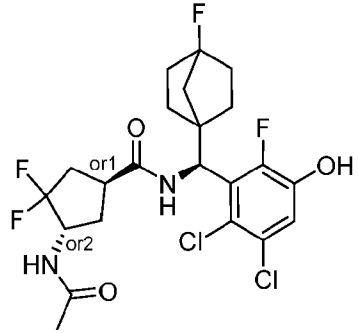
I-3338		440.1	D	
I-3339		440.05	D	
I-3340		440.1	E	
I-3341		440.1	D	
I-3342		440.1	E	

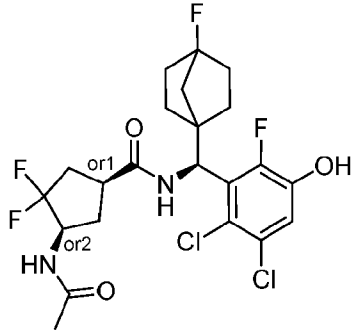
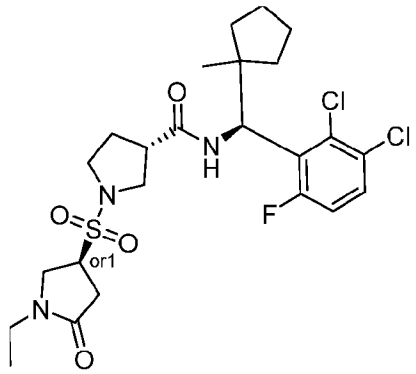
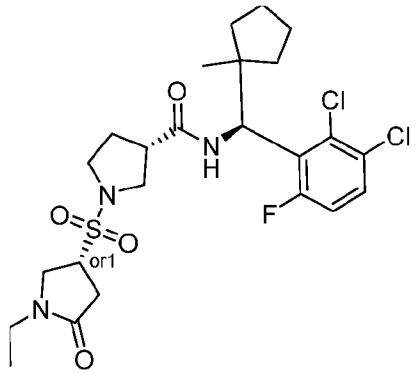
I-3343		531.1	B A
I-3344		531.1	D
I-3345		531.1	C

I-3346		531.15	B A
I-3347		531.15	D
I-3348		531.1	C

I-3349			531.1	B	B
I-3350		1H NMR (400 MHz, DMSO-d6) 8.21 (d, J = 8.2 Hz, 1H), 7.60 - 7.52 (m, 1H), 7.22 - 7.10 (m, 2H), 5.26 (d, J = 8.1 Hz, 1H), 5.11 (d, J = 4.0 Hz, 1H), 4.19 (dd, J = 8.3, 4.9 Hz, 1H), 3.99 (s, 1H), 3.91 (dd, J = 8.3, 4.3 Hz, 1H), 3.83 (q, J = 7.0, 6.5 Hz, 1H), 3.76 (q, J = 7.7, 7.2 Hz, 1H), 3.15 - 3.06 (m, 1H), 2.14- 2.05 (m, 1H), 1.87 - 1.57 (m, 15H), 1.45 (d, J = 8.8 Hz, 2H).	515.1	C	
I-3351		1H NMR (400 MHz, DMSO-d6) 8.22 (d, J = 8.3 Hz, 1H), 7.56 (td, J = 8.6, 5.4 Hz, 1H), 7.22 - 7.10 (m, 2H), 5.27 (d, J = 8.2 Hz, 1H), 5.09 (d, J = 3.9 Hz, 1H), 4.21 (dd, J = 8.3, 5.2 Hz, 1H), 4.00 - 3.90 (m, 2H), 3.86 (dt, J = 8.1, 6.4 Hz, 1H), 3.76 (dt, J = 8.1, 6.6 Hz, 1H), 3.11 (tt, J = 13.6, 6.6 Hz, 1H), 2.10 (tt, J = 9.1, 3.0 Hz, 1H), 1.92 (ddd, J = 12.9, 8.1, 4.9 Hz, 1H), 1.87 - 1.56 (m, 14H), 1.45 (d, J = 9.2 Hz, 2H).	515.15	B	

I-3352		1H NMR (400 MHz, DMSO-d6) 9.33 (d, J = 1.4 Hz, 1H), 9.07 (d, J = 5.0 Hz, 1H), 8.48 (d, J = 7.3 Hz, 1H), 8.27 (d, J = 8.2 Hz, 1H), 8.03 (dd, J = 5.0, 1.4 Hz, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.18 - 7.11 (m, 1H), 5.33 (d, J = 3.8 Hz, 1H), 5.27 (d, J = 8.1 Hz, 1H), 4.14 (d, J = 5.7 Hz, 2H), 3.23 - 3.14 (m, 1H), 1.93 - 1.66 (m, 11H), 1.60 (d, J = 8.4 Hz, 1H), 1.46 (d, J = 8.9 Hz, 2H).	523.35	B	B
I-3353		1H NMR (400 MHz, DMSO-d6) 9.34 (d, J = 1.4 Hz, 1H), 9.08 (d, J = 5.1 Hz, 1H), 8.50 (d, J = 7.9 Hz, 1H), 8.27 (d, J = 8.2 Hz, 1H), 8.05 (dd, J = 5.0, 1.4 Hz, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.31 (dd, J = 17.5, 6.1 Hz, 2H), 4.23 - 4.09 (m, 2H), 3.17 (dt, J = 13.8, 6.8 Hz, 1H), 2.06 (ddd, J = 13.0, 8.2, 5.0 Hz, 1H), 1.79 (ddt, J = 26.9, 19.0, 11.3 Hz, 10H), 1.60 (d, J = 8.5 Hz, 1H), 1.46 (d, J = 8.3 Hz, 2H).	523.35	B	B
I-3354		1H NMR (400 MHz, DMSO-d6) 9.42 (dd, J = 5.0, 1.7 Hz, 1H), 8.65 (d, J = 7.9 Hz, 1H), 8.30 - 8.20 (m, 2H), 7.93 (dd, J = 8.4, 5.0 Hz, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.20 - 7.11 (m, 1H), 5.34 - 5.26 (m, 2H), 4.24 (qd, J = 8.3, 4.4 Hz, 1H), 4.17 - 4.10 (m, 1H), 3.25 - 3.15 (m, 1H), 2.08 (ddd, J = 13.1, 8.3, 5.0 Hz, 1H), 2.03 - 1.63 (m, 10H), 1.61 (d, J = 8.4 Hz, 1H), 1.46 (d, J = 8.0 Hz, 2H).	523.3	B	A
I-3355		1H NMR (400 MHz, DMSO-d6) 9.41 (dd, J = 5.0, 1.7 Hz, 1H), 8.64 (d, J = 7.5 Hz, 1H), 8.31 - 8.19 (m, 2H), 7.92 (dd, J = 8.5, 5.0 Hz, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.19 - 7.11 (m, 1H), 5.37 - 5.25 (m, 2H), 4.20 (ddd, J = 16.0, 8.1, 3.7 Hz, 2H), 3.20 (p, J = 8.1 Hz, 1H), 1.96 - 1.67 (m, 11H), 1.61 (d, J = 8.3 Hz, 1H), 1.46 (d, J = 8.9 Hz, 2H).	523.35	C	

I-3356		1H NMR (400 MHz, DMSO-d6) 9.29 (d, J = 1.2 Hz, 1H), 9.17 (d, J = 1.1 Hz, 2H), 8.43 (d, J = 7.5 Hz, 1H), 8.26 (d, J = 8.2 Hz, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.15 (t, J = 9.1 Hz, 1H), 5.29 (d, J = 8.1 Hz, 1H), 4.88 (d, J = 3.4 Hz, 1H), 4.20 - 4.12 (m, 1H), 4.10 (d, J = 3.9 Hz, 1H), 3.17 (dt, J = 13.0, 6.4 Hz, 1H), 2.06 - 1.88 (m, 2H), 1.86 - 1.61 (d, J − 8.4 Hz, 10H), 1.47 (d, J − 8.3 Hz, 2H).	523.3	B	A
I-3357		1H NMR (400 MHz, DMSO-d6) 9.28 (s, 1H), 9.15 (s, 2H), 8.42 (d, J = 7.2 Hz, 1H), 8.26 (d, J = 8.3 Hz, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.15 (td, J = 9.5, 1.6 Hz, 1H), 5.28 (d, J = 8.1 Hz, 1H), 4.88 (d, J = 3.2 Hz, 1H), 4.19 - 4.08 (m, 2H), 3.21 - 3.13 (m, 1H), 1.96 - 1.68 (m, 11H), 1.61 (d, J = 8.5 Hz, 1H), 1.47 (d, J = 8.9 Hz, 2H).	523.35	C	
I-3358		1H NMR (400 MHz, DMSO-d6) 10.18 (s, 1H), 8.29 (d, J = 8.4 Hz, 1H), 8.03 (d, J = 8.8 Hz, 1H), 7.08 (d, J = 8.1 Hz, 1H), 5.50 (d, J = 8.3 Hz, 1H), 4.46 (dq, J = 17.9, 8.9 Hz, 1H), 3.13 - 3.06 (m, 1H), 2.26 (s, 1H), 2.21 (dt, J = 18.1, 6.8 Hz, 1H), 1.97 (ddt, J = 12.5, 8.6, 4.8 Hz, 1H), 1.86 (s, 3H), 1.86 - 1.52 (d, J = 12.6 Hz, 11H).	511	B	A

I-3359		1H NMR (400 MHz, DMSO-d6) 10.46 (s, 1H), 8.27 (d, J = 8.4 Hz, 1H), 8.01 (d, J = 8.9 Hz, 1H), 7.09 (d, J = 8.1 Hz, 1H), 5.47 (d, J = 8.3 Hz, 1H), 4.41 (dt, J = 18.1, 9.0 Hz, 1H), 3.18 - 3.08 (m, 1H), 2.28 (s, 2H), 1.86 - 1.58 (td, J = 30.3, 28.4, 13.0 Hz, 15H).	511.2	D	
I-3360				B	B
I-3361				B	

I-3362			C
I-3363			B

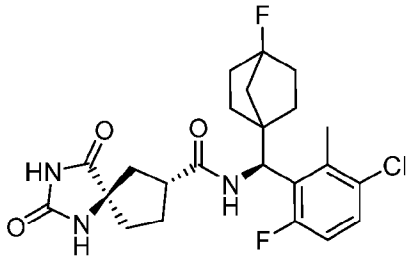
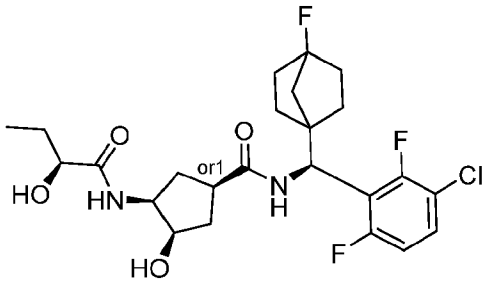
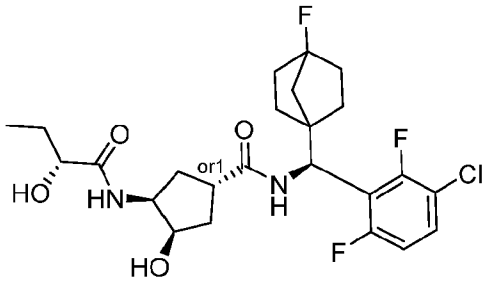
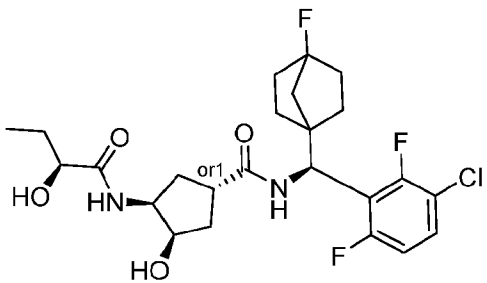
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I-3365		535.5	B	
I-3366		507.5	B	

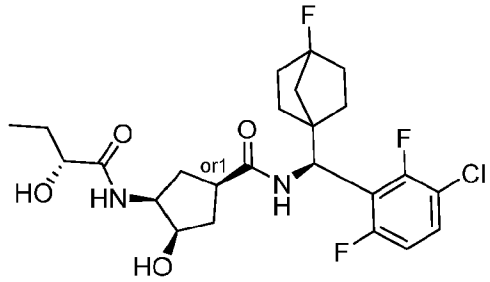
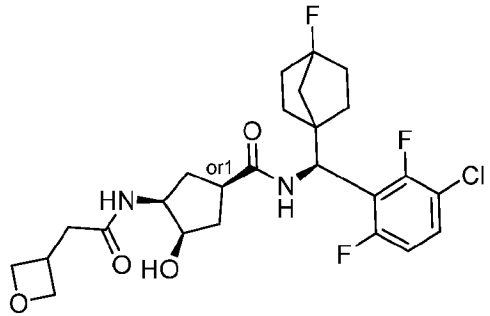
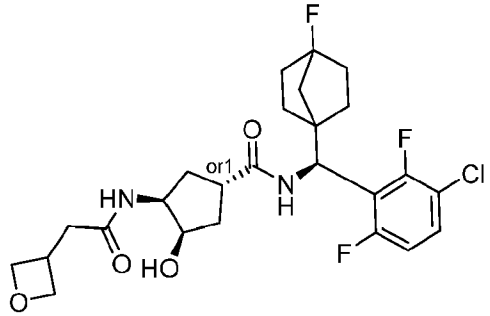
I-3367		402.3	E
I-3368		535.5	B
I-3369		532.5	B

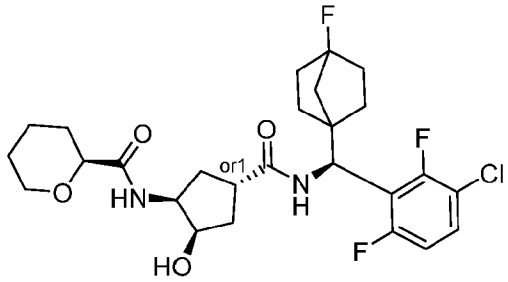
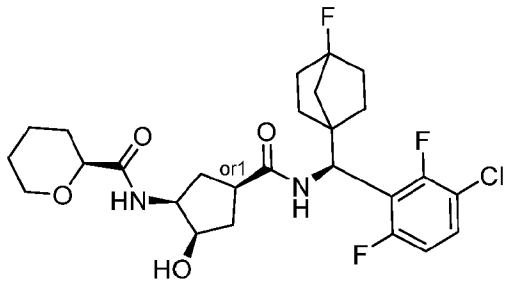
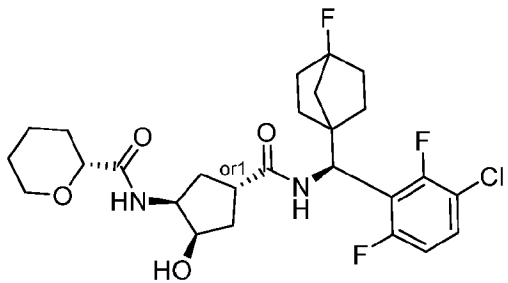
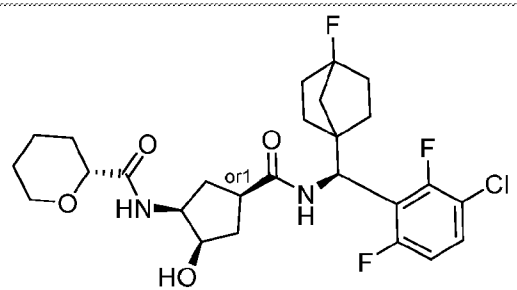
I-3370		390.3	D	
I-3371		535.05	D	
I-3372		535.05	D	

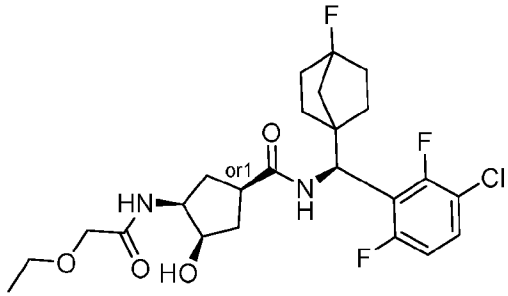
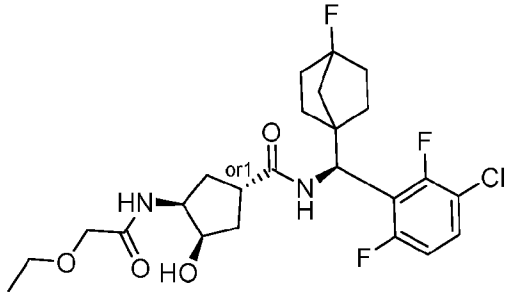
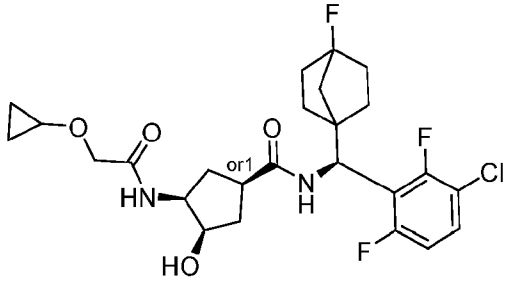
I-3373		537.15	B	B
I-3374		537.15	D	
I-3375		537.15	D	

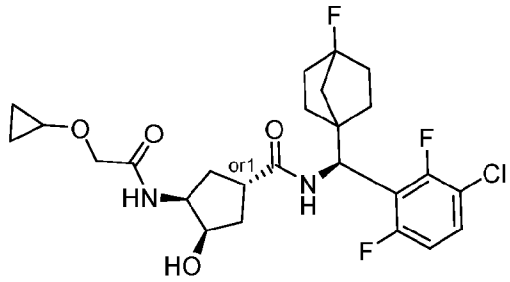
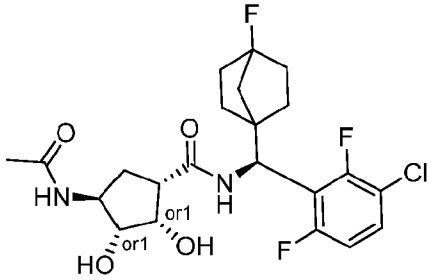
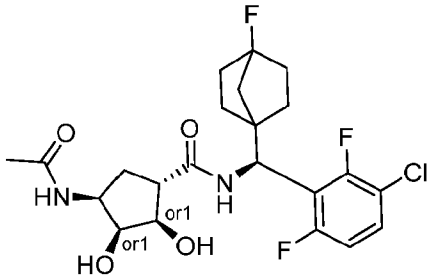
I-3376		537.15	B	B
I-3377	-	537.1	C	
I-3378	-	537.1	B	B

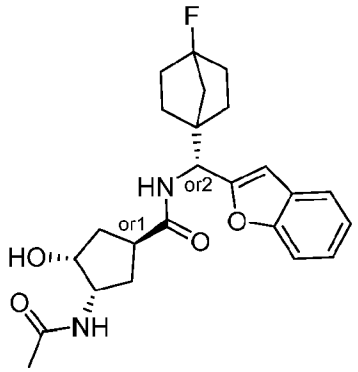
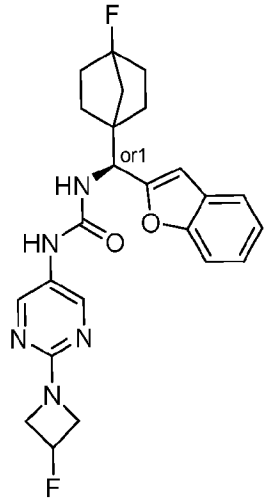
I-3379		1H NMR (400 MHz, DMSO-d6) 10.62 (s, 1H), 8.32 - 8.28 (m, 1H), 8.25 (d, J = 8.3 Hz, 1H), 7.38 (dd, J = 8.8, 4.8 Hz, 1H), 7.07 (dd, J = 11.0, 8.7 Hz, 1H), 5.25 (d, J = 8.1 Hz, 1H), 3.02 (q, J = 9.0, 8.4 Hz, 1H), 2.43 (s, 3H), 2.11 (dd, J = 13.1, 10.1 Hz, 1H), 2.00 - 1.83 (m, 5H), 1.65 (t, J = 8.8 Hz, 6H), 1.53 (s, 4H).	466.25	A	A
I-3380		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.3 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.35 (d, J = 7.6 Hz, 1H), 7.14 (t, J = 9.4 Hz, 1H), 5.54 (d, J = 5.2 Hz, 1H), 5.27 (d, J = 8.1 Hz, 1H), 5.09 (d, J = 3.7 Hz, 1H), 3.99 - 3.90 (m, 2H), 3.80 (dt, J = 6.6, 4.4 Hz, 1H), 3.16 - 3.07 (m, 1H), 1.98 -1.90 (m, 1H), 1.76 (dd, J = 20.3, 10.5 Hz, 7H), 1.70 - 1.57 (m, 5H), 1.49 (td, J = 13.1, 12.0, 6.7 Hz, 3H), 0.84 (t, J = 7.4 Hz, 3H).	503.15	B	
I-3381		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.33 (d, J = 8.0 Hz, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.52 (d, J = 5.2 Hz, 1H), 5.25 (d, J = 8.1 Hz, 1H), 5.10 (d, J = 3.9 Hz, 1H), 3.99 (d, J = 4.0 Hz, 1H), 3.91 (dd, J = 8.2, 4.2 Hz, 1H), 3.79 (dt, J = 6.3, 4.2 Hz, 1H), 3.10 (dt, J = 13.6, 6.9 Hz, 1H), 2.03 - 1.54 (m, 13H), 1.49 - 1.19 (m, 3H), 0.82 (t, J = 7.4 Hz, 3H).	503.2	C	
I-3382		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.31 (d, J = 8.0 Hz, 1H), 7.15 (td, J = 9.5, 9.0, 1.6 Hz, 1H), 5.52 (d, J = 5.1 Hz, 1H), 5.25 (d, J = 8.1 Hz, 1H), 5.10 (d, J = 4.0 Hz, 1H), 3.98 (p, J = 3.5 Hz, 1H), 3.90 (tt, J = 8.4, 4.2 Hz, 1H), 3.78 (dt, J = 7.1, 4.4 Hz, 1H), 3.17 - 3.07 (m, 1H), 1.85 - 1.76 (m, 5H), 1.75 - 1.66 (m, 5H), 1.62 (ddd, J = 16.7, 7.6, 3.6 Hz, 3H), 1.46 (p, J = 7.2 Hz, 3H), 0.84 (t, J = 7.4 Hz, 3H).	503.15	C	

I-3383		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.33 (d, J = 7.6 Hz, 1H), 7.15 (t, J = 9.3 Hz, 1H), 5.54 (d, J = 5.1 Hz, 1H), 5.35 - 5.19 (m, 1H), 5.10 (d, J = 3.7 Hz, 1H), 3.94 (d, J = 6.1 Hz, 2H), 3.79 (dt, J = 7.1, 4.6 Hz, 1H), 3.18 - 3.01 (m, 1H), 1.95 (d, J = 12.9 Hz, 1H), 1.88 - 1.56 (m, 12H), 1.48 (dd, J = 14.6, 7.7 Hz, 3H), 0.84 (t, J = 7.4 Hz, 3H).	503.2	C	
I-3384		1H NMR (400 MHz, DMSO-d6) 8.22 (d, J = 8.2 Hz, 1H), 7.55 (dd, J = 8.4, 5.7 Hz, 2H), 7.20 - 7.04 (m, 1H), 5.25 (d, J = 8.2 Hz, 1H), 4.61 (ddd, J = 8.0, 5.9, 2.4 Hz, 2H), 4.27 (q, J = 6.2 Hz, 2H), 4.07 - 3.76 (m, 2H), 3.25 - 3.03 (m, 2H), 2.51 (s, 1H), 196 - 1.65 (m, 12H), 1.45 (d, J = 9.5 Hz, 2H).	515.2	B	A
I-3385		1H NMR (400 MHz, DMSO-d6) 8.22 (d, J = 8.3 Hz, 1H), 7.79 - 7.46 (m, 2H), 7.14 (t, J = 9.4 Hz, 1H), 5.26 (d, J = 8.2 Hz, 1H), 4.79 (d, J = 3.3 Hz, 1H), 4.62 (dd, J = 7.9, 5.9 Hz, 2H), 4.28 (td, J = 6.1, 4.4 Hz, 2H), 3.90 (d, J = 10.1 Hz, 2H), 3.17 (p, J = 7.3 Hz, 1H), 3.13 - 3.04 (m, 1H), 1.94 - 1.57 (m, 10H), 1.59 (d, J = 8.6 Hz, 2H), 1.51 - 1.39 (m, 2H).	515.2	D	

I-3386		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (td, J = 9.5, 1.6 Hz, 1H), 7.04 (d, J = 7.9 Hz, 1H), 5.24 (d, J = 8.1 Hz, 1H), 5.17 (d, J = 4.0 Hz, 1H), 4.03 - 3.87 (m, 3H), 3.69 (dd, J = 11.4, 2.4 Hz, 1H), 3.42 (td, J = 11.0, 3.4 Hz, 1H), 3.10 (qd, J = 8.6, 5.0 Hz, 1H), 1.90 - 1.76 (m, 7H), 1.72 (td, J = 8.2, 3.6 Hz, 5H), 1.66 - 1.57 (m, 2H), 1.53 - 1.40 (m, 5H), 1.30 - 1.22 (m, 1H).	529.15	C	
I-3387		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.3 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.18 - 7.11 (m, 1H), 7.05 (d, J = 7.4 Hz, 1H), 5.27 (d, J = 8.1 Hz, 1H), 5.14 (d, J = 3.6 Hz, 1H), 3.96 (dd, J = 8.1, 4.1 Hz, 3H), 3.70 (dd, J = 11.4, 2.5 Hz, 1H), 3.43 (td, J = 10.9, 3.5 Hz, 1H), 3.11 (qd, J = 8.7, 4.8 Hz, 1H), 1.92 (td, J = 12.7, 12.2, 4.1 Hz, 2H), 1.83 - 1.72 (m, 7H), 1.71 - 1.57 (m, 5H), 1.53 - 1.41 (m, 5H), 1.31 - 1.22 (m, 1H).	529.15	B	
I-3388		1H NMR (400 MHz, DMSO-d6) 8.23 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.6, 5.4 Hz, 1H), 7.15 (t, J = 9.2 Hz, 1H), 7.03 (d, J = 7.9 Hz, 1H), 5.25 (d, J = 8.2 Hz, 1H), 5.13 (d, J = 4.1 Hz, 1H), 4.38 - 3.88 (m, 3H), 3.68 (dd, J = 11.3, 2.5 Hz, 1H), 3.59 - 3.33 (m, 1H), 3.10 (dd, J = 9.7, 5.2 Hz, 1H), 2.12 - 1.55 (m, 15H), 1.47 (s, 4H), 1.24 (t, J = 12.0 Hz, 1H).	529.15	D	
I-3389		1H NMR (400 MHz, DMSO-d6) 8.23 (d, J = 8.3 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.14 (t, J = 9.4 Hz, 1H), 7.05 (d, J = 7.6 Hz, 1H), 5.26 (d, J = 8.2 Hz, 1H), 5.16 (d, J = 3.8 Hz, 1H), 3.97 (d, J = 7.3 Hz, 3H), 3.71 (dd, J = 11.4, 2.4 Hz, 1H), 3.44 (t, J = 10.7 Hz, 1H), 3.10 (d, J = 7.8 Hz, 1H), 2.08 - 1.84 (m, 14H), 1.47 (d, J = 8.0 Hz, 5H), 1.35 - 1.13 (m, 1H).	529.15	C	

I-3390		1H NMR (400 MHz, DMSO-d6) 8.25 (d, J = 8.3 Hz, 1H), 7.56 (td, J = 8.6, 5.4 Hz, 1H), 7.15 (q, J = 9.3, 8.0 Hz, 2H), 5.27 (d, J = 8.1 Hz, 1H), 5.22 - 5.04 (m, 1H), 3.98 (d, J = 6.2 Hz, 2H), 3.83 (s, 2H), 3.50 (q, J = 7.0 Hz, 2H), 3.21 - 2.97 (m, 1H), 2.05 - 1.55 (m, 11H), 1.45 (d, J = 9.5 Hz, 3H), 1.15 (t, J = 7.0 Hz, 3H).	503.1	C	
I-3391		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.15 (t, J = 9.0 Hz, 2H), 5.25 (d, J = 8.1 Hz, 1H), 5.13 (d, J = 3.9 Hz, 1H), 4.16 - 3.88 (m, 2H), 3.81 (s, 2H), 3.49 (q, J = 7.0 Hz, 2H), 3.20 - 3.03 (m, 1H), 2.03 - 1.55 (m, 11H), 1.65 - 1.36 (m, 3H), 1.14 (t, J = 7.0 Hz, 3H).	503.1	D	
I-3392		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.3 Hz, 1H), 7.56 (td, J = 8.6, 5.4 Hz, 1H), 7.14 (t, J = 9.1 Hz, 2H), 5.26 (d, J − 8.1 Hz, 1H), 5.10 (d, J − 3.5 Hz, 1H), 3.98 (d, J = 6.5 Hz, 2H), 3.89 (s, 2H), 3.42 (tt, J = 5.9, 3.0 Hz, 1H), 3.12 (ddt, J = 18.7, 13.4, 7.0 Hz, 1H), 1.99 - 1.88 (m, 1H), 1.87 - 1.54 (m, 10H), 1.45 (d, J = 9.6 Hz, 2H), 0.55 (h, J = 2.6 Hz, 2H), 0.46 (dt, J = 6.1, 2.3 Hz, 2H).	515.1	B	B

I-3393		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.31 - 6.97 (m, 2H), 5.25 (d, J = 8.1 Hz, 1H), 5.11 (s, 1H), 4.11 - 3.76 (m, 4H), 3.41 (tt, J = 6.0, 2.9 Hz, 1H), 3.12 (ddd, J = 23.3, 12.5, 6.2 Hz, 1H), 2.02-1.50 (m, 11H), 1.45 (d, J = 9.4 Hz, 2H), 0.54 (p, J = 2.8, 2.3 Hz, 2H), 0.45 (dq, J = 5.9, 3.1, 2.6 Hz, 2H).	515.1	C	
I-3394		1H NMR (400 MHz, DMSO-d6) 8.23 (d, J = 8.3 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.14 (t, J = 9.4 Hz, 1H), 7.05 (d, J = 7.6 Hz, 1H), 5.26 (d, J = 8.2 Hz, 1H), 5.16 (d, J = 3.8 Hz, 1H), 3.97 (d, J = 7.3 Hz, 3H), 3.71 (dd, J = 11.4, 2.4 Hz, 1H), 3.44 (t, J = 10.7 Hz, 1H), 3.10 (d, J = 7.8 Hz, 1H), 2.08 - 1.84 (m, 14H), 1.47 (d, J = 8.0 Hz, 5H), 1.35 - 1.13 (m, 1H).	475	D	
I-3395		1H NMR (400 MHz, DMSO-d6) 8.23 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.6, 5.4 Hz, 1H), 7.15 (t, J = 9.2 Hz, 1H), 7.03 (d, J = 7.9 Hz, 1H), 5.25 (d, J = 8.2 Hz, 1H), 5.13 (d, J = 4.1 Hz, 1H), 4.38 - 3.88 (m, 3H), 3.68 (dd, J = 11.3, 2.5 Hz, 1H), 3.59 - 3.33 (m, 1H), 3.10 (dd, J = 9.7, 5.2 Hz, 1H), 2.12 - 1.55 (m, 15H), 1.47 (s, 4H), 1.24 (t, J = 12.0 Hz, 1H).	475.1	E	

I-3396		1H NMR (400 MHz, DMSO-d6) 8.44 - 8.39 (m, 2H), 8.25 (s, 1H), 7.59 (dd, J = 7.3, 1.8 Hz, 2H), 7.31 - 7.18 (m, 2H), 7.00 (d, J = 9.1 Hz, 1H), 6.73 (s, 1H), 5.54 - 5.39 (tt, J = 6.0, 3.1 Hz, 1H), 5.06 (d, J = 9.0 Hz, 1H), 4.30 (dddd, J = 21.6, 10.5, 5.9, 1.5 Hz, 2H), 4.01 (dddd, J = 24.7, 10.5, 3.2, 1.5 Hz, 2H), 1.80 (dt, J = 32.2, 7.3 Hz, 7H), 1.65 (d, J = 8.5 Hz, 1H), 1.52 - 1.40 (m, 2H).	454.3		
I-3397		1H NMR (400 MHz, DMSO-d6) 8.40 (d, J = 8.2 Hz, 1H), 8.06 (d, J = 8.9 Hz, 1H), 7.58 (td, J = 8.6, 5.4 Hz, 1H), 7.17 (q, J = 9.4, 8.8 Hz, 1H), 5.30 (d, J = 8.3 Hz, 1H), 4.46 (dt, J = 18.0, 9.0 Hz, 1H), 3.09 (d, J = 9.6 Hz, 1H), 2.32-2.15 (m, 2H), 1.98 (t, J = 9.3 Hz, 1H), 1.85 (s, 3H), 1.86-1.69 (m, 8H), 1.61 (d, J = 8.4 Hz, 1H), 1.46 (s, 2H).	479.3	D	

I-3398		531.1	B	A
I-3399		537.15	B	A
I-3400		557.1	C	

I-3401		529.15	C	
I-3402		552.15	C	
I-3403		525.15	B	A

I-3404		514.15	B	
I-3405		539.15	C	
I-3406		521.1	C	

I-3407		541.15	C	
I-3408		525.15	D	
I-3409		539.15	B	A
I-3410		539.15	D	

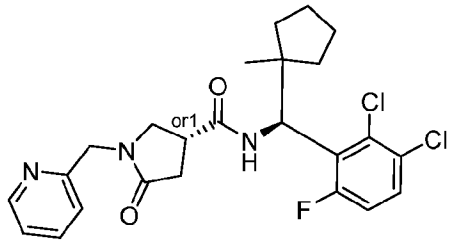
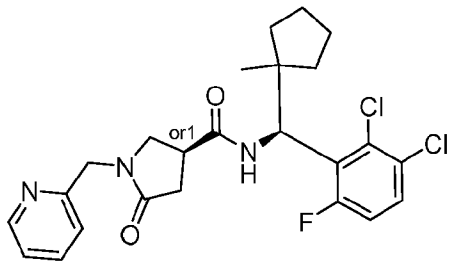
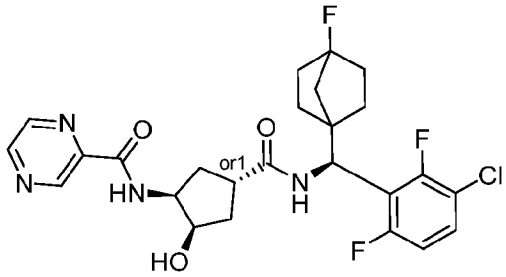
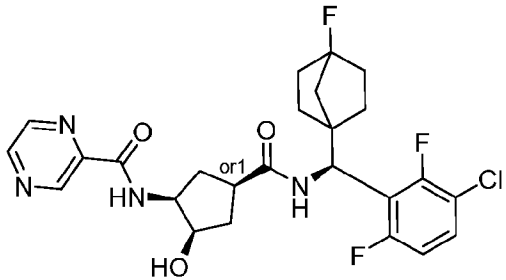
I-3411		509.1	B	A
I-3412		523.05	C	
I-3413		552.1	C	

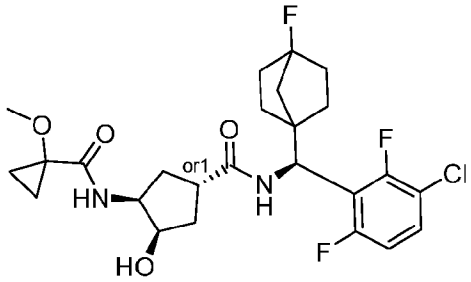
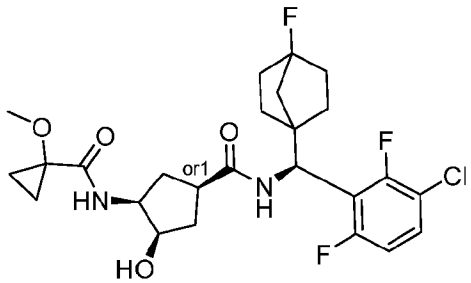
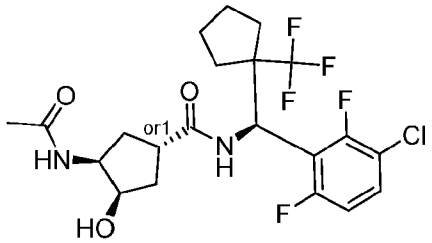
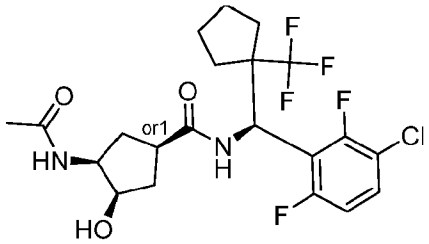
I-3414		529.15	B	A
I-3415		512.15	C	
I-3416		557.1	B	

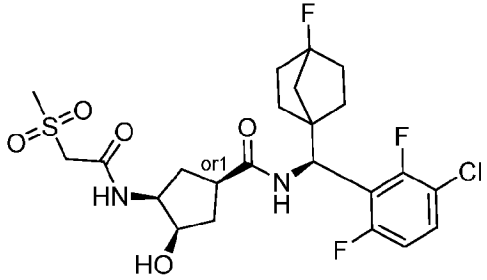
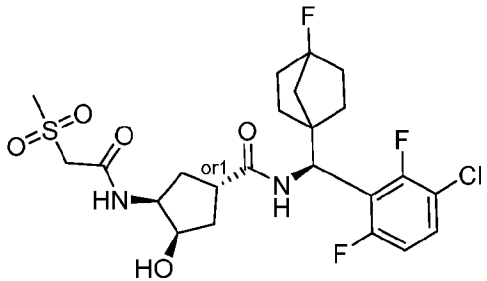
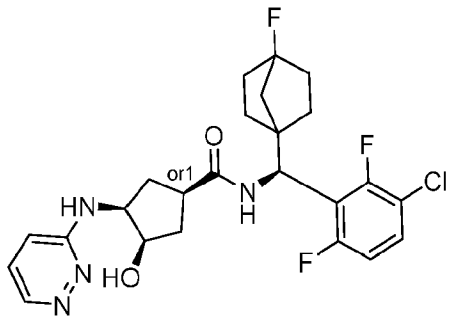
I-3417		533.1	C	
I-3418		521.1	D	
I-3419		535.1	B	B
I-3420		523.1	C	

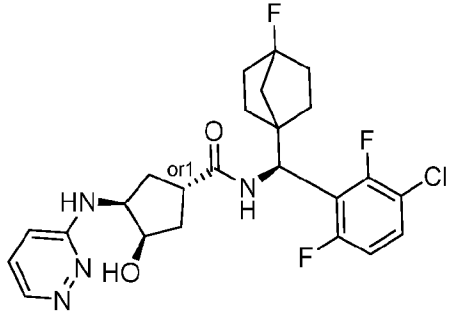
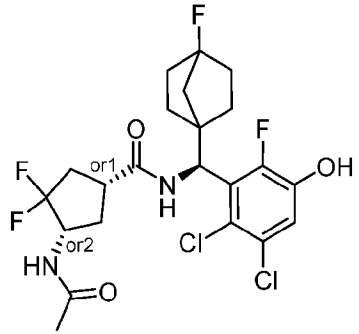
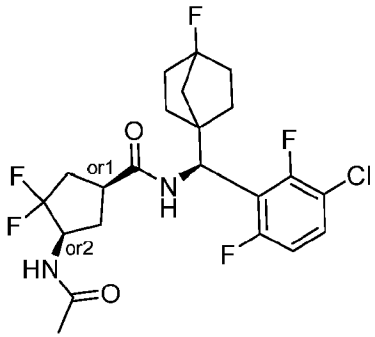
I-3421		509.1	C	
I-3422		541.15	B	
I-3423		537.15	B	B
I-3424		512.15	C	

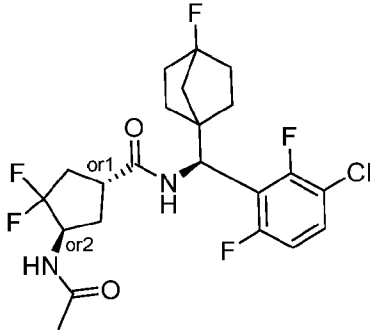
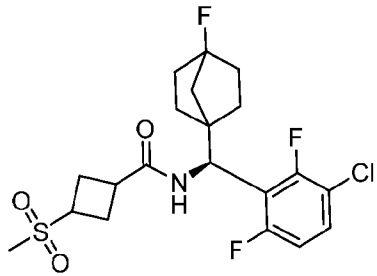
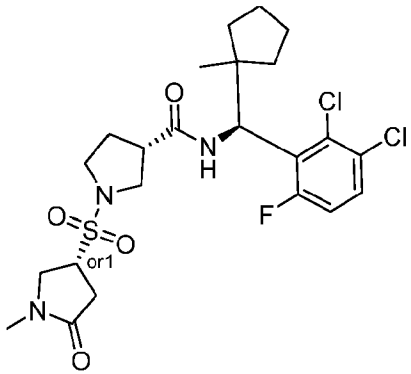
I-3425		514.15	C		
I-3426			B	B	
I-3427			B		
I-3428			A	B	

I-3429				D	
I-3430		1H NMR (400 MHz, DMSO-d6)? 9.21 (d, J = 1.5 Hz, 1H), 8.90 (d, J = 2.5 Hz, 1H), 8.74 (dd, J = 2.5, 1.5 Hz, 1H), 8.35 (d, J = 7.9 Hz, 1H), 8.29 (d, J = 8.3 Hz, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.16 (s, 1H), 5.30 (dd, J = 12.5, 6.1 Hz, 2H), 4.25 - 4.15 (m, 1H), 4.11 (d, J = 4.2 Hz, 1H), 3.17 (dt, J = 13.7, 6.8 Hz, 1H), 2.05 (ddd, J = 13.1, 8.3, 5.0 Hz, 1H), 1.78 (ddt, J = 33.0, 21.9, 12.5 Hz, 12H), 1.60 (d, J = 8.4 Hz, 1H), 1.46 (d, J = 8.8 Hz, 3H).	523.1	B	A
I-3431		1H NMR (400 MHz, DMSO-d6) 9.19 (d, J = 1.4 Hz, 1H), 8.89 (d, J = 2.5 Hz, 1H), 8.74 (dd, J = 2.5, 1.5 Hz, 1H), 8.32 (dd, J = 20.2, 7.8 Hz, 2H), 7.57 (td, J = 8.6, 5.3 Hz, 1H), 7.16 (t, J = 9.3 Hz, 1H), 5.32 (d, J = 3.7 Hz, 1H), 5.27 (d, J = 8.1 Hz, 1H), 4.15 (d, J = 7.5 Hz, 2H), 3.18 (p, J = 8.5 Hz, 1H), 2.36-2.26 (m, 1H), 1.94-1.66 (m, 11H), 1.60 (d, J = 8.5 Hz, 1H), 1.46 (d, J = 9.3 Hz, 2H).	523.1	B	A
I-3432		1H NMR (400 MHz, DMSO-d6) 8.25 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.30 (d, J = 7.8 Hz, 1H), 7.20 - 7.10 (m, 1H), 5.25 (d, J = 8.1 Hz, 1H), 5.20 (d, J = 4.1 Hz, 1H), 4.07 - 3.91 (m, 2H), 3.26 (s, 3H), 3.13 (p, J = 8.0 Hz, 1H), 1.87 - 1.67 (m, 11H), 1.60 (d, J = 8.4 Hz, 1H), 1.45 (d, J = 9.1 Hz, 2H), 1.07 - 0.95 (m, 4H).	515.15	B	

I-3433		1H NMR (400 MHz, DMSO-d6) 8.25 (d, J = 8.3 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.31 (d, J = 7.3 Hz, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.27 (d, J = 8.2 Hz, 1H), 5.19 (d, J = 3.8 Hz, 1H), 4.00 (d, J = 6.2 Hz, 2H), 3.28 (s, 3H), 3.13 (dt, J = 13.6, 6.9 Hz, 1H), 1.93 (s, 1H), 1.83 - 1.64 (m, 10H), 1.60 (d, J = 8.3 Hz, 1H), 1.46 (d, J = 9.6 Hz, 2H), 1.02 (dt, J = 12.8, 3.4 Hz, 4H).	515.15	B	
I-3434		1H NMR (400 MHz, DMSO-d6) 8.34 (d, J = 9.6 Hz, 1H), 7.63 (td, J = 8.7, 5.4 Hz, 1H), 7.49 (d, J = 7.8 Hz, 1H), 7.24 - 7.16 (m, 1H), 5.77 (d, J = 9.5 Hz, 1H), 4.80 (d, J = 3.5 Hz, 1H), 4.00 - 3.85 (m, 2H), 3.15 (p, J = 8.1 Hz, 1H), 1.99 - 1.86 (m, 3H), 1.85 - 1.70 (m, 6H), 1.69 - 1.60 (m, 3H), 1.60 - 1.50 (m, 3H).	483.05	C	
I-3435		1H NMR (400 MHz, DMSO-d6) 8.35 (d, J = 9.6 Hz, 1H), 7.63 (td, J = 8.7, 5.4 Hz, 1H), 7.51 (d, J = 7.5 Hz, 1H), 7.24 - 7.16 (m, 1H), 5.79 (d, J = 9.6 Hz, 1H), 4.78 (d, J = 3.2 Hz, 1H), 3.98 - 3.87 (m, 2H), 3.20 - 3.10 (m, 1H), 1.92 (dp, J = 10.9, 5.8, 4.8 Hz, 3H), 1.85 - 1.72 (m, 6H), 1.67 (dd, J = 8.7, 2.9 Hz, 3H), 1.55 (s, 3H).	483.1	D	
I-3436		1H NMR (400 MHz, DMSO-d6) ?8.25 (d, J = 8.3 Hz, 1H), 8.10 (d, J = 7.5 Hz, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.27 (d, J = 8.2 Hz, 1H), 4.95 (d, J = 3.3 Hz, 1H), 4.14 (d, J = 3.5 Hz, 2H), 3.96 (d, J = 8.5 Hz, 2H), 3.10 (s, 4H), 1.96-1.85 (m, 1H), 1.84-1.55 (m, 11H), 1.46 (d, J = 10.2 Hz, 2H).	537.05	C	

I-3437		1H NMR (400 MHz, DMSO-d6) 8.26 (d, J = 8.2 Hz, 1H), 8.08 (d, J = 7.7 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.25 (d, J = 8.1 Hz, 1H), 4.95 (d, J = 3.6 Hz, 1H), 4.19-4.06 (m, 2H), 4.01 (d, J = 4.1 Hz, 1H), 3.97-3.86 (m, 1H), 3.08 (s, 4H), 1.88-1.64 (m, 11H), 1.59 (d, J = 8.5 Hz, 1H), 1.45 (d, J = 9.7 Hz, 2H).	537.15	B	B
I-3438		1H NMR (400 MHz, DMSO-d6) 8.38 (dd, J = 4.4, 1.4 Hz, 1H), 8.24 (d, J = 8.2 Hz, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.30 - 7.04 (m, 2H), 6.90 (dd, J = 9.1, 1.4 Hz, 1H), 6.50 (d, J = 7.5 Hz, 1H), 5.29 (d, J = 8.2 Hz, 1H), 4.88 (d, J = 3.6 Hz, 1H), 4.28 - 4.10 (m, 2H), 3.14 (dd, J = 12.7, 7.9 Hz, 1H), 2.02 (ddd, J = 12.7, 8.1, 4.8 Hz, 1H), 1.90 - 1.78 (m, 4H), 1.77 - 1.65 (m, 6H), 1.60 (d, J = 8.4 Hz, 1H), 1.46 (d, J = 8.6 Hz, 2H).	495.3	C	
I-3439		1H NMR (400 MHz, DMSO-d6) 8.38 (dd, J = 4.4, 1.4 Hz, 1H), 8.22 (d, J = 8.3 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.24 - 7.08 (m, 2H), 6.89 (dd, J = 9.0, 1.4 Hz, 1H), 6.45 (d, J = 7.5 Hz, 1H), 5.30 (d, J = 8.1 Hz, 1H), 4.86 (d, J = 3.6 Hz, 1H), 4.39 - 4.06 (m, 2H), 3.15 (tt, J = 13.5, 6.6 Hz, 1H), 2.12 - 1.94 (m, 1H), 1.90 - 1.65 (m, 10H), 1.60 (d, J = 8.5 Hz, 1H), 1.46 (d, J = 8.4 Hz, 2H).	495.15	A	A

I-3440		1H NMR (400 MHz, DMSO-d6) 8.37 (dd, J = 4.3, 1.4 Hz, 1H), 8.24 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.22 - 7.10 (m, 2H), 6.87 (dd, J = 9.0, 1.5 Hz, 1H), 6.47 (d, J = 7.0 Hz, 1H), 5.27 (d, J = 8.2 Hz, 1H), 4.88 (d, J = 3.7 Hz, 1H), 4.17 (d, J = 5.5 Hz, 2H), 3.15 (qd, J = 8.6, 6.0 Hz, 1H), 1.93 - 1.85 (m, 2H), 1.84 - 1.74 (m, 6H), 1.71 (d, J = 12.3 Hz, 3H), 1.60 (d, J = 8.4 Hz, 1H), 1.46 (d, J = 9.1 Hz, 2H).	495.35	B	
I-3441		1H NMR (400 MHz, DMSO-d6) 8.28 (d, J = 8.5 Hz, 1H), 8.12 (d, J = 8.7 Hz, 1H), 7.07 (d, J = 8.0 Hz, 1H), 5.50 (d, J = 8.4 Hz, 1H), 4.48 - 4.30 (m, 1H), 3.08 - 2.92 (m, 1H), 2.36 - 2.06 (m, 3H), 1.85 (s, 7H), 1.73 - 1.59 (m, 4H), 1.57 (d, J = 9.2 Hz, 2H), 1.50 (d, J = 11.3 Hz, 2H).	511.05	B	A
I-3442		1H NMR (400 MHz, DMSO-d6) 8.37 (d, J = 8.1 Hz, 1H), 8.07 (d, J = 8.8 Hz, 1H), 7.58 (td, J = 8.7, 5.4 Hz, 1H), 7.20 - 7.12 (m, 1H), 5.25 (d, J = 8.0 Hz, 1H), 4.47 - 4.31 (m, 1H), 3.03 (ddd, J = 11.1, 9.2, 7.2 Hz, 1H), 2.40 - 2.17 (m, 2H), 2.11 (dt, J = 14.2, 7.7 Hz, 1H), 1.83 (s, 3H), 1.79 (d, J = 11.5 Hz, 3H), 1.76 - 1.57 (m, 5H), 1.55 - 1.34 (m, 3H).	479.1	C	

I-3443		1H NMR (400 MHz, DMSO-d6) 8.39 (d, J = 8.4 Hz, 1H), 8.12 (d, J = 8.8 Hz, 1H), 7.58 (td, J = 8.6, 5.4 Hz, 1H), 7.16 (t, J = 9.4 Hz, 1H), 5.30 (d, J = 8.3 Hz, 1H), 4.52-4.27 (m, 1H), 3.10-2.92 (m, 1H), 2.37-2.04 (m, 3H), 1.90-1.54 (m, 12H), 1.46 (d, J = 8.4 Hz, 2H).	479.1	B	A
I-3444				C	
I-3445				B	

I-3446		B	
I-3447		C	

I-3448			C
I-3449			C
I-3450			B

I-3451		451.4	C	
I-3452		508.4	B	
I-3453		521.5	C	
I-3454		530.5	B	

I-3455		518.4	C
I-3456		522.5	C
I-3457		518.4	B

I-3458		531.4	D	
I-3459		531.5	B	B
I-3460		525.4	B	

I-3461		550.5	B	
I-3462		521.4	B	
I-3463		508.4	B	

I-3464		548.4	B	
I-3465		541.4	B	
I-3466		520.4	D	

I-3467		536.5	D	
I-3468		532.5	D	
I-3469		537.5	C	

I-3470		536.5	D	
I-3471		534.5	B	
I-3472		468.4	B	B

I-3473		506.4	D	
I-3474		544.5	B	B
I-3475		546.5	A	C

I-3476		531.4	B	
I-3477		550.5	B	
I-3478		508.4	B	

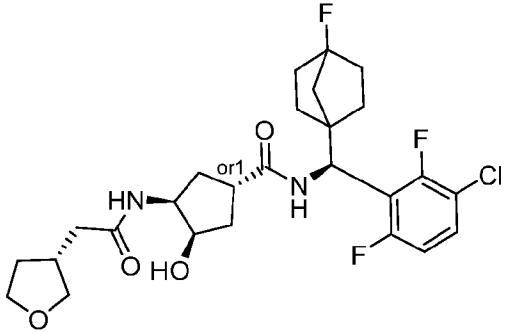
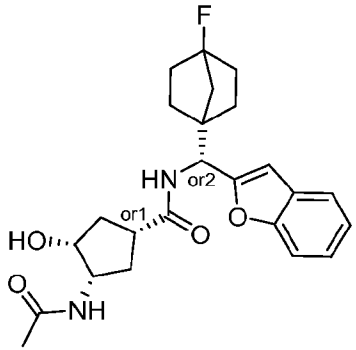
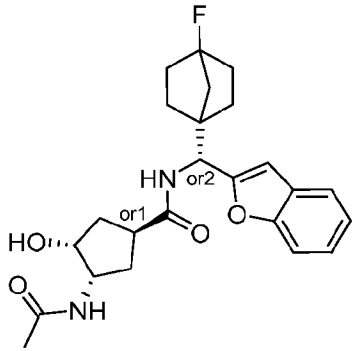
I-3479		466.2	D	
I-3480		535.1	B	
I-3481		531.05	A	A

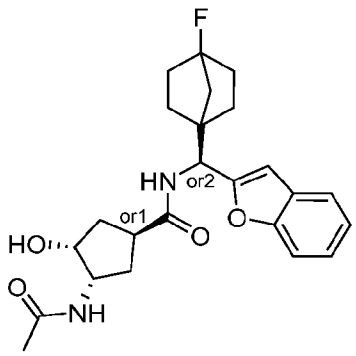
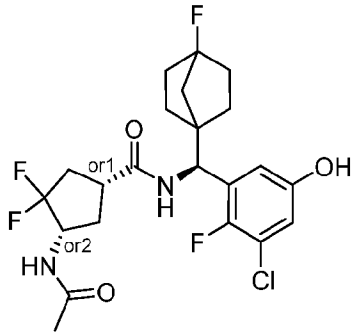
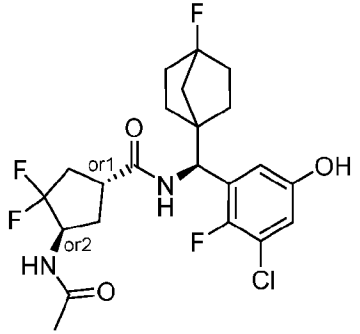
I-3482		557.1	B	
I-3483		531.1	A	A
I-3484		517.05	B	

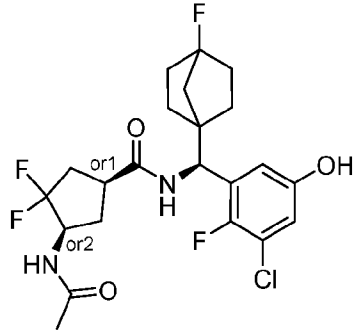
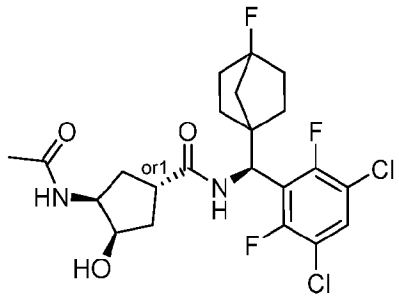
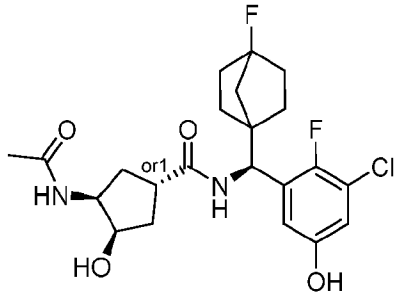
I-3485		545.1	A	A
I-3486		543.05	C	
I-3487		529.15	C	

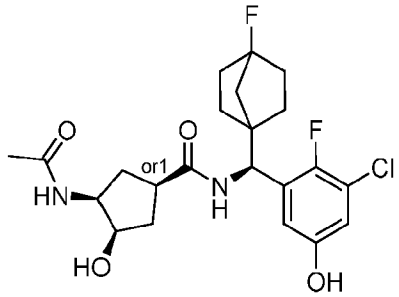
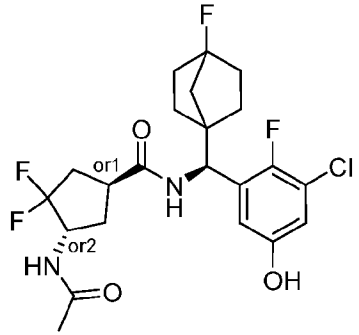
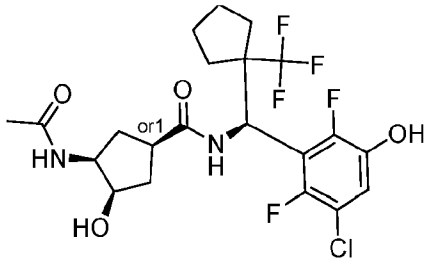
I-3488		526.15	C	
I-3489		529.15	B	
I-3490		545.15	C	
I-3491		524.1	B	

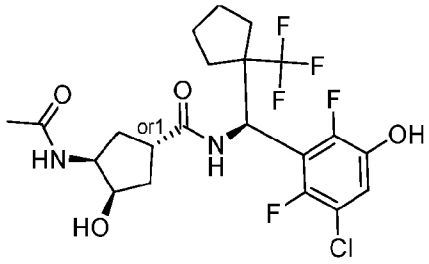
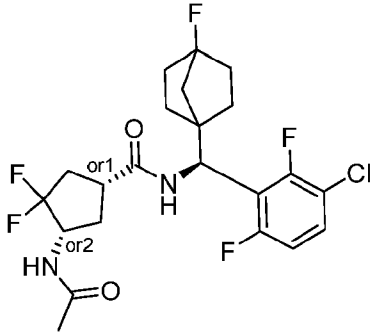
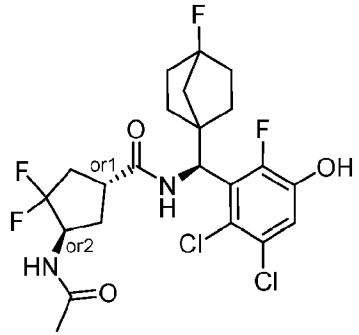
I-3492		524.1	B	A
I-3493		529.15	C	
I-3494		539.15	B	A
I-3495		526.15	C	

I-3496			529.2	D	
I-3497		1H NMR (400 MHz, DMSO-d6) 8.34 (d, J = 9.1 Hz, 1H), 7.62 - 7.48 (m, 3H), 7.24 (dtd, J = 17.6, 7.3, 1.4 Hz, 2H), 6.71 (s, 1H), 5.23 (d, J = 9.0 Hz, 1H), 4.78 (d, J = 3.4 Hz, 1H), 3.98 (s, 2H), 3.14 - 3.01 (m, 1H), 1.82 - 1.72 (m, 12H), 1.69 (s, 3H), 1.48 (s, 1H), 1.42 (t, J = 10.9 Hz, 1H).	429.3		
I-3498		1H NMR (400 MHz, DMSO-d6) 8.35 (d, J = 9.1 Hz, 1H), 7.59 (dd, J = 7.3, 1.6 Hz, 1H), 7.52 (d, J = 8.3 Hz, 2H), 7.24 (dtd, J = 17.7, 7.3, 1.4 Hz, 2H), 6.71 (s, 1H), 5.22 (d, J = 9.0 Hz, 1H), 4.78 (d, J = 3.2 Hz, 1H), 3.97 (d, J = 6.5 Hz, 2H), 3.14 - 3.01 (m, 1H), 1.85 - 1.73 (m, 15H), 1.44 (dd, J = 23.3, 10.3 Hz, 2H).	429.35		

I-3499		1H NMR (400 MHz, DMSO-d6) 8.33 (d, J = 9.1 Hz, 1H), 7.59 (dd, J = 7.8, 1.4 Hz, 1H), 7.55 - 7.40 (m, 2H), 7.34 - 7.21 (m, 1H), 7.21 (td, J = 7.4, 1.3 Hz, 1H), 6.72 (s, 1H), 5.22 (d, J = 9.1 Hz, 1H), 4.79 (d, J = 3.5 Hz, 1H), 4.01 - 3.89 (m, 2H), 3.07 (td, J = 9.0, 4.0 Hz, 1H), 1.91 - 1.80 (m, 9H), 1.79 - 1.63 (m, 6H), 1.43 (dd, J = 23.5, 10.7 Hz, 2H).	429.25		
I-3500		1H NMR (400 MHz, DMSO-d6) 9.79 (s, 1H), 8.35 (d, J = 8.6 Hz, 1H), 8.05 (d, J = 8.8 Hz, 1H), 6.79 (dd, J = 5.8, 2.9 Hz, 1H), 6.65 (dd, J = 5.4, 2.9 Hz, 1H), 5.17 (d, J = 8.5 Hz, 1H), 4.43 (dt, J = 18.0, 9.0 Hz, 1H), 3.08 (qd, J = 9.0, 4.2 Hz, 1H), 2.44 - 2.19 (m, 2H), 1.92 - 1.64 (m, 11H), 1.61 (d, J = 8.5 Hz, 1H), 1.54 (d, J = 8.5 Hz, 1H), 1.36 (d, J = 10.0 Hz, 2H).	477.3	B	
I-3501		1H NMR (400 MHz, DMSO-d6) 9.78 (s, 1H), 8.37 (d, J = 8.8 Hz, 1H), 8.14 (d, J = 8.8 Hz, 1H), 6.80 (dd, J = 5.8, 2.9 Hz, 1H), 6.67 (dd, J = 5.4, 2.9 Hz, 1H), 5.20 (d, J = 8.7 Hz, 1H), 4.42 (d, J = 12.0 Hz, 1H), 2.98 (dt, J = 16.8, 8.3 Hz, 1H), 2.39-2.12 (m, 3H), 1.85 (s, 3H), 1.77 (s, 2H), 1.71 (s, 3H), 1.71-1.63 (m, 2H), 1.59 (d, J = 8.4 Hz, 1H), 1.53 (d, J = 8.7 Hz, 1H), 1.35 (s, 2H).	477.1	B	

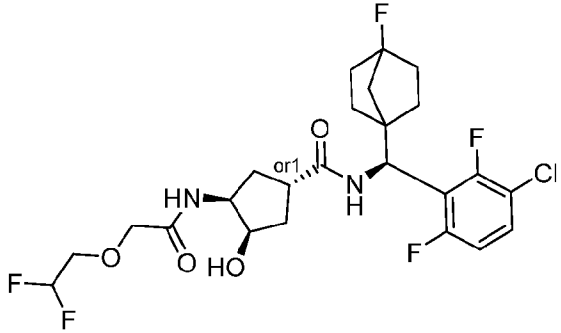
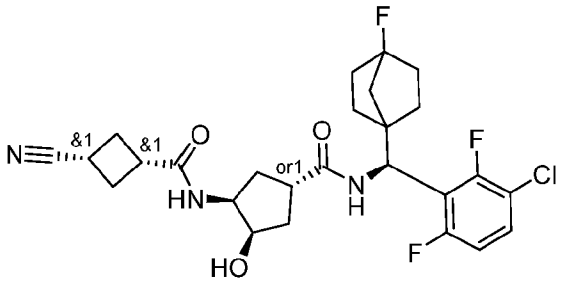
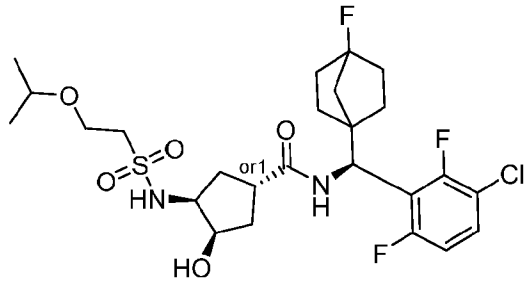
I-3502		1H NMR (400 MHz, DMSO-d6) 9.69 (s, 1H), 8.35 (d, J = 8.5 Hz, 1H), 8.11 (d, J = 8.8 Hz, 1H), 6.78 (dd, J = 5.8, 2.9 Hz, 1H), 6.63 (dd, J = 5.3, 2.9 Hz, 1H), 5.15 (d, J = 8.4 Hz, 1H), 4.44 - 4.35 (m, 1H), 3.07 - 2.93 (m, 1H), 2.46 - 2.22 (m, 2H), 2.16 (ddd, J = 30.0, 22.9, 13.6 Hz, 1H), 1.84 (s, 3H), 1.77 - 1.68 (s, 6H), 1.61 (d, J = 8.4 Hz, 1H), 1.58 - 1.46 (m, 2H), 1.35 (s, 2H).	477.05	B	
I-3503		1H NMR (400 MHz, DMSO-d6) 8.32 (d, J = 8.0 Hz, 1H), 7.96 (t, J = 7.4 Hz, 1H), 7.52 (d, J = 7.5 Hz, 1H), 5.24 (d, J = 7.9 Hz, 1H), 4.80 (d, J = 3.3 Hz, 1H), 4.00 - 3.83 (m, 2H), 3.08 (dt, J = 13.1, 6.6 Hz, 1H), 1.81 (s, 5H), 1.74 (dd, J = 23.1, 8.7 Hz, 8H), 1.61 (d, J = 8.5 Hz, 2H), 1.47 (d, J = 11.4 Hz, 2H).	493	D	
I-3504		1H NMR (400 MHz, DMSO-d6) 9.78 (s, 1H), 8.20 (d, J = 8.6 Hz, 1H), 7.51 (d, J = 7.7 Hz, 1H), 6.78 (dd, J = 5.9, 2.9 Hz, 1H), 6.66 (dd, J = 5.5, 2.9 Hz, 1H), 5.16 (d, J = 8.5 Hz, 1H), 4.81 (d, J = 3.6 Hz, 1H), 3.97 (s, 1H), 3.95 - 3.83 (m, 1H), 3.18 - 2.99 (m, 1H), 1.74 (d, J = 46.7 Hz, 13H), 1.63 - 1.44 (m, 2H), 1.34 (s, 2H).	457.25	B	

I-3505		1H NMR (400 MHz, DMSO-d6) 9.78 (s, 1H), 8.21 (d, J = 8.7 Hz, 1H), 7.52 (d, J = 7.6 Hz, 1H), 6.78 (dd, J = 5.8, 2.8 Hz, 1H), 6.66 (dd, J = 5.4, 3.0 Hz, 1H), 5.17 (d, J = 8.6 Hz, 1H), 4.80 (d, J = 3.4 Hz, 1H), 4.07 - 3.74 (m, 2H), 3.05 (dd, J = 9.6, 4.9 Hz, 1H), 1.81 (s, 3H), 1.80 - 1.72 (m, 5H), 1.72 - 1.61 (m, 5H), 1.60 - 1.44 (m, 2H), 1.35 (s, 2H).	457.3	B	A
I-3506		1H NMR (400 MHz, DMSO-d6) 9.81 (s, 1H), 8.37 (d, J = 8.6 Hz, 1H), 8.08 (d, J = 8.8 Hz, 1H), 6.79 (dd, J = 5.8, 2.9 Hz, 1H), 6.65 (dd, J = 5.4, 2.9 Hz, 1H), 5.20 (d, J = 8.7 Hz, 1H), 4.48 (dt, J = 18.1, 9.2 Hz, 1H), 3.08 (s, 1H), 2.37 - 2.17 (m, 2H), 2.04 - 1.94 (m, 1H), 1.86 (s, 4H), 1.81 - 1.64 (m, 6H), 1.62 - 1.52 (m, 2H), 1.36 (s, 2H).	475.15	A	A
I-3507		1H NMR (400 MHz, DMSO-d6) 10.38 (s, 1H), 8.30 (d, J = 9.7 Hz, 1H), 7.51 (d, J = 7.4 Hz, 1H), 7.11 - 7.03 (m, 1H), 5.77 (s, 1H), 4.78 (d, J = 3.2 Hz, 1H), 3.98 - 3.87 (m, 2H), 3.20 - 3.09 (m, 1H), 1.97 - 1.86 (m, 3H), 1.86 - 1.71 (m, 6H), 1.67 (dt, J = 12.7, 6.3 Hz, 3H), 1.60 - 1.48 (m, 3H).	499.05	D	

I-3508		1H NMR (400 MHz, DMSO-d6) 10.38 (s, 1H), 8.30 (d, J = 9.7 Hz, 1H), 7.50 (d, J = 7.8 Hz, 1H), 7.06 (dd, J = 8.6, 7.3 Hz, 1H), 5.76 (s, 1H), 4.80 (d, J = 3.5 Hz, 1H), 3.93 (dtt, J = 29.8, 8.8, 3.6 Hz, 2H), 3.19 - 3.09 (m, 1H), 1.96 - 1.86 (m, 3H), 1.85 - 1.69 (m, 6H), 1.69 - 1.59 (m, 3H), 1.59 - 1.47 (m, 3H).	499.05	D	
I-3509		1H NMR (400 MHz, DMSO-d6) 8.39 (d, J = 8.2 Hz, 1H), 8.03 (d, J = 8.8 Hz, 1H), 7.58 (td, J = 8.7, 5.4 Hz, 1H), 7.16 (t, J = 9.4 Hz, 1H), 5.27 (d, J = 8.1 Hz, 1H), 4.40 (dq, J = 18.0, 8.9 Hz, 1H), 3.12 (dd, J = 8.4, 5.1 Hz, 1H), 2.35 (s, 1H), 2.31 (s, 1H), 1.83 (s, 3H), 1.75 (dd, J = 28.1, 9.7 Hz, 9H), 1.61 (d, J = 8.4 Hz, 1H), 1.46 (s, 2H).	479.2	B	
I-3510		1H NMR (400 MHz, DMSO-d6) 10.72 - 10.13 (m, 1H), 8.42 - 8.26 (m, 1H), 8.13 - 7.96 (m, 1H), 7.09 (d, J = 8.0 Hz, 1H), 5.52- 5.30 (m, 1H), 4.41 (d, J = 12.0 Hz, 1H), 3.04 (dt, J = 19.9, 10.2 Hz, 1H), 2.42 - 2.02 (m, 4H), 1.81 (d, J = 19.0 Hz, 5H), 1.70 (d, J = 10.9 Hz, 3H), 1.64 - 1.40 (m, 5H).	511.05	C	

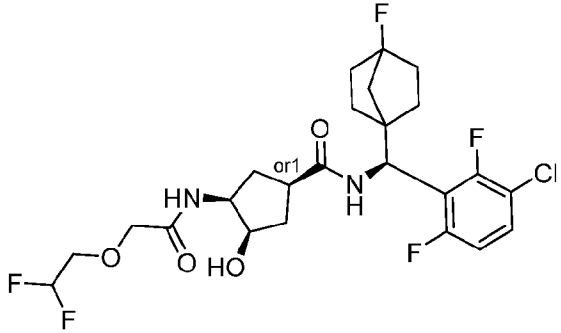
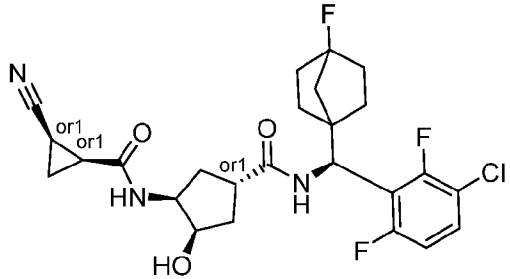
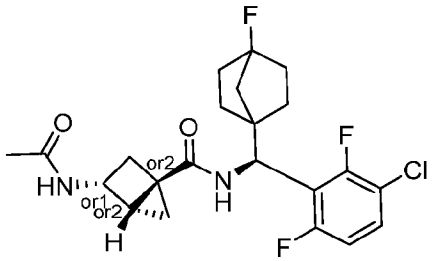
I-3511				D
I-3512				D
I-3513				E

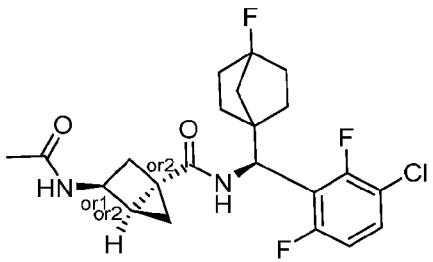
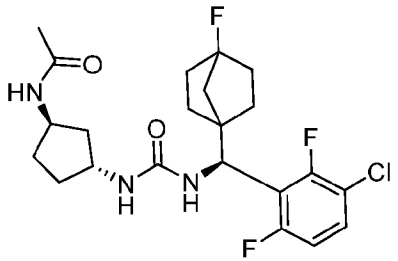
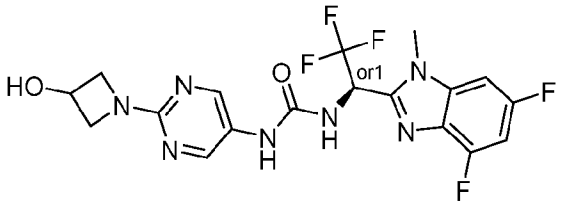
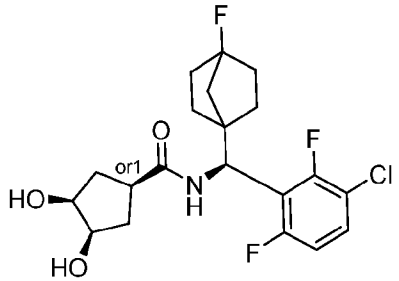
I-3514			C	
I-3515			B	
I-3516			D	
I-3517			B	

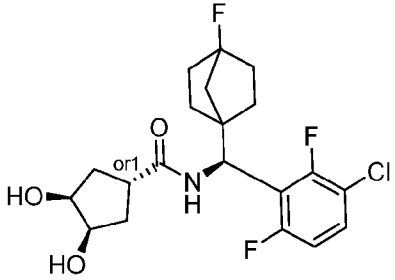
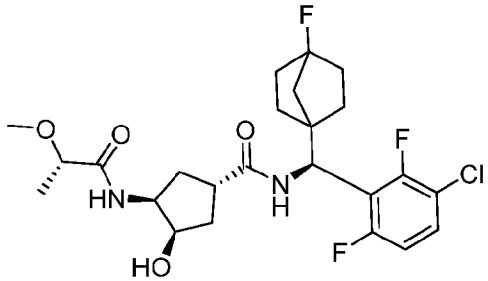
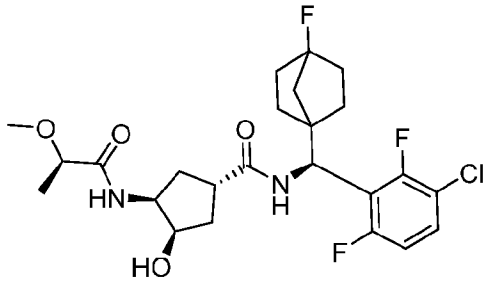
I-3518			539.2	D	
I-3519			524.25	C	
I-3520			567.15	D	

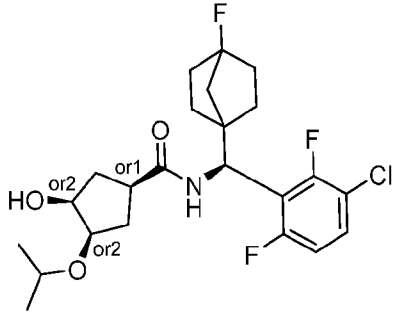
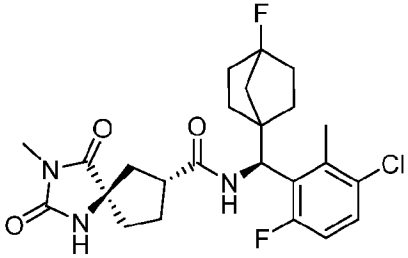
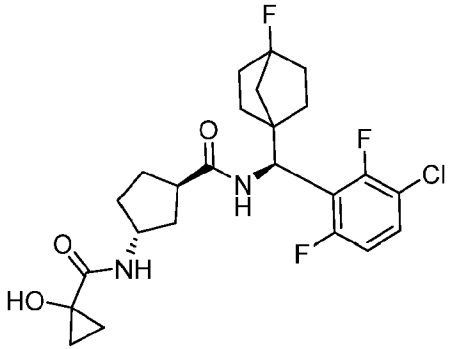
I-3521		510.1	A	A
I-3522		524.25	B	
I-3523		571.1	D	
I-3524		567.15	D	

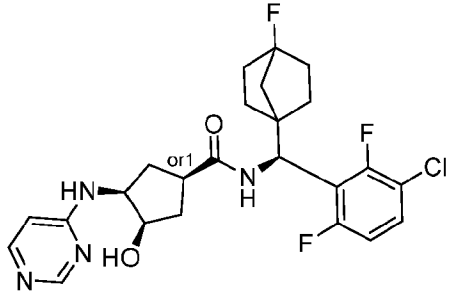
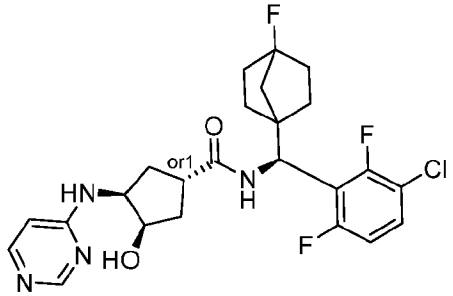
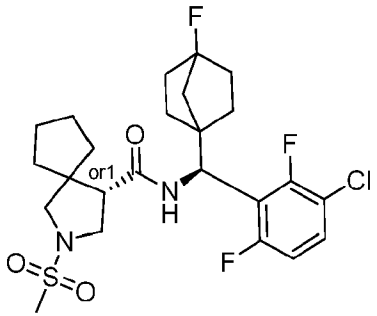
I-3525		571.1	D	
I-3526		545.15	C	
I-3527		510.15	A	A
I-3528		510.1	C	

I-3529			539.25	B	
I-3530			510.1	C	
I-3531		1H NMR (400 MHz, DMSO-d6) 7.95 (d, J = 7.0 Hz, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.43 (d, J = 8.4 Hz, 1H), 7.20 - 7.11 (m, 1H), 5.32 (d, J = 8.3 Hz, 1H), 4.22 (td, J = 10.0, 8.9, 4.3 Hz, 1H), 2.79 (ddd, J = 11.7, 9.7, 1.9 Hz, 1H), 2.34 - 2.26 (m, 1H), 1.77 (d, J = 13.6 Hz, 11H), 1.59 (d, J = 8.3 Hz, 1H), 1.48 (d, J = 15.5 Hz, 3H), 1.43 - 1.35 (m, 2H), 1.29 (dd, J = 4.6, 2.5 Hz, 1H). 19F NMR (377 MHz, DMSO-d6) -112.63, -112.96, -173.56.	441.1	D	

I-3532		1H NMR (400 MHz, DMSO-d6) 7.95 (d, J = 6.9 Hz, 1H), 7.58 (td, J = 8.7, 5.4 Hz, 1H), 7.50 (d, J = 8.5 Hz, 1H), 7.21 - 7.12 (m, 1H), 5.37 (d, J = 8.4 Hz, 1H), 4.15 (dt, J = 9.4, 5.4 Hz, 1H), 2.64 (dd, J = 11.6, 9.8 Hz, 1H), 2.31 (t, J = 3.9 Hz, 1H), 1.76 (d, J = 9.7 Hz, 8H), 1.70 (t, J = 9.0 Hz, 2H), 1.58 (d, J = 8.6 Hz, 1H), 1.45 (dt, J = 11.9, 6.0 Hz, 3H), 1.38 - 1.29 (m, 2H). 19F NMR (377 MHz, DMSO-d6) -112.56, -113.33, -173.54.	441.1	D	
I-3533		1H NMR (400 MHz, DMSO-d6) 7.84 (d, J = 7.4 Hz, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.16 (t, J = 9.4 Hz, 1H), 6.37 (d, J = 9.8 Hz, 1H), 6.24 (d, J = 7.4 Hz, 1H), 5.24 (d, J = 9.6 Hz, 1H), 4.09 (q, J = 7.0 Hz, 1H), 3.93 (q, J = 6.5 Hz, 1H), 2.02 - 1.85 (m, 2H), 1.85 - 1.60 (m,9H), 1.60 - 1.45 (m, 4H), 1.46 - 1.22 (m, 4H).	458.15	D	
I-3534		1H NMR (300 MHz, DMSO-d6) 8.58 (s, 1H), 8.37 (s, 2H), 7.74 (d, J = 9.1 Hz, 1H), 7.50 (dd, J = 8.9, 2.3 Hz, 1H), 7.19 (td, J = 10.6, 2.2 Hz, 1H), 6.28 ¨C 6.18 (m, 1H), 5.65 (d, J = 6.5 Hz, 1H), 4.59 ¨C 4.49 (m, 1H), 4.18 (dd, J = 9.1, 6.6 Hz, 2H), 3.90 (s, 3H), 3.80 ¨C 3.71 (m, 2H).	458.15	D	
I-3535		1H NMR (400 MHz, DMSO-d6) 8.31 (d, J = 8.4 Hz, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.16 (td, J = 9.5, 9.0, 1.6 Hz, 1H), 5.25 (d, J = 8.3 Hz, 1H), 4.68 (dd, J = 20.4, 4.4 Hz, 2H), 3.78 (d, J = 4.9 Hz, 2H), 2.72 - 2.61 (m, 1H), 2.29 - 1.89 (m, 2H), 1.88 - 1.29 (m, 12H).	418.1	C	

I-3536		1H NMR (400 MHz, DMSO-d6)? 8.18 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.14 (td, J = 9.5, 1.6 Hz, 1H), 5.24 (d, J = 8.1 Hz, 1H), 4.37 (dd, J = 4.4, 1.2 IIz, 2II), 3.83 (dp, J = 14.3, 4.5 IIz, 2II), 3.08 (tt, J = 9.3, 6.8 Hz, 1H), 1.82 - 1.52 (m, 12H), 1.44 (dd, J − 13.6, 6.0 Hz, 2H).	418.1	D	
I-3537		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.6, 5.3 Hz, 1H), 7.23 (d, J = 7.5 Hz, 1H), 7.15 (t, J = 9.6 Hz, 1H), 5.27 (d, J = 8.1 Hz, 1H), 5.07 (s, 1H), 4.03 - 3.89 (m, 2H), 3.74 - 3.64 (m, 1H), 3.27 (s, 3H), 3.11 (qd, J = 8.5, 4.5 Hz, 1H), 1.92 (ddd, J = 12.9, 8.3, 4.7 Hz, 1H), 1.85 - 1.55 (m, 11H), 1.46 (d, J = 9.6 Hz, 2H), 1.21 (d, J = 6.7 Hz, 3H).	503.1	C	
I-3538		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 8.3 Hz, 1H), 7.56 (td, J = 8.6, 5.4 Hz, 1H), 7.28 - 7.03 (m, 2H), 5.27 (d, J = 8.1 Hz, 1H), 5.10 (d, J = 3.9 Hz, 1H), 3.95 (dt, J = 12.9, 4.7 Hz, 2H), 3.70 (q, J = 6.6 Hz, 1H), 3.27 (s, 3H), 3.12 (qd, J = 8.6, 4.6 Hz, 1H), 1.93 (ddd, J = 12.9, 8.3, 4.8 Hz, 1H), 1.87 - 1.53 (m, 11H), 1.45 (d, J = 9.6 Hz, 2H), 1.21 (d, J = 6.6 Hz, 3H).	503.15	C	

I-3539		1H NMR (400 MHz, DMSO-d6) 8.21 (d, J = 8.1 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.19 - 7.08 (m, 1H), 5.24 (d, J = 8.1 Hz, 1H), 4.06 (d, J = 4.1 Hz, 1H), 3.92 (p, J = 4.1 Hz, 1H), 3.73 (td, J = 6.8, 3.6 Hz, 1H), 3.64 (h, J = 6.1 Hz, 1H), 3.14 - 3.00 (m, 1H), 1.87 - 1.66 (m, 10H), 1.59 (d, J = 8.5 Hz, 1H), 1.48 (ddd, J = 20.7, 10.3, 6.7 Hz, 3H), 1.08 (t, J = 5.7 Hz, 6H).	460.2	D	
I-3540		1H NMR (400 MHz, DMSO-d6) 8.59 (s, 1H), 8.28 (s, 1H), 7.39 (s, 1H), 7.07 (t, J = 10.0 Hz, 1H), 5.25 (s, 1H), 3.03 (s, 1H), 2.83 (s, 3H), 2.43 (s, 3H), 2.13 (t, J = 11.7 Hz, 1H), 1.87 (s, 5H), 1.68 (s, 6H), 1.53 (s, 4H).	480.15	B	A
I-3541		1H NMR (400 MHz, DMSO-d6) ?8.20 (d, J = 8.4 Hz, 1H), 7.58 (dd, J = 11.3, 6.8 Hz, 2H), 7.15 (t, J = 9.3 Hz, 1H), 6.20 (s, 1H), 5.28 (d, J = 8.3 Hz, 1H), 4.11 (d, J = 7.0 Hz, 1H), 3.05-2.91 (m, 1H), 1.93-1.66 (m, 11H), 1.60 (d, J = 8.3 Hz, 1H), 1.46 (d, J = 9.7 Hz, 4H), 1.00 (q, J = 4.1 Hz, 2H), 0.80 (q, J = 4.0 Hz, 2H).	485.1	C	

I-3542		1H NMR (400 MHz, DMSO-d6) 8.35 (d, J = 1.2 Hz, 1H), 8.25 (d, J = 8.2 Hz, 1H), 7.97 (s, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.29 - 7.04 (m, 2H), 6.56 (d, J = 6.0 Hz, 1H), 5.28 (d, J = 8.1 Hz, 1H), 4.96 (s, 1H), 4.22 (t, J = 6.5 Hz, 1H), 4.08 (d, J = 4.2 Hz, 2H), 3.25 - 3.00 (m, 1H), 2.10 - 1.89 (m, 1H), 1.93 - 1.53 (m, 11H), 1.46 (d, J = 8.6 Hz, 2H).	495.2	B	A
I-3543		1H NMR (400 MHz, DMSO-d6) 8.33 (s, 1H), 8.26 (d, J = 8.2 Hz, 1H), 7.96 (s, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.15 (t, J = 9.7 Hz, 2H), 6.65 - 6.47 (m, 1H), 5.26 (d, J = 8.1 Hz, 1H), 4.94 (s, 1H), 4.14 (d, J = 26.6 Hz, 3H), 3.14 (p, J = 7.7 Hz, 1H), 2.04 - 1.66 (m, 11H), 1.60 (d, J = 8.4 Hz, 1H), 1.46 (d, J = 9.5 Hz, 2H).	495.2	C	
I-3544		1H NMR (400 MHz, DMSO-d6) 8.46 (d, J = 8.2 Hz, 1H), 7.64-7.53 (m, 1H), 7.16 (t, J = 9.4 Hz, 1H), 5.29 (d, J = 8.1 Hz, 1H), 3.41 (dd, J = 10.4, 7.2 Hz, 1H), 3.21-3.13 (m, 2H), 3.03 (d, J = 8.6 Hz, 1H), 2.98-2.91 (m, 1H), 2.81 (s, 3H), 1.89-1.57 (m, 14H), 1.58-1.32 (m, 4H).	519.1	D	

I-3545			D	
I-3546			D	
I-3547			B	
I-3548			B	

I-3549		539.5	C	
I-3550		519.4	C	
I-3551		546.5	D	

I-3552		539.5	D
I-3553		504.4	C
I-3554		521.5	C

I-3555		504.4	C	
I-3556		519.4	C	
I-3557		531.5	C	

I-3558		478.4	C
I-3559		548.4	B
I-3560		504.4	C

I-3561		518.4	B	A
I-3562		532.5	B	B
I-3563		506.4	B	B

I-3564		516.4	B	
I-3565		518.4	B	
I-3566		518.4	B	B

I-3567		545.5	D
I-3568		553.5	D
I-3569		518.4	B

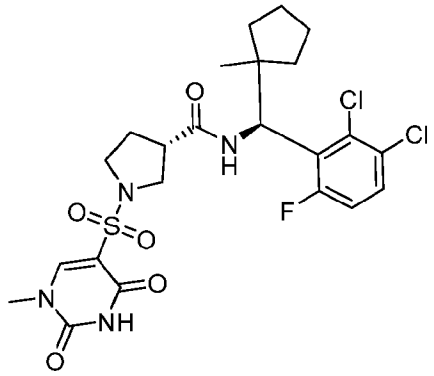
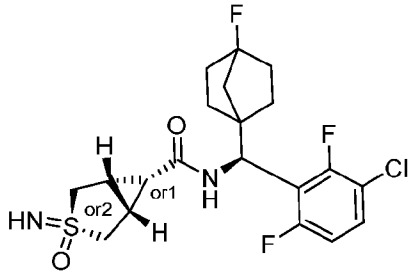
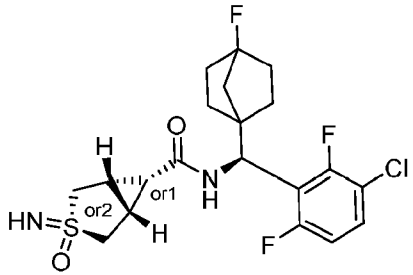
I-3570		545.5	C	
I-3571		533.5	D	
I-3572		492.4	D	

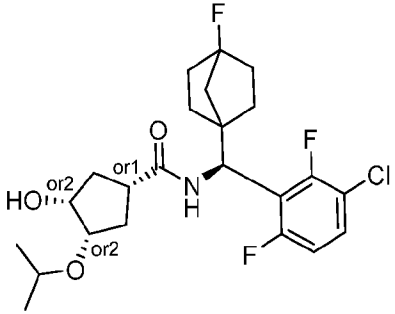
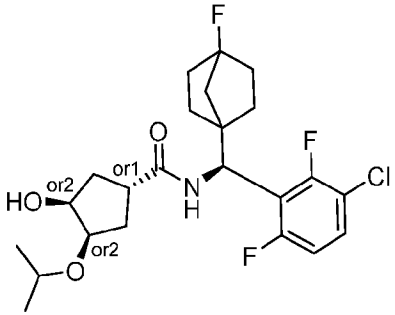
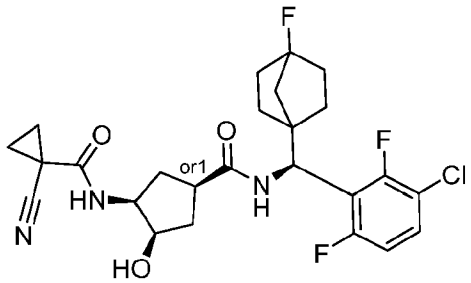
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I-3574		522.4	B	
I-3575		534.4	D	

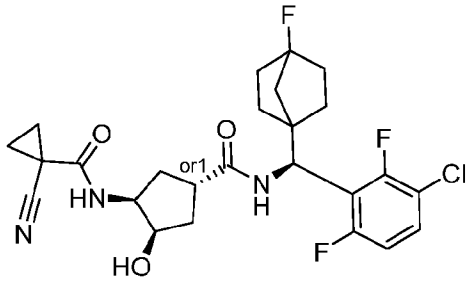
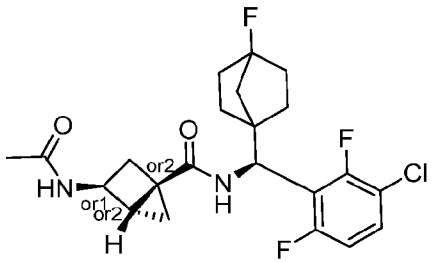
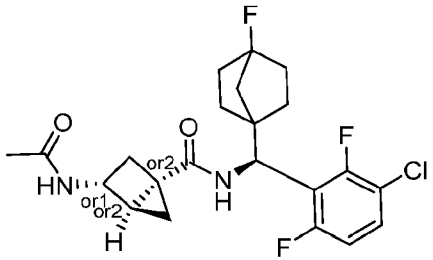
I-3576		520.4	D	
I-3577		545.5	B	B
I-3578		546.5	D	

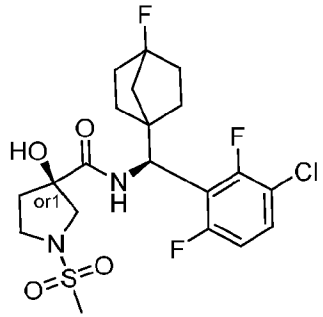
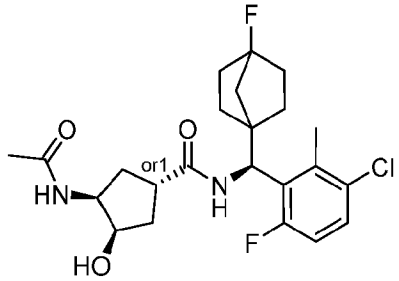
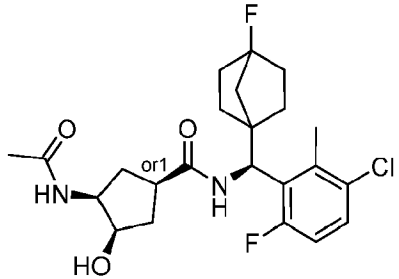
I-3579		522.5	C
I-3580		532.5	D
I-3581		550.5	D

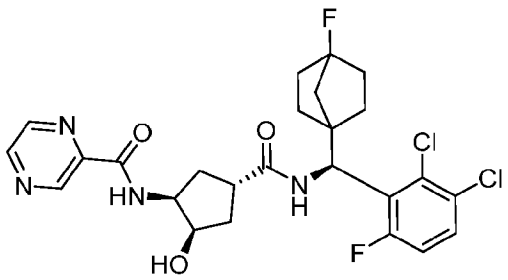
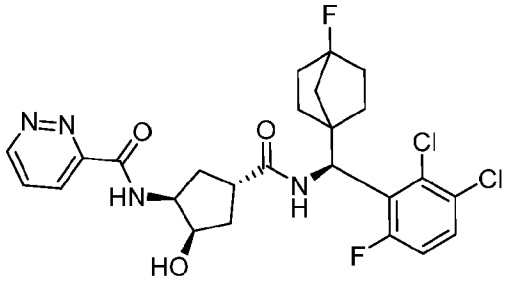
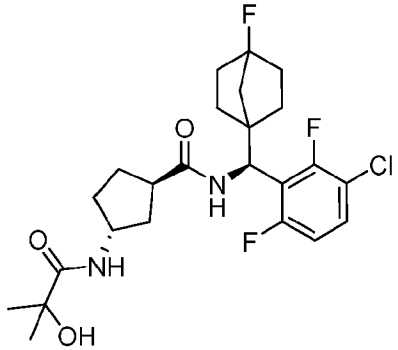
I-3582		541.5	C
I-3583		560.5	D
I-3584		539.5	D

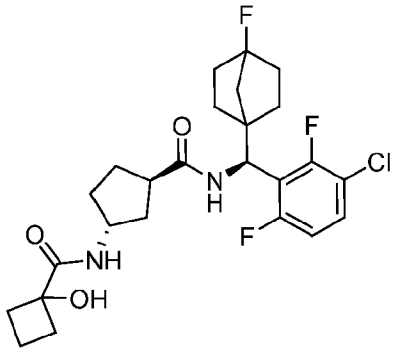
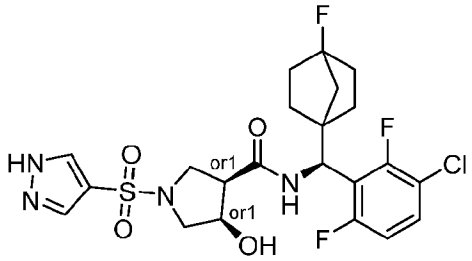
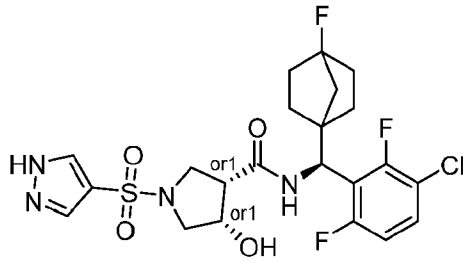
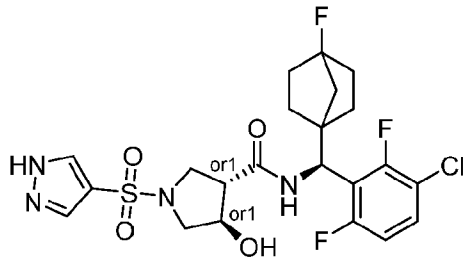
I-3585			562.5	B	B
I-3586		1H NMR (300 MHz, Methanol-d4) 7.46 (td, J = 8.7, 5.5 Hz, 1H), 7.02 (td, J = 9.4, 1.8 Hz, 1H), 5.50 (s, 1H), 3.69-3.51 (m, 2H), 3.10 (ddd, J = 13.4, 10.8, 2.2 Hz, 2H), 2.35-2.10 (m, 3H), 1.95-1.49 (m, 10H).	447.1	D	
I-3587		1H NMR (300 MHz, Methanol-d4) 7.46 (td, J = 8.7, 5.5 Hz, 1H), 7.02 (td, J = 9.4, 1.8 Hz, 1H), 5.49 (s, 1H), 3.68-3.48 (m, 2H), 3.15 (ddd, J = 13.4, 11.1, 1.9 Hz, 2H), 2.38-2.12 (m, 3H), 1.97-1.51 (m, 10H).	447.1	D	

I-3588		1H NMR (400 MHz, DMSO-d6) 8.22 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (td, J = 9.5, 1.6 Hz, 1H), 5.24 (d, J = 8.1 Hz, 1H), 4.07 (d, J = 4.3 Hz, 1H), 3.95 (p, J = 4.2 Hz, 1H), 3.72 - 3.58 (m, 2H), 3.06 (ddd, J = 15.8, 8.9, 6.2 Hz, 1H), 1.84 - 1.54 (m, 12H), 1.45 (d, J = 9.2 Hz, 2H), 1.06 (dd, J = 8.9, 6.1 Hz, 6H).	460.2	D	
I-3589		1H NMR (300 MHz, DMSO-d6) 8.20 (d, J = 8.3 Hz, 1H), 7.58 (td, J = 8.7, 5.5 Hz, 1H), 7.16 (td, J = 9.5, 1.7 Hz, 1H), 5.26 (d, J = 8.2 Hz, 1H), 4.45 (d, J = 5.2 Hz, 1H), 3.90 (p, J = 4.6 Hz, 1H), 3.73 - 3.59 (m, 2H), 2.68 (qd, J = 8.9, 6.1 Hz, 1H), 2.06 - 1.54 (m, 12H), 1.46 (s, 2H), 1.08 (dd, J = 13.2, 6.1 Hz, 6H).	460.15	C	
I-3590			510.15	B	

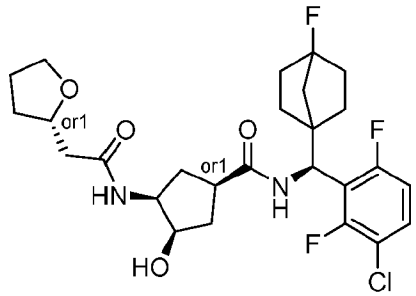
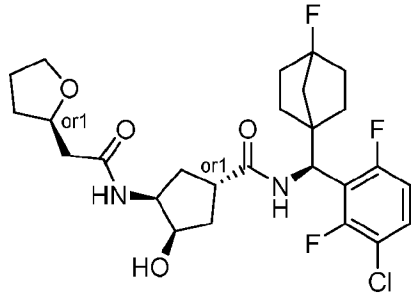
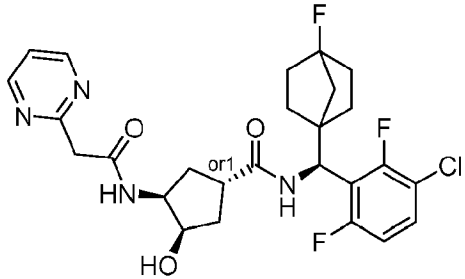
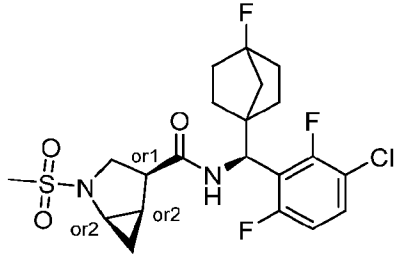
I-3591			510.15	B	
I-3592		1H NMR (400 MHz, DMSO-d6) 8.35 (d, J = 6.1 Hz, 1H), 7.59 (td, J = 8.6, 5.4 Hz, 1H), 7.46 (d, J = 8.6 Hz, 1H), 7.22 - 7.13 (m, 1H), 5.42 (d, J = 8.5 Hz, 1H), 3.37 (q, J = 5.1 Hz, 1H), 2.23 (dd, J = 6.5, 2.1 Hz, 1H), 2.10 - 1.94 (m, 2H), 1.80 (s, 3H), 1.79 (s, 3H), 1.78 - 1.65 (m, 3H), 1.56 (d, J = 8.4 Hz, 1H), 1.52 - 1.44 (m, 2H), 1.41 (d, J = 10.4 Hz, 1H), 1.15 (dd, J = 4.3, 2.3 Hz, 1H). 19F NMR (377 MHz, DMSO-d6) -112.18, -113.19, -173.52.	441.15	D	
I-3593		1H NMR (400 MHz, DMSO-d6) 8.36 (d, J = 6.2 Hz, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.44 (d, J = 8.5 Hz, 1H), 7.20 - 7.11 (m, 1H), 5.32 (d, J = 8.3 Hz, 1H), 3.39 (td, J = 5.7, 3.2 Hz, 1H), 2.21 - 2.05 (m, 2H), 1.97 (dd, J = 11.5, 5.3 Hz, 1H), 1.81 (s, 3H), 1.85 - 1.76 (m, 5H), 1.70 (d, J = 8.2, 6.5 Hz, 2H), 1.60 (d, J = 8.4 Hz, 1H), 1.56 - 1.41 (m, 3H), 1.12 (dd, J = 4.4, 2.3 Hz, 1H). 19F NMR (377 MHz, DMSO-d6) -112.21, -112.99, -173.54.	441.15	D	

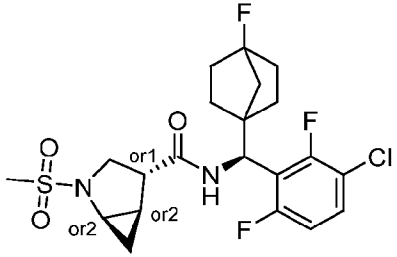
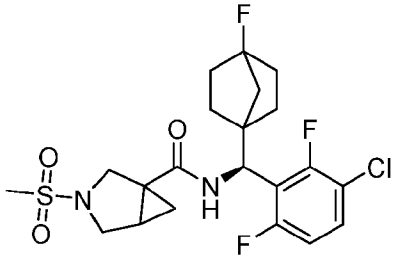
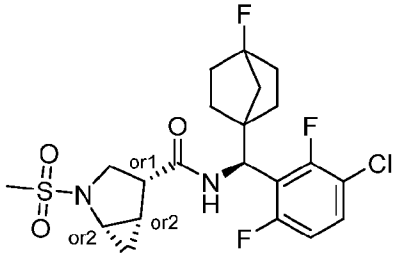
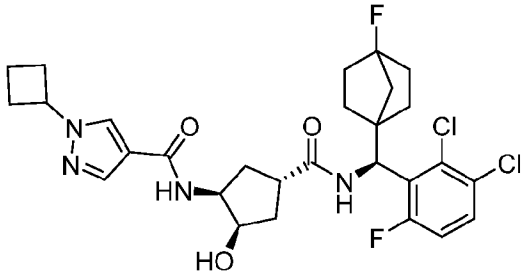
I-3594		1H NMR (400 MHz, DMSO-d6) 8.00 (d, J = 9.8 Hz, 1H), 7.65 (td, J = 8.7, 5.5 Hz, 1H), 7.24 (t, J = 9.4 Hz, 1H), 6.30 (s, 1H), 5.43 (d, J = 9.7 Hz, 1H), 3.50-3.36 (m, 3H), 3.23 (d, J = 11.0 Hz, 1H), 2.88 (s, 3H), 2.30-2.18 (m, 1H), 2.04 (dd, J = 11.6, 6.0 Hz, 1H), 1.86-1.78 (m, 4H), 1.72 (d, J = 11.0 Hz, 3H), 1.63 (q, J = 8.7 Hz, 1H), 1.48 (s, 1H), 1.43 (d, J = 11.2 Hz, 1H).	481.05	D	
I-3595		1H NMR (400 MHz, DMSO-d6) 8.15 (d, J = 8.3 Hz, 1H), 7.48 (d, J = 7.8 Hz, 1H), 7.38 (dd, J = 8.8, 4.9 Hz, 1H), 7.06 (dd, J = 10.9, 8.8 Hz, 1H), 5.21 (d, J = 8.1 Hz, 1H), 4.77 (d, J = 3.6 Hz, 1H), 3.95 (p, J = 3.4 Hz, 1H), 3.86 (dt, J = 12.7, 8.6 Hz, 1H), 3.06 (s, 1H), 2.42 (s, 3H), 1.86 - 1.62 (m, 12H), 1.52 (s, 5H).	455.15	D	
I-3596		1H NMR (400 MHz, DMSO-d6) 8.16 (d, J = 8.4 Hz, 1H), 7.50 (d, J = 7.3 Hz, 1H), 7.38 (dd, J = 8.9, 4.8 Hz, 1H), 7.06 (t, J = 9.8 Hz, 1H), 5.24 (d, J = 8.3 Hz, 1H), 4.76 (d, J = 3.1 Hz, 1H), 3.91 (d, J = 6.6 Hz, 2H), 3.07 (s, 1H), 2.42 (s, 3H), 1.87 - 1.63 (m, 12H), 1.52 (s, 5H).	455.15	B	A

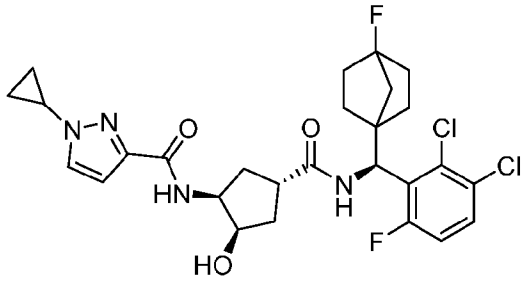
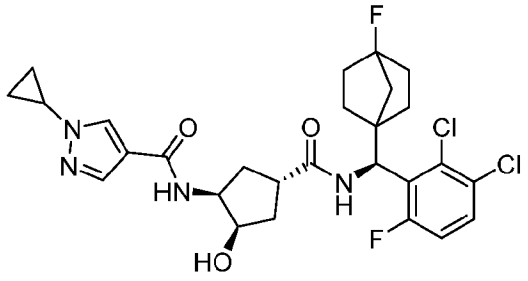
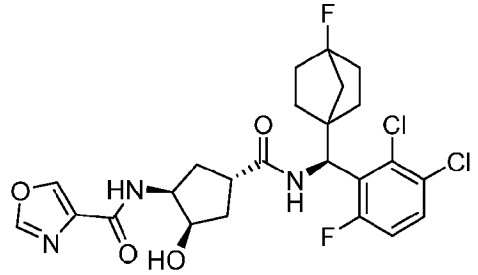
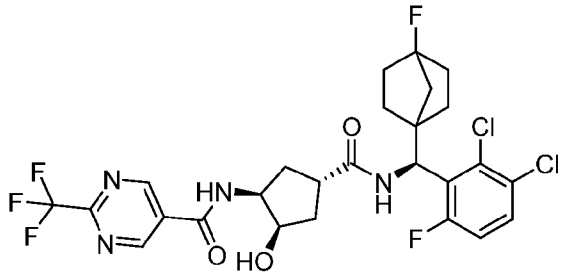
I-3597		1H NMR (400 MHz, DMSO-d6) 9.21 (d, J = 1.5 Hz, 1H), 8.90 (d, J = 2.5 Hz, 1H), 8.74 (dd, J = 2.5, 1.5 Hz, 1H), 8.35 (d, J = 7.9 Hz, 1H), 8.25 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.28 (dd, J = 10.6, 9.0 Hz, 1H), 5.52 (d, J = 8.1 Hz, 1H), 5.31 (d, J = 4.0 Hz, 1H), 4.24 - 4.06 (m, 2H), 3.17 (qd, J = 8.6, 4.8 Hz, 1H), 2.11 - 2.01 (m, 2H), 1.85 (ddd, J = 18.3, 11.1, 3.3 Hz, 3H), 1.80 - 1.62 (m, 6H), 1.62 - 1.45 (m, 3H).	539.1	B	A
I-3598		1H NMR (400 MHz, DMSO-d6) 9.42 (dd, J = 5.1, 1.7 Hz, 1H), 8.66 (d, J = 7.9 Hz, 1H), 8.31-8.20 (m, 2H), 7.93 (dd, J = 8.4, 5.0 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.28 (dd, J = 10.6, 9.0 Hz, 1H), 5.51 (s, 1H), 5.33 (d, J = 4.1 Hz, 1H), 4.30 C 4.17 (m, 1H), 4.13 (d, J = 4.9 Hz, 1H), 3.26-3.14 (m, 1H), 2.07 (ddd, J = 13.0, 8.3, 4.9 Hz, 1H), 1.96-1.45 (m, 13H) .	539.1	B	A
I-3599		1H NMR (400 MHz, CDCl3) δ 7.35 – 7.27 (m, 1H), 6.92 – 6.83 (m, 1H), 6.73 – 6.67 (m, 1H), 6.29 – 6.22 (m, 1H), 5.71 – 5.64 (m, 1H), 4.34 – 4.22 (m, 1H), 2.84 – 2.71 (m, 1H), 2.28 – 2.11 (m, 2H), 2.02 – 2.00 (m, 3H), 2.00 – 1.47 (m, 10H), 1.47 – 1.44 (m, 7H).	487	C	

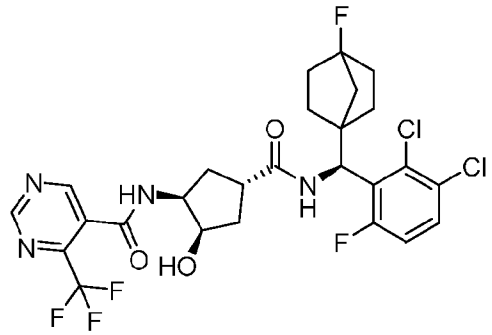
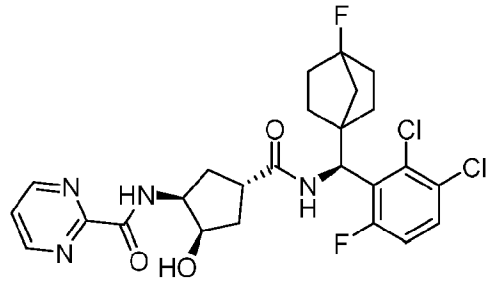
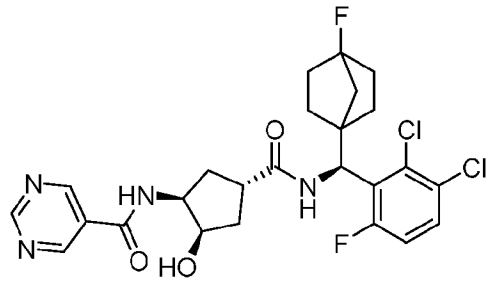
I-3600		1H NMR (400 MHz, CDCl3) δ 7.36 – 7.27 (m, 1H), 6.93 – 6.80 (m, 1H), 6.60 – 6.48 (m, 1H), 6.28 – 6.17 (m, 1H), 5.71 – 5.62 (m, 1H), 4.40 – 4.20 (m, 1H), 2.96 – 1.08 (m, 23H).	499	B	
I-3601			533.1	D	
I-3602			533.2	D	
I-3603			533.1	D	

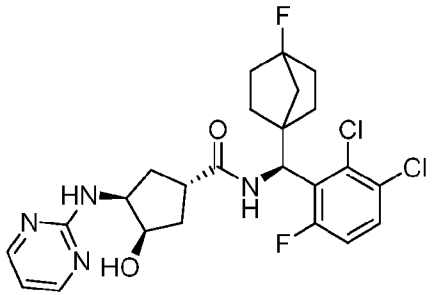
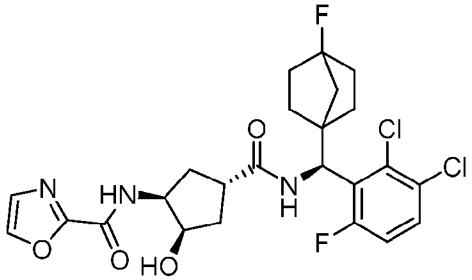
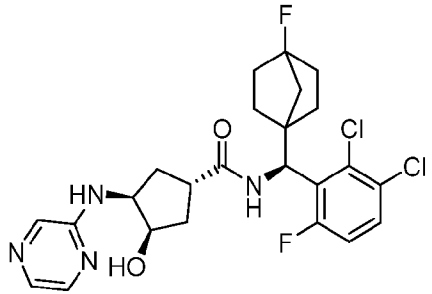
I-3604		533.1	B	B	B
I-3605		537.15	B	B	B
I-3606		529.2	B	B	
I-3607		529.3	B	B	

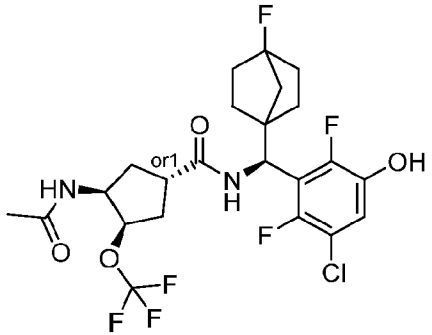
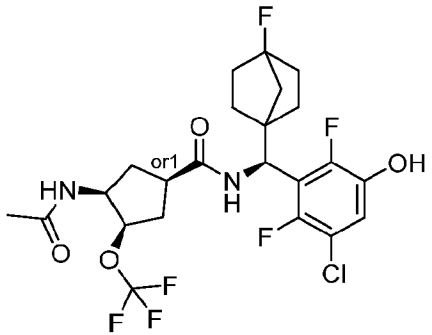
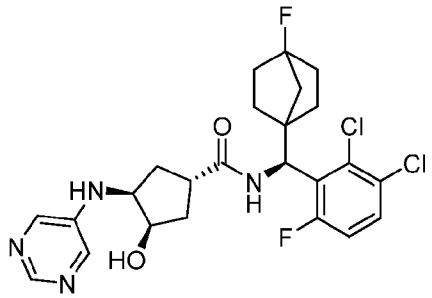
I-3608			529.2	D	
I-3609			529.2	C	
I-3610			537.2	D	
I-3611		1H NMR (400 MHz, DMSO-d6) 8.44 (d, J = 8.6 Hz, 1H), 7.59 (td, J = 8.7, 5.4 Hz, 1H), 7.17 (td, J = 9.4, 1.6 Hz, 1H), 5.38 (d, J = 8.5 Hz, 1H), 3.41 - 3.34 (m, 2H), 3.20 (td, J = 6.1, 2.7 Hz, 1H), 3.04 - 2.95 (m, 1H), 2.91 (s, 3H), 2.09 - 1.98 (m, 1H), 1.88 - 1.68 (m, 7H), 1.63 (d, J = 8.5 Hz, 1H), 1.47 (d, J = 10.9 Hz, 2H), 1.00 (ddd, J = 6.9, 4.5, 2.8 Hz, 1H), 0.57 (dt, J = 8.6, 6.2 Hz, 1H).	477.05	B	A

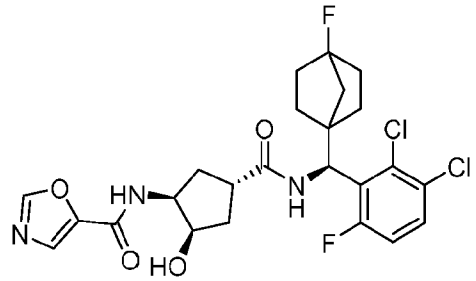
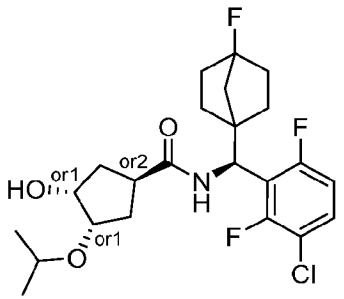
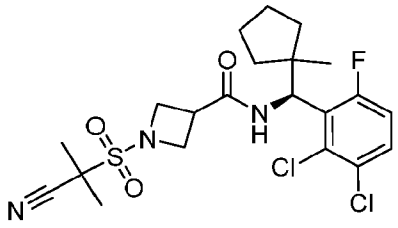
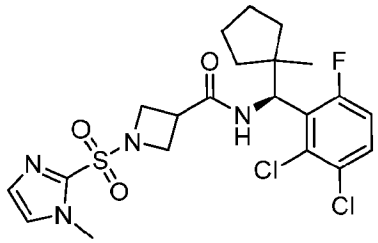
I-3612		1H NMR (400 MHz, DMSO-d6) 8.43 (d, J = 8.2 Hz, 1H), 7.58 (td, J = 8.7, 5.5 Hz, 1H), 7.16 (t, J = 9.3 Hz, 1H), 5.30 (d, J = 8.2 Hz, 1H), 3.29 (s, 1H), 3.16 (dt, J = 8.6, 6.8 Hz, 2H), 3.05 (dd, J = 10.5, 7.9 Hz, 1H), 2.88 (s, 3H), 1.87 - 1.68 (m, 8H), 1.63 (d, J = 8.4 Hz, 1H), 1.46 (d, J = 10.8 Hz, 2H), 0.94 (ddd, J = 7.0, 4.7, 2.7 Hz, 1H), 0.68 (dt, J = 9.0, 6.1 Hz, 1H).	477.05	B	
I-3613		1H NMR (400 MHz, DMSO-d6) 8.48 (d, J = 8.2 Hz, 1H), 7.59 (td, J = 8.7, 5.4 Hz, 1H), 7.17 (t, J = 9.4 Hz, 1H), 5.29 (d, J = 8.0 Hz, 1H), 3.46 (d, J = 10.5 Hz, 1H), 3.21 (d, J = 7.7 Hz, 1H), 3.13 - 3.03 (m, 2H), 2.90 (s, 3H), 1.87 - 1.67 (m, 7H), 1.65 - 1.56 (m, 2H), 1.47 (s, 2H), 0.94 (ddd, J = 6.8, 4.6, 2.7 Hz, 1H), 0.67 (dt, J = 9.1, 6.0 Hz, 1H).	477.05	D	
I-3614		1H NMR (400 MHz, DMSO-d6) 8.40 (d, J = 8.2 Hz, 1H), 7.58 (td, J = 8.7, 5.4 Hz, 1H), 7.20 - 7.11 (m, 1H), 5.28 (d, J = 8.1 Hz, 1H), 3.40 (t, J = 4.5 Hz, 2H), 3.17 (td, J = 6.0, 2.7 Hz, 1H), 3.06 - 2.97 (m, 1H), 2.90 (s, 3H), 1.93 - 1.69 (m, 8H), 1.63 (d, J = 8.4 Hz, 1H), 1.47 (q, J = 10.7, 7.6 Hz, 2H), 0.83 (ddd, J = 6.9, 4.5, 2.8 Hz, 1H), 0.42 (dt, J = 8.7, 6.2 Hz, 1H).	477.1	D	
I-3615		1H NMR (400 MHz, DMSO-d6) 8.32 (s, 1H), 8.23 (d, J = 8.2 Hz, 1H), 7.89 (s, 1H), 7.63 (dd, J = 9.0, 5.0 Hz, 1H), 7.50 (d, J = 7.8 Hz, 1H), 7.27 (t, J = 9.8 Hz, 1H), 5.51 (d, J = 8.0 Hz, 1H), 4.91 - 4.76 (m, 2H), 4.10 (qd, J = 9.0, 3.5 Hz, 1H), 4.05 - 3.93 (m, 1H), 3.13 (p, J = 8.9, 8.4 Hz, 1H), 2.40 (p, J = 8.0, 6.5 Hz, 4H), 1.99 - 1.45 (m, 16H).	581.1	B	B

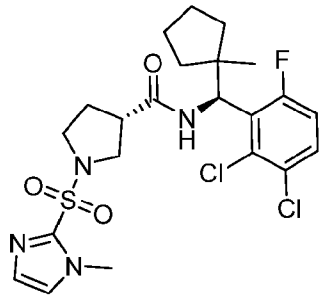
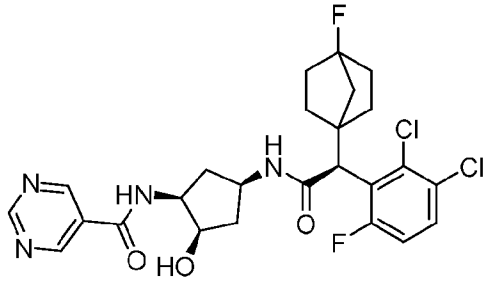
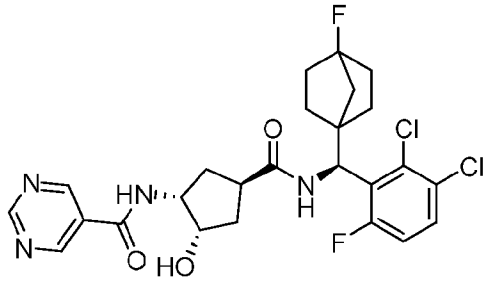
I-3616		1H NMR (400 MHz, DMSO-d6) 8.22 (d, J = 8.1 Hz, 1H), 7.85 (d, J = 2.4 Hz, 1H), 7.62 (dd, J = 8.9, 5.0 Hz, 1H), 7.39 (d, J = 7.9 Hz, 1H), 7.27 (t, J = 9.8 Hz, 1H), 6.59 (d, J = 2.3 Hz, 1H), 5.51 (d, J = 8.1 Hz, 1H), 5.21 (d, J = 4.1 Hz, 1H), 4.10 (q, J = 8.5, 6.5 Hz, 1H), 4.03 (s, 1H), 3.78 (tt, J = 7.4, 3.9 Hz, 1H), 3.14 (s, 1H), 2.03 ?C 1.61 (m, 11H), 1.61 - 1.44 (m, 3H), 1.12 - 1.04 (m, 2H), 1.01 (dd, J − 7.0, 4.6 Hz, 2H).	567.3	A	A
I-3617		1H NMR (400 MHz, DMSO-d6) 8.24 (d, J = 26.3 Hz, 2H), 7.83 (s, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.48 (d, J = 7.8 Hz, 1H), 7.27 (t, J = 9.8 Hz, 1H), 5.51 (d, J = 8.1 Hz, 1H), 4.84 (d, J = 3.5 Hz, 1H), 4.08 (d, J = 8.3 Hz, 1H), 3.99 (s, 1H), 3.74 (dq, J = 7.5, 3.9 Hz, 1H), 3.12 (d, J = 8.8 Hz, 1H), 1.85 (d, J = 22.6 Hz, 4H), 1.73 (d, J = 10.7 Hz, 4H), 1.67 - 1.42 (m, 6H), 1.07- 0.91 (m, 4H).	567.35	B	B
I-3618		1H NMR (400 MHz, DMSO-d6) 8.66 (d, J = 1.1 Hz, 1H),8.54 - 8.50 (m, 1H), 8.24 (d, J = 8.4 Hz, 1H), 7.65 - 7.56 (m, 2H), 7.27 (t, J = 9.7 Hz, 1H), 5.51 (d, J = 8.1 Hz, 1H), 5.26 (d, J = 4.1 Hz, 1H), 4.12 (dd, J = 8.3, 4.5 Hz, 1H), 4.05 (s, 1H), 3.15 (s, 1H), 1.86 - 1.66 (m, 11H), 1.58 (d, J = 8.5 Hz, 3H).	528.15	B	A
I-3619		1H NMR (400 MHz, DMSO-d6) 9.39 (s, 2H), 8.66 (d, J = 7.5 Hz, 1H), 8.26 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.28 (dd, J = 10.6, 9.0 Hz, 1H), 5.52 (d, J = 8.0 Hz, 1H), 4.92 (d, J = 3.4 Hz, 1H), 4.24 - 4.08 (m, 2H), 3.18 (dd, J = 9.3, 4.9 Hz, 1H), 2.06 - 1.51 (m, 14H). 19F NMR (377 MHz, DMSO-d6) -69.04, -109.32, -173.53, -173.76.	607.15	B	B

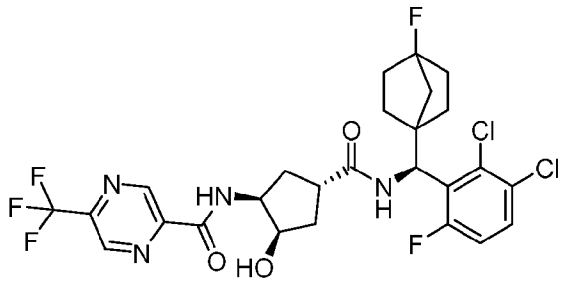
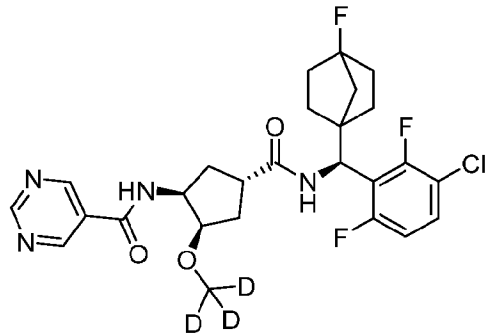
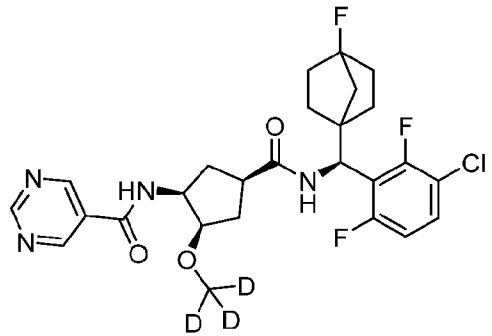
I-3620		1H NMR (300 MHz, DMSO-d6) 9.48 (s, 1H), 9.16 (s, 1H), 8.60 (d, J = 7.6 Hz, 1H), 8.24 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.28 (dd, J = 10.6, 9.0 Hz, 1H), 5.53 (d, J = 8.0 Hz, 1H), 4.96 (d, J = 3.6 Hz, 1H), 4.21 - 4.03 (m, 2H), 3.15 (d, J = 6.3 Hz, 1H), 2.03 - 1.48 (m, 14H).	607.2	C	
I-3621		1H NMR (400 MHz, DMSO-d6)8.97 (d, J = 4.9 Hz, 2H), 8.46 (d, J = 7.8 Hz, 1H), 8.24 (d, J = 8.2 Hz, 1H), 7.70-7.60 (m, 2H),? 7.27 (dd, J = 10.6, 9.0 Hz, 1H), 5.53 (d, J = 8.1 Hz, 1H), 5.28 (d, J = 4.0 Hz, 1H), 4.23-4.07 (m, 2H), 3.16 (dt, J = 13.8, 6.9 Hz, 1H), 2.05 (ddd, J = 12.9, 8.2, 5.0 Hz, 1H), 1.95-1.48 (m, 13H).	539.2	B	A
I-3622		1H NMR (400 MHz, DMSO-d6) 9.29 (s, 1H), 9.17 (s, 2H), 8.45 (d, J = 7.5 Hz, 1H), 8.25 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 9.0, 5.0 Hz, 1H), 7.28 (dd, J = 10.6, 9.0 Hz, 1H), 5.52 (d, J = 8.0 Hz, 1H), 4.89 (d, J = 3.4 Hz, 1H), 4.21 - 4.04 (m, 2H), 3.16 (td, J = 9.1, 8.5, 4.2 Hz, 1H), 2.05 - 1.48 (m, 14H).	539.2	B	A

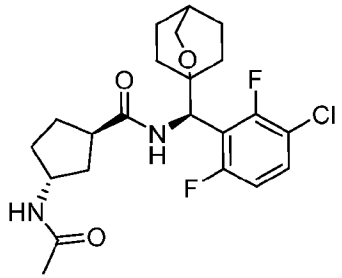
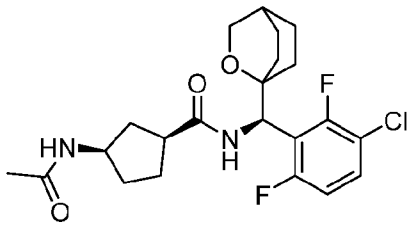
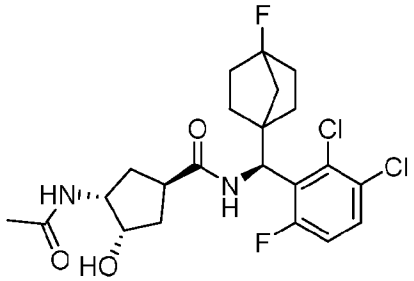
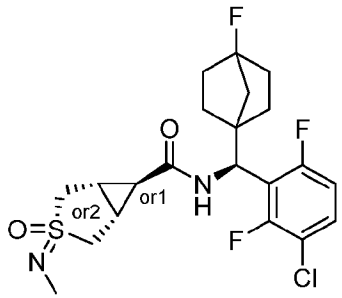
I-3623		1H NMR (400 MHz, DMSO-d6) 8.23 (dd, J = 17.8, 6.5 Hz, 3H), 7.63 (dd, J = 9.0, 5.0 Hz, 1H), 7.27 (dd, J = 10.6, 9.0 Hz, 1H), 6.57 (t, J = 4.7 Hz, 1H), 6.39 (d, J = 7.4 Hz, 1H), 5.51 (d, J = 8.1 Hz, 1H), 4.85 (d, J = 3.7 Hz, 1H), 4.16 - 4.05 (m, 2H), 3.16 - 3.08 (m, 1H), 1.91 - 1.58 (m, 1H), 1.81 (m, 14H). 19F NMR (377 MHz, DMSO-d6) -109.23, -111.42, -173.52, -173.76.	511.15	B	A
I-3624		1H NMR (400 MHz, DMSO-d6) 8.33 (s, 1H), 8.24 (d, J = 8.2 Hz, 1H), 7.99 (d, J = 7.1 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.45 (s, 1H), 7.27 (dd, J = 10.6, 8.9 Hz, 1H), 5.51 (d, J = 8.0 Hz, 1H), 5.20 (d, J = 3.7 Hz, 1H), 4.09 (d, J = 6.2 Hz, 2H), 3.16 (s, 1H), 1.92 - 1.58 (m, 14H). 19F NMR (377 MHz, DMSO-d6) -109.29, -111.40, -173.53, -173.76.	528.15	B	A
I-3625		1H NMR (300 MHz, DMSO-d6) 8.20 (d, J = 8.2 Hz, 1H), 8.01 (d, J = 1.5 Hz, 1H), 7.88 (dd, J = 2.9, 1.5 Hz, 1H), 7.67-7.54 (m, 2H), 7.27 (dd, J = 10.6, 9.0 Hz, 1H), 6.74 (d, J = 7.2 Hz, 1H), 5.51 (d, J = 8.0 Hz, 1H), 4.84 (d, J = 3.3 Hz, 1H), 4.09 (d, J = 6.5 Hz, 2H), 3.13 (dt, J = 13.0, 9.4 Hz, 1H), 1.96-1.54 (m, 14H). 19F NMR (282 MHz, DMSO) -109.259, 173.778.	511.2	A	A

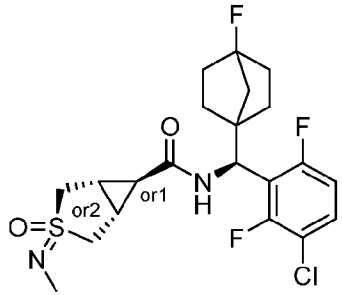
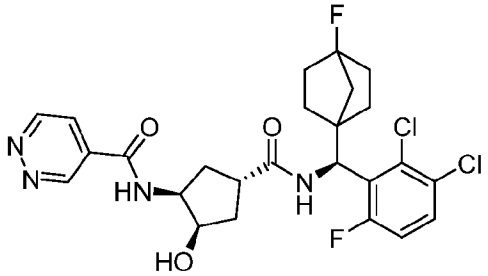
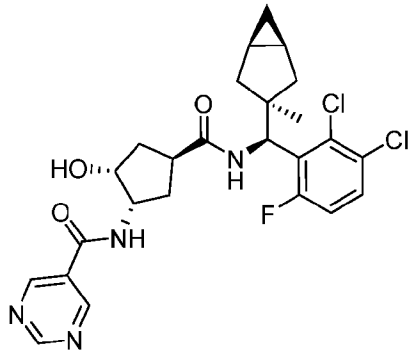
I-3626		1H NMR (400 MHz, DMSO-d6) 10.27 (s, 1H), 8.26 (d, J = 8.4 Hz, 1H), 7.99 (d, J = 7.5 Hz, 1H), 7.01 (t, J = 7.9 Hz, 1H), 5.25 (d, J = 8.4 Hz, 1H), 4.73 (s, 1H), 4.09 (d, J = 8.5 Hz, 1H), 3.21 -3.06 (m, 1H), 2.14 (dd, J = 14.6, 8.6 Hz, 1H), 2.04 (d, J = 7.1 Hz, 1H), 1.83 - 1.65 (m, 12H), 1.58 (d, J = 8.3 Hz, 1H), 1.45 (s, 2H).	543.15	C	
I-3627		1H NMR (400 MHz, DMSO-d6) 10.27 (s, 1H), 8.26 (d, J = 8.4 Hz, 1H), 8.00 (d, J = 7.6 Hz, 1H), 7.00 (t, J = 7.9 Hz, 1H), 5.26 (d, J = 8.3 Hz, 1H), 4.70 (d, J = 4.6 Hz, 1H), 4.14 (d, J = 9.5 Hz, 1H), 3.14 (t, J = 10.3 Hz, 1H), 2.03 (dd, J = 14.6, 8.7 Hz, 1H), 1.99 - 1.87 (m, 2H), 1.82-1.65 (s, 11H), 1.58 (d, J = 8.3 Hz, 1H), 1.45 (d, J = 9.5 Hz, 2H).	543.15	C	
I-3628		1H NMR (400 MHz, DMSO-d6) 8.35 (s, 1H), 8.22 (d, J = 8.2 Hz, 1H), 8.15 (s, 2H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.28 (dd, J = 10.6, 8.9 Hz, 1H), 5.83 (d, J = 7.7 Hz, 1H), 5.51 (d, J = 8.0 Hz, 1H), 4.88 (d, J = 3.8 Hz, 1H), 4.13 (t, J = 3.8 Hz, 1H), 3.72 - 3.61 (m, 1H), 3.14 (s, 1H), 2.04 (ddd, J = 17.6, 7.8, 3.8 Hz, 1H), 1.92 - 1.55 (m, 9H), 1.55 - 1.42 (m, 4H). 19F NMR (377 MHz, DMSO-d6) -109.33, -111.40, -173.52, -173.76.	511.15	B	A

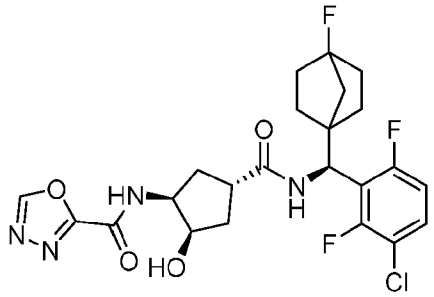
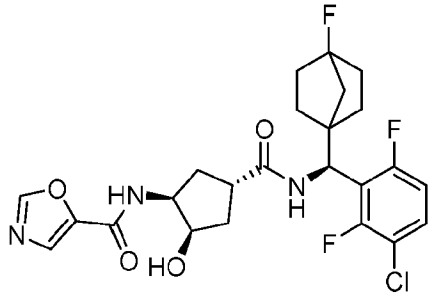
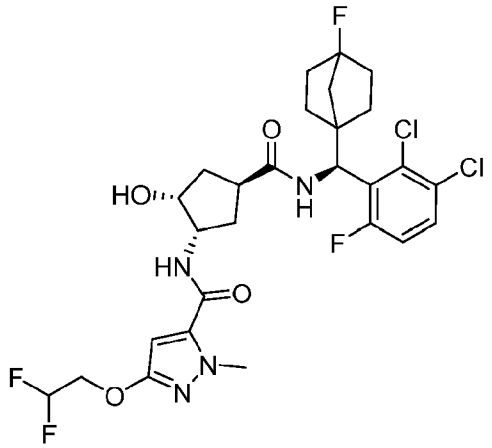
I-3629		1H NMR (400 MHz, DMSO-d6) 8.54 (s, 1H), 8.24 (d, J = 8.2 Hz, 1H), 7.96 (d, J = 7.5 Hz, 1H), 7.83 (s, 1H), 7.63 (dd, J = 9.0, 5.0 Hz, 1H), 7.27 (dd, J = 10.6, 8.9 Hz, 1H), 5.51 (d, J = 8.0 Hz, 1H), 5.01 (d, J = 3.7 IIz, 1II), 4.15 - 4.02 (m, 2II), 3.13 (q, J = 7.9 IIz, 1II), 1.92 - 1.58 (m, 14H). 19F NMR (377 MHz, DMSO-d6) -109.31, -111.40, -173.54, -173.77.	528.2	B	A
I-3630		1H NMR (400 MHz, DMSO-d6) 8.20 (d, J = 8.4 Hz, 1H), 7.58 (td, J = 8.7, 5.4 Hz, 1H), 7.16 (td, J = 9.4, 1.6 Hz, 1H), 5.27 (d, J = 8.3 Hz, 1H), 4.44 (d, J = 5.1 Hz, 1H), 3.89 (p, J − 4.7 Hz, 1H), 3.72 - 3.62 (m, 2H), 2.66 (qd, J = 8.9, 6.2 Hz, 1H), 2.05 - 1.39 (m, 14H), 1.09 (dd, J = 12.0, 6.0 Hz, 6H).	460.2	C	
I-3631			491.4	D	
I-3632			504.4	C	

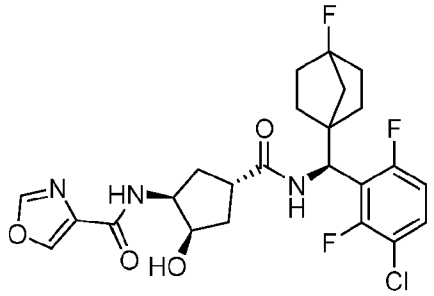
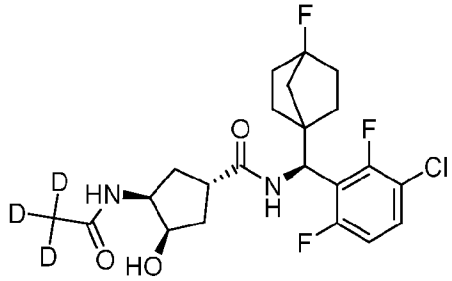
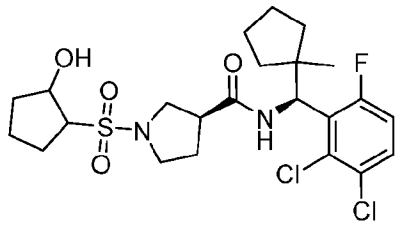
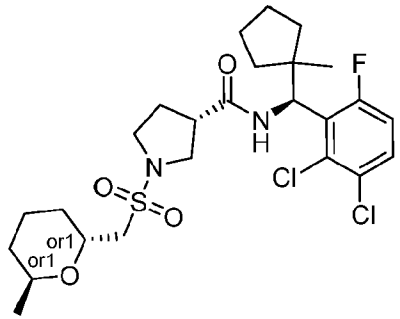
I-3633			518.4	B	
I-3634		1H NMR (400 MHz, DMSO-d6) 9.28 (s, 1H), 9.15 (s, 2II), 8.42 (d, J = 6.1 IIz, 1II), 8.23 (d, J = 8.2 IIz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.27 (dd, J = 10.6, 9.0 Hz, 1H), 5.51 (d, J − 8.0 Hz, 1H), 4.89 (s, 1H), 4.13 (s, 2H), 3.21 - 3.10 (m, 1H), 2.02 C 1.48 (m, 14H).	539.05	D	
I-3635		1H NMR (300 MHz, DMSO-d6) 9.29 (s, 1H), 9.16 (s, 2H), 8.42 (d, J = 7.1 Hz, 1H), 8.25 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.28 (dd, J = 10.6, 9.0 Hz, 1H), 5.51 (d, J = 8.0 Hz, 1H), 4.89 (d, J = 3.3 Hz, 1H), 4.14 (s, 2H), 3.17 (s, 1H), 2.03-1.65 (m, 11II), 1.57 (t, J = 12.3 IIz, 3II).	539.25	B	

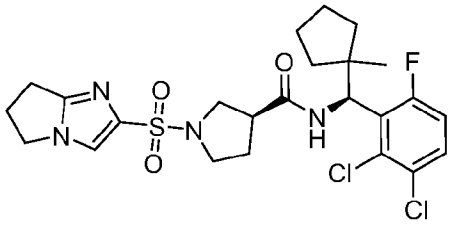
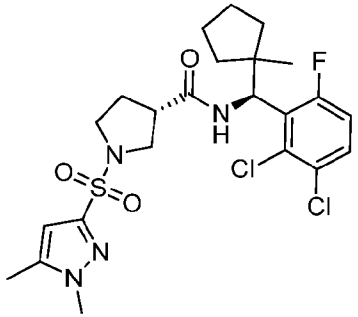
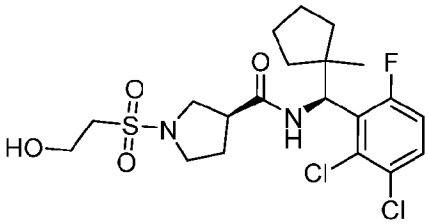
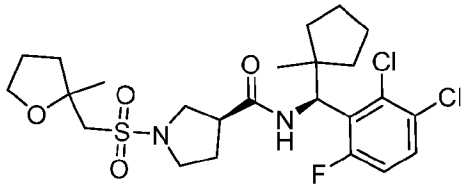
I-3636		1H NMR (400 MHz, DMSO-d6) 9.37 (d, J = 1.4 Hz, 1H), 9.29 (d, J = 1.5 Hz, 1H), 8.43 (d, J = 7.9 Hz, 1H), 8.27 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 8.9, 5.1 Hz, 1H), 7.28 (dd, J = 10.6, 8.9 Hz, 1H), 5.52 (d, J = 8.0 Hz, 1H), 5.33 (d, J = 4.0 Hz, 1H), 4.25 - 4.15 (m, 1H), 4.12 (d, J = 4.6 Hz, 1H), 3.27 - 3.18 (m, 1H), 2.07 (dq, J = 13.0, 7.8, 6.5 Hz, 1H), 1.93 - 1.73 (m, 10H), 1.71 - 1.58 (m, 3H). 19F NMR (377 MHz, DMSO-d6) -66.18, -66.21, -109.28, -173.76.	607.15	B	
I-3637		1H NMR (400 MHz, DMSO-d6) 9.30 (d, J = 3.2 Hz, 1H), 9.17-9.08 (m, 2H), 8.57 (d, J = 7.7 Hz, 1H), 8.28 (d, J = 8.1 Hz, 1H), 7.58 (td, J = 8.7, 5.4 Hz, 1H), 7.16 (t, J = 9.5 Hz, 1H), 5.30 (d, J = 8.2 Hz, 1H), 4.30 (dt, J = 12.6, 6.2 Hz, 1H), 3.77 (s, 1H), 3.16-3.02 (m, 1H), 2.07-1.93 (m, 3H), 1.86-1.56 (m, 9H), 1.46 (s, 2H). 19F NMR (282 MHz, DMSO) -111.047, -113.597, -173.563.	540.25	B	
I-3638		1H NMR (400 MHz, DMSO-d6) 9.30 (s, 1H), 9.14 (d, J = 1.4 Hz, 2H), 8.56 (d, J = 8.0 Hz, 1H), 8.28 (d, J = 8.3 Hz, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.23-7.09 (m, 1H), 5.29 (d, J = 8.2 Hz, 1H), 4.35-4.18 (m, 1H), 3.80 (td, J − 4.5, 2.4 Hz, 1H), 3.10 (d, J − 10.5 Hz, 1H), 2.12 (ddd, J = 13.6, 8.8, 2.5 Hz, 1H), 1.94 (q, J = 10.5 Hz, 1H), 1.85-1.68 (m, 9H), 1.61 (d, J = 8.4 Hz, 1H), 1.47 (d, J = 8.0 Hz, 2H). 19F NMR (282 MHz, DMSO) -111.635, -113.401, -173.565.	540.25	C	

I-3639		1H NMR (300 MHz, DMSO-d6) 8.06 (d, J = 8.8 Hz, 1H), 7.82 (d, J = 7.6 Hz, 1H), 7.54 (td, J = 8.6, 5.4 Hz, 1H), 7.11 (t, J = 9.2 Hz, 1H), 5.12 (d, J = 8.6 Hz, 1H), 4.05-3.88 (m, 1H), 3.74 (s, 2H), 2.88 (t, J = 8.3 Hz, 1H), 1.96 (dt, J = 12.3, 7.4 Hz, 1H), 1.88-1.51 (m, 15H), 1.46-1.24 (m, 2H).	441.15	E	
I-3640		1II NMR (300 MIIz, DMSO-d6) 8.00 (d, J = 8.8 IIz, 1H), 7.78 (d, J = 6.9 Hz, 1H), 7.54 (td, J = 8.7, 5.4 Hz, 1H), 7.22-7.00 (m, 1H), 5.11 (d, J = 8.7 Hz, 1H), 4.00 (q, J = 6.5 Hz, 1H), 3.74 (d, J = 2.1 Hz, 2H), 2.97 (q, J = 7.9 Hz, 1H), 1.91-1.74 (m, 7H), 1.73-1.48 (m, 9H), 1.47-1.28 (m, 2H).	441.15	D	
I-3641		1H NMR (300 MHz, DMSO-d6) 8.19 (d, J = 8.2 Hz, 1H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.48 (d, J = 7.7 Hz, 1H), 7.27 (dd, J = 10.6, 9.0 Hz, 1H), 5.48 (d, J = 8.0 Hz, 1H), 4.78 (d, J = 3.5 Hz, 1H), 4.00-3.92 (m, 1H), 3.88 (dd, J = 10.8, 7.0 Hz, 1H), 3.19-3.03 (m, 1H), 1.93-1.65 (m, 12H), 1.59 (dd, J = 11.0, 6.9 Hz, 5H).	475.15	B	
I-3642		1H NMR (400 MHz, DMSO-d6) 8.71 (d, J = 8.4 Hz, 1H), 7.65-7.52 (m, 1H), 7.16 (t, J = 9.3 Hz, 1H), 5.30 (d, J = 8.3 Hz, 1H), 3.62 (ddd, J = 22.5, 13.7, 6.8 Hz, 2H), 2.88 (d, J = 13.4 Hz, 2H), 2.62 (s, 3H), 2.28 (t, J = 3.9 Hz, 1H), 1.96 (d, J = 26.6 Hz, 2H), 1.77 (dd, J = 23.2, 12.9 Hz, 7H), 1.62 (d, J = 8.3 Hz, 1H), 1.45 (s, 2H).	461.1	E	

I-3643		1H NMR (400 MHz, DMSO-d6) 8.71 (d, J = 8.3 Hz, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.20-7.11 (m, 1H), 5.30 (d, J = 8.2 Hz, 1H), 3.71-3.49 (m, 2H), 2.88 (dd, J = 13.7, 2.0 Hz, 2H), 2.61 (s, 3H), 2.28 (t, J = 3.9 Hz, 1H), 2.06-1.89 (m, 2H), 1.86-1.68 (m, 7H), 1.62 (d, J = 8.5 Hz, 1H), 1.44 (d, J = 13.9 Hz, 2H).	461.1	D	
I-3644		1H NMR (400 MHz, DMSO-d6) 9.56 (t, J = 1.8 Hz, 1H), 9.42 (dd, J = 5.4, 1.3 Hz, 1H), 8.60 (d, J = 7.6 Hz, 1H), 8.27 (d, J = 8.2 Hz, 1H), 8.03 (dd, J = 5.4, 2.3 Hz, 1H), 7.63 (dd, J = 9.0, 5.0 Hz, 1H), 7.28 (dd, J = 10.7, 8.9 Hz, 1H), 5.52 (d, J = 8.0 Hz, 1H), 4.92 (s, 1H), 4.13 (d, J = 24.3 Hz, 2H), 3.24-3.12 (m, 1H), 2.08 (s, 1H), 2.07-1.48 (m, 13H).	539.1	B	A
I-3645		1H NMR (400 MHz, DMSO-d6) 9.29 (s, 1H), 9.17 (s, 2H), 8.44 (d, J = 7.5 Hz, 1H), 8.06 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.32 - 7.20 (m, 1H), 5.42 (d, J = 8.6 Hz, 1H), 4.86 (d, J = 3.4 Hz, 1H), 4.21 - 4.04 (m, 2H), 3.19 (tt, J = 12.5, 6.2 Hz, 1H), 2.01 (dt, J = 12.7, 10.3 Hz, 1H), 1.88 (ddd, J = 12.5, 8.5, 3.9 Hz, 1H), 1.69 (dtd, J = 23.5, 13.4, 7.1 Hz, 3H), 1.53 (dd, J = 12.8, 5.8 Hz, 1H), 1.46 - 1.20 (m, 4H), 1.17 - 0.93 (m, 3H), 0.85 (td, J = 7.9, 4.0 Hz, 1H), 0.11 (q, J = 3.9 Hz, 1H).	521.1	B	A

I-3646		1H NMR (400 MHz, DMSO-d6) 9.44 (d, J = 1.2 Hz, 1H), 8.51 (d, J = 7.0 Hz, 1H), 8.29 (d, J = 8.2 Hz, 1H), 7.57 (td, J = 8.6, 5.3 Hz, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.28 (d, J = 8.2 Hz, 1H), 5.12 (d, J = 3.5 Hz, 1H), 4.15 - 4.05 (m, 2H), 3.16 (p, J = 7.8 Hz, 1H), 1.98 (t, J = 8.2 Hz, 2H), 1.83 - 1.63 (m, 9H), 1.60 (d, J = 8.5 Hz, 1H), 1.46 (d, J = 9.0 Hz, 2H).	513.3	B	A
I-3647		1H NMR (400 MHz, DMSO-d6) 8.54 (s, 1H), 8.27 (d, J = 8.2 Hz, 1H), 7.97 (d, J = 7.4 Hz, 1H), 7.83 (s, 1H), 7.57 (td, J = 8.7, 5.3 Hz, 1H), 7.15 (t, J = 9.4 Hz, 1H), 5.28 (d, J = 8.1 Hz, 1H), 5.02 (d, J = 3.6 Hz, 1H), 4.09 (ddt, J = 20.7, 8.4, 4.1 Hz, 2H), 3.15 (p, J = 8.2 Hz, 1H), 1.93 (t, J = 8.6 Hz, 2H), 1.85 - 1.58 (m, 10H), 1.46 (d, J = 9.1 Hz, 2H).	512.15	B	A
I-3648		1H NMR (400 MHz, DMSO-d6) 8.25 (d, J = 8.2 Hz, 1H), 7.89 (d, J = 7.4 Hz, 1H), 7.63 (dd, J = 9.0, 5.0 Hz, 1H), 7.28 (dd, J = 10.6, 8.9 Hz, 1H), 6.53-6.17 (m, 2H), 5.50 (d, J = 8.0 Hz, 1H), 4.91 (d, J = 3.5 Hz, 1H), 4.35 (td, J = 14.9, 3.6 Hz, 2H), 4.11-4.02 (m, 2H), 3.89 (s, 3H), 3.21-3.06 (m, 1H), 1.97-1.47 (m, 14H).	621.25	B	

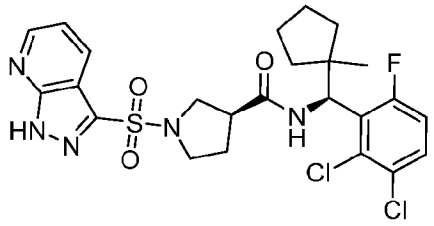
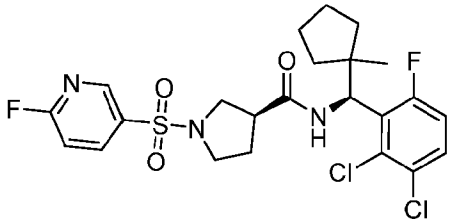
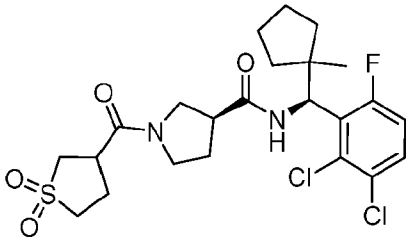
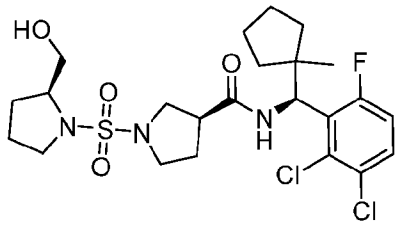
I-3649		1H NMR (400 MHz, DMSO-d6) 8.66 (s, 1H), 8.52 (s, 1H), 8.27 (d, J = 8.2 Hz, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 2H), 7.15 (t, J = 9.3 Hz, 1H), 5.32 - 5.22 (m, 2H), 4.11 (dtd, J = 28.0, 9.3, 8.8, 4.6 Hz, 2H), 3.16 (qd, J = 8.6, 4.8 Hz, 1H), 2.00 (ddd, J = 13.0, 8.3, 4.9 Hz, 1H), 1.76 (dtt, J = 17.3, 12.6, 7.1 Hz, 10H), 1.60 (d, J = 8.4 Hz, 1H), 1.54 - 1.38 (m, 2H).	512.1	B	A
I-3650		1H NMR (400 MHz, DMSO-d6) 8.21 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.6, 5.4 Hz, 1H), 7.49 (d, J = 7.5 Hz, 1H), 7.14 (t, J = 9.4 Hz, 1H), 5.27 (d, J = 8.1 Hz, 1H), 4.77 (d, J = 3.2 Hz, 1H), 3.92 (q, J = 8.5, 6.9 Hz, 2H), 3.08 (td, J − 9.3, 8.7, 4.5 Hz, 1H), 1.88-1.62 (m, 10H), 1.60 (td, J = 9.1, 3.6 Hz, 2H), 1.45 (d, J = 9.6 Hz, 2H).	462.15	B	
I-3651			522	B	
I-3652			550	D	

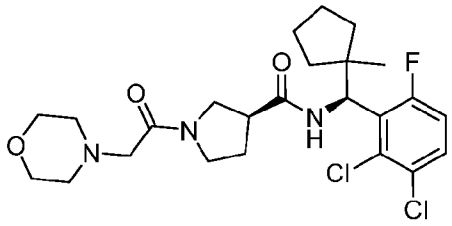
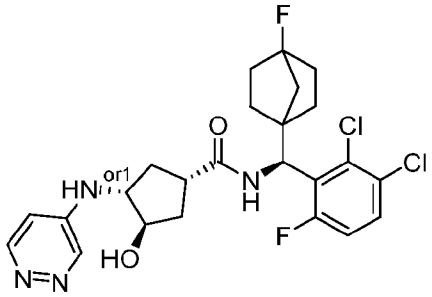
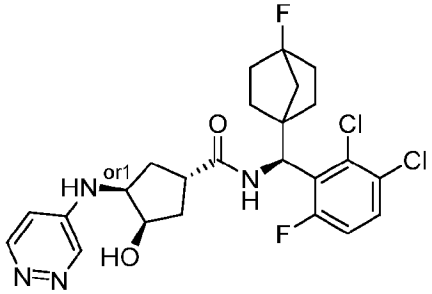
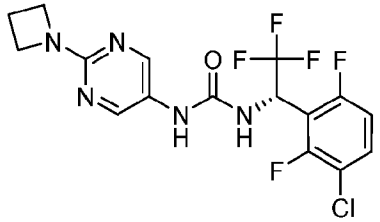
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I-3654			532	B	
I-3655			482	B	
I-3656			536	D	

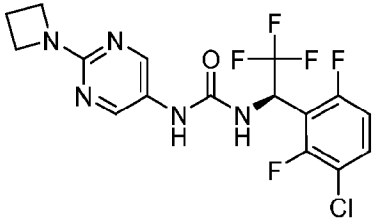
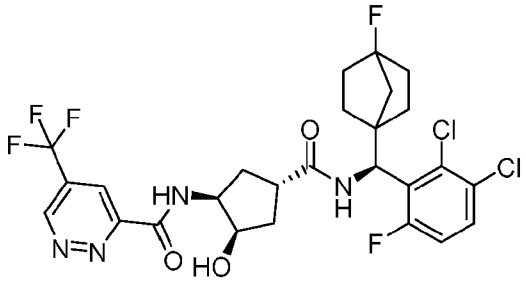
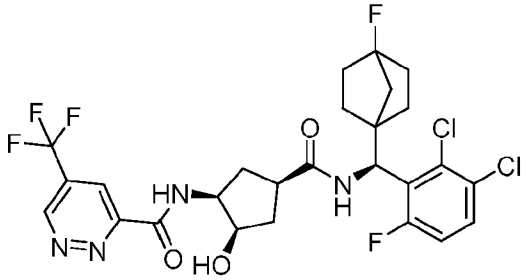
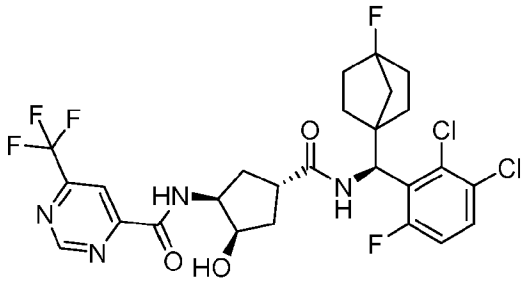
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I-3658		501	B	
I-3659		553	D	
I-3660		515	B	

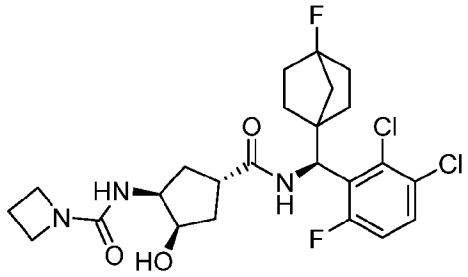
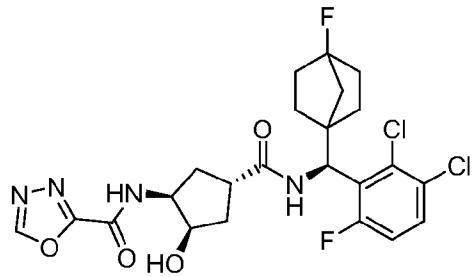
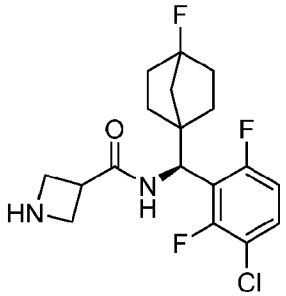
I-3661		562	B	B	D
I-3662		564	B	B	B
I-3663		560	A	A	A
I-3664		538	B	B	A

I-3665		551	D	
I-3666		548	C	
I-3667		558	B	
I-3668		522	B	

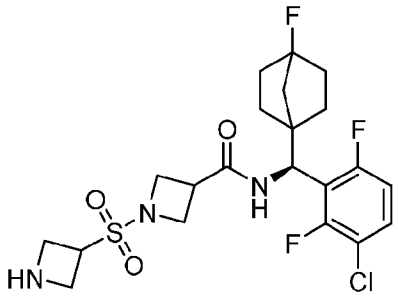
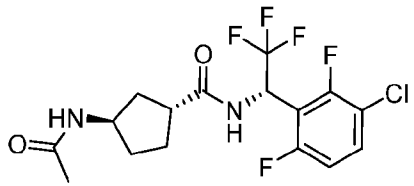
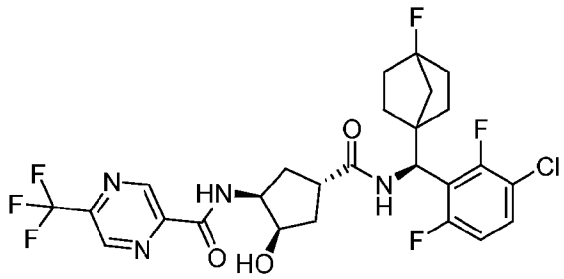
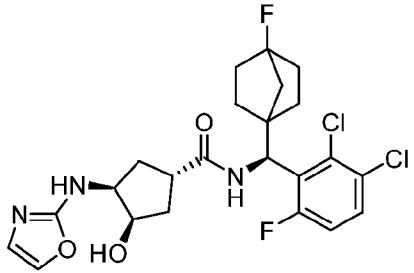
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I-3670			533	C	
I-3671			520	B	
I-3672			537	C	

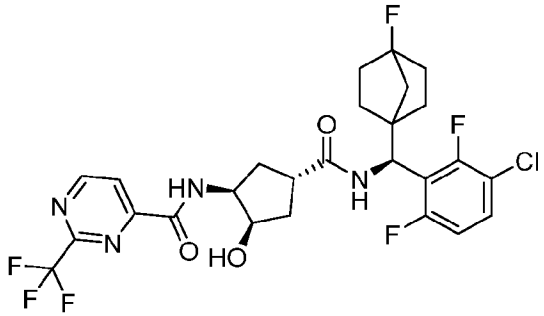
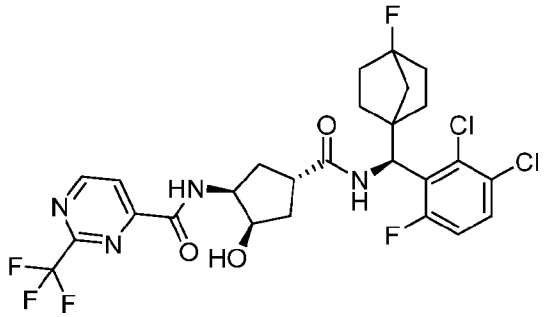
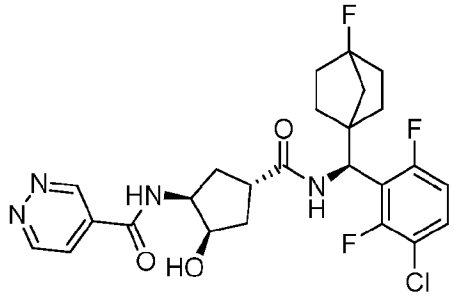
I-3673			501	C	
I-3674		1H NMR (400 MHz, DMSO-d6) 8.63 (d, J = 3.1 Hz, 1H), 8.45 (d, J = 6.1 Hz, 1H), 8.33 (d, J = 8.3 Hz, 1H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (t, J = 9.8 Hz, 1H), 6.75 - 6.57 (m, 2H), 5.52 (d, J = 8.2 Hz, 1H), 5.15 (d, J = 5.4 Hz, 1H), 4.07 (s, 1H), 3.66 (s, 1H), 2.88 (d, J = 14.7 Hz, 1H), 2.23 - 1.48 (m, 14H).	511.15	B	
I-3675		1H NMR (400 MHz, DMSO-d6) 8.64 (d, J = 3.0 Hz, 1H), 8.45 (d, J = 6.1 Hz, 1H), 8.22 (d, J = 8.2 Hz, 1H), 7.62 (dd, J = 9.0, 5.0 Hz, 1H), 7.33 - 7.22 (m, 1H), 6.70 - 6.56 (m, 2H), 5.52 (d, J = 8.0 Hz, 1H), 4.96 (s, 1H), 4.12 (s, 1H), 2.15 - 1.42 (m, 14H).	511.15	A	A
I-3676		1H NMR (300 MHz, DMSO-d6) 8.66 (s, 1H), 8.35 (s, 1H), 7.93-7.81 (m, 1H), 7.59 (d, J = 10.0 Hz, 1H), 7.39 (t, J = 9.7 Hz, 1H), 6.08 (t, J = 9.0 Hz, 1H), 4.13-3.91 (m, 4H), 2.28 (t, J = 7.5 Hz, 2H). 19F NMR (282 MHz, DMSO) -73.64, -113.28, -113.34.	422.05	E	

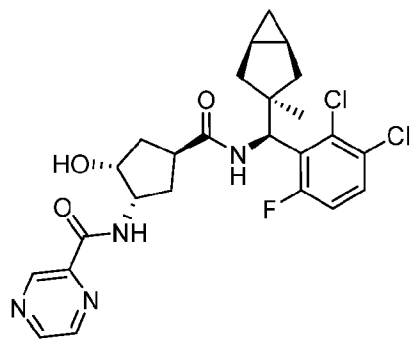
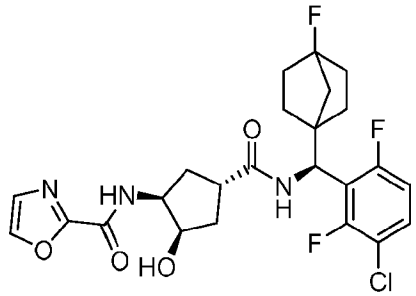
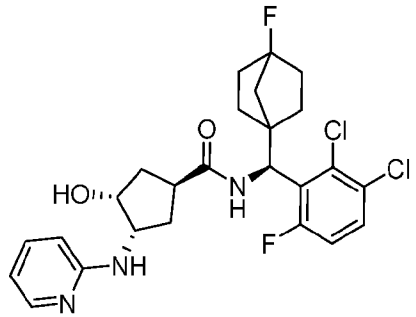
I-3677		1H NMR (300 MHz, DMSO-d6) 8.67 (s, 1H), 8.36 (s, 2H), 7.84 (td, J = 8.8, 5.6 Hz, 1H), 7.60 (d, J = 9.9 Hz, 1H), 7.39 (t, J = 9.2 Hz, 1H), 6.09 (p, J = 9.0 Hz, 1H), 3.99 (t, J = 7.4 Hz, 4H), 2.28 (p, J = 7.5 Hz, 2H). 19F NMR (282 MHz, DMSO) -73.678, -113.286, -113.344.	422.05	D	
I-3678		1H NMR (400 MHz, DMSO-d6) 9.91 (d, J = 2.2 Hz, 1H), 8.74 (d, J = 7.8 Hz, 1H), 8.49 (d, J = 2.2 Hz, 1H), 8.25 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 8.9, 5.0 Hz, 1H), 7.33 - 7.22 (m, 1H), 5.53 (d, J = 8.1 Hz, 1H), 5.30 (d, J = 4.1 Hz, 1H), 4.31 - 4.11 (m, 2H), 3.25 - 3.12 (m, 1H), 2.17 - 1.45 (m, 14H).	607.15	B	
I-3679		1H NMR (400 MHz, DMSO-d6) 9.90 (s, 1H), 8.72 (d, J = 7.5 Hz, 1H), 8.47 (s, 1H), 8.25 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 9.0, 4.9 Hz, 1H), 7.26 (t, J = 9.6 Hz, 1H), 5.50 (d, J = 8.1 Hz, 1H), 5.31 (d, J = 3.9 Hz, 1H), 4.19 (s, 2H), 3.24 - 3.16 (m, 1H), 1.96 - 1.46 (m, 14H).	607.1	E	
I-3680		1H NMR (400 MHz, DMSO-d6) 9.61 (s, 1H), 8.57 (d, J = 7.8 Hz, 1H), 8.37 (d, J = 1.3 Hz, 1H), 8.27 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 9.0, 5.0 Hz, 1H), 7.28 (dd, J = 10.6, 9.0 Hz, 1H), 5.55-5.31 (m, 2H), 4.28-4.07 (m, 2H), 3.18 (qd, J = 8.5, 4.7 Hz, 1H), 2.07 (ddd, J = 12.9, 8.3, 4.8 Hz, 1H), 1.92-1.48 (m, 13H). 19F NMR (377 MHz, DMSO) -68.686, -109.290, -173.779.	607.2	B	

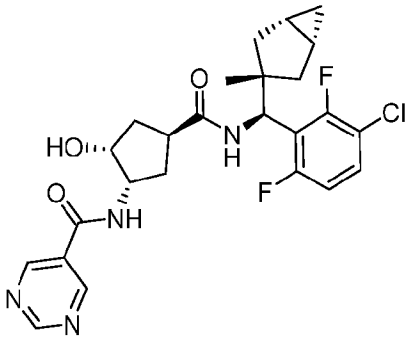
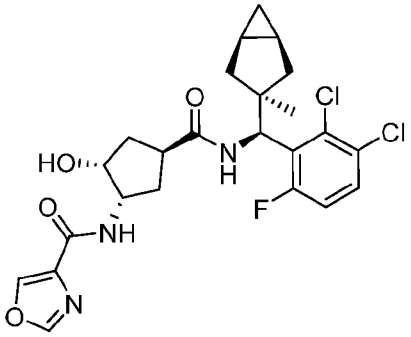
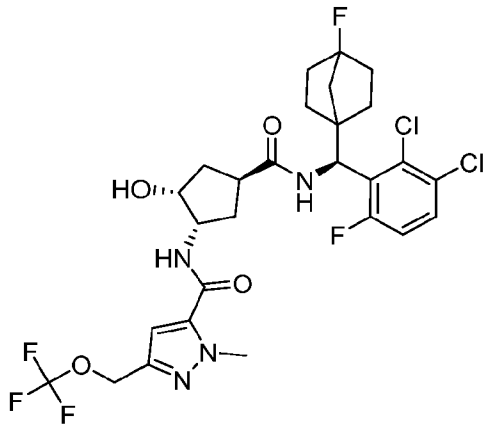
I-3681		19F NMR (282 MHz, DMSO) -109.27, -173.53, -173.77. 1H NMR (300 MHz, DMSO-d6) 8.17 (d, J = 8.2 Hz, 1H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.6, 9.0 Hz, 1H), 5.49 (d, J = 7.7 Hz, 2H), 4.77 (d, J = 3.5 Hz, 1H), 3.91-3.85 (m, 1H), 3.78 (dd, J = 9.9, 5.1 Hz, 4H), 3.12-2.98 (m, 1H), 2.10 (p, J = 7.4 Hz, 2H), 1.85-1.49 (m, 15H).	516.2	B	A
I-3682		1H NMR (300 MHz, DMSO-d6) 9.44 (s, 1H), 8.50 (d, J = 6.8 Hz, 1H), 8.26 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.28 (dd, J = 10.6, 8.9 Hz, 1H), 5.52 (d, J = 8.0 Hz, 1H), 5.12 (d, J = 3.0 Hz, 1H), 4.11 (s, 2H), 3.16 (t, J = 7.1 Hz, 1H), 2.03 - 1.46 (m, 14H).	527.1	B	A
I-3683				D	

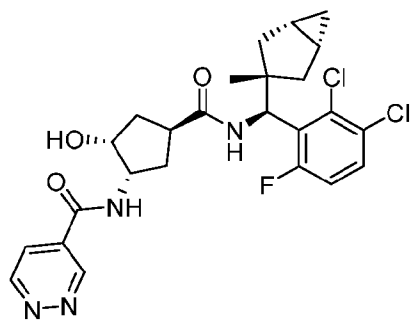
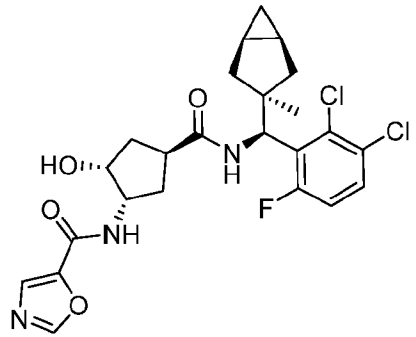
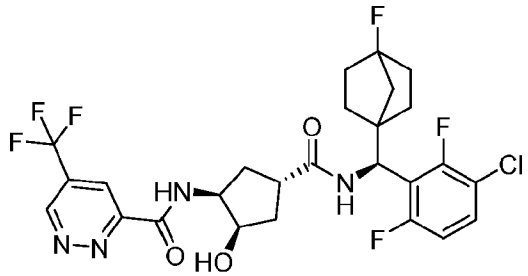
I-3684		506.15	B
I-3685		534.15	C
I-3686		506.15	B

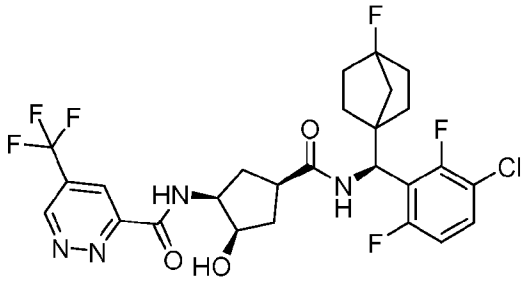
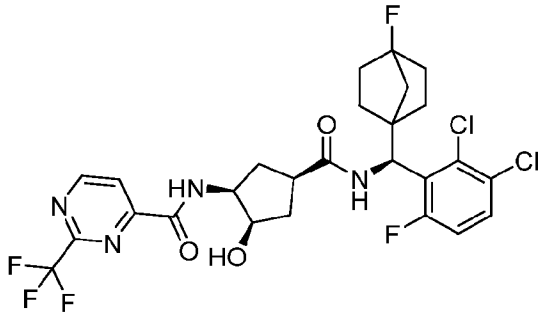
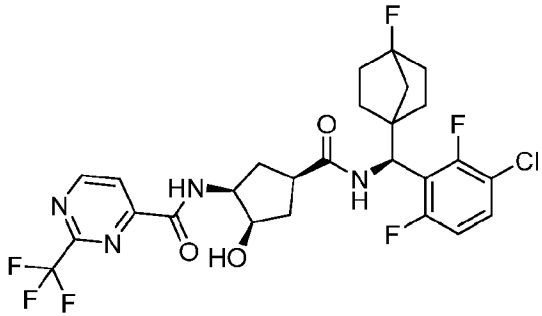
I-3687			492.1	B	
I-3688		1H NMR (300 MHz, DMSO-d6) 9.18 (d, J = 8.8 Hz, 1H), 7.86-7.73 (m, 2H), 7.33 (td, J = 9.3, 1.6 Hz, 1H), 6.12 (p, J = 8.9 Hz, 1H), 4.01 (h, J = 6.6 Hz, 1H), 3.08-2.94 (m, 1H), 2.00-1.82 (m, 2H), 1.76 (s, 4H), 1.69-1.54 (m, 2H), 1.47-1.34 (m, 1H). 19F NMR (282 MHz, DMSO) -72.03, -112.78.	399.1	E	
I-3689		1H NMR (400 MHz, DMSO-d6) 9.37 (s, 1H), 9.29 (s, 1H), 8.43 (d, J = 7.9 Hz, 1H), 8.30 (d, J = 8.3 Hz, 1H), 7.57 (td, J = 8.6, 5.3 Hz, 1H), 7.16 (t, J = 9.4 Hz, 1H), 5.34 (d, J = 4.0 Hz, 1H), 5.29 (d, J = 8.1 Hz, 1H), 4.25 - 4.16 (m, 1H), 4.13 (d, J = 4.6 Hz, 1H), 3.19 (s, 1H), 2.07 (q, J = 8.3, 7.5 Hz, 1H), 1.94 - 1.70 (m, 10H), 1.60 (d, J = 8.5 Hz, 1H), 1.46 (d, J = 8.0 Hz, 2H). 19F NMR (377 MHz, DMSO-d6) -66.22, -111.67, -113.78, -173.55.	591.15	B	
I-3690		1H NMR (400 MHz, DMSO-d6) 8.22 (d, J = 8.2 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.39 (d, J = 1.1 Hz, 1H), 7.27 (dd, J = 10.6, 9.0 Hz, 1H), 6.77-6.65 (m, 2H), 5.50 (d, J = 7.9 Hz, 1H), 4.80 (d, J = 3.8 Hz, 1H), 4.06 (d, J = 4.2 Hz, 1H), 3.78 (qd, J = 8.4, 3.8 Hz, 1H), 3.10 (dt, J = 13.4, 9.0 Hz, 1H), 2.03-1.40 (m, 14H).	500.1	B	A

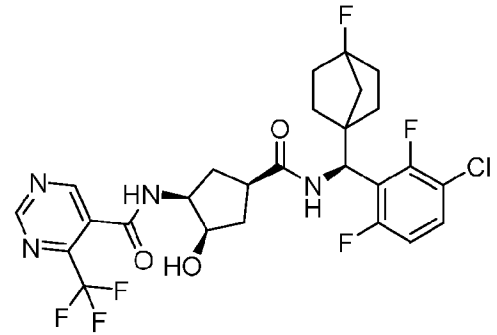
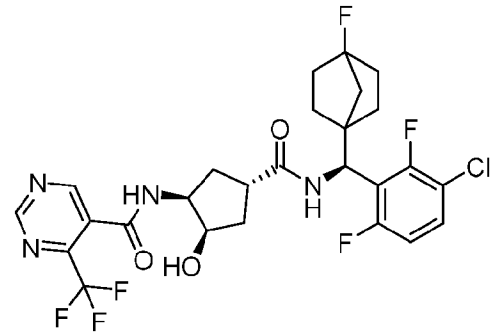
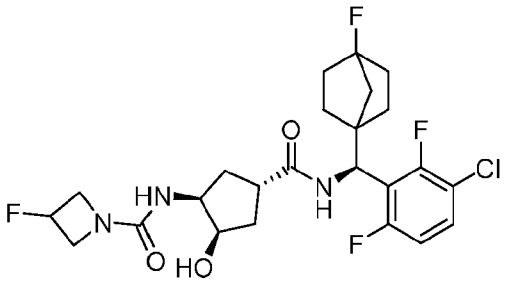
I-3691		1H NMR (400 MHz, DMSO-d6) 9.33 (d, J = 5.0 Hz, 1H), 8.44 (d, J = 7.8 Hz, 1H), 8.37-8.24 (m, 2H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.16 (td, J = 9.4, 1.6 Hz, 1H), 5.41 (d, J = 3.7 Hz, 1H), 5.29 (d, J = 8.2 Hz, 1H), 4.17 (dt, J = 24.7, 4.8 Hz, 2H), 3.20 (t, J = 7.6 Hz, 1H), 2.08 (dq, J = 11.1, 6.4, 5.7 Hz, 1H), 1.93-1.57 (m, 11H), 1.46 (d, J = 8.5 Hz, 2H).	591.15	B	B
I-3692		1H NMR (400 MHz, DMSO-d6) 9.32 (d, J = 5.1 Hz, 1H), 8.42 (d, J = 7.8 Hz, 1H), 8.31 (d, J = 5.0 Hz, 1H), 8.26 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.27 (dd, J = 10.6, 9.0 Hz, 1H), 5.52 (d, J = 8.0 Hz, 1H), 5.38 (d, J = 4.1 Hz, 1H), 4.20 (qd, J = 8.3, 4.4 Hz, 1H), 4.13 (t, J = 4.3 Hz, 1H), 3.25 -3.13 (m, 1H), 2.08 (ddd, J = 13.1, 8.4, 5.0 Hz, 1H), 1.93 - 1.46 (m, 13H).	607.15	B	B
I-3693		1H NMR (400 MHz, DMSO-d6) 9.56 (t, J = 1.8 Hz, 1H), 9.41 (dd, J = 5.3, 1.3 Hz, 1H), 8.59 (d, J = 7.4 Hz, 1H), 8.28 (d, J = 8.3 Hz, 1H), 8.02 (dd, J = 5.3, 2.3 Hz, 1H), 7.63-7.51 (m, 1H), 7.16 (t, J = 9.4 Hz, 1H), 5.29 (d, J = 8.1 Hz, 1H), 4.91 (d, J = 3.4 Hz, 1H), 4.13 (dd, J = 20.0, 6.8 Hz, 2H), 3.17 (s, 1H), 2.11-1.87 (m, 2H), 1.86-1.56 (m, 10H), 1.46 (d, J = 8.6 Hz, 2H).	523.15	B	B

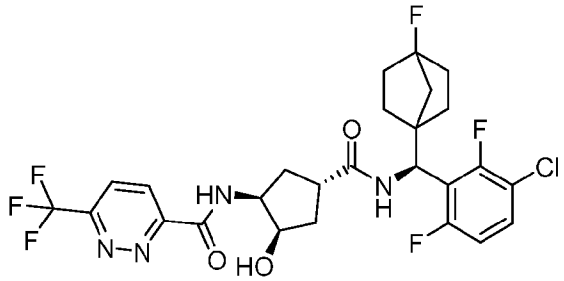
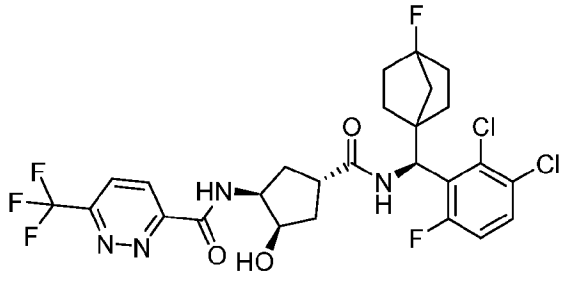
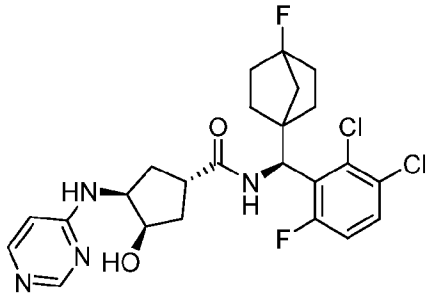
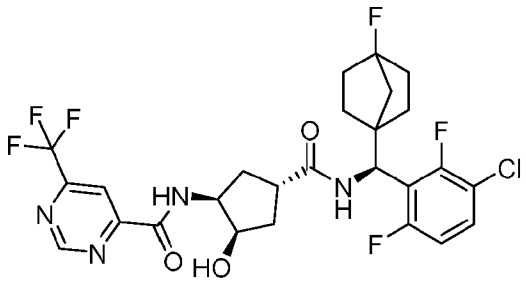
I-3694		1H NMR (400 MHz, DMSO-d6) 9.21 (d, J = 1.5 Hz, 1H), 8.89 (d, J = 2.5 Hz, 1H), 8.77 - 8.71 (m, 1H), 8.33 (d, J = 7.9 Hz, 1H), 8.04 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.25 (dd, J = 10.7, 9.0 Hz, 1H), 5.43 (d, J = 8.6 Hz, 1H), 5.27 (s, 1H), 4.25 - 4.13 (m, 1H), 4.10 (s, 1H), 3.23 - 3.15 (m, 1H), 2.01 (ddd, J = 13.0, 8.2, 5.1 Hz, 1H), 1.86 (dt, J = 12.8, 9.4 Hz, 1H), 1.74 (dd, J = 8.5, 3.3 Hz, 2H), 1.63 (dd, J = 12.7, 5.7 Hz, 1H), 1.56 - 1.48 (m, 1H), 1.38 (t, J = 13.7 Hz, 2H), 1.31 (s, 2H), 1.08 (s, 3H), 0.85 (td, J = 7.8, 4.0 Hz, 1H), 0.10 (q, J = 4.0 Hz, 1H).	521.15	A	A
I-3695		1H NMR (400 MHz, DMSO-d6) 8.30 (d, J = 22.6 Hz, 1H), 8.01 (d, J = 7.2 Hz, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 2H), 7.45 (s, 1H), 7.20-7.07 (m, 1H), 5.25 (dd, J = 22.1, 5.9 Hz, 2H), 4.15-4.02 (m, 2H), 3.15 (dt, J = 13.7, 7.0 Hz, 1H), 2.07-1.54 (m, 12H), 1.46 (d, J = 9.4 Hz, 2H).	512.15	B	A
I-3696		1H NMR (400 MHz, DMSO-d6) 8.21 (d, J = 8.2 Hz, 1H), 7.92 (dd, J = 5.1, 1.9 Hz, 1H), 7.63 (dd, J = 9.0, 5.0 Hz, 1H), 7.38-7.19 (m, 2H), 6.59-6.38 (m, 2H), 6.07 (d, J = 7.2 Hz, 1H), 5.51 (d, J = 8.1 Hz, 1H), 4.82 (s, 1H), 4.08 (dd, J = 13.9, 5.4 Hz, 2H), 3.11 (td, J = 13.0, 8.5 Hz, 1H), 2.11-1.31 (m, 14H).	510.1	B	A

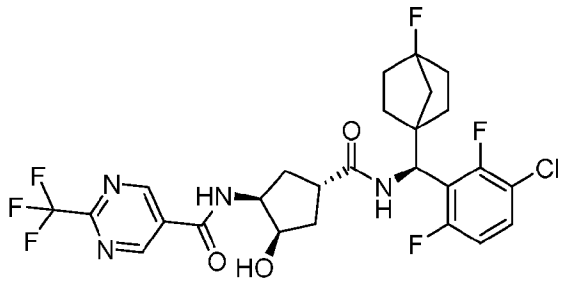
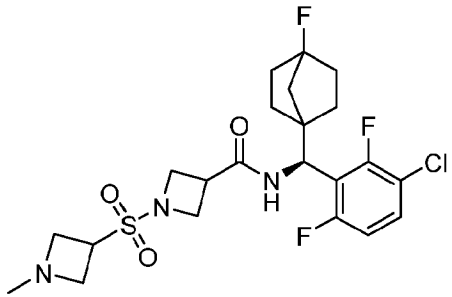
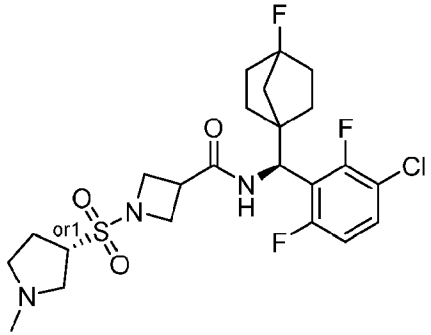
I-3697		1H NMR (400 MHz, DMSO-d6) 9.29 (s, 1H), 9.17 (d, J = 1.9 Hz, 2H), 8.43 (d, J = 7.4 Hz, 1H), 8.11 (d, J = 8.8 Hz, 1H), 7.55 (q, J = 7.7, 7.2 Hz, 1H), 7.14 (t, J = 9.5 Hz, 1H), 5.13 (d, J = 8.6 Hz, 1H), 4.85 (d, J = 3.4 Hz, 1H), 4.16 (s, 1H), 4.10 (s, 1H), 3.19 (s, 1H), 2.01 (q, J = 11.2 Hz, 1H), 1.89 (s, 1H), 1.77 (s, 1H), 1.68 (d, J = 13.3 Hz, 2H), 1.46 (s, 1H), 1.32 (q, J = 13.9, 13.3 Hz, 4H), 1.07 (s, 3H), 0.86 (s, 1H), 0.15 (s, 1H).	505.15	A	A
I-3698		1H NMR (400 MHz, DMSO-d6) 8.66 (d, J = 1.0 Hz, 1H), 8.51 (d, J = 1.0 Hz, 1H), 8.02 (d, J = 8.8 Hz, 1H), 7.63 - 7.52 (m, 2H), 7.25 (t, J = 9.8 Hz, 1H), 5.42 (d, J = 8.6 Hz, 1H), 5.23 (d, J = 4.1 Hz, 1H), 4.18 - 3.98 (m, 2H), 3.17 (s, 1H), 1.95 (dt, J = 8.1, 4.9 Hz, 1H), 1.87 - 1.76 (m, 1H), 1.67 (dd, J = 30.5, 9.6 Hz, 3H), 1.52 (d, J = 12.7 Hz, 1H), 1.36 (dd, J = 27.5, 13.7 Hz, 4H), 1.07 (s, 3H), 0.90 - 0.78 (m, 1H), 0.10 (d, J = 4.1 Hz, 1H).	510.1	A	A
I-3699		1H NMR (400 MHz, DMSO-d6) 8.25 (d, J = 8.2 Hz, 1H), 8.11-8.02 (m, 1H), 7.63 (dd, J = 9.0, 5.0 Hz, 1H), 7.28 (dd, J = 10.6, 9.0 Hz, 1H), 7.09 (d, J = 1.5 Hz, 1H), 5.51 (d, J = 8.0 Hz, 1H), 5.09 (s, 2H), 4.91 (s, 1H), 4.04 (s, 5H), 3.14 (s, 1H), 2.03-1.49 (m, 14H).	639.1	B	

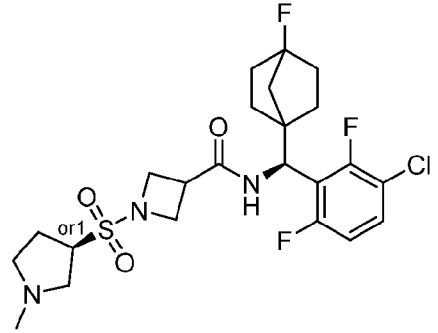
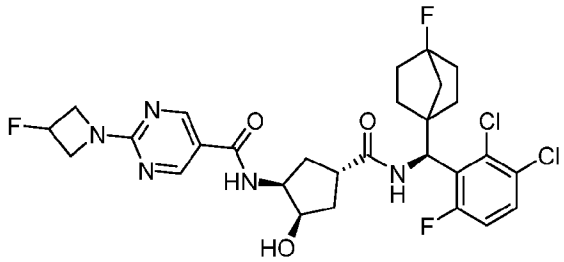
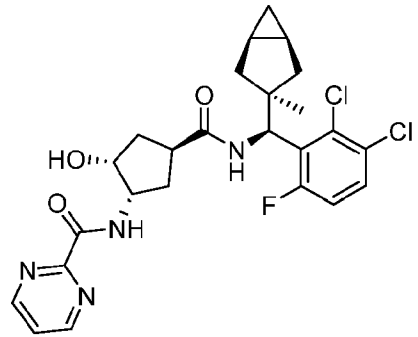
I-3700		1H NMR (400 MHz, DMSO-d6) 9.55 (dd, J = 2.3, 1.3 Hz, 1H), 9.41 (dd, J = 5.3, 1.3 Hz, 1H), 8.55 (d, J = 7.5 Hz, 1H), 8.07 - 7.97 (m, 2H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 5.43 (d, J = 8.6 Hz, 1H), 4.86 (d, J = 3.4 Hz, 1H), 4.21 - 4.06 (m, 2H), 3.23 - 3.15 (m, 1H), 2.19 - 1.84 (m, 2H), 1.80 - 1.59 (m, 3H), 1.53 (dd, J = 12.6, 5.8 Hz, 1H), 1.37 (dd, J = 26.1, 13.6 Hz, 4H), 1.08 (d, J = 2.4 Hz, 3H), 0.85 (td, J = 8.0, 4.1 Hz, 1H), 0.11 (q, J = 3.9 Hz, 1H).	521.25	A	A
I-3701		1H NMR (400 MHz, DMSO-d6) 8.53 (s, 1H), 8.02 (d, J = 8.8 Hz, 1H), 7.92 (d, J = 7.5 Hz, 1H), 7.83 (s, 1H), 7.60 (dd, J = 9.0, 5.1 Hz, 1H), 7.25 (t, J = 9.8 Hz, 1H), 5.41 (d, J = 8.6 Hz, 1H), 4.98 (d, J = 3.6 Hz, 1H), 4.08 (d, J = 20.6 Hz, 2H), 3.16 (s, 1H), 1.91 (q, J = 8.9, 8.3 Hz, 2H), 1.79 - 1.56 (m, 3H), 1.51 (s, 1H), 1.36 (dd, J = 27.3, 14.0 Hz, 4H), 1.07 (s, 3H), 0.84 (s, 1H), 0.10 (s, 1H).	510.1	A	A
I-3702		1H NMR (300 MHz, DMSO-d6)9.92 (dd, J = 2.3, 0.8 Hz, 1H), 8.76 (d, J = 7.8 Hz, 1H), 8.50 (dt, J = 2.2, 0.9 Hz, 1H), 8.30 (d, J = 8.3 Hz, 1H), 7.58 (td, J = 8.7, 5.5 Hz, 1H), 7.26 - 7.05 (m, 1H), 5.31 (dd, J = 8.4, 6.0 Hz, 2H), 4.28 (td, J = 8.3, 4.4 Hz, 1H), 4.17 (d, J = 4.0 Hz, 1H), 3.20 (dt, J = 13.4, 6.6 Hz, 1H), 2.10 (ddd, J = 13.0, 8.3, 4.9 Hz, 1H), 2.00 - 1.59 (m, 11H), 1.47 (s, 2H).	591.2	B	A

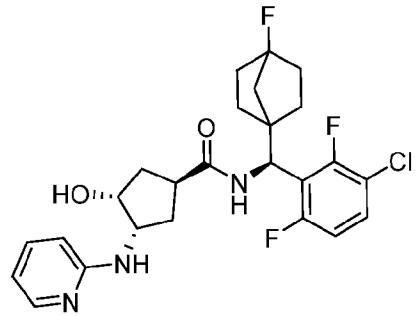
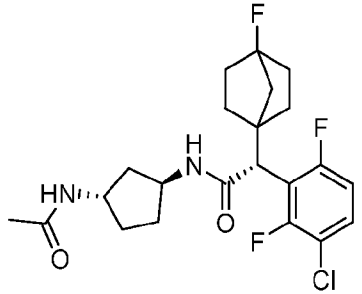
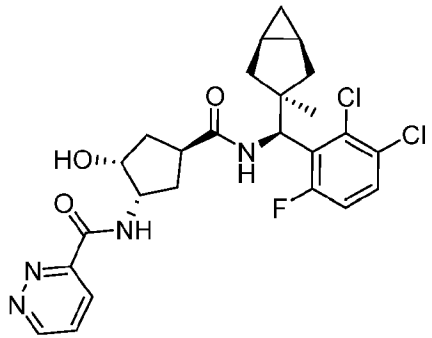
I-3703		1H NMR (300 MHz, DMSO-d6) 9.91 (dd, J = 2.3, 0.7 Hz, 1H), 8.75 (d, J = 7.3 Hz, 1H), 8.48 (dd, J = 2.3, 0.9 Hz, 1H), 8.30 (d, J = 8.2 Hz, 1H), 7.58 (td, J = 8.7, 5.5 Hz, 1H), 7.16 (t, J = 8.8 Hz, 1H), 5.33 (d, J = 3.8 Hz, 1H), 5.28 (d, J = 8.1 Hz, 1H), 4.28 - 4.16 (m, 2H), 3.30 - 3.12 (m, 1H), 1.90 (t, J = 8.1 Hz, 4H), 1.84 - 1.59 (m, 8H), 1.48 (s, 2H).	591.15	E	
I-3704		1H NMR (400 MHz, DMSO-d6) 9.24 (d, J = 5.1 Hz, 1H), 8.40 - 8.13 (m, 3H), 7.56 (dd, J = 8.8, 4.8 Hz, 1H), 7.20 (t, J = 9.9 Hz, 1H), 5.48 - 5.25 (m, 2H), 4.09 (s, 2H), 3.12 (s, 1H), 1.95 - 1.19 (m, 14H).	606.12	E	
I-3705		1H NMR (400 MHz, DMSO-d6 9.31 (d, J = 5.0 Hz, 1H), 8.42 (d, J = 7.1 Hz, 1H), 8.35 - 8.25 (m, 2H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.16 (t, J = 9.3 Hz, 1H), 5.41 (d, J = 3.6 Hz, 1H), 5.27 (d, J = 8.1 Hz, 1H), 4.17 (d, J = 5.7 Hz, 2H), 3.19 (dd, J = 9.3, 5.8 Hz, 1H), 1.96 - 1.68 (m, 11H), 1.60 (d, J = 8.4 Hz, 1H), 1.46 (d, J = 9.1 Hz, 2H).	591.15	E	

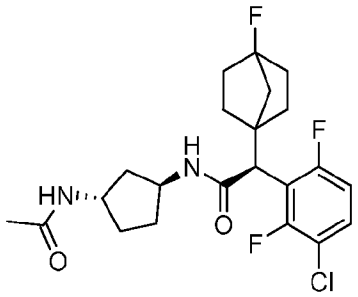
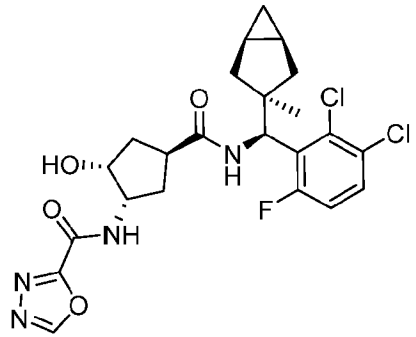
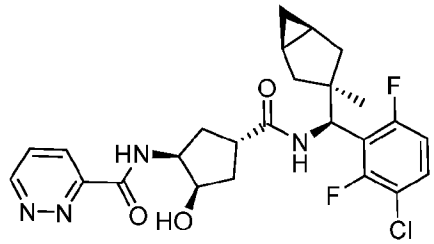
I-3706		1H NMR (300 MHz, DMSO-d6) 9.47 (s, 1H), 9.15 (s, 1H), 8.59 (d, J = 7.4 Hz, 1H), 8.27 (d, J = 8.2 Hz, 1H), 7.58 (td, J = 8.8, 5.6 Hz, 1H), 7.16 (t, J = 9.4 Hz, 1H), 5.28 (d, J = 8.1 Hz, 1H), 4.98 (d, J = 3.5 Hz, 1H), 4.11 (d, J = 8.1 Hz, 2H), 3.21 - 3.06 (m, 1H), 1.91 - 1.40 (m, 14H).	589.1	E	
I-3707		1H NMR (300 MHz, DMSO-d6) 9.48 (s, 1H), 9.17 (s, 1H), 8.61 (d, J = 7.6 Hz, 1H), 8.27 (d, J = 8.3 Hz, 1H), 7.58 (td, J = 8.7, 5.5 Hz, 1H), 7.16 (t, J = 9.2 Hz, 1H), 5.30 (d, J = 8.1 Hz, 1H), 4.97 (d, J = 3.6 Hz, 1H), 4.12 (d, J = 17.9 Hz, 2H), 3.23 - 3.09 (m, 1H), 2.06 - 1.40 (m, 13H).	591.2	C	
I-3708		19F NMR (377 MHz, DMSO) -111.40, -113.97, -173.55, -179.56. 1H NMR (400 MHz, DMSO-d6) 8.22 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.6, 5.4 Hz, 1H), 7.14 (t, J = 9.1 Hz, 1H), 5.88 (d, J = 7.6 Hz, 1H), 5.44-5.19 (m, 2H), 4.76 (dd, J = 3.3, 1.6 Hz, 1H), 4.12 (ddd, J = 21.6, 10.4, 6.0 Hz, 2H), 3.98-3.72 (m, 4H), 3.07 (dd, J = 9.7, 5.3 Hz, 1H), 1.88-1.66 (m, 10H), 1.64-1.53 (m, 2H), 1.45 (d, J = 9.7 Hz, 2H).	518.2	B	

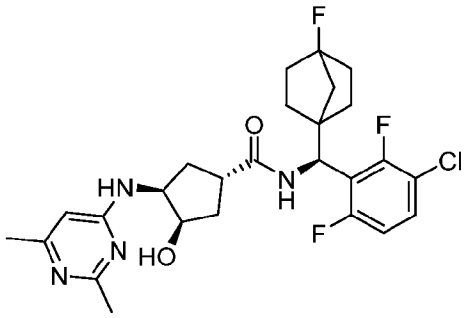
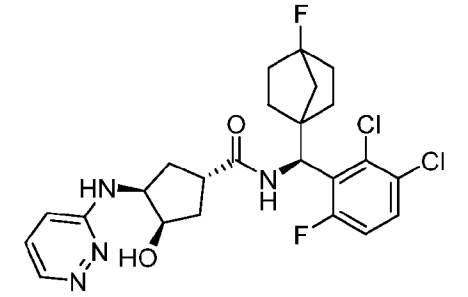
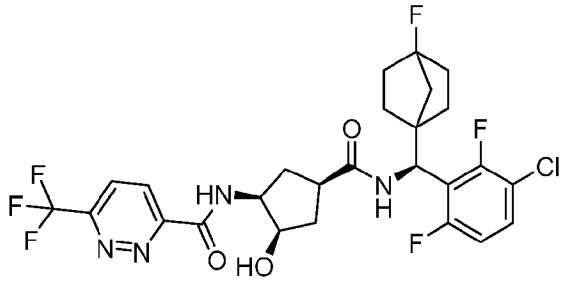
I-3709		1H NMR (400 MHz, DMSO-d6) 8.74 (d, J = 7.8 Hz, 1H), 8.49 (d, J = 1.2 Hz, 2H), 8.30 (d, J = 8.3 Hz, 1H), 7.58 (td, J = 8.7, 5.5 Hz, 1H), 7.16 (t, J = 9.3 Hz, 1H), 5.34 (s, 1H), 5.32 (d, J = 10.9 Hz, 1H), 4.29 - 4.22 (m, 1H), 4.22 - 4.14 (m, 1H), 3.21 (dd, J = 9.3, 4.9 Hz, 1H), 1.96 - 1.91 (m, 1H), 1.77 (dq, J = 23.1, 14.0, 11.0 Hz, 10H), 1.61 (d, J = 8.3 Hz, 1H), 1.50 - 1.44 (m, 2H).	589.05	B	
I-3710		1H NMR (400 MHz, DMSO-d6) 8.74 (d, J = 7.8 Hz, 1H), 8.49 (d, J = 1.3 Hz, 2H), 8.28 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.28 (dd, J = 10.6, 9.0 Hz, 1H), 5.52 (d, J = 8.1 Hz, 1H), 5.33 (d, J = 4.0 Hz, 1H), 4.25 (dd, J = 8.3, 4.4 Hz, 1H), 4.15 (s, 1H), 3.20 (dd, J = 9.1, 4.8 Hz, 1H), 2.09 (tt, J = 9.3, 5.0 Hz, 1H), 1.94 (t, J = 9.5 Hz, 1H), 1.90 - 1.62 (m, 10H), 1.59 (d, J − 8.5 Hz, 2H).	607.1	B	A
I-3711		1H NMR (300 MHz, DMSO-d6) 8.36 (d, J = 1.2 Hz, 1H), 8.22 (d, J = 8.2 Hz, 1H), 7.98 (d, J = 5.9 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.28 (dd, J = 10.6, 9.0 Hz, 1H), 7.11 (s, 1H), 6.57 (d, J = 6.1 Hz, 1H), 5.52 (d, J = 8.0 Hz, 1H), 4.91 (d, J = 3.7 Hz, 1H), 4.30-4.02 (m, 2H), 3.13 (dd, J = 10.1, 4.2 Hz, 1H), 2.02-1.46 (m, 14H).	511.15	A	A
I-3712		1H NMR (300 MHz, DMSO-d6) 9.61 (d, J = 1.3 Hz, 1H), 8.57 (d, J = 7.7 Hz, 1H), 8.37 (d, J = 1.3 Hz, 1H), 8.29 (d, J = 8.2 Hz, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.22 C 7.09 (m, 1H), 5.32 (dd, J = 17.4, 6.0 Hz, 2H), 4.19 (ddd, J = 20.3, 10.4, 6.3 Hz, 2H), 3.19 (dd, J = 9.3, 5.1 Hz, 1H), 2.08 (ddd, J = 13.0, 8.3, 4.9 Hz, 1H), 1.96 C 1.60 (m, J = 8.4 Hz, 11H), 1.46 (s, 2H).	591.2	B	

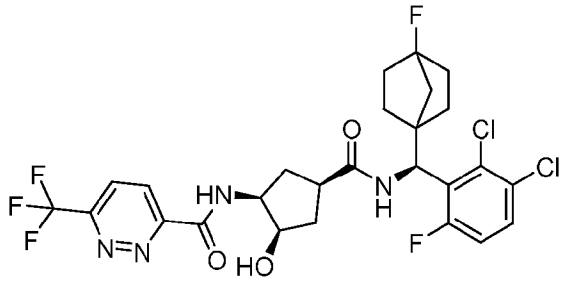
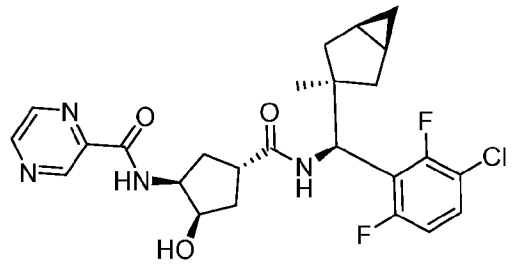
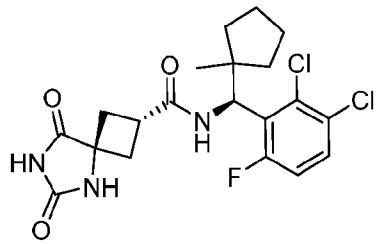
I-3713		1H NMR (400 MHz, DMSO-d6) 9.39 (s, 2H), 8.67 (d, J = 7.6 Hz, 1H), 8.29 (d, J = 8.3 Hz, 1H), 7.58 (td, J = 8.7, 5.5 Hz, 1H), 7.16 (t, J = 9.1 Hz, 1H), 5.29 (d, J = 8.1 Hz, 1H), 4.93 (d, J = 3.3 Hz, 1H), 4.15 (dd, J = 26.1, 6.6 Hz, 3H), 3.19 (dd, J = 9.1, 4.8 Hz, 1H), 2.06 C 1.91 (m, 2H), 1.77 (dq, J = 29.2, 10.0, 6.7 Hz, 7H), 1.61 (d, J = 8.4 Hz, 1H), 1.47 (d, J = 8.3 Hz, 3H). 19F NMR (377 MHz, DMSO-d6) -69.04, -111.58, -113.94, -173.54.	591.15	B	
I-3714			506.05	B	
I-3715			520.15	B	

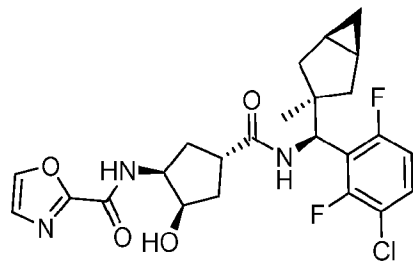
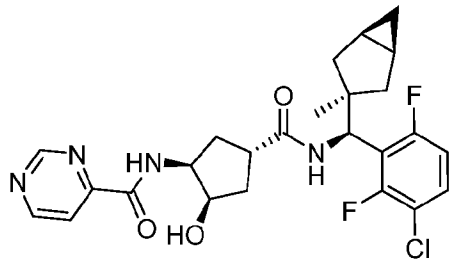
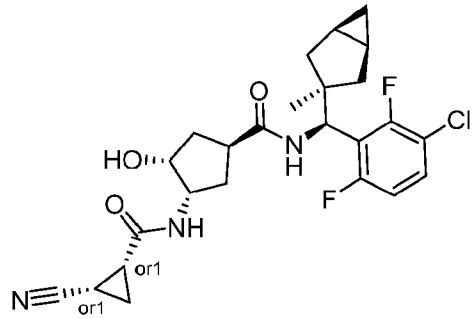
I-3716			520.05	B	
I-3717		1H NMR (400 MHz, DMSO-d6) 8.80 (s, 2H), 8.23 (d, J = 8.2 Hz, 1H), 7.95 (d, J = 7.6 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.27 (dd, J = 10.6, 8.9 Hz, 1H), 5.65 - 5.36 (m, 2H), 4.85 (d, J = 3.5 Hz, 1H), 4.44 (dddd, J = 21.7, 11.0, 5.9, 1.7 Hz, 2H), 4.22 - 4.08 (m, 3H), 4.04 (d, J = 4.2 Hz, 1H), 3.15 (s, 1H), 2.10 - 1.38 (m, 14H)	612.15	B	A
I-3718		1H NMR (400 MHz, DMSO-d6) 8.97 (d, J = 4.9 Hz, 2H), 8.46 (d, J = 7.9 Hz, 1H), 8.05 (d, J = 8.7 Hz, 1H), 7.70 (t, J = 4.9 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.26 (dd, J = 10.7, 9.0 Hz, 1H), 5.43 (d, J = 8.6 Hz, 1H), 5.26 (d, J = 4.0 Hz, 1H), 4.22 - 4.06 (m, 2H), 3.19 (d, J = 13.9 Hz, 1H), 2.01 (ddd, J = 12.9, 8.1, 5.0 Hz, 1H), 1.85 (dt, J = 12.8, 9.4 Hz, 1H), 1.73 (dd, J = 8.5, 3.3 Hz, 2H), 1.63 (dd, J = 12.5, 5.6 Hz, 1H), 1.53 (dd, J = 12.5, 5.7 Hz, 1H), 1.40 (d, J = 12.9 Hz, 1H), 1.33 (d, J = 14.3 Hz, 2H), 1.24 (s, 1H), 1.08 (s, 3H), 0.85 (q, J = 7.2 Hz, 1H), 0.10 (q, J = 4.0 Hz, 1H).	521.15	A	A

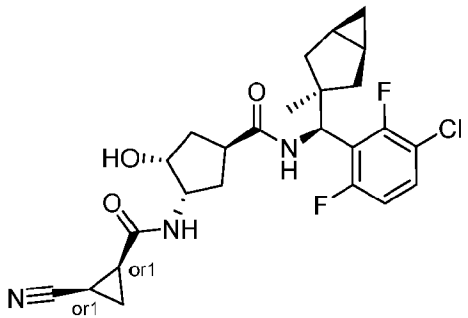
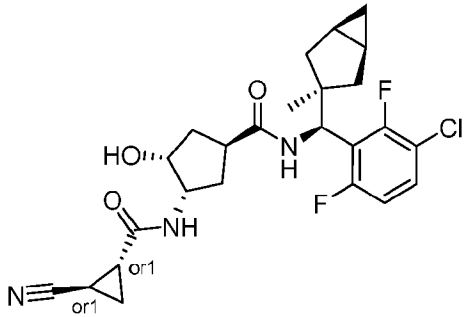
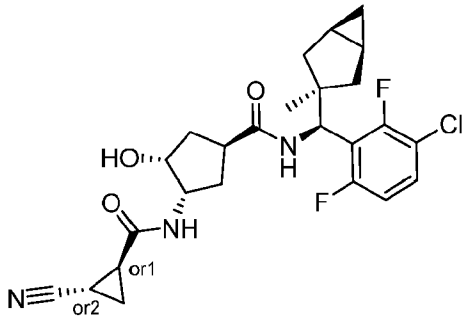
I-3719		1H NMR (400 MHz, DMSO-d6) 8.19 (d, J = 8.3 Hz, 1H), 7.92 (dd, J = 5.1, 1.9 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.34 (ddd, J = 8.7, 6.9, 2.0 Hz, 1H), 7.19 - 7.09 (m, 1H), 6.54 (d, J = 8.4 Hz, 1H), 6.49 - 6.41 (m, 1H), 6.05 (s, 1H), 5.29 (d, J = 8.2 Hz, 1H), 4.79 (s, 1H), 4.08 (q, J = 6.3, 5.3 Hz, 2H), 3.19 - 3.08 (m, 1H), 1.98 (ddd, J = 12.4, 7.8, 4.7 Hz, 1H), 1.83 - 1.70 (m, 10H), 1.60 (d, J = 8.5 Hz, 1H), 1.45 (d, J = 6.8 Hz, 2H).	494.15	B	
I-3720		1H NMR (400 MHz, DMSO-d6) 7.82 (d, J = 7.4 Hz, 1H), 7.68 (d, J = 7.2 Hz, 1H), 7.57 (td, J = 8.7, 5.6 Hz, 1H), 7.15 (td, J = 9.4, 1.6 Hz, 1H), 4.07 (ddq, J = 41.8, 13.8, 6.8 Hz, 2H), 3.86 (s, 1H), 1.92 - 1.73 (m, 4H), 1.74 (s, 4H), 1.65 (dd, J = 12.6, 4.9 Hz, 8H), 1.63 - 1.52 (m, 1H), 1.32 - 1.10 (m, 2H).	443.25	E	
I-3721		1H NMR (400 MHz, DMSO-d6) 9.42 (dd, J = 5.1, 1.7 Hz, 1H), 8.65 (d, J = 7.9 Hz, 1H), 8.24 (dd, J = 8.5, 1.7 Hz, 1H), 8.07 (d, J = 8.8 Hz, 1H), 7.93 (dd, J = 8.4, 5.0 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 5.43 (d, J = 8.6 Hz, 1H), 5.31 (d, J = 4.1 Hz, 1H), 4.23 (dd, J = 8.2, 4.5 Hz, 1H), 4.12 (s, 1H), 3.26-3.17 (m, 1H), 2.09-1.98 (m, 1H), 1.96-1.84 (m, 1H), 1.74 (q, J = 5.3, 3.8 Hz, 2H), 1.68-1.60 (m, 1H), 1.52 (d, J = 12.3 Hz, 1H), 1.38 (t, J = 13.6 Hz, 2H), 1.31 (s, 2H), 1.10-1.05 (m, 3H), 0.85 (d, J = 4.6 Hz, 1H) ,0.13-0.07 (m, 1H).	521.15	A	A

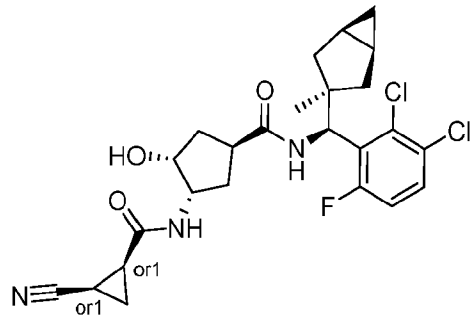
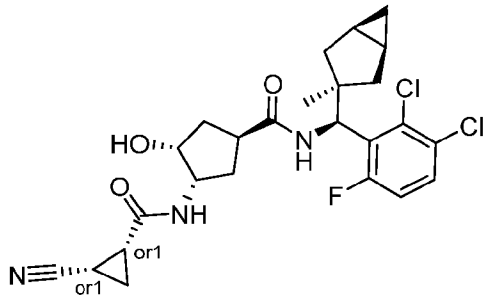
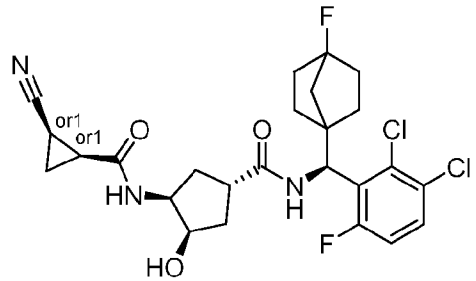
I-3722		1H NMR (400 MHz, DMSO-d6) 7.83 (s, 1H), 7.69 (d, J = 7.3 Hz, 1H), 7.58 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (td, J = 9.3, 1.6 Hz, 1H), 4.13 (p, J = 7.1 Hz, 1H), 3.97 (p, J = 7.0 Hz, 1H), 3.86 (s, 1H), 1.94 - 1.76 (m, 5H), 1.70 (d, J = 28.3 Hz, 9H), 1.62 - 1.38 (m, 3H), 1.38 - 1.14 (m, 2H).	443.25	E	
I-3723		1H NMR (400 MHz, DMSO-d6) 9.44 (s, 1H), 8.48 (d, J = 7.0 Hz, 1H), 8.06 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.25 (dd, J = 10.6, 9.0 Hz, 1H), 5.41 (d, J = 8.6 Hz, 1H), 5.09 (d, J = 3.5 Hz, 1H), 4.11 (s, 2H), 3.18 (dd, J = 8.8, 5.4 Hz, 1H), 2.13 - 1.90 (m, 2H), 1.90 - 1.60 (m, 3H), 1.53 (dd, J = 12.3, 5.6 Hz, 1H), 1.50 - 1.23 (m, 4H), 1.08 (s, 3H), 0.85 (td, J = 7.9, 4.1 Hz, 1H), 0.11 (q, J = 3.9 Hz, 1H).	511.25	A	A
I-3724		1H NMR (400 MHz, DMSO-d6)9.41 (dd, J = 5.0, 1.7 Hz, 1H), 8.64 (d, J = 7.9 Hz, 1H), 8.23 (dd, J = 8.4, 1.7 Hz, 1H), 8.09 (d, J = 8.7 Hz, 1H), 7.92 (dd, J = 8.5, 5.0 Hz, 1H), 7.55 (td, J = 8.6, 5.4 Hz, 1H), 7.13 (t, J = 9.4 Hz, 1H), 5.28 (d, J = 4.1 Hz, 1H), 5.14 (d, J = 8.7 Hz, 1H), 4.29-4.17 (m, 1H), 4.13 (t, J = 3.6 Hz, 1H), 3.21 (dd, J = 9.6, 5.2 Hz, 1H), 2.04 (ddd, J = 13.0, 8.2, 4.9 Hz, 1H), 1.90 (dt, J = 13.0, 9.4 Hz, 1H), 1.77 (dt, J = 7.7, 3.5 Hz, 2H), 1.66 (dd, J = 13.7, 6.4 Hz, 1H), 1.47 (dd, J = 12.5, 6.0 Hz, 1H), 1.32 (q, J = 12.8 Hz, 4H), 1.06 (s, 3H), 0.85 (td, J = 8.2, 4.2 Hz, 1H), 0.15 (t, J = 3.8 Hz, 1H).	505.15	B	A

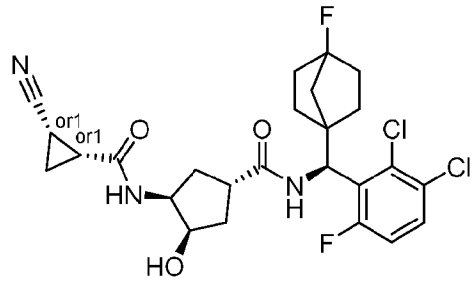
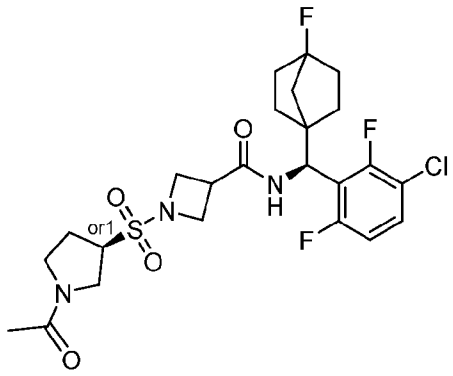
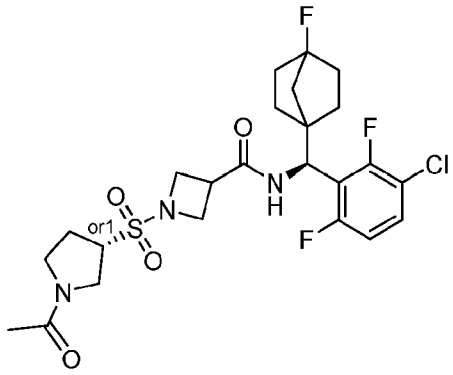
I-3725		1H NMR (400 MHz, DMSO-d6) 8.22 (d, J = 8.3 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.19-7.11 (m, 1H), 6.68 (s, 1H), 6.19 (s, 1H), 5.28 (d, J = 8.1 Hz, 1H), 4.84 (s, 1H), 4.20 (s,1H), 4.05 (s, 1H), 3.18-3.08 (m, 1H), 2.26 (s, 3H), 2.13 (s, 3H), 2.01-1.91 (m, 1H), 1.83-1.72 (m, 8H), 1.71-1.66 (m, 2H), 1.60 (d, J = 8.4 Hz, 1H), 1.46 (d, J = 8.0 Hz, 2H).19F NMR (377 MHz, DMSO) ◆◆ -111.08, -158.02, -158.62, -164.92, -164.96, -165.01, -168.50, -173.40, -173.58, -173.61, -173.95.	523.2	B	A
I-3726		1H NMR (300 MHz, DMSO-d6)8.38 (dd, J = 4.4, 1.4 Hz, 1H), 8.22 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 8.9, 5.0 Hz, 1H), 7.28 (dd, J = 10.5, 9.0 Hz, 1H), 7.19 (dd, J = 9.0, 4.4 Hz, 1H), 6.89 (dd, J = 9.1, 1.4 Hz, 1H), 6.48 (d, J = 7.4 Hz, 1H), 5.53 (d, J = 8.1 Hz, 1H), 4.88 (d, J = 3.5 Hz, 1H), 4.29-4.08 (m, 2H), 3.23-3.08 (m, 1H), 2.01 (d, J = 4.6 Hz, 1H), 1.74 (dd, J = 23.1, 16.9 Hz, 10H), 1.59 (d, J = 8.5 Hz, 3H).	511.05	A	A
I-3727		1H NMR (400 MHz, DMSO-d6) 8.73 (d, J = 7.4 Hz, 1H), 8.47 (s, 2H), 8.31 (d, J = 8.2 Hz, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.16 (t, J = 9.4 Hz, 1H), 5.37 - 5.24 (m, 2H), 4.28 - 4.13 (m, 2H), 3.26 - 3.16 (m, 1H), 1.93 - 1.44 (m, 14H).	591.15	E	

I-3728		1H NMR (300 MHz, DMSO-d6) 8.72 (d, J = 7.2 Hz, 1H), 8.48 (s, 2H), 8.28 (d, J = 8.1 Hz, 1H), 7.64 (dd, J = 8.9, 5.1 Hz, 1H), 7.32 - 7.22 (m, 1H), 5.51 (d, J = 8.1 Hz, 1H), 5.33 (d, J = 3.9 Hz, 1H), 4.19 (s, 2H), 3.19 (d, J = 7.7 Hz, 1H), 1.94 - 1.48 (m, 14H).	607.15	D	
I-3729		1H NMR (400 MHz, DMSO-d6)9.21 (d, J = 1.5 Hz, 1H), 8.90 (d, J = 2.5 Hz, 1H), 8.74 (t, J = 2.0 Hz, 1H), 8.34 (d, J = 8.0 Hz, 1H), 8.12 (d, J = 8.7 Hz, 1H), 7.55 (td, J = 8.6, 5.3 Hz, 1H), 7.14 (t, J = 9.4 Hz, 1H), 5.30 (d, J = 4.0 Hz, 1H), 5.13 (d, J = 8.7 Hz, 1H), 4.22-4.05 (m, 2H), 3.26-3.10 (m, 1H), 2.01 (ddd, J = 13.0, 8.2, 4.9 Hz, 1H), 1.86 (dt, J = 12.8, 9.4 Hz, 1H), 1.76 (dd, J = 7.5, 2.8 Hz, 2H), 1.66 (dd, J = 13.2, 6.3 Hz, 1H), 1.51-1.38 (m, 1H), 1.32 (t, J = 11.2 Hz, 4H), 1.06 (s, 3H), 0.84 (d, J = 8.6 Hz, 1H), 0.14 (d, J = 3.6 Hz, 1H).	505.15	B	A
I-3730		1H NMR (400 MHz, DMSO-d6) 10.57 (s, 1H), 8.62 (s, 1H), 8.23 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 5.50 (d, J = 8.5 Hz, 1H), 3.30-3.26 (m, 0H), 2.71-2.53 (m, 2H), 2.21 (dd, J = 24.5, 11.2 Hz, 2H), 1.59 (s, 6H), 1.37 (s, 1H), 1.27 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H).	442.1	A	

I-3731		1H NMR (400 MHz, DMSO-d6) 8.33 (s, 1H), 8.10 (d, J = 8.7 Hz, 1H), 7.98 (d, J = 7.0 Hz, 1H), 7.55 (td, J = 8.6, 5.3 Hz, 1H), 7.44 (s, 1H), 7.13 (t, J = 9.4 Hz, 1H), 5.19 (d, J = 3.4 Hz, 1H), 5.12 (d, J = 8.6 Hz, 1H), 4.15 - 4.03 (m, 2H), 3.17 (qd, J = 8.7, 4.9 Hz, 1H), 2.01 - 1.83 (m, 2H), 1.68 (dt, J = 25.7, 7.4 Hz, 3H), 1.46 (dd, J = 13.0, 5.5 Hz, 1H), 1.31 (q, J = 13.2, 12.5 Hz, 4H), 1.06 (s, 3H), 0.85 (dq, J = 8.5, 4.2 Hz, 1H), 0.14 (q, J = 3.8 Hz, 1H).	494.15	B	A
I-3732		1H NMR (400 MHz, DMSO-d6) - 9.34 (d, J = 1.4 Hz, 1H), 9.09 (d, J = 5.0 Hz, 1H), 8.49 (d, J = 7.9 Hz, 1H), 8.11 (d, J = 8.8 Hz, 1H), 8.05 (dd, J = 5.1, 1.5 Hz, 1H), 7.55 (td, J = 8.6, 5.4 Hz, 1H), 7.18 - 7.08 (m, 1H), 5.32 (d, J = 4.0 Hz, 1H), 5.13 (d, J = 8.7 Hz, 1H), 4.18 (qd, J = 8.2, 4.3 Hz, 1H), 4.15 - 4.07 (m, 1H), 3.19 (dt, J = 13.4, 6.9 Hz, 1H), 2.10 - 1.96 (m, 1H), 1.85 (dt, J = 12.8, 9.4 Hz, 1H), 1.75 (dt, J = 7.9, 3.6 Hz, 2H), 1.70 - 1.61 (m, 1H), 1.51 - 1.42 (m, 1H), 1.31 (q, J = 12.7 Hz, 4H), 1.06 (s, 3H), 0.85 (td, J = 8.2, 4.2 Hz, 1H), 0.14 (q, J = 3.7 Hz, 1H).	505.15	B	A
I-3733		1H NMR (400 MHz, DMSO-d6) 8.10 (dd, J = 15.9, 8.4 Hz, 2H), 7.54 (td, J = 8.7, 5.4 Hz, 1H), 7.18-7.08 (m, 1H), 5.11 (d, J = 8.7 Hz, 1H), 4.98 (d, J = 3.5 Hz, 1H), 4.08-3.97 (m, 1H), 3.96 (s, 1H), 3.20-3.07 (m, 1H), 2.26 (td, J = 8.0, 6.3 Hz, 1H), 2.04 (td, J = 8.7, 6.6 Hz, 1H), 1.88-1.61 (m, 5H), 1.46 (dd, J = 12.8, 5.8 Hz, 1H), 1.31 (ddd, J = 12.0, 10.4, 6.5 Hz, 5H), 1.24 (dd, J = 8.6, 4.2 Hz, 1H), 1.06 (s, 3H), 0.86 (t, J = 6.2 Hz, 1H), 0.14 (q, J − 3.8 Hz, 1H).	492.15	A	A

I-3734		1H NMR (400 MHz, DMSO-d6) 8.14 (d, J = 7.8 Hz, 1H), 8.08 (d, J = 8.7 Hz, 1H), 7.54 (td, J = 8.7, 5.4 Hz, 1H), 7.13 (t, J = 9.4 Hz, 1H), 5.11 (d, J = 8.7 Hz, 1H), 4.90 (d, J = 3.4 Hz, 1H), 4.06-3.94 (m, 2H), 3.12 (td, J = 8.9, 5.1 Hz, 1H), 2.23 (td, J = 7.9, 6.2 Hz, 1H), 2.02 (td, J = 8.6, 6.6 Hz, 1H), 1.82 (t, J = 4.1 Hz, 1H), 1.81-1.72 (m, 1H), 1.68 (dt, J = 23.5, 6.0 Hz, 3H), 1.50-1.41 (m, 1H), 1.29 (dddd, J = 23.0, 12.1, 8.7, 5.2 Hz, 6H), 1.06 (s, 3H), 0.89-0.81 (m, 1H), 0.15 (q, J = 3.8 Hz, 1H).	492.15	A	A
I-3735		1H NMR (400 MHz, DMSO-d6) 8.21 (d, J = 7.4 Hz, 1H), 8.07 (d, J = 8.7 Hz, 1H), 7.54 (td, J = 8.6, 5.4 Hz, 1H), 7.18 - 7.07 (m, 1H), 5.10 (d, J = 8.7 Hz, 1H), 4.94 (d, J = 3.1 Hz, 1H), 3.95 (d, J = 6.2 Hz, 2H), 3.13 (dd, J = 8.9, 5.5 Hz, 1H), 2.44 (ddd, J = 8.6, 6.0, 4.3 Hz, 1H), 1.90 (ddd, J = 9.0, 5.9, 4.3 Hz, 1H), 1.77 (ddd, J = 12.4, 8.5, 3.7 Hz, 2H), 1.73 - 1.57 (m, 3H), 1.50 - 1.41 (m, 1H), 1.41 - 1.21 (m, 6H), 1.05 (s, 3H), 0.85 (td, J = 8.0, 3.6 Hz, 1H), 0.13 (t, J = 3.9 Hz, 1H).	492.3	B	A
I-3736		1H NMR (400 MHz, DMSO-d6) 8.19 (d, J = 7.7 Hz, 1H), 8.07 (d, J = 8.7 Hz, 1H), 7.54 (td, J = 8.7, 5.4 Hz, 1H), 7.18 - 7.05 (m, 1H), 5.11 (d, J = 8.7 Hz, 1H), 4.93 (d, J = 3.5 Hz, 1H), 4.02 - 3.88 (m, 2H), 3.13 (qd, J = 8.7, 5.5 Hz, 1H), 2.44 (ddd, J = 8.7, 6.0, 4.3 Hz, 1H), 1.96 - 1.88 (m, 1H), 1.87 - 1.75 (m, 2H), 1.75 - 1.57 (m, 3H), 1.55 - 1.30 (m, 5H), 1.30 - 1.19 (m, 2H), 1.06 (s, 3H), 0.85 (td, J = 7.8, 3.9 Hz, 1H), 0.14 (q, J = 3.7 Hz, 1H).	492.3	B	A

I-3737		1H NMR (400 MHz, DMSO-d6) 8.12 (d, J = 7.8 Hz, 1H), 8.01 (d, J = 8.7 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.7, 8.9 Hz, 1H), 5.41 (d, J = 8.6 Hz, 1H), 4.88 (d, J = 3.5 Hz, 1H), 3.98 (dt, J = 14.8, 4.6 Hz, 2H), 3.13 (dt, J = 14.0, 6.9 Hz, 1H), 2.23 (td, J = 7.9, 6.3 Hz, 1H), 2.02 (td, J = 8.6, 6.6 Hz, 1H), 1.86 - 1.59 (m, 5H), 1.52 (dd, J = 12.8, 5.8 Hz, 1H), 1.44 - 1.21 (m, 6H), 1.14 - 1.02 (m, 3H), 0.85 (td, J = 7.9, 4.0 Hz, 1H), 0.11 (q, J = 3.9 Hz, 1H).	508.15	A	A
I-3738		1H NMR (400 MHz, DMSO-d6) 8.07 (d, J = 8.0 Hz, 1H), 7.98 (d, J = 8.7 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.24 (t, J = 9.8 Hz, 1H), 5.41 (d, J = 8.6 Hz, 1H), 4.93 (d, J = 3.5 Hz, 1H), 4.10 - 3.91 (m, 2H), 3.14 (d, J = 9.0 Hz, 1H), 2.26 (q, J = 7.5 Hz, 1H), 2.03 (q, J = 7.9 Hz, 1H), 1.80 (q, J = 10.6, 7.9 Hz, 2H), 1.74 - 1.58 (m, 3H), 1.57 - 1.45 (m, 1H), 1.44 - 1.18 (m, 6H), 1.07 (s, 3H), 0.85 (s, 1H), 0.10 (d, J = 4.1 Hz, 1H).	508.1	A	A
I-3739		1H NMR (400 MHz, DMSO-d6) 8.21 (d, J = 8.2 Hz, 1H), 8.12 (d, J = 8.1 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.27 (dd, J = 10.6, 9.0 Hz, 1H), 5.50 (d, J = 8.0 Hz, 1H), 4.99 (d, J = 3.6 Hz, 1H), 4.15 - 3.88 (m, 2H), 3.11 (dd, J = 10.0, 4.6 Hz, 1H), 2.26 (td, J = 7.9, 6.3 Hz, 1H), 2.04 (td, J = 8.4, 6.5 Hz, 1H), 1.94 - 1.48 (m, 14H), 1.35 - 1.20 (m, 2H).	526.15	B	A

I-3740		1H NMR (400 MHz, DMSO-d6) 8.17 (dd, J = 28.7, 8.0 Hz, 2H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.27 (dd, J = 10.6, 9.0 Hz, 1H), 5.51 (d, J = 8.0 Hz, 1H), 4.91 (d, J = 3.6 Hz, 1H), 4.11 - 3.88 (m, 2H), 3.12 (s, 1H), 2.23 (td, J = 7.9, 6.3 Hz, 1H), 2.02 (td, J = 8.7, 6.7 Hz, 1H), 1.96 - 1.42 (m, 14H), 1.28 (dtd, J = 20.2, 8.0, 7.2, 3.6 Hz, 2H).	526.15	B	A
I-3741			548.15	B	
I-3742			548.1	C	

I-3743		558	B	
I-3744		560	B	
I-3745		564	B	

[0574] In chemical structures in Table 1, above, and the Examples, below, stereogenic centers are described according to the Enhanced Stereo Representation format (MDL/Biovia, *e.g.*, using labels "or1", "or2", "abs", "and1"). (See, for example, the structures of Compounds I-21, I-23, I-29, I-30, etc.)

[0575] In some embodiments, the present disclosure provides a compound in Table 1, above, wherein the compound is denoted as having an ADP-Glo IC_{50} of "A". In some embodiments, the present disclosure provides a compound in Table 1, above, wherein the compound is denoted as having an ADP-Glo IC_{50} of "A" or "B". In some embodiments, the present disclosure provides a compound in Table 1, above, wherein the compound is denoted as having an ADP-Glo IC_{50} of "A" or "B" or "C". In some embodiments, the present disclosure provides a compound in Table 1, above, wherein the compound is denoted as having an ADP-Glo IC_{50} of "A" or "B" or "C" or "D".

[0576] In some embodiments, the present disclosure provides a compound in Table 1, above, wherein the compound is denoted as having an MCF10A IC_{50} of "A". In some embodiments, the present disclosure provides a compound in Table 1, above, wherein the compound is denoted as having an MCF10A IC_{50} of "A" or "B". In some embodiments, the present disclosure provides a compound in Table 1, above, wherein the compound is denoted as having an MCF10A IC_{50} of "A" or "B" or "C". In some embodiments, the present disclosure provides a compound in Table 1, above, wherein the compound is denoted as having an MCF10A IC_{50} of "A" or "B" or "C" or "D".

[0577] In some embodiments, the present disclosure comprises a compound of formula I selected from those depicted in Table 1, above, or a pharmaceutically acceptable salt, stereoisomer, or mixture of stereoisomers thereof. In some embodiments, the present disclosure provides a compound of formula I selected from those depicted in Table 1, above, or a pharmaceutically acceptable salt thereof. In some embodiments, the present disclosure provides a compound of formula I selected from those depicted in Table 1, above.

[0578] In some embodiments, the present disclosure comprises a compound of formula II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX, XXI, XXII, XXIII, XXIV, XXV, XXVI, XXVII, XXVIII, XXIX, XXX, XXXI, XXXII, XXXIII, XXXIV, XXXV, or XXXVI selected from those depicted in Table 1, above, or a pharmaceutically acceptable salt, stereoisomer, or mixture of stereoisomers thereof. In some embodiments, the present disclosure provides a compound of formula II, III, IV, V, VI, VII,

VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX, XXI, XXII, XXIII, XXIV, XXV, XXVI, XXVII, XXVIII, XXIX, XXX, XXXI, XXXII, XXXIII, XXXIV, XXXV, or XXXVI selected from those depicted in Table 1, above, or a pharmaceutically acceptable salt thereof. In some embodiments, the present disclosure provides a compound of formula II, III, IV, V, VI, VII, VIII, IX, X, XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX, XXI, XXII, XXIII, XXIV, XXV, XXVI, XXVII, XXVIII, XXIX, XXX, XXXI, XXXII, XXXIII, XXXIV, XXXV, or XXXVI selected from those depicted in Table 1, above.

4. Uses, Formulation, and Administration

Pharmaceutically Acceptable Compositions

[0579] According to another embodiment, the disclosure provides a composition comprising a compound of this disclosure, or a pharmaceutically acceptable derivative thereof, and a pharmaceutically acceptable carrier, adjuvant, or vehicle. In some embodiments, the disclosure provides a pharmaceutical composition comprising a compound of this disclosure, and a pharmaceutically acceptable carrier. The amount of compound in compositions of this disclosure is such that it is effective to measurably inhibit a PI3Kα protein kinase, or a mutant thereof, in a biological sample or in a patient. In certain embodiments, the amount of compound in compositions of this disclosure is such that it is effective to measurably inhibit a PI3Kα protein kinase, or a mutant thereof, in a biological sample or in a patient. In certain embodiments, a composition of this disclosure is formulated for administration to a patient in need of such composition. In some embodiments, a composition of this disclosure is formulated for oral administration to a patient.

[0580] The terms "subject" and "patient," as used herein, mean an animal (*i.e.*, a member of the kingdom animal), preferably a mammal, and most preferably a human. In some embodiments, the subject is a human, mouse, rat, cat, monkey, dog, horse, or pig. In some embodiments, the subject is a human. In some embodiments, the subject is a mouse, rat, cat, monkey, dog, horse, or pig.

[0581] The term "pharmaceutically acceptable carrier, adjuvant, or vehicle" refers to a non-toxic carrier, adjuvant, or vehicle that does not destroy the pharmacological activity of the compound with which it is formulated. Pharmaceutically acceptable carriers, adjuvants or vehicles that may be used in the compositions of this disclosure include, but are not limited to, ion exchangers, alumina, aluminum stearate, lecithin, serum proteins, such as human serum albumin, buffer substances such as phosphates, glycine, sorbic acid, potassium sorbate, partial

glyceride mixtures of saturated vegetable fatty acids, water, salts or electrolytes, such as protamine sulfate, disodium hydrogen phosphate, potassium hydrogen phosphate, sodium chloride, zinc salts, colloidal silica, magnesium trisilicate, polyvinyl pyrrolidone, cellulose-based substances, polyethylene glycol, sodium carboxymethylcellulose, polyacrylates, waxes, polyethylene-polyoxypropylene-block polymers, polyethylene glycol and wool fat.

[0582] A "pharmaceutically acceptable derivative" means any non-toxic salt, ester, salt of an ester or other derivative of a compound of this disclosure that, upon administration to a recipient, is capable of providing, either directly or indirectly, a compound of this disclosure or an inhibitorily active metabolite or residue thereof.

[0583] As used herein, the term "inhibitorily active metabolite or residue thereof" means that a metabolite or residue thereof is also an inhibitor of a PI3Kα protein kinase, or a mutant thereof.

[0584] Compositions of the present disclosure may be administered orally, parenterally, by inhalation spray, topically, rectally, nasally, buccally, vaginally or via an implanted reservoir. The term "parenteral" as used herein includes subcutaneous, intravenous, intramuscular, intra-articular, intra-synovial, intrasternal, intrathecal, intrahepatic, intralesional and intracranial injection or infusion techniques. Preferably, the compositions are administered orally, intraperitoneally or intravenously.

[0585] Sterile injectable forms of the compositions of this disclosure may be aqueous or oleaginous suspension. These suspensions may be formulated according to techniques known in the art using suitable dispersing or wetting agents and suspending agents. The sterile injectable preparation may also be a sterile injectable solution or suspension in a non-toxic parenterally acceptable diluent or solvent, for example as a solution in 1,3-butanediol. Among the acceptable vehicles and solvents that may be employed are water, Ringer's solution and isotonic sodium chloride solution. In addition, sterile, fixed oils are conventionally employed as a solvent or suspending medium.

[0586] For this purpose, any bland fixed oil may be employed including synthetic mono- or di-glycerides. Fatty acids, such as oleic acid and its glyceride derivatives are useful in the preparation of injectables, as are natural pharmaceutically-acceptable oils, such as olive oil or castor oil, especially in their polyoxyethylated versions. These oil solutions or suspensions may also contain a long-chain alcohol diluent or dispersant, such as carboxymethyl cellulose or similar dispersing agents that are commonly used in the formulation of pharmaceutically

acceptable dosage forms including emulsions and suspensions. Other commonly used surfactants, such as Tweens, Spans and other emulsifying agents or bioavailability enhancers which are commonly used in the manufacture of pharmaceutically acceptable solid, liquid, or other dosage forms may also be used for the purposes of formulation.

[0587] Pharmaceutically acceptable compositions of this disclosure may be orally administered in any orally acceptable dosage form including, but not limited to, capsules, tablets, aqueous suspensions or solutions. In the case of tablets for oral use, carriers commonly used include lactose and corn starch. Lubricating agents, such as magnesium stearate, are also typically added. For oral administration in a capsule form, useful diluents include lactose and dried cornstarch. When aqueous suspensions are required for oral use, the active ingredient is combined with emulsifying and suspending agents. If desired, certain sweetening, flavoring or coloring agents may also be added.

[0588] Alternatively, pharmaceutically acceptable compositions of this disclosure may be administered in the form of suppositories for rectal or vaginal administration. These can be prepared by mixing the agent with a suitable non-irritating excipient that is solid at room temperature but liquid at rectal or vaginal temperature and therefore will melt in the rectum or vagina to release the drug. Such materials include cocoa butter, beeswax and polyethylene glycols.

[0589] Pharmaceutically acceptable compositions of this disclosure may also be administered topically, especially when the target of treatment includes areas or organs readily accessible by topical application, including diseases of the eye, the skin, or the lower intestinal tract. Suitable topical formulations are readily prepared for each of these areas or organs.

[0590] Topical application for the lower intestinal tract can be effected in a rectal suppository formulation (see above) or in a suitable enema formulation. Topically-transdermal patches may also be used.

[0591] For topical applications, provided pharmaceutically acceptable compositions may be formulated in a suitable ointment containing the active component suspended or dissolved in one or more carriers. Carriers for topical administration of compounds of this disclosure include, but are not limited to, mineral oil, liquid petrolatum, white petrolatum, propylene glycol, polyoxyethylene, polyoxypropylene compound, emulsifying wax and water. Alternatively, provided pharmaceutically acceptable compositions can be formulated in a suitable lotion or cream containing the active components suspended or dissolved in one or

more pharmaceutically acceptable carriers. Suitable carriers include, but are not limited to, mineral oil, sorbitan monostearate, polysorbate 60, cetyl esters wax, cetearyl alcohol, 2-octyldodecanol, benzyl alcohol and water.

[0592] For ophthalmic use, provided pharmaceutically acceptable compositions may be formulated as micronized suspensions in isotonic, pH adjusted sterile saline, or, preferably, as solutions in isotonic, pH adjusted sterile saline, either with or without a preservative such as benzylalkonium chloride. Alternatively, for ophthalmic uses, the pharmaceutically acceptable compositions may be formulated in an ointment such as petrolatum.

[0593] Pharmaceutically acceptable compositions of this disclosure may also be administered by nasal aerosol or inhalation. Such compositions are prepared according to techniques well-known in the art of pharmaceutical formulation and may be prepared as solutions in saline, employing benzyl alcohol or other suitable preservatives, absorption promoters to enhance bioavailability, fluorocarbons, and/or other conventional solubilizing or dispersing agents.

[0594] Preferably, pharmaceutically acceptable compositions of this disclosure are formulated for oral administration. Such formulations may be administered with or without food. In some embodiments, pharmaceutically acceptable compositions of this disclosure are administered without food. In other embodiments, pharmaceutically acceptable compositions of this disclosure are administered with food.

[0595] The amount of compounds of the present disclosure that may be combined with the carrier materials to produce a composition in a single dosage form will vary depending upon the patient treated and the particular mode of administration. Preferably, provided compositions should be formulated so that a dosage of between 0.01 - 100 mg/kg body weight/day of the inhibitor can be administered to a patient receiving these compositions.

[0596] It should also be understood that a specific dosage and treatment regimen for any particular patient will depend upon a variety of factors, including the activity of the specific compound employed, the age, body weight, general health, sex, diet, time of administration, rate of excretion, drug combination, and the judgment of the treating physician and the severity of the particular disease being treated. The amount of a compound of the present disclosure in the composition will also depend upon the particular compound in the composition.

[0597] The precise dose to be employed in the compositions will also depend on the route of administration and should be decided according to the judgment of the practitioner and each subject's circumstances. In specific embodiments of the disclosure, suitable dose ranges for

oral administration of the compounds of the disclosure are generally about 1 mg/day to about 1000 mg/day. In some embodiments, the oral dose is about 1 mg/day to about 800 mg/day. In some embodiments, the oral dose is about 1 mg/day to about 500 mg/day. In some embodiments, the oral dose is about 1 mg/day to about 250 mg/day. In some embodiments, the oral dose is about 1 mg/day to about 100 mg/day. In some embodiments, the oral dose is about 5 mg/day to about 50 mg/day. In some embodiments, the oral dose is about 5 mg/day. In some embodiments, the oral dose is about 10 mg/day. In some embodiments, the oral dose is about 20 mg/day. In some embodiments, the oral dose is about 30 mg/day. In some embodiments, the oral dose is about 40 mg/day. In some embodiments, the oral dose is about 50 mg/day. In some embodiments, the oral dose is about 60 mg/day. In some embodiments, the oral dose is about 70 mg/day. In some embodiments, the oral dose is about 100 mg/day. It will be recognized that any of the dosages listed herein may constitute an upper or lower dosage range and may be combined with any other dosage to constitute a dosage range comprising an upper and lower limit.

[0598] In some embodiments, pharmaceutically acceptable compositions contain a provided compound and/or a pharmaceutically acceptable salt thereof at a concentration ranging from about 0.01 to about 90 wt%, about 0.01 to about 80 wt%, about 0.01 to about 70 wt%, about 0.01 to about 60 wt%, about 0.01 to about 50 wt%, about 0.01 to about 40 wt%, about 0.01 to about 30 wt%, about 0.01 to about 20 wt%, about 0.01 to about 2.0 wt%, about 0.01 to about 1 wt%, about 0.05 to about 0.5 wt%, about 1 to about 30 wt%, or about 1 to about 20 wt%. The composition can be formulated as a solution, suspension, ointment, or a capsule, and the like. The pharmaceutical composition can be prepared as an aqueous solution and can contain additional components, such as preservatives, buffers, tonicity agents, antioxidants, stabilizers, viscosity-modifying ingredients and the like.

[0599] Pharmaceutically acceptable carriers are well-known to those skilled in the art, and include, *e.g.*, adjuvants, diluents, excipients, fillers, lubricants and vehicles. In some embodiments, the carrier is a diluent, adjuvant, excipient, or vehicle. In some embodiments, the carrier is a diluent, adjuvant, or excipient. In some embodiments, the carrier is a diluent or adjuvant. In some embodiments, the carrier is an excipient.

[0600] Examples of pharmaceutically acceptable carriers may include, *e.g.*, water or saline solution, polymers such as polyethylene glycol, carbohydrates and derivatives thereof, oils, fatty acids, or alcohols. Non-limiting examples of oils as pharmaceutical carriers include oils of petroleum, animal, vegetable or synthetic origin, such as peanut oil, soybean oil, mineral

oil, sesame oil and the like. The pharmaceutical carriers may also be saline, gum acacia, gelatin, starch paste, talc, keratin, colloidal silica, urea, and the like. In addition, auxiliary, stabilizing, thickening, lubricating and coloring agents may be used. Other examples of suitable pharmaceutical carriers are described in *e.g.*, *Remington's: The Science and Practice of Pharmacy*, 22nd Ed. (Allen, Loyd V., Jr ed., Pharmaceutical Press (2012)); *Modern Pharmaceutics*, 5th Ed. (AleYAnder T. Florence, Juergen Siepmann, CRC Press (2009)); *Handbook of Pharmaceutical Excipients*, 7th Ed. (Rowe, Raymond C.; Sheskey, Paul J.; Cook, Walter G.; Fenton, Marian E. eds., Pharmaceutical Press (2012)) (each of which is hereby incorporated by reference in its entirety).

[0601] The pharmaceutically acceptable carriers employed herein may be selected from various organic or inorganic materials that are used as materials for pharmaceutical formulations and which are incorporated as analgesic agents, buffers, binders, disintegrants, diluents, emulsifiers, excipients, extenders, glidants, solubilizers, stabilizers, suspending agents, tonicity agents, vehicles and viscosity-increasing agents. Pharmaceutical additives, such as antioxidants, aromatics, colorants, flavor-improving agents, preservatives, and sweeteners, may also be added. Examples of acceptable pharmaceutical carriers include carboxymethyl cellulose, crystalline cellulose, glycerin, gum arabic, lactose, magnesium stearate, methyl cellulose, powders, saline, sodium alginate, sucrose, starch, talc and water, among others. In some embodiments, the term "pharmaceutically acceptable" means approved by a regulatory agency of the Federal or a state government or listed in the U.S. Pharmacopeia or other generally recognized pharmacopeia for use in animals, and more particularly in humans.

[0602] Surfactants such as, *e.g.*, detergents, are also suitable for use in the formulations. Specific examples of surfactants include polyvinylpyrrolidone, polyvinyl alcohols, copolymers of vinyl acetate and of vinylpyrrolidone, polyethylene glycols, benzyl alcohol, mannitol, glycerol, sorbitol or polyoxyethylenated esters of sorbitan; lecithin or sodium carboxymethylcellulose; or acrylic derivatives, such as methacrylates and others, anionic surfactants, such as alkaline stearates, in particular sodium, potassium or ammonium stearate; calcium stearate or triethanolamine stearate; alkyl sulfates, in particular sodium lauryl sufate and sodium cetyl sulfate; sodium dodecylbenzenesulphonate or sodium dioctyl sulphosuccinate; or fatty acids, in particular those derived from coconut oil, cationic surfactants, such as water-soluble quaternary ammonium salts of formula $N^+R'R''R'''R''''Y^-$, in which the R radicals are identical or different optionally hydroxylated hydrocarbon radicals

and Y^- is an anion of a strong acid, such as halide, sulfate and sulfonate anions; cationic surfactants, such as cetyltrimethylammonium bromide; amine salts of formula $N^+R'R''R'''$, in which the R radicals are identical or different optionally hydroxylated hydrocarbon radicals; cationic surfactants, such as octadecylamine hydrochloride; non-ionic surfactants, such as optionally polyoxyethylenated esters of sorbitan, in particular Polysorbate 80, or polyoxyethylenated alkyl ethers; polyethylene glycol stearate, polyoxyethylenated derivatives of castor oil, polyglycerol esters, polyoxyethylenated fatty alcohols, polyoxyethylenated fatty acids or copolymers of ethylene oxide and of propylene oxide; and amphoteric surfactants, such as substituted lauryl compounds of betaine.

[0603] Suitable pharmaceutical carriers may also include excipients such as starch, glucose, lactose, sucrose, gelatin, malt, rice, flour, chalk, silica gel, sodium stearate, glycerol monostearate, talc, sodium chloride, dried skim milk, glycerol, propylene, glycol, polyethylene glycol 300, water, ethanol, polysorbate 20, and the like. The present compositions, if desired, may also contain wetting or emulsifying agents, or pH buffering agents.

[0604] Tablets and capsule formulations may further contain one or more adjuvants, binders, diluents, disintegrants, excipients, fillers, or lubricants, each of which are known in the art. Examples of such include carbohydrates such as lactose or sucrose, dibasic calcium phosphate anhydrous, corn starch, mannitol, xylitol, cellulose or derivatives thereof, microcrystalline cellulose, gelatin, stearates, silicon dioxide, talc, sodium starch glycolate, acacia, flavoring agents, preservatives, buffering agents, disintegrants, and colorants. Orally administered compositions may contain one or more optional agents such as, *e.g.*, sweetening agents such as fructose, aspartame or saccharin; flavoring agents such as peppermint, oil of wintergreen, or cherry; coloring agents; and preservative agents, to provide a pharmaceutically palatable preparation.

Uses of Compounds and Pharmaceutically Acceptable Compositions

[0605] Compounds and compositions described herein are generally useful for the inhibition of a kinase or a mutant thereof. In some embodiments, the kinase inhibited by the compounds and compositions described herein is a phosphatidylinositol 3-kinase (PI3K). In some embodiments, the kinase inhibited by the compounds and compositions described herein is one or more of a PI3Kα, PI3Kδ, and PI3Kγ. In some embodiments, the kinase inhibited by the compounds and compositions described herein is a PI3Kα. In some

embodiments, the kinase inhibited by the compounds and compositions described herein is a PI3Kα containing at least one of the following mutations: H1047R, E542K, and E545K.

[0606] Compounds or compositions of the disclosure can be useful in applications that benefit from inhibition of PI3K enzymes. For example, PI3K inhibitors of the present disclosure are useful for the treatment of cellular proliferative diseases generally. Compounds or compositions of the disclosure can be useful in applications that benefit from inhibition of PI3Kα enzymes. For example, PI3Kα inhibitors of the present disclosure are useful for the treatment of cellular proliferative diseases generally.

[0607] Aberrant regulation of PI3K, which often increases survival through Aid activation, is one of the most prevalent events in human cancer and has been shown to occur at multiple levels. The tumor suppressor gene PTEN, which dephosphorylates phosphoinositides at the 3' position of the inositol ring, and in so doing antagonizes PI3K activity, is functionally deleted in a variety of tumors. In other tumors, the genes for the p110 alpha isoform, PIK3CA, and for Akt are amplified, and increased protein expression of their gene products has been demonstrated in several human cancers. Furthermore, mutations and translocation of p85 alpha that serve to up-regulate the p85-p110 complex have been described in human cancers. Finally, somatic missense mutations in PIK3CA that activate downstream signaling pathways have been described at significant frequencies in a wide diversity of human cancers (Kang et el., Proc. Natl. Acad. Sci. USA 102:802 (2005); Samuels et al., Science 304:554 (2004); Samuels et al., Cancer Cell 7:561-573 (2005)). These observations show that deregulation of phosphoinositol-3 kinase, and the upstream and downstream components of this signaling pathway, is one of the most common deregulations associated with human cancers and proliferative diseases (Parsons et al., Nature 436:792 (2005); Hennessey at el., Nature Rev. Drug Disc. 4:988-1004 (2005)).

[0608] The activity of a compound utilized in this disclosure as an inhibitor of a PI3K kinase, for example, a PI3Kα, or a mutant thereof, may be assayed *in vitro*, *in vivo* or in a cell line. *In vitro* assays include assays that determine inhibition of either the phosphorylation activity and/or the subsequent functional consequences, or ATPase activity of an activated PI3Kα, or a mutant thereof. Alternative *in vitro* assays quantitate the ability of the inhibitor to bind to a a PI3Kα. Inhibitor binding may be measured by radiolabeling the inhibitor prior to binding, isolating the inhibitor/PI3Kα complex and determining the amount of radiolabel bound. Alternatively, inhibitor binding may be determined by running a competition experiment

where new inhibitors are incubated with a PI3Kα bound to known radioligands. Representative *in vitro* and *in vivo* assays useful in assaying a PI3Kα inhibitor include those described and disclosed in the patent and scientific publications described herein. Detailed conditions for assaying a compound utilized in this disclosure as an inhibitor of a PI3Kα, or a mutant thereof, are set forth in the Examples below.

Treatment of Disorders

[0609] Provided compounds are inhibitors of PI3Kα and are therefore useful for treating one or more disorders associated with activity of PI3Kα or mutants thereof. Thus, in certain embodiments, the present disclosure provides a method of treating a PI3Kα-mediated disorder in a subject, comprising administering a therapeutically effective amount of a compound of the present disclosure, or a pharmaceutically acceptable salt thereof, or a pharmaceutically acceptable composition of either of the foregoing, to a subject in need thereof. In certain embodiments, the present disclosure provides a method of treating a PI3Kα-mediated disorder in a subject comprising administering a therapeutically effective amount of a compound of the present disclosure, or a pharmaceutically acceptable composition thereof, to a subject in need thereof. In some embodiments, the subject has a mutant PI3Kα. In some embodiments, the subject has PI3Kα containing at least one of the following mutations: H1047R, E542K, and E545K. In some embodiments, the subject has PI3Kα containing at least one of the mutations in Table A:

[0610] Table A.

[0611]

M1*
M1I
M1L
M1R
M1T
M1V
P2H
P2L
P2S
P3A
P3L
P3S
P3T
R4*

R4G
R4L
R4P
R4Q
R4_P17del
R4_P18del
P5T
P5_R19del
S6L
S6_I13del
S7*
S7L
S7_P18del
S7_R19del
S7fs*3

G8C
G8D
G8R
G8S
G8V
G8_P17del
G8_P18del
G8_R19del
E9*
E9A
E9G
E9K
E9Q
E9_I20>V
E9_L15>G

E9_M16>V
E9_M16del
E9_P17>A
E9_P17del
E9_P18>CPT
E9_P18>GCPT
E9_P18del
E9_R19>G
E9_R19del
E9fs*6
L10P
L10Q
L10R
L10V
L10_L15>R

L10_L15del
L10_L21del
L10_M16del
L10_P17>T
L10_P17del
L10_P18>Q
L10_P18del
W11*
W11C
W11G
W11L
W11R
W11S
W11_H14del
W11_L15del
W11_L21del
W11_M16del
W11_P17>S
W11_P18>S
W11_P18>CG
W11_P18del
W11_R19del
W11_V22del
W11del
G12C
G12D
G12S
G12V
G12_L21del
G12_P17>A
G12_P18>I
I13F
I13M
I13N
I13V
I13_P18del
I13del
H14D
H14N
H14Y
H14_I20del
H14_L21del
L15S
L15V

L15W
M16I
M16K
M16L
M16R
M16T
M16V
P17A
P17L
P17R
P17S
P18L
P18Q
P18S
P18T
P18fs*4
R19*
R19I
R19K
I20M
I20T
I20fs*3
L21I
L21R
L21V
V22G
V22I
V22L
E23K
E23Q
C24F
C24Y
L25*
L25F
L25S
P27S
G29K
G29R
M30I
M30V
M30fs*9
I31M
I31V
V32A

V32L
V32M
T33A
T33I
T33S
E35*
E35K
E35Q
C36*
L37F
L37I
R38C
R38G
R38H
R38L
R38S
R38_I43>L
E39*
E39A
E39D
E39K
E39Q
A40V
T41I
L42*
L42F
I43L
I43M
T44F
T44I
I45L
I45T
I45V
K46M
H47L
H47Q
H47Y
E48*
E48K
E48Q
E48V
F50L
F50fs*22
K51R

E52*
E52K
E52Q
A53S
A53V
A53fs*19
R54I
R54K
K55I
K55Q
Y56*
Y56H
P57H
P57L
P57S
L58F
L58R
L58V
L58fs*13
L58fs*14
H59L
H59N
H59R
H59Y
Q60*
Q60E
Q60L
Q60P
L61F
L61I
L61R
L62F
L62I
L62del
Q63*
Q63E
Q63H
Q63L
Q63fs*9
D64G
D64H
D64N
D64V
D64Y

D64_S72>VL
E65*
E65A
E65G
E65K
E65V
S66C
S66F
S66Y
S67A
S67C
S67F
S67Y
S67del
Y68C
Y68H
I69F
I69L
I69N
I69S
I69V
F70V
V71G
V71I
V71L
S72G
S72R
S72T
S72fs*27
V73A
V73I
T74A
T74I
T74S
Q75*
Q75E
Q75H
Q75L
Q75P
E76Q
E76del
A77G
A77P
E78*

E78G
E78K
E78Q
E78_R79insVSK NTYLSKCYS
R79M
R79W
R79_E80>K
E80K
E80_E81>KK
E81*
E81A
E81D
E81G
E81K
E81Q
E81V
E81_F82>V
E81del
F82I
F82L
F83C
F83I
F83K
F83L
F83S
F83V
F83Y
F83del
F83fs*17
D84H
D84N
D84Y
D84fs*1
E85*
E85K
E85Q
T86I
T86S
R87G
R87I
R87S
R87T
R88*
R88G

R88L
R88P
R88Q
L89F
L89H
C90F
C90G
C90S
C90W
C90Y
C90fs*1
L92F
L92I
R93G
R93L
R93L
R93P
R93Q
R93W
L94F
F95C
F95S
F95fs*2
Q96*
Q96E
Q96H
Q96K
Q96R
Q96fs*4
P97F
P97H
P97L
P97S
F98C
F98L
F98V
L99*
L99F
L99V
L99fs*1
K100*
K100N
K100del
V101A

V101I
V101L
V101del
I102F
I102M
I102T
I102V
I102_E103>K
I102_E103ins16
I102_P104>K
I102_P104>T
I102_P104del
I102_V105del
I102del
I102fs*6
E103*
E103D
E103G
E103K
E103Q
E103_E110del
E103_G106>D
E103_N107del
E103_P104>A
E103_P104>S
E103_P104del
E103_R108>YC
E103_V105>A
E103_V105>D
E103del
P104A
P104K
P104L
P104Q
P104R
P104S
P104T
P104_E110>Q
P104_E110del
P104_G106>R
P104_G106>S
P104_G106del
P104_N107>H
P104_N107del

P104_V105>I
P104_V105>L
P104_V105del
P104_V105insV GNREEKILNREIG MIQY
P104del
V105A
V105I
V105L
V105_E109>A
V105_E109>K
V105_E109>EE
V105_E109del
V105_E110del
V105_G106del
V105_N107>D
V105_N107>Y
V105_N107>AT
V105_N107>GD
V105_N107del
V105_N107del
V105_R108del
V105del
V105del
G106A
G106C
G106D
G106E
G106F
G106L
G106R
G106S
G106V
G106_E109>A
G106_E109>E
G106_E109del
G106_E110>K
G106_I112>F
G106_K111>E
G106_N107>T
G106_N107del
G106_R108>I
G106_R108>V
G106_R108del

G106del
N107H
N107I
N107K
N107S
N107T
N107Y
N107_E109>K
N107_E109del
N107_E109del
N107_E110del
N107_K111>YRE
N107_R108>S
N107_R108del
N107del
R108C
R108G
R108H
R108L
R108P
R108S
R108_E109>C
R108_E109>Q
R108_E109del
R108_E109insLK VIEPVGNR
R108_E110del
R108_I112>L
R108_I112>V
R108_I112del
R108_K111>Q
R108_K111>EA
R108_K111del
R108del
E109*
E109A
E109G
E109K
E109_E110>A
E109_I112>D
E109_I112>V
E109_L113>D
E109_L113>V
E109_N114del
E109_R115>G

E109fs*11
E110*
E110K
E110Q
E110_E116del
E110_I112>D
E110_I112del
E110_K111>D
E110_K111>G
E110_K111>M
E110_K111>V
E110_K111del
E110_K111insE
E110_N114>D
E110_R115>G
E110del
K111E
K111M
K111N
K111Q
K111R
K111T
K111_E116del
K111_I112>D
K111_I112>F
K111_I112>N
K111_I112del
K111_I112insK
K111_I112insEK
K111_L113>I
K111_L113del
K111_N114>D
K111_N114del
K111_R115del
K111del
I112D
I112F
I112L
I112N
I112S
I112T
I112V
I112_L113del
I112_L113insI

I112_L113insQI
I112>MSM
I112del
L113F
L113H
L113I
L113R
L113V
L113_I117del
L113_N114>H
L113_N114del
L113_N114insL
L113del
N114D
N114H
N114I
N114S
N114Y
N114_I117del
N114_R115>K
N114_R115insL N
N114del
R115*
R115E
R115G
R115L
R115P
R115Q
R115_E116insD EEKILNR
R115del
E116*
E116G
E116K
E116Q
E116_I117insRE
I117F
I117V
I117_G118insEI
G118D
G118E
G118V

G118_F119insMIEPVGNREEKILNREIG
G118_F119insMIQEILNREIG
G118_F119insMIQYPQSILNREIG
F119I
F119L
A120S
A120T
I121L
I121N
G122A
G122C
G122D
G122S
G122V
M123I
M123K
M123L
M123V
P124A
P124L
P124Q
P124S
P124_V125>Q
V125A
V125E
V125G
V125L
V125M
C126S
C126W
C126Y
C126fs*19
E127*
E127D
E127K
E127Q
F128Y
D129H
D129N
D129Y
M130I

M130T
V131F
V131I
K132T
D133G
D133H
D133Y
D133fs*12
P134L
P134S
E135*
E135K
E135Q
E135fs*3
Q137*
Q137H
Q137L
D138G
D138N
D138Y
F139I
F139L
F139S
F139Y
F139_R140>S*
R140*
R140Q
R141I
R141K
R141T
R141fs*4
N142D
I143T
L144P
L144V
N145K
N145S
N145T
N145Y
N145_V146>KI
V146A
V146G
V146I
C147F

C147S
C147Y
K148E
E149*
E149A
E149D
E149G
E149K
E149Q
E149V
A150G
A150S
A150V
V151A
V151L
V151M
D152H
D152N
L153F
R154K
R154M
R154S
R154W
D155H
D155V
D155Y
L156I
L156V
N157K
S158*
S158A
S158L
S158P
P159S
P159T
H160N
H160R
H160Y
H160fs*12
S161C
S161I
S161T
R162G
R162I

R162K
R162T
A163G
A163T
A163V
M164I
M164L
M164T
M164V
Y165C
Y165F
YV165_166*F
V166A
V166G
V166I
Y167*
Y167C
Y167H
P168F
P168H
P168L
P168R
P168S
P168T
P169A
P169L
P169Q
P169R
P169S
P169T
N170fs*2
V171E
V171L
E172D
E172G
E172Q
S173C
S173Y
S174L
P175L
P175Q
P175S
E176D
E176K

E176Q
L177*
L177F
P178S
K179N
K179Q
H180N
H180P
H180R
I181V
Y182F
Y182H
N183H
N183T
K184E
K184N
K184Q
K184R
K184T
L185*
L185F
L185S
D186A
D186E
D186G
D186N
D186Y
K187E
K187Q
K187R
G188R
Q189*
Q189fs*14
I190L
I190V
V192L
V192M
V193L
I194M
W195*
W195C
W195R
V196L
I197M

I197T
I197V
V198D
V198F
V198I
S199F
S199P
S199Y
P200A
P200L
P200R
P200S
N201D
N201S
N202D
N202fs*9
D203G
D203H
D203N
D203Y
K204T
Q205*
Q205H
Q205K
Q205P
Q205R
K206E
Y207S
T208A
L209V
K210R
I211M
I211V
N212S
H213P
H213Y
D214E
D214G
D214Y
D214_C215>ER
C215S
C215T
C215Y
V216A

V216I
V216L
P217L
P217R
P217S
E218D
E218K
E218Q
E218fs*4
Q219H
Q219K
V220L
I221N
I221V
E223D
E223G
E223K
E223Q
A224G
A224S
A224T
A224V
I225M
I225S
I225T
I225V
R226G
R226S
R226T
K227*
K228N
T229A
T229P
T229S
T229fs*9
T229fs*11
R230*
R230G
R230L
R230Q
R230fs*7
S231R
M232I
M232L

M232V
L233F
L233S
L233V
L234fs*8
S235C
S235F
S235P
S235T
S236C
S236F
S236T
S236Y
E237K
E237Q
Q238K
Q238L
L239I
L239Q
L239R
L239V
K240N
K240Q
K240T
V243D
V243G
V243I
V243L
V243fs*15
E245K
Y246C
Q247*
Q247H
Q247L
Q247R
G248C
G248V
K249*
K249N
K249T
Y250C
Y250F
Y250H
Y250N

I251N
K253I
K253N
K253T
V254G
V254L
V254M
V254_C255>LW
C255F
C255Y
C255fs*3
G256*
G256A
G256E
G256R
G256V
C257R
D258E
D258G
D258H
D258N
E259Q
Y260C
Y260H
F261L
F261V
F261Y
E263*
E263D
E263K
E263Q
E263fs*5
K264Q
K264T
K264fs*4
Y265*
Y265C
P266H
P266L
P266R
P266S
L267M
L267P
L267V

S268N
S268T
Q269*
Q269H
Q269L
Q269R
Q269fs*4
Y270F
Y270N
K271N
K271R
Y272C
Y272F
Y272H
I273L
I273M
I273T
R274G
R274I
R274K
R274T
S275C
S275I
S275N
C276*
C276F
C276G
I277L
I277T
I277V
I277fs*7
M278I
M278K
M278L
M278T
M278fs*23
L279F
L279H
L279I
L279R
L279V
G280A
G280E
G280K

G280R
G280V
G280W
R281M
R281S
R281fs*5
M282I
P283L
P283S
N284H
N284K
N284S
N284Y
L285F
L285M
M286I
L287F
M288I
M288T
A289T
A289V
K290N
E291*
E291K
E291Q
S292C
S292I
S292N
S292R
L293F
Y294*
Y294H
Y294fs*25
S295A
S295C
S295F
S295Y
Q296*
Q296E
Q296K
Q296R
L297P
L297R
P298A

P298Q
P298R
P298S
M299I
M299L
M299T
D300A
D300E
D300H
D300N
C301*
C301F
C301G
C301S
C301W
C301Y
F302C
F302Y
T303A
T303K
T303R
M304I
M304L
M304T
M304V
P305S
P305_N319>H
S306A
S306C
S306F
S306P
S306Y
S306fs*13
Y307F
Y307H
S308A
S308C
S308F
S308Y
R309G
R309_R310>S
R310C
R310H
R310L

I311F
I311N
S312C
S312F
S312fs*18
T313I
T313K
T315I
P316L
P316Q
P316S
P316T
Y317C
Y317F
Y317H
M318I
M318T
M318V
M318fs*15
N319S
N319T
G320*
G320A
G320E
G320R
G320V
E321A
E321K
E321Q
E321V
S323A
S323C
S323F
S323P
S323Y
T324I
K325E
K325Q
K325R
K325_I330del
K325fs*6
S326A
S326C
S326F

S326P
S326Y
L327F
L327H
L327I
L327fs*4
W328*
W328C
W328L
W328R
W328S
V329F
V329G
V329I
I330L
I330V
N331H
S332I
S332T
A333S
A333T
A333V
L334F
R335I
R335K
R335S
R335T
R335_I336ins18
R335fs*2
R335fs*17
R335fs*33
I336M
I336fs*8
K337Q
K337T
I338F
I338N
I338S
I338T
I338fs*7
L339F
L339I
L339R
L339V

C340F
C340R
C340_A341insVKILC
A341S
A341V
A341_T342insIKILCA
A341_T342insLRIKILCA
A341_T342insYKILCA
T342A
T342I
T342S
T342_N345>H
T342_Y343ins37
T342_Y343insRIKILCAT
Y343C
Y343F
Y343I
Y343L
Y343S
Y343_N345del
Y343_V344>L
Y343_V344insATY
Y343_V344insERIKILCATY
Y343_V344insLCATY
V344A
V344E
V344F
V344G
V344L
V344M
V344R
V344_N345>RFSAFWLRSS
V344_N345insK
V344_N345insM
V344_N345insV
V344_N345insILCATYV

V344_N345insKV
V344_N345insKILCATYV
V344_N345insTTYV
V344_N345insTYV
V344_N347del
N345D
N345H
N345I
N345K
N345S
N345T
N345Y
N345_I348>K
N345_I348del
N345_K353del
N345_V346>K
N345_V346>KL
N345_V346>KATYVNV
N345_V346insATYVN
V346A
V346E
V346G
V346L
V346L
V346Q
V346_N347>ERTYVNVN
V346_N347insK
V346_N347insV
V346_N347insEKIKKKKKK
V346_N347insKNV
V346_N347insMNV
V346_N347insVNV
V346>GK
N347D
N347I
N347K

N347T
N347Y
N347_I348insR
N347_I348insVN
I348M
I348S
I348V
I348_R349insLN I
R349*
R349Q
R349_D350insIR
R349_D350insV R
D350G
D350H
D350K
D350N
D350Y
D350_I351insKK ILCATYVNVNIRD
D350_I351insRI KILCATYVNVNIR D
D350del
I351F
I351S
I351_D352>E
I351_D352>KYL Q
I351_D352insGI KILCATYVNVNIR DI
I351_D352insVN VNIRDI
D352H
D352N
D352Y
D352>RDIN
K353M
K353N
K353_I354insVV NVNIRDIDK
I354D
I354F
I354L
I354N

I354S
I354T
I354V
Y355C
Y355_V356insY
V356A
V356F
V356I
V356L
R357*
R357G
R357L
R357Q
R357fs*10
T358A
T358K
T358S
T358_G359insA
G359A
G359C
G359R
G359V
I360F
I360T
I360V
Y361C
Y361F
Y361H
Y361_H362insQI YVRTGIY
H362N
H362R
H362Y
G363A
G363E
G363V
G363_G364insY VRTGIYHG
G363>YHR
G364E
G364K
G364R
G364_E365insV RTGIYHGG
E365D

E365K
E365Q
E365V
P366F
P366H
P366L
P366R
P366S
P366T
P366fs*5
C368Y
D369G
D369N
D369Y
N370D
N370K
N370S
N372S
T373I
T373P
T373S
Q374*
Q374E
Q374H
R375G
R375I
R375K
R375S
V376I
P377L
P377S
C378F
C378L
C378R
C378W
C378Y
S379C
S379F
N380K
N380Y
P381A
P381S
R382K
R382W

R382fs*6
W383*
W383C
W383L
E385K
W386R
L387Q
L387V
N388D
N388I
N388T
Y389C
Y389F
Y389S
D390A
D390H
D390N
D390Y
I391V
I391fs*36
Y392*
Y392H
P394S
P394_D395ins2 3
D395H
D395N
D395V
D395Y
L396F
L396I
L396P
L396V
P397A
P397R
P397S
P397T
R398C
R398H
R398L
A399D
A399G
A399S
A399T
A399V

R401*
R401L
R401Q
R401S
L402V
C403R
L404F
L404I
L404V
S405F
S405T
S405Y
I406F
I406M
I406V
C407F
C407R
C407W
C407Y
C407fs*21
S408C
S408P
V409F
V409I
K410_G411insGRKGAKEVKYFRRK
K410fs*6
G411D
G411R
G411S
G411V
R412*
R412L
R412Q
K413N
K413_G414insRK
G414A
G414D
G414R
G414S
G414V
G414fs*13
A415D

K416E
K416I
E417D
E417G
E417K
E417Q
E417V
E418*
E418A
E418K
E418Q
E418_C420>D
E418_P421>A
H419L
H419P
H419Q
H419R
H419Y
H419_C420>R
H419_C420del
H419_L422>T
H419_L422>LM
H419_L422>PW
H419_L422del
H419_L422del
H419_P421>L
H419_P421>P
H419_P421>Q
H419_P421>R
H419_P421>T
H419_P421del
H419fs*11
C420R
C420S
C420Y
C420_P421del
C420_L422>W
C420_A423>W
C420_A423>Y
C420_A423del
C420_I427>WHGNV
P421A
P421L
P421R

P421S
P421T
P421_A423>H
P421_A423>H
P421_A423del
P421_L422del
P421>RR
L422E
L422F
L422S
L422W
L422_A423>F
A423E
A423S
A423T
A423V
W424*
W424C
W424G
W424L
W424R
W424_G425insF
W424_I427del
G425E
G425R
G425V
N426D
N426S
N426fs*6
I427K
I427M
I427T
I427V
N428K
N428S
N428Y
L429F
L429V
L429fs*2
F430C
F430L
Y432F
Y432H
Y432fs*5

T433A
T433R
T433_D434>NTD
T433_D434insTLVSGKMALNLWPVPHGLE
D434E
D434H
D434fs*2
T435I
T435N
T435S
L436P
L436V
L436fs*1
L436fs*32
V437E
V437G
V437I
S438A
S438C
S438fs*30
G439A
G439E
G439K
G439R
G439fs*5
K440E
K440N
K440fs*45
M441I
M441V
E441fs*3
M441fs*3
M441fs*28
A442T
A442V
L443F
N444H
N444K
N444_G451>K
N444_L455>H
L445F
L445I

L445_W446insL
W446*
W446S
W446_D454del
W446_E453del
W446_G451del
W446_G460>C
W446_H450>R
W446_H450del
W446_I459del
W446_L456del
W446_P447ins W
W446_P458del
W446_V461del
P447A
P447L
P447S
P447_L452del
P447_L455del
P447_V448ins24
P447_V448insLF DYTDTLVSGKMA LNLWP
V448A
V448E
V448G
V448L
V448_D454del
V448_E453>K
V448_E453>P
V448_E453>YK
V448_E453del
V448_G451del
V448_L452del
V448_L455del
V448_P449insS GKMALNLWPV
V448_P449insV SGKMALNLWPV
V448fs*14
P449A
P449H
P449L
P449R

P449S
P449T
P449_D454>R
P449_D454del
P449_E453>Q
P449_E453del
P449_H450insL VSGKMALNLWP VP
P449_H450insP VP
P449_H450insP VP
P449_I459del
P449_L452del
P449_L455del
P449_L456del
P449_P458del
H450D
H450N
H450Q
H450R
H450Y
H450_D454del
H450_E453del
H450_G451>PR G
H450_G460>R
H450_I459>L
H450_I459del
H450_L452del
H450_L455>P
H450_L455>Q
H450_L455>KM
H450_L455del
H450_L455del
H450_L455del
H450_L456>P
H450_L456del
H450_N457del
H450_P458>LIH
H450_P458del
H450_V461>GS
G451A
G451E

G451K
G451R
G451V
G451_D454>RR
G451_D454del
G451_E453del
G451_G460del
G451_I459>A
G451_I459>V
G451_L452>KKK KK
G451_L452insF GKMALNLWPVP HG
G451_L455>A
G451_L455>V
G451_L455>GT M
G451_L455del
G451_L456>K
G451_L456>V
G451_N457del
G451_P458>V
G451_P458del
L452S
L452_E453del
L452_E453ins21
L452_E453insA GKMALNLWPVP HGL
L452_E453insVS GKMALNLWPVP HGL
L452_G460>F
L452_G460del
L452_I459>FRRF
L452_I459>PLW ARL
L452_I459del
L452_I459del
L452_L455>W
L452_N457>T
L452_N457>Y
L452_P458>F
L452_T462>QKT
L452_V461>F

E453*
E453A
E453D
E453G
E453K
E453Q
E453V
E453_D454>KN
E453_D454del
E453_D454insG KMALNLWPVPH GLE
E453_D454insV SGKMALNLWPV PHGLE
E453_D454insV VSGKMALNLWP VPHGLE
E453_G460>C
E453_G460del
E453_G463del
E453_I459>G
E453_I459>V
E453_I459del
E453_L455>G
E453_L455>V
E453_L455del
E453_L455del
E453_L456>M
E453_L456>V
E453_L456del
E453_P458del
E453_T462del
E453_T462del
E453>GLK
E453del
D454E
D454G
D454H
D454K
D454N
D454Y
D454_I459del
D454_K468del
D454_L455>V
D454_L455del

D454_N467>VS
D454_P458>Y
D454del
L455F
L455_G460>C
L455_G460del
L455_I459>C
L455_I459>C
L455_I459>F
L455_I459del
L455_L456>FM
L455_L456insPGKMALNLWPVPHGLEDL
L455_N467>SD
L455_N467del
L455_P458del
L455_T462del
L455_V461>F
L456M
L456P
L456R
L456V
L456_I459del
L456_N457insKKKKKREDLL
N457D
N457K
N457S
N457_G460>S
N457_G463>R
N457_I459>K
N457_I459>K
N457_P458>TR
N457_T462del
N457_V461del
P458A
P458L
P458R
P458S
P458_G463>R
P458_I459insMNLWPVPHGLEDLLNP
P458_K468del

P458_V461>L
I459M
I459N
I459S
I459T
I459V
I459_T462del
G460A
G460C
G460D
G460R
G460V
V461A
V461_N465del
T462I
T462_N465del
T462_S464del
T462fs*12
G463*
G463A
G463E
G463R
G463V
G463_K468del
S464*
S464L
N465I
N465K
N465S
N465T
N465Y
N465_P466ins27
P466L
P466Q
P466S
P466_N467insKLLNPIGVTGSNP
N467H
N467K
N467T
K468*
K468R
K468T
K468_E469ins31

K468_E469ins35
K468_E469insVERLLNPIGVTGSNPNK
K468_E469insVLLNPIGVTGSNPNK
E469*
E469A
E469D
E469G
E469K
E469V
E469_T470>D
E469>DK
T470I
T470N
T470P
T470S
T470fs*4
P471A
P471I
P471L
P471Q
P471S
P471T
P471>QTL
C472S
C472W
C472>FF
L473I
L473V
L473_E474insL
L473_E474insACL
L473_L475>FGVWSLEL
E474A
E474K
E474Q
E474V
L475*
L475F
E476G
E476K
E476Q

E476_F477insLE
D478A
D478E
D478G
D478H
D478N
D478Y
W479C
W479S
F480L
S481G
S481N
S481R
S481T
S482C
S482N
V483A
V483L
V483M
V484A
V484I
V484L
K485E
K485R
K485T
F486L
F486Y
P487L
P487Q
P487R
P487S
D488G
D488H
D488N
D488_S490del
M489I
M489V
S490P
V491G
V491L
V491M
I492F
I492M
I492T

E493K
E493Q
E494*
E494D
E494K
E494Q
E494V
H495L
H495N
H495Q
A496D
A496S
A496T
A496V
N497S
W498*
W498C
W498L
W498R
W498S
S499F
S499Y
V500L
V500fs*9
S501F
S501T
S501Y
R502*
R502G
R502Q
E503G
E503K
E503Q
E503del
G505A
G505E
G505R
F506C
F506L
F506V
S507G
S507I
S507R
S507T

Y508C
Y508H
Y508N
S509C
S509F
H510Q
H510R
H510Y
A511P
A511S
G512*
G512A
G512E
G512R
G512V
L513P
L513V
L513fs*5
S514C
S514N
S514R
N515Y
R516I
R516K
R516T
L517I
L517P
L517R
L517V
A518G
A518P
A518S
A518T
R519K
R519T
D520E
D520H
D520N
N521D
N521K
N521S
E522*
E522K
E522Q

L523F
L523V
L523fs*1
R524K
R524M
R524S
R524fs*36
E525*
E525A
E525G
E525K
E525fs*35
N526S
N526fs*34
D527E
D527G
D527H
D527N
K528E
E529K
E529Q
Q530*
Q530H
Q530K
Q530R
L531R
A533T
I534N
I534V
S535C
S535F
S535Y
T536A
T536K
T536S
R537*
R537L
R537Q
D538A
D538E
D538G
D538H
D538N
D538Y

D538_S541>A
D538del
P539A
P539H
P539L
P539R
P539S
P539T
P539del
L540F
L540H
L540I
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E545G
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E545L
E545N
E545P
E545Q

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E545S
E545T
E545V
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E545_Q546>DL
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Q546P
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F550V
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L551fs*9
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S553T
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R555T
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Y557S
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C558S
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I561V
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R577K
R577S

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D578Y
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C585G
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K588fs*8
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P592S
P592T
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I593V
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P595T
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E596Q
E596V
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D603Y
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C604Y
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N605K
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G613V

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K621Q
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Q630R

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Q634H
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V638I
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E642Q
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Q643R
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N647T
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L648V
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K656T

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F666L
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W669C
W669G
W669R
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V680fs*19
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G685V
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E689Q
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C692R

R693C
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A694V
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G696W
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Q705H
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V706I
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T716N
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D717H
D717N
D717V
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I718V
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L719R
L719V
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K720I
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Q721K
Q721P
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E722K
E722Q
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K723R
K723T
K724T
K724del
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D725E
D725G
D725H
D725V
D725Y
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E726Q
E726V
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L735S
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M745L
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Q749K
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P754S

P754T
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L755Q
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N756Y
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P757S
P757fs*5
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A758V
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H759Q
H759Y
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Q760R
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L764P
L764V
R765G
R765S
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L766fs*10
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E768D
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E768Q
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I771S
I771T
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M772V
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S774F
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N785S
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P786T
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I788V
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M789T
M789V
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Q795R
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E798Q
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F801V
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L831V

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G887R

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V906L

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G927V
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R951H
R951L
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V952L
F954Y
F954fs*7
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Q958L
Q958R
D959Y

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T974fs*3
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I991fs*26
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L997I
L997V

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F998fs*14
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L1001fs*4
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Y1021F
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A1027V

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M1040L

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D1045Y
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H1048R
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G1049R

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G1050D
G1050S
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W1051L
W1051fs*16
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T1052R
T1053fs*15
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K1054_M1055>NGLDLPHN*TACIEM
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W1057C
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I1058L
I1058M
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T1061K
I1062L
I1062V
K1063*
Q1064H
Q1064_H1065insQWTTKMDWIFHTIKQ
Q1064fs*6
Q1064fs*7
Q1064fs*9
Q1064fs*24
Q1064fs*5+
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H1065Q
H1065R
H1065Y

H1065_*1069>?
H1065_A1066>LKLK
H1065fs*?
H1065fs*4
H1065fs*5
H1065fs*8
H1065fs*8
H1065fs*1+
H1065fs*15
H1065fs*6+
A1066_*1069>?
A1066_L1067insCV
A1066fs*2+
A1066fs*4
A1066fs*5
A1066fs*5+
A1066fs*8
A1066I
A1066L
A1066L
L1067F

L1067V
L1067W
L1067_*1069>FKLKKN*
L1067fs*4
L1067fs*5
L1067fs*6
L1067fs*7
L1067fs*7
L1067fs*11+
L1067fs*20
L1067fs*5+
N1068K
N1068fs*1
N1068fs*3
N1068fs*4
N1068fs*5
N1068fs*5
N1068fs*7
N1068fs*1+
N1068fs*10
N1068fs*11
N1068fs*21

[0612] As used herein, the term "PI3Kα-mediated" disorders, diseases, and/or conditions means any disease or other deleterious condition in which PI3Kα or a mutant thereof is known to play a role. Accordingly, another embodiment of the present disclosure relates to treating or lessening the severity of one or more diseases in which PI3Kα, or a mutant thereof, is known to play a role. Such PI3Kα-mediated disorders include, but are not limited to, cellular proliferative disorders (*e.g.*, cancer). In some embodiments, the PI3Kα-mediated disorder is a disorder mediated by a mutant PI3Kα. In some embodiments, the PI3Kα-mediated disorder is a disorder mediated by a PI3Kα containing at least one of the following mutations: H1047R, E542K, and E545K.

[0613] In some embodiments, the present disclosure provides a method for treating a cellular proliferative disease, said method comprising administering to a patient in need thereof a therapeutically effective amount of a compound of the present disclosure, or a pharmaceutically acceptable salt thereof, or a pharmaceutically acceptable composition of

either of the foregoing. In some embodiments, the present disclosure provides a method for treating a cellular proliferative disease, said method comprising administering to a patient in need thereof, a therapeutically effective amount of a compound of the present disclosure, or a pharmaceutically acceptable composition thereof.

[0614] In some embodiments, the method of treatment comprises the steps of: (i) identifying a subject in need of such treatment; (ii) providing a disclosed compound, or a pharmaceutically acceptable salt thereof; and (iii) administering said provided compound in a therapeutically effective amount to treat, suppress and/or prevent the disease state or condition in a subject in need of such treatment. In some embodiments, the subject has a mutant PI3Kα. In some embodiments, the subject has PI3Kα containing at least one of the following mutations: H1047R, E542K, and E545K.

[0615] In some embodiments, the method of treatment comprises the steps of: (i) identifying a subject in need of such treatment; (ii) providing a composition comprising a disclosed compound, or a pharmaceutically acceptable salt thereof; and (iii) administering said composition in a therapeutically effective amount to treat, suppress and/or prevent the disease state or condition in a subject in need of such treatment. In some embodiments, the subject has a mutant PI3Kα. In some embodiments, the subject has PI3Kα containing at least one of the following mutations: H1047R, E542K, and E545K.

[0616] Another aspect of the disclosure provides a compound according to the definitions herein, or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of either of the foregoing, for use in the treatment of a disorder described herein. Another aspect of the disclosure provides the use of a compound according to the definitions herein, or a pharmaceutically acceptable salt thereof, or a pharmaceutical composition of either of the foregoing, for the treatment of a disorder described herein. Similarly, the disclosure provides the use of a compound according to the definitions herein, or a pharmaceutically acceptable salt thereof, for the preparation of a medicament for the treatment of a disorder described herein.

Cellular Proliferative Diseases

[0617] In some embodiments, the disorder is a cellular proliferative disease. In some embodiments, the cellular proliferative disease is cancer. In some embodiments, the cancer is a tumor. In some embodiments, the cancer is a solid tumor. In some embodiments, the cellular proliferative disease is a tumor and/or cancerous cell growth. In some embodiments,

the cellular proliferative disease is a tumor. In some embodiments, the cellular proliferative disease is a solid tumor. In some embodiments, the cellular proliferative disease is a cancerous cell growth.

[0618] In some embodiments, the cancer is selected from sarcoma; lung; bronchus; prostate; breast (including sporadic breast cancers and sufferers of Cowden disease); pancreas; gastrointestinal; colon; rectum; carcinoma; colon carcinoma; adenoma; colorectal adenoma; thyroid; liver; intrahepatic bile duct; hepatocellular; adrenal gland; stomach; gastric; glioma; glioblastoma; endometrial; melanoma; kidney; renal pelvis; urinary bladder; uterine corpus; uterine cervix; vagina; ovary (including clear cell ovarian cancer); multiple myeloma; esophagus; a leukemia; acute myelogenous leukemia; chronic myelogenous leukemia; lymphocytic leukemia; myeloid leukemia; brain; a carcinoma of the brain; oral cavity and pharynx; larynx; small intestine; non-Hodgkin lymphoma; villous colon adenoma; a neoplasia; a neoplasia of epithelial character; lymphoma; a mammary carcinoma; basal cell carcinoma; squamous cell carcinoma; actinic keratosis; neck; head; polycythemia vera; essential thrombocythemia; myelofibrosis with myeloid metaplasia; and Waldenstrom macroglobulinemia.

[0619] In some embodiments, the cancer is selected from lung; bronchus; prostate; breast (including sporadic breast cancers and Cowden disease); pancreas; gastrointestinal; colon; rectum; thyroid; liver; intrahepatic bile duct; hepatocellular; adrenal gland; stomach; gastric; endometrial; kidney; renal pelvis; urinary bladder; uterine corpus; uterine cervix; vagina; ovary (including clear cell ovarian cancer); esophagus; a leukemia; acute myelogenous leukemia; chronic myelogenous leukemia; lymphocytic leukemia; myeloid leukemia; brain; oral cavity and pharynx; larynx; small intestine; neck; and head. In some embodiments, the cancer is selected from sarcoma; carcinoma; colon carcinoma; adenoma; colorectal adenoma; glioma; glioblastoma; melanoma; multiple myeloma; a carcinoma of the brain; non-Hodgkin lymphoma; villous colon adenoma; a neoplasia; a neoplasia of epithelial character; lymphoma; a mammary carcinoma; basal cell carcinoma; squamous cell carcinoma; actinic keratosis; polycythemia vera; essential thrombocythemia; myelofibrosis with myeloid metaplasia; and Waldenstrom macroglobulinemia.

[0620] In some embodiments, the cancer is selected from lung; bronchus; prostate; breast (including sporadic breast cancers and Cowden disease); pancreas; gastrointestinal; colon; rectum; thyroid; liver; intrahepatic bile duct; hepatocellular; adrenal gland; stomach; gastric; endometrial; kidney; renal pelvis; urinary bladder; uterine corpus; uterine cervix; vagina;

ovary (including clear cell ovarian cancer); esophagus; brain; oral cavity and pharynx; larynx; small intestine; neck; and head. In some embodiments, the cancer is a leukemia. In some embodiments, the cancer is acute myelogenous leukemia; chronic myelogenous leukemia; lymphocytic leukemia; or myeloid leukemia.

[0621] In some embodiments, the cancer is breast cancer (including sporadic breast cancers and Cowden disease). In some embodiments, the cancer is breast cancer. In some embodiments, the cancer is ER+/HER2- breast cancer. In some embodiments, the cancer is ER+/HER2- breast cancer, and the subject is intolerant to, or ineligible for, treatment with alpelisib. In some embodiments, the cancer is sporadic breast cancer. In some embodiments, the cancer is Cowden disease.

[0622] In some embodiments, the cancer is ovarian cancer. In some embodiments, the ovarian cancer is clear cell ovarian cancer.

[0623] In some embodiments, the cellular proliferative disease has mutant PI3Kα. In some embodiments, the cancer has mutant PI3Kα. In some embodiments, the breast cancer has mutant PI3Kα. In some embodiments, the ovarian cancer has mutant PI3Kα.

[0624] In some embodiments, the cellular proliferative disease has PI3Kα containing at least one of the following mutations: H1047R, E542K, and E545K. In some embodiments, the cancer has PI3Kα containing at least one of the following mutations: H1047R, E542K, and E545K. In some embodiments, the breast cancer has PI3Kα containing at least one of the following mutations: H1047R, E542K, and E545K. In some embodiments, the ovarian cancer has PI3Kα containing at least one of the following mutations: H1047R, E542K, and E545K.

[0625] In some embodiments, the cancer is adenoma; carcinoma; sarcoma; glioma; glioblastoma; melanoma; multiple myeloma; or lymphoma. In some embodiments, the cancer is a colorectal adenoma or avillous colon adenoma. In some embodiments, the cancer is colon carcinoma; a carcinoma of the brain; a mammary carcinoma; basal cell carcinoma; or a squamous cell carcinoma. In some embodiments, the cancer is a neoplasia or a neoplasia of epithelial character. In some embodiments, the cancer is non-Hodgkin lymphoma. In some embodiments, the cancer is actinic keratosis; polycythemia vera; essential thrombocythemia; myelofibrosis with myeloid metaplasia; or Waldenstrom macroglobulinemia.

[0626] In some embodiments, the cellular proliferative disease displays overexpression or amplification of PI3Kα, somatic mutation of PIK3CA, germline mutations or somatic mutation of PTEN, or mutations and translocation of p85α that serve to up-regulate the p85-p110 complex. In some embodiments, the cellular proliferative disease displays overexpression or amplification of PI3Kα. In some embodiments, the cellular proliferative disease displays somatic mutation of PIK3CA. In some embodiments, the cellular proliferative disease displays germline mutations or somatic mutation of PTEN. In some embodiments, the cellular proliferative disease displays mutations and translocation of p85α that serve to up-regulate the p85-p110 complex.

Additional Disorders

[0627] In some embodiments, the PI3Kα-mediated disorder is selected from the group consisting of: polycythemia vera, essential thrombocythemia, myelofibrosis with myeloid metaplasia, asthma, COPD, ARDS, PROS (PI3K-related overgrowth syndrome), venous malformation, Loffler's syndrome, eosinophilic pneumonia, parasitic (in particular metazoan) infestation (including tropical eosinophilia), bronchopulmonary aspergillosis, polyarteritis nodosa (including Churg-Strauss syndrome), eosinophilic granuloma, eosinophil-related disorders affecting the airways occasioned by drug-reaction, psoriasis, contact dermatitis, atopic dermatitis, alopecia greata, erythema multiforme, dermatitis herpetiformis, scleroderma, vitiligo, hypersensitivity angiitis, urticaria, bullous pemphigoid, lupus erythematosus, pemphisus, epidermolysis bullosa acquisita, autoimmune haematogical disorders (*e.g.*, haemolytic anaemia, aplastic anaemia, pure red cell anaemia and idiopathic thrombocytopenia), systemic lupus erythematosus, polychondritis, Wegener granulomatosis, dermatomyositis, chronic active hepatitis, myasthenia gravis, Steven-Johnson syndrome, idiopathic sprue, autoimmune inflammatory bowel disease (*e.g.*, ulcerative colitis and Crohn's disease), endocrine opthalmopathy, Graves' disease, sarcoidosis, alveolitis, chronic hypersensitivity pneumonitis, multiple sclerosis, primary biliary cirrhosis, uveitis (anterior and posterior), interstitial lung fibrosis, psoriatic arthritis, glomerulonephritis, cardiovascular diseases, atherosclerosis, hypertension, deep venous thrombosis, stroke, myocardial infarction, unstable angina, thromboembolism, pulmonary embolism, thrombolytic diseases, acute arterial ischemia, peripheral thrombotic occlusions, and coronary artery disease, reperfusion injuries, retinopathy, such as diabetic retinopathy or hyperbaric oxygen-induced retinopathy, and conditions characterized by elevated intraocular pressure or secretion of ocular aqueous humor, such as glaucoma.

[0628] In some embodiments, the PI3Kα-mediated disorder is polycythemia vera, essential thrombocythemia, or myelofibrosis with myeloid metaplasia. In some embodiments, the PI3Kα-mediated disorder is asthma, COPD, ARDS, PROS (PI3K-related overgrowth syndrome), venous malformation, Loffler's syndrome, eosinophilic pneumonia, parasitic (in particular metazoan) infestation (including tropical eosinophilia), or bronchopulmonary aspergillosis. In some embodiments, the PI3Kα-mediated disorder is polyarteritis nodosa (including Churg-Strauss syndrome), eosinophilic granuloma, eosinophil-related disorders affecting the airways occasioned by drug-reaction, psoriasis, contact dermatitis, atopic dermatitis, alopecia greata, erythema multiforme, dermatitis herpetiformis, or scleroderma. In some embodiments, the PI3Kα-mediated disorder is vitiligo, hypersensitivity angiitis, urticaria, bullous pemphigoid, lupus erythematosus, pemphisus, epidermolysis bullosa acquisita, or autoimmune haematogical disorders (*e.g.*, haemolytic anaemia, aplastic anaemia, pure red cell anaemia and idiopathic thrombocytopenia). In some embodiments, the PI3Kα-mediated disorder is systemic lupus erythematosus, polychondritis, scleroderma, Wegener granulomatosis, dermatomyositis, chronic active hepatitis, myasthenia gravis, Steven-Johnson syndrome, idiopathic sprue, or autoimmune inflammatory bowel disease (*e.g.*, ulcerative colitis and Crohn's disease).

[0629] In some embodiments, the PI3Kα-mediated disorder is endocrine opthalmopathy, Graves' disease, sarcoidosis, alveolitis, chronic hypersensitivity pneumonitis, multiple sclerosis, primary biliary cirrhosis, uveitis (anterior and posterior), interstitial lung fibrosis, or psoriatic arthritis. In some embodiments, the PI3Kα-mediated disorder is glomerulonephritis, cardiovascular diseases, atherosclerosis, hypertension, deep venous thrombosis, stroke, myocardial infarction, unstable angina, thromboembolism, pulmonary embolism, thrombolytic diseases, acute arterial ischemia, peripheral thrombotic occlusions, and coronary artery disease, or reperfusion injuries. In some embodiments, the PI3Kα-mediated disorder is retinopathy, such as diabetic retinopathy or hyperbaric oxygen-induced retinopathy, and conditions characterized by elevated intraocular pressure or secretion of ocular aqueous humor, such as glaucoma.

Routes of Administration and Dosage Forms

[0630] The compounds and compositions, according to the methods of the present disclosure, may be administered using any amount and any route of administration effective for treating or lessening the severity of the disorder (*e.g.*, a proliferative disorder). The e^{YA}ct amount

required will vary from subject to subject, depending on the species, age, and general condition of the subject, the severity of the infection, the particular agent, its mode of administration, and the like. Compounds of the disclosure are preferably formulated in unit dosage form for ease of administration and uniformity of dosage. The expression "unit dosage form" as used herein refers to a physically discrete unit of agent appropriate for the patient to be treated. It will be understood, however, that the total daily usage of the compounds and compositions of the present disclosure will be decided by the attending physician within the scope of sound medical judgment. The specific effective dose level for any particular patient or organism will depend upon a variety of factors including the disorder being treated and the severity of the disorder; the activity of the specific compound employed; the specific composition employed; the age, body weight, general health, sex and diet of the patient; the time of administration, route of administration, and rate of excretion of the specific compound employed; the duration of the treatment; drugs used in combination or coincidental with the specific compound employed, and like factors well known in the medical arts.

[0631] Pharmaceutically acceptable compositions of this disclosure can be administered to humans and other animals orally, rectally, parenterally, intracisternally, intravaginally, intraperitoneally, topically (as by powders, ointments, or drops), bucally, as an oral or nasal spray, or the like. In certain embodiments, the compounds of the disclosure may be administered orally or parenterally at dosage levels of about 0.01 mg/kg to about 50 mg/kg and preferably from about 1 mg/kg to about 25 mg/kg, of subject body weight per day, one or more times a day, to obtain the desired therapeutic effect.

[0632] Liquid dosage forms for oral administration include, but are not limited to, pharmaceutically acceptable emulsions, microemulsions, solutions, suspensions, syrups and elixirs. In addition to the active compounds, the liquid dosage forms may contain inert diluents commonly used in the art such as, for example, water or other solvents, solubilizing agents and emulsifiers such as ethyl alcohol, isopropyl alcohol, ethyl carbonate, ethyl acetate, benzyl alcohol, benzyl benzoate, propylene glycol, 1,3-butylene glycol, dimethylformamide, oils (in particular, cottonseed, groundnut, corn, germ, olive, castor, and sesame oils), glycerol, tetrahydrofurfuryl alcohol, polyethylene glycols and fatty acid esters of sorbitan, and mixtures thereof. Besides inert diluents, the oral compositions can also include adjuvants such as wetting agents, emulsifying and suspending agents, sweetening, flavoring, and perfuming agents.

[0633] Injectable preparations, for example, sterile injectable aqueous or oleaginous suspensions may be formulated according to the known art using suitable dispersing or wetting agents and suspending agents. The sterile injectable preparation may also be a sterile injectable solution, suspension or emulsion in a nontoxic parenterally acceptable diluent or solvent, for example, as a solution in 1,3-butanediol. Among the acceptable vehicles and solvents that may be employed are water, Ringer's solution, U.S.P. and isotonic sodium chloride solution. In addition, sterile, fixed oils are conventionally employed as a solvent or suspending medium. For this purpose, any bland fixed oil can be employed including synthetic mono- or diglycerides. In addition, fatty acids such as oleic acid are used in the preparation of injectables.

[0634] Injectable formulations can be sterilized, for example, by filtration through a bacterial-retaining filter, or by incorporating sterilizing agents in the form of sterile solid compositions which can be dissolved or dispersed in sterile water or other sterile injectable medium prior to use.

[0635] In order to prolong the effect of a compound of the present disclosure, it is often desirable to slow the absorption of the compound from subcutaneous or intramuscular injection. This may be accomplished by the use of a liquid suspension of crystalline or amorphous material with poor water solubility. The rate of absorption of the compound then depends upon its rate of dissolution that, in turn, may depend upon crystal size and crystalline form. Alternatively, delayed absorption of a parenterally administered compound form is accomplished by dissolving or suspending the compound in an oil vehicle. Injectable depot forms are made by forming microencapsule matrices of the compound in biodegradable polymers such as polylactide-polyglycolide. Depending upon the ratio of compound to polymer and the nature of the particular polymer employed, the rate of compound release can be controlled. Examples of other biodegradable polymers include poly(orthoesters) and poly(anhydrides). Depot injectable formulations are also prepared by entrapping the compound in liposomes or microemulsions that are compatible with body tissues.

[0636] Compositions for rectal or vaginal administration are preferably suppositories which can be prepared by mixing the compounds of this disclosure with suitable non-irritating excipients or carriers such as cocoa butter, polyethylene glycol or a suppository wax which are solid at ambient temperature but liquid at body temperature and therefore melt in the rectum or vaginal cavity and release the active compound.

[0637] Solid dosage forms for oral administration include capsules, tablets, pills, powders, and granules. In such solid dosage forms, the active compound is mixed with at least one inert, pharmaceutically acceptable excipient or carrier such as sodium citrate or dicalcium phosphate and/or a) fillers or extenders such as starches, lactose, sucrose, glucose, mannitol, and silicic acid, b) binders such as, for example, carboxymethylcellulose, alginates, gelatin, polyvinylpyrrolidinone, sucrose, and acacia, c) humectants such as glycerol, d) disintegrating agents such as agar--agar, calcium carbonate, potato or tapioca starch, alginic acid, certain silicates, and sodium carbonate, e) solution retarding agents such as paraffin, f) absorption accelerators such as quaternary ammonium compounds, g) wetting agents such as, for example, cetyl alcohol and glycerol monostearate, h) absorbents such as kaolin and bentonite clay, and i) lubricants such as talc, calcium stearate, magnesium stearate, solid polyethylene glycols, sodium lauryl sulfate, and mixtures thereof. In the case of capsules, tablets and pills, the dosage form may also comprise buffering agents.

[0638] Solid compositions of a similar type may also be employed as fillers in soft and hard-filled gelatin capsules using such excipients as lactose or milk sugar as well as high molecular weight polyethylene glycols and the like. The solid dosage forms of tablets, dragees, capsules, pills, and granules can be prepared with coatings and shells such as enteric coatings and other coatings well known in the pharmaceutical formulating art. They may optionally contain opacifying agents and can also be of a composition that they release the active ingredient(s) only, or preferentially, in a certain part of the intestinal tract, optionally, in a delayed manner. Examples of embedding compositions that can be used include polymeric substances and waxes. Solid compositions of a similar type may also be employed as fillers in soft and hard-filled gelatin capsules using such excipients as lactose or milk sugar as well as high molecular weight polethylene glycols and the like.

[0639] The active compounds can also be in micro-encapsulated form with one or more excipients as noted above. The solid dosage forms of tablets, dragees, capsules, pills, and granules can be prepared with coatings and shells such as enteric coatings, release controlling coatings and other coatings well known in the pharmaceutical formulating art. In such solid dosage forms the active compound may be admixed with at least one inert diluent such as sucrose, lactose, or starch. Such dosage forms may also comprise, as is normal practice, additional substances other than inert diluents, *e.g.*, tableting lubricants and other tableting aids such a magnesium stearate and microcrystalline cellulose. In the case of capsules, tablets and pills, the dosage forms may also comprise buffering agents. They may optionally contain

opacifying agents and can also be of a composition that they release the active ingredient(s) only, or preferentially, in a certain part of the intestinal tract, optionally, in a delayed manner. Examples of embedding compositions that can be used include polymeric substances and waxes.

[0640] Dosage forms for topical or transdermal administration of a compound of this disclosure include ointments, pastes, creams, lotions, gels, powders, solutions, sprays, inhalants or patches. The active component is admixed under sterile conditions with a pharmaceutically acceptable carrier and any needed preservatives or buffers as may be required. Ophthalmic formulation, ear drops, and eye drops are also contemplated as being within the scope of this disclosure. Additionally, the present disclosure contemplates the use of transdermal patches, which have the added advantage of providing controlled delivery of a compound to the body. Such dosage forms can be made by dissolving or dispensing the compound in the proper medium. Absorption enhancers can also be used to increase the flux of the compound across the skin. The rate can be controlled by either providing a rate controlling membrane or by dispersing the compound in a polymer matrix or gel.

Dosage Amounts and Regimens

[0641] In accordance with the methods of the present disclosure, the compounds of the disclosure are administered to the subject in a therapeutically effective amount, *e.g.,* to reduce or ameliorate symptoms of the disorder in the subject. This amount is readily determined by the skilled artisan, based upon known procedures, including analysis of titration curves established *in vivo* and methods and assays disclosed herein.

[0642] In some embodiments, the methods comprise administration of a therapeutically effective dosage of the compounds of the disclosure. In some embodiments, the therapeutically effective dosage is at least about 0.0001 mg/kg body weight, at least about 0.001 mg/kg body weight, at least about 0.01 mg/kg body weight, at least about 0.05 mg/kg body weight, at least about 0.1 mg/kg body weight, at least about 0.25 mg/kg body weight, at least about 0.3 mg/kg body weight, at least about 0.5 mg/kg body weight, at least about 0.75 mg/kg body weight, at least about 1 mg/kg body weight, at least about 2 mg/kg body weight, at least about 3 mg/kg body weight, at least about 4 mg/kg body weight, at least about 5 mg/kg body weight, at least about 6 mg/kg body weight, at least about 7 mg/kg body weight, at least about 8 mg/kg body weight, at least about 9 mg/kg body weight, at least about 10 mg/kg body weight, at least about 15 mg/kg body weight, at least about 20 mg/kg body

weight, at least about 25 mg/kg body weight, at least about 30 mg/kg body weight, at least about 40 mg/kg body weight, at least about 50 mg/kg body weight, at least about 75 mg/kg body weight, at least about 100 mg/kg body weight, at least about 200 mg/kg body weight, at least about 250 mg/kg body weight, at least about 300 mg/kg body weight, at least about 350 mg/kg body weight, at least about 400 mg/kg body weight, at least about 450 mg/kg body weight, at least about 500 mg/kg body weight, at least about 550 mg/kg body weight, at least about 600 mg/kg body weight, at least about 650 mg/kg body weight, at least about 700 mg/kg body weight, at least about 750 mg/kg body weight, at least about 800 mg/kg body weight, at least about 900 mg/kg body weight, or at least about 1000 mg/kg body weight. It will be recognized that any of the dosages listed herein may constitute an upper or lower dosage range and may be combined with any other dosage to constitute a dosage range comprising an upper and lower limit.

[0643] In some embodiments, the therapeutically effective dosage is in the range of about 0.1 mg to about 10 mg/kg body weight, about 0.1 mg to about 6 mg/kg body weight, about 0.1 mg to about 4 mg /kg body weight, or about 0.1 mg to about 2 mg/kg body weight.

[0644] In some embodiments the therapeutically effective dosage is in the range of about 1 to 500 mg, about 2 to 150 mg, about 2 to 120 mg, about 2 to 80 mg, about 2 to 40 mg, about 5 to 150 mg, about 5 to 120 mg, about 5 to 80 mg, about 10 to 150 mg, about 10 to 120 mg, about 10 to 80 mg, about 10 to 40 mg, about 20 to 150 mg, about 20 to 120 mg, about 20 to 80 mg, about 20 to 40 mg, about 40 to 150 mg, about 40 to 120 mg or about 40 to 80 mg.

[0645] In some embodiments, the methods comprise a single dosage or administration (*e.g.*, as a single injection or deposition). Alternatively, in some embodiments, the methods comprise administration once daily, twice daily, three times daily or four times daily to a subject in need thereof for a period of from about 2 to about 28 days, or from about 7 to about 10 days, or from about 7 to about 15 days, or longer. In some embodiments, the methods comprise chronic administration. In yet other embodiments, the methods comprise administration over the course of several weeks, months, years, or decades. In still other embodiments, the methods comprise administration over the course of several weeks. In still other embodiments, the methods comprise administration over the course of several months. In still other embodiments, the methods comprise administration over the course of several years. In still other embodiments, the methods comprise administration over the course of several decades.

[0646] The dosage administered can vary depending upon known factors such as the pharmacodynamic characteristics of the active ingredient and its mode and route of administration; time of administration of active ingredient; age, sex, health and weight of the recipient; nature and extent of symptoms; kind of concurrent treatment, frequency of treatment and the effect desired; and rate of excretion. These are all readily determined and may be used by the skilled artisan to adjust or titrate dosages and/or dosing regimens.

Inhibition of Protein Kinases

[0647] According to one embodiment, the disclosure relates to a method of inhibiting protein kinase activity in a biological sample comprising the step of contacting said biological sample with a compound of this disclosure, or a composition comprising said compound. According to another embodiment, the disclosure relates to a method of inhibiting activity of a PI3K, or a mutant thereof, in a biological sample comprising the step of contacting said biological sample with a compound of this disclosure, or a composition comprising said compound. According to another embodiment, the disclosure relates to a method of inhibiting activity of PI3Kα, or a mutant thereof, in a biological sample comprising the step of contacting said biological sample with a compound of this disclosure, or a composition comprising said compound. In some embodiments, the PI3Kα is a mutant PI3Kα. In some embodiments, the PI3Kα contains at least one of the following mutations: H1047R, E542K, and E545K.

[0648] In another embodiment, the disclosure provides a method of selectively inhibiting PI3Kα over one or both of PI3Kδ and PI3Kγ. In some embodiments, a compound of the present disclosure is more than 5-fold selective over PI3Kδ and PI3Kγ. In some embodiments, a compound of the present disclosure is more than 10-fold selective over PI3Kδ and PI3Kγ. In some embodiments, a compound of the present disclosure is more than 50-fold selective over PI3Kδ and PI3Kγ. In some embodiments, a compound of the present disclosure is more than 100-fold selective over PI3Kδ and PI3Kγ. In some embodiments, a compound of the present disclosure is more than 200-fold selective over PI3Kδ and PI3Kγ. In some embodiments, the PI3Kα is a mutant PI3Kα. In some embodiments, the PI3Kα contains at least one of the following mutations: H1047R, E542K, and E545K.

[0649] In another embodiment, the disclosure provides a method of selectively inhibiting a mutant PI3Kα over a wild-type PI3Kα. In some embodiments, a compound of the present disclosure is more than 5-fold selective for mutant PI3Kα over wild-type PI3Kα. In some

embodiments, a compound of the present disclosure is more than 10-fold selective for mutant PI3Kα over wild-type PI3Kα. In some embodiments, a compound of the present disclosure is more than 50-fold selective for mutant PI3Kα over wild-type PI3Kα. In some embodiments, a compound of the present disclosure is more than 100-fold selective for mutant PI3Kα over wild-type PI3Kα. In some embodiments, a compound of the present disclosure is more than 200-fold selective for mutant PI3Kα over wild-type PI3Kα. In some embodiments, the mutant PI3Kα contains at least one of the following mutations: H1047R, E542K, and E545K.

[0650] The term "biological sample", as used herein, includes, without limitation, cell cultures or extracts thereof; biopsied material obtained from a mammal or extracts thereof; and blood, saliva, urine, feces, semen, tears, or other body fluids or extracts thereof.

[0651] Inhibition of activity of a PI3K (for example, PI3Kα, or a mutant thereof) in a biological sample is useful for a variety of purposes that are known to one of skill in the art. Examples of such purposes include, but are not limited to, blood transfusion, organ-transplantation, biological specimen storage, and biological assays.

[0652] Another embodiment of the present disclosure relates to a method of inhibiting protein kinase activity in a patient comprising the step of administering to said patient a compound of the present disclosure, or a composition comprising said compound.

[0653] According to another embodiment, the disclosure relates to a method of inhibiting activity of a PI3K, or a mutant thereof, in a patient comprising the step of administering to said patient a compound of the present disclosure, or a composition comprising said compound. In some embodiments, the disclosure relates to a method of inhibiting activity of PI3Kα, or a mutant thereof, in a patient comprising the step of administering to said patient a compound of the present disclosure, or a composition comprising said compound. In some embodiments, the PI3Kα is a mutant PI3Kα. In some embodiments, the PI3Kα contains at least one of the following mutations: H1047R, E542K, and E545K.

[0654] According to another embodiment, the present disclosure provides a method for treating a disorder mediated by a PI3K, or a mutant thereof, in a patient in need thereof, comprising the step of administering to said patient a compound according to the present disclosure or pharmaceutically acceptable composition thereof. In some embodiments, the present disclosure provides a method for treating a disorder mediated by PI3Kα, or a mutant

thereof, in a patient in need thereof, comprising the step of administering to said patient a compound according to the present disclosure or pharmaceutically acceptable composition thereof. In some embodiments, the PI3Kα is a mutant PI3Kα. In some embodiments, the PI3Kα contains at least one of the following mutations: H1047R, E542K, and E545K.

[0655] According to another embodiment, the present disclosure provides a method of inhibiting signaling activity of PI3Kα, or a mutant thereof, in a subject, comprising administering a therapeutically effective amount of a compound according to the present disclosure, or a pharmaceutically acceptable composition thereof, to a subject in need thereof. In some embodiments, the present disclosure provides a method of inhibiting PI3Kα signaling activity in a subject, comprising administering a therapeutically effective amount of a compound according to the present disclosure, or a pharmaceutically acceptable composition thereof, to a subject in need thereof. In some embodiments, the PI3Kα is a mutant PI3Kα. In some embodiments, the PI3Kα contains at least one of the following mutations: H1047R, E542K, and E545K. In some embodiments, the subject has a mutant PI3Kα. In some embodiments, the subject has PI3Kα containing at least one of the following mutations: H1047R, E542K, and E545K.

[0656] The compounds described herein can also inhibit PI3Kα function through incorporation into agents that catalyze the destruction of PI3Kα. For example, the compounds can be incorporated into proteolysis targeting chimeras (PROTACs). A PROTAC is a bifunctional molecule, with one portion capable of engaging an E3 ubiquitin ligase, and the other portion having the ability to bind to a target protein meant for degradation by the cellular protein quality control machinery. Recruitment of the target protein to the specific E3 ligase results in its tagging for destruction (*i.e.*, ubiquitination) and subsequent degradation by the proteasome. Any E3 ligase can be used. The portion of the PROTAC that engages the E3 ligase is connected to the portion of the PROTAC that engages the target protein via a linker which consists of a variable chain of atoms. Recruitment of PI3Kα to the E3 ligase will thus result in the destruction of the PI3Kα protein. The variable chain of atoms can include, for example, rings, heteroatoms, and/or repeating polymeric units. It can be rigid or flexible. It can be attached to the two portions described above using standard techniques in the art of organic synthesis.

Combination Therapies

[0657] Depending upon the particular disorder, condition, or disease, to be treated, additional therapeutic agents, that are normally administered to treat that condition, may be administered in combination with compounds and compositions of this disclosure. As used herein, additional therapeutic agents that are normally administered to treat a particular disease, or condition, are known as "appropriate for the disease, or condition, being treated."

[0658] Additionally, PI3K serves as a second messenger node that integrates parallel signaling pathways, and evidence is emerging that the combination of a PI3K inhibitor with inhibitors of other pathways will be useful in treating cancer and cellular proliferative diseases.

[0659] Accordingly, in certain embodiments, the method of treatment comprises administering the compound or composition of the disclosure in combination with one or more additional therapeutic agents. In certain other embodiments, the methods of treatment comprise administering the compound or composition of the disclosure as the only therapeutic agent.

[0660] Approximately 20-30% of human breast cancers overexpress Her-2/neu-ErbB2, the target for the drug trastuzumab. Although trastuzumab has demonstrated durable responses in some patients expressing Her2/neu-ErbB2, only a subset of these patients respond. Recent work has indicated that this limited response rate can be substantially improved by the combination of trastuzumab with inhibitors of PI3K or the PI13K/AKT pathway (Chan et al., Breast Can. Res. Treat. 91:187 (2005), Woods Ignatoski et al., Brit. J. Cancer 82:666 (2000), Nagata et al., Cancer Cell 6:117 (2004)). Accordingly, in certain embodiments, the method of treatment comprises administering the compound or composition of the disclosure in combination with trastuzumab. In certain embodiments, the cancer is a human breast cancer that overexpresses Her-2/neu-ErbB2.

[0661] A variety of human malignancies express activating mutations or increased levels of Her1/EGFR and a number of antibody and small molecule inhibitors have been developed against this receptor tyrosine kinase including tarceva, gefitinib and erbitux. However, while EGFR inhibitors demonstrate anti-tumor activity in certain human tumors (*e.g.*, NSCLC), they fail to increase overall patient survival in all patients with EGFR-expressing tumors. This may be rationalized by the fact that many downstream targets of Her1/EGFR are

mutated or deregulated at high frequencies in a variety of malignancies, including the PI3K/Akt pathway.

[0662] For example, gefitinib inhibits the growth of an adenocarcinoma cell line in *in vitro* assays. Nonetheless, sub-clones of these cell lines can be selected that are resistant to gefitinib that demonstrate increased activation of the PI3/Akt pathway. Down-regulation or inhibition of this pathway renders the resistant sub-clones sensitive to gefitinib (Kokubo et al., Brit. J. Cancer 92:1711 (2005)). Furthermore, in an *in vitro* model of breast cancer with a cell line that harbors a PTEN mutation and over-expresses EGFR inhibition of both the PI3K/Akt pathway and EGFR produced a synergistic effect (She et al., Cancer Cell 8:287-297 (2005)). These results indicate that the combination of gefitinib and PI3K/Akt pathway inhibitors would be an attractive therapeutic strategy in cancer.

[0663] Accordingly, in certain embodiments, the method of treatment comprises administering the compound or composition of the disclosure in combination with an inhibitor of Her1/EGFR. In certain embodiments, the method of treatment comprises administering the compound or composition of the disclosure in combination with one or more of tarceva, gefitinib, and erbitux. In certain embodiments, the method of treatment comprises administering the compound or composition of the disclosure in combination with gefitinib. In certain embodiments, the cancer expresses activating mutations or increased levels of Her1/EGFR.

[0664] The combination of AEE778 (an inhibitor of Her-2/neu/ErbB2, VEGFR and EGFR) and RAD001 (an inhibitor of mTOR, a downstream target of Akt) produced greater combined efficacy that either agent alone in a glioblastoma xenograft model (Goudar et al., Mol. Cancer. Ther. 4:101-112 (2005)).

[0665] Anti-estrogens, such as tamoxifen, inhibit breast cancer growth through induction of cell cycle arrest that requires the action of the cell cycle inhibitor p27Kip. Recently, it has been shown that activation of the Ras-Raf-MAP Kinase pathway alters the phosphorylation status of p27Kip such that its inhibitory activity in arresting the cell cycle is attenuated, thereby contributing to anti-estrogen resistance (Donovan, et al, J. Biol. Chem. 276:40888, (2001)). As reported by Donovan et al., inhibition of MAPK signaling through treatment with MEK inhibitor reversed the aberrant phosphorylation status of p27 in hormone refractory breast cancer cell lines and in so doing restored hormone sensitivity. Similarly,

phosphorylation of p27Kip by Aid also abrogates its role to arrest the cell cycle (Viglietto et al., Nat. Med. 8:1145 (2002)).

[0666] Accordingly, in certain embodiments, the method of treatment comprises administering the compound or composition of the disclosure in combination with a treatment for a hormone-dependent cancer. In certain embodiments, the method of treatment comprises administering the compound or composition of the disclosure in combination with tamoxifen. In certain embodiments, the cancer is a hormone dependent cancer, such as breast and prostate cancers. By this use, it is aimed to reverse hormone resistance commonly seen in these cancers with conventional anticancer agents.

[0667] In hematological cancers, such as chronic myelogenous leukemia (CML), chromosomal translocation is responsible for the constitutively activated BCR-Abl tyrosine kinase. The afflicted patients are responsive to imatinib, a small molecule tyrosine kinase inhibitor, as a result of inhibition of Abl kinase activity. However, many patients with advanced stage disease respond to imatinib initially, but then relapse later due to resistance-conferring mutations in the Abl kinase domain. *In vitro* studies have demonstrated that BCR-Abl employs the Ras-Raf kinase pathway to elicit its effects. In addition, inhibiting more than one kinase in the same pathway provides additional protection against resistance-conferring mutations.

[0668] Accordingly, in another aspect, the compounds and compositions of the disclosure are used in combination with at least one additional agent selected from the group of kinase inhibitors, such as imatinib, in the treatment of hematological cancers, such as chronic myelogenous leukemia (CML). By this use, it is aimed to reverse or prevent resistance to said at least one additional agent.

[0669] Because activation of the PI3K/Akt pathway drives cell survival, inhibition of the pathway in combination with therapies that drive apoptosis in cancer cells, including radiotherapy and chemotherapy, will result in improved responses (Ghobrial et al., CA Cancer J. Clin 55:178-194 (2005)). As an example, combination of PI3 kinase inhibitor with carboplatin demonstrated synergistic effects in both *in vitro* proliferation and apoptosis assays as well as in *in vivo* tumor efficacy in a xenograft model of ovarian cancer (Westfall and Skinner, Mol. Cancer Ther. 4:1764-1771 (2005)).

[0670] In some embodiments, the one or more additional therapeutic agents is selected from antibodies, antibody-drug conjugates, kinase inhibitors, immunomodulators, and histone

deacetylase inhibitors. Synergistic combinations with PIK3CA inhibitors and other therapeutic agents are described in, for example, Castel et al., Mol. Cell Oncol. (2014)1(3) e963447.

[0671] In some embodiments, the one or more additional therapeutic agent is selected from the following agents, or a pharmaceutically acceptable salt thereof: BCR-ABL inhibitors (see, *e.g.*, Ultimo et al. Oncotarget (2017) 8 (14) 23213-23227.): *e.g.*, imatinib, inilotinib, nilotinib, dasatinib, bosutinib, ponatinib, bafetinib, danusertib, saracatinib, PF03814735; ALK inhibitors (see, *e.g.*, Yang et al. Tumour Biol. (2014) 35 (10) 9759-67): *e.g.*, crizotinib, NVP-TAE684, ceritinib, alectinib, brigatinib, entrecinib, lorlatinib; BRAF inhibitors (see, *e.g.*, Silva et al. Mol. Cancer Res. (2014) 12, 447-463): *e.g.*, vemurafenib, dabrafenib; FGFR inhibitors (see, *e.g.*, Packer et al. Mol. Cancer Ther. (2017) 16(4) 637-648): *e.g.*, infigratinib, dovitinib, erdafitinib, TAS-120, pemigatinib, BLU-554, AZD4547; FLT3 inhibitors: *e.g.*, sunitinib, midostaurin, tanutinib, sorafenib, lestaurtinib, quizartinib, and crenolanib; MEK Inhibitors (see, *e.g.*, Jokinen et al. Ther. Adv. Med. Oncol. (2015) 7(3) 170-180): *e.g.*, trametinib, cobimetinib, binimetinib, selumetinib; ERK inhibitors: *e.g.*, ulixertinib, MK 8353, LY 3214996; KRAS inhibitors: *e.g.*, AMG-510, MRTX849, ARS-3248; Tyrosine kinase inhibitors (see, *e.g.*, Makhov et al. Mol. Cancer. Ther. (2012) 11(7) 1510-1517): *e.g.*, erlotinib, linifanib, sunitinib, pazopanib; Epidermal growth factor receptor (EGFR) inhibitors (see, *e.g.*, She et al. BMC Cancer (2016) 16, 587): gefitnib, osimertinib, cetuximab, panitumumab; HER2 receptor inhibitors (see, *e.g.*, Lopez et al. Mol. Cancer Ther. (2015) 14(11) 2519-2526): *e.g.*, trastuzumab, pertuzumab, neratinib, lapatinib, lapatinib; MET inhibitors (see, *e.g.*, Hervieu et al. Front. Mol. Biosci. (2018) 5, 86): *e.g.*, crizotinib, cabozantinib; CD20 antibodies: *e.g.*, rituximab, tositumomab, ofatumumab; DNA Synthesis inhibitors: *e.g.*, capecitabine, gemcitabine, nelarabine, hydroxycarbamide; Antineoplastic agents (see, *e.g.*, Wang et al. Cell Death & Disease (2018) 9, 739): *e.g.*, oxaliplatin, carboplatin, cisplatin; Immunomodulators: *e.g.*, afutuzumab, lenalidomide, thalidomide, pomalidomide; CD40 inhibitors: *e.g.*, dacetuzumab; Pro-apoptotic receptor agonists (PARAs): *e.g.*, dulanermin; Heat Shock Protein (HSP) inhibitors (see, *e.g.*, Chen et al. Oncotarget (2014) 5 (9). 2372-2389): *e.g.*, tanespimycin; Hedgehog antagonists (see, *e.g.*, Chaturvedi et al. Oncotarget (2018) 9 (24), 16619-16633): *e.g.*, vismodegib; Proteasome inhibitors (see, *e.g.*, Lin et al. Int. J. Oncol. (2014) 44 (2), 557-562): *e.g.*, bortezomib; PI3K inhibitors: *e.g.*, pictilisib, dactolisib, alpelisib, buparlisib, taselisib, idelalisib, duvelisib, umbralisib; SHP2 inhibitors (see, *e.g.*, Sun et al. Am. J. Cancer Res. (2019) 9 (1), 149-159:

e.g., SHP099, RMC-4550, RMC-4630); BCL-2 inhibitors (see, *e.g.*, Bojarczuk et al. Blood (2018) 133 (1), 70-80): *e.g.*, venetoclax; Aromatase inhibitors (see, *e.g.*, Mayer et al. Clin. Cancer Res. (2019) 25 (10), 2975-2987): exemestane, letrozole, anastrozole, fulvestrant, tamoxifen; mTOR inhibitors (see, *e.g.*, Woo et al. Oncogenesis (2017) 6, e385): *e.g.*, temsirolimus, ridaforolimus, everolimus, sirolimus; CTLA-4 inhibitors (see, *e.g.*, O'Donnell et al. (2018) 48, 91-103): *e.g.*, tremelimumab, ipilimumab; PD1 inhibitors (see O'Donnell, supra): *e.g.*, nivolumab, pembrolizumab; an immunoadhesin; Other immune checkpoint inhibitors (see, *e.g.*, Zappasodi et al. Cancer Cell (2018) 33, 581-598, where the term "immune checkpoint" refers to a group of molecules on the cell surface of CD4 and CD8 T cells. Immune checkpoint molecules include, but are not limited to, Programmed Death 1 (PD-1), Cytotoxic T-Lymphocyte Antigen 4 (CTLA-4), B7H1, B7H4, OX-40, CD 137, CD40, and LAG3. Immunotherapeutic agents which can act as immune checkpoint inhibitors useful in the methods of the present disclosure, include, but are not limited to, inhibitors of PD-L1, PD-L2, CTLA4, TIM3, LAG3, VISTA, BTLA, TIGIT, LAIR1, CD 160, 2B4 and/or TGFR beta): *e.g.*, pidilizumab, AMP-224; PDL1 inhibitors (see *e.g.*, O'Donnell supra): *e.g.*, MSB0010718C; YW243.55.S70, MPDL3280A; MEDI-4736, MSB-0010718C, or MDX-1105; Histone deacetylase inhibitors (HDI, see, *e.g.*, Rahmani et al. Clin. Cancer Res. (2014) 20(18), 4849-4860): *e.g.* vorinostat; Androgen Receptor inhibitors (see *e.g.*, Thomas et al. Mol. Cancer Ther. (2013) 12(11), 2342-2355): *e.g.*, enzalutamide, abiraterone acetate, orteronel, galeterone, seviteronel, bicalutamide, flutamide; Androgens: *e.g.*, fluoxymesterone; CDK4/6 inhibitors (see, *e.g.*, Gul et al. Am. J. Cancer Res. (2018) 8(12), 2359-2376): *e.g.*, alvocidib, palbociclib, ribociclib, trilaciclib, abemaciclib.

[0672] In some embodiments, the one or more additional therapeutic agent is selected from the following agents: anti-FGFR antibodies; FGFR inhibitors, cytotoxic agents; Estrogen Receptor-targeted or other endocrine therapies, immune-checkpoint inhibitors, CDK inhibitors, Receptor Tyrosine Kinase inhibitors, BRAF inhibitors, MEK inhibitors, other PI3K inhibitors, SHP2 inhibitors, and SRC inhibitors. (See Katoh, Nat. Rev. Clin. Oncol. (2019), 16:105-122; Chae, et al. Oncotarget (2017), 8:16052-16074; Formisano et al., Nat. Comm. (2019), 10:1373-1386; and references cited therein.)

[0673] The structure of the active compounds identified by code numbers, generic or trade names may be taken from the actual edition of the standard compendium *The Merck Index* or from databases, *e.g.*, Patents International (*e.g.*, IMS World Publications).

[0674] A compound of the current disclosure may also be used in combination with known therapeutic processes, for example, the administration of hormones or radiation. In certain embodiments, a provided compound is used as a radiosensitizer, especially for the treatment of tumors which exhibit poor sensitivity to radiotherapy.

[0675] A compound of the current disclosure can be administered alone or in combination with one or more other therapeutic compounds, possible combination therapy taking the form of fixed combinations or the administration of a compound of the disclosure and one or more other therapeutic compounds being staggered or given independently of one another, or the combined administration of fixed combinations and one or more other therapeutic compounds. A compound of the current disclosure can besides or in addition be administered especially for tumor therapy in combination with chemotherapy, radiotherapy, immunotherapy, phototherapy, surgical intervention, or a combination of these. Long-term therapy is equally possible as is adjuvant therapy in the context of other treatment strategies, as described above. Other possible treatments are therapy to maintain the patient's status after tumor regression, or even chemopreventive therapy, for example in patients at risk.

[0676] Those additional agents may be administered separately from an inventive compound-containing composition, as part of a multiple dosage regimen. Alternatively, those agents may be part of a single dosage form, mixed together with a compound of this disclosure in a single composition. If administered as part of a multiple dosage regime, the two active agents may be submitted simultaneously, sequentially or within a period of time from one another normally within five hours from one another.

[0677] As used herein, the term "combination," "combined," and related terms refers to the simultaneous or sequential administration of therapeutic agents in accordance with this disclosure. For example, a compound of the present disclosure may be administered with another therapeutic agent simultaneously or sequentially in separate unit dosage forms or together in a single unit dosage form. Accordingly, the present disclosure provides a single unit dosage form comprising a compound of the current disclosure, an additional therapeutic agent, and a pharmaceutically acceptable carrier, adjuvant, or vehicle.

[0678] The amount of both an inventive compound and additional therapeutic agent (in those compositions which comprise an additional therapeutic agent as described above) that may be combined with the carrier materials to produce a single dosage form will vary depending upon the host treated and the particular mode of administration. In some embodiments, compositions

of this disclosure should be formulated so that a dosage of between 0.01 - 100 mg/kg body weight/day of an inventive compound can be administered.

[0679] In those compositions which comprise an additional therapeutic agent, that additional therapeutic agent and the compound of this disclosure may act synergistically. Therefore, the amount of additional therapeutic agent in such compositions will be less than that required in a monotherapy utilizing only that therapeutic agent. In such compositions, a dosage of between 0.01 – 1,000 μg/kg body weight/day of the additional therapeutic agent can be administered.

[0680] The amount of additional therapeutic agent present in the compositions of this disclosure will be no more than the amount that would normally be administered in a composition comprising that therapeutic agent as the only active agent. In some embodiments, the amount of additional therapeutic agent in the presently disclosed compositions will range from about 50% to 100% of the amount normally present in a composition comprising that agent as the only therapeutically active agent.

[0681] The compounds of this disclosure, or pharmaceutical compositions thereof, may also be incorporated into compositions for coating an implantable medical device, such as prostheses, artificial valves, vascular grafts, stents and catheters. Vascular stents, for example, have been used to overcome restenosis (re-narrowing of the vessel wall after injury). However, patients using stents or other implantable devices risk clot formation or platelet activation. These unwanted effects may be prevented or mitigated by pre-coating the device with a pharmaceutically acceptable composition comprising a kinase inhibitor. Implantable devices coated with a compound of this disclosure are another embodiment of the present disclosure.

[0682] Any of the compounds and/or compositions of the disclosure may be provided in a kit comprising the compounds and/or compositions. Thus, in some embodiments, the compound and/or composition of the disclosure is provided in a kit.

[0683] The disclosure is further described by the following non-limiting Examples.

EXAMPLES

[0684] Examples are provided herein to facilitate a more complete understanding of the disclosure. The following examples serve to illustrate the exemplary modes of making and practicing the subject matter of the disclosure. However, the scope of the disclosure is not to

be construed as limited to specific embodiments disclosed in these examples, which are illustrative only.

[0685] As depicted in the Examples and General Schemes below, in certain exemplary embodiments, compounds are prepared according to the following general procedures. It will be appreciated that, although the general methods depict the synthesis of certain compounds of the present disclosure, the following general methods, and other methods known to one of ordinary skill in the art, can be applied to other classes and subclasses and species of each of these compounds, as described herein. Additional compounds of the disclosure were prepared by methods substantially similar to those described herein in the Examples and methods known to one skilled in the art.

[0686] In the description of the synthetic methods described below, unless otherwise stated, it is to be understood that all reaction conditions (for example, reaction solvent, atmosphere, temperature, duration, and workup procedures) are selected from the standard conditions for that reaction, unless otherwise indicated. The starting materials for the Examples are either commercially available or are readily prepared by standard methods from known materials.

List of Abbreviations

aq: aqueous
Ac: acetyl
ACN or MeCN: acetonitrile
AmF: ammonium formate
anhyd.: anhydrous
BINAP: (±)-2,2′-Bis(diphenylphosphino)-1,1′-binaphthalene
Bn: Benzyl
conc.: concentrated
DBU: 1,8-Diazabicyclo[5.4.0]undec-7-ene
DCE: Dichloroethane
DCM: Dichloromethane
DIPEA: Diisopropylamine
DMF: N,N-dimethylformamide
DMP: Dess-Martin periodinane
DMPU: N,N′-Dimethylpropyleneurea
DMSO: dimethylsulfoxide
DIPEA: diisopropylethylamine

EA or EtOAc: ethyl acetate

EDCI, EDC, or EDAC: 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide

equiv or eq: molar equivalents

Et: ethyl

HATU: 1-[Bis(dimethylamino)methylene]-1*H*-1,2,3-triazolo[4,5-*b*]pyridinium 3-oxid He^{YA}fluorophosphate

HPLC: high pressure liquid chromatography

LCMS or LC-MS: liquid chromatography-mass spectrometry

Ms: methanesulfonyl

NBS: N-bromosuccinimide

NMR: nuclear magnetic resonance

PE: petroleum ether

PMB: *p*-methoxybenzyl

rt or RT: room temperature

sat: saturated

TBS: *tert*-butyldimethylsilyl

TEA: triethylamine

Tf: trifluoromethanesulfonate

TFA: trifluoroacetic acid

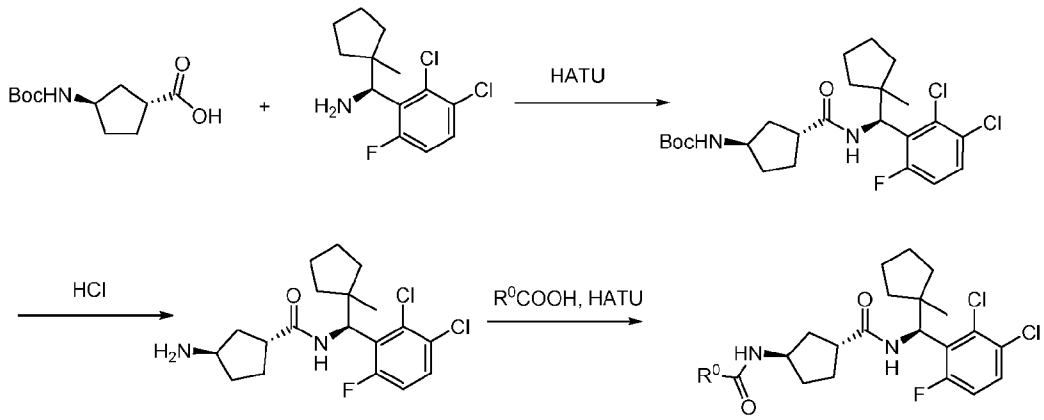
THF: tetrahydrofuran

TLC: thin layer chromatography

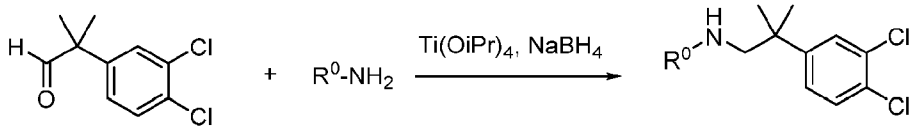
Tol: toluene

UV: ultra violet

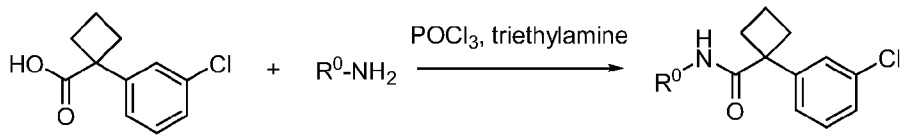
General Scheme 1



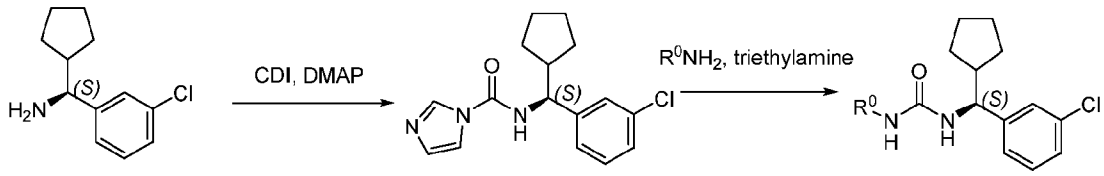
General Scheme 2



General Scheme 3



General Scheme 4



[0687] In some examples, compounds of the present disclosure were synthesized in accordance with the exemplary procedures shown in General Schemes 1, 2, 3, or 4. For the purposes of these schemes, R^0 is an illustrative variable which, when taken together with its contiguous atoms in each instance, represents a commercially available compound, a compound disclosed herein, or other starting materials readily ascertained by one of skill in the art that result in the compounds of the present dislosure. It will be appreciated by one of skill in the art that certain reagents depicted in the General Schemes can be substituted with an appropriate reagent to accomplish an equivalent or substantially similar reaction.

LC-MS and GC-MS Methods:

[0688] Method A: The analytical LC-MS system is equipped with Shimadzu LCMS-2020, PDA detector (operating at 254 nm), ELSD detector, and ESI-source operating in positive ion mode. LC conditions: the column is HALO C18 30*3.0 mm, 2 μm, operating at 40°C with 1.5 mL/min of a binary gradient consisting of water + 0.1 % formic acid (A) and acetonitrile + 0.1 % formic acid （B） . The retention time is expressed in minutes based on UV-trace at 254 nm.

Gradient: 0.01 min 5% B

1.00 min 100% B

1.40 min 100% B

1.42 min 5% B

Total run time: 1.5 min

[0689] Method B: The analytical LC-MS system is equipped with Shimadzu LCMS-2020, PDA detector (operating at 254 nm), ELSD detector, and ESI-source operating in positive ion mode. LC conditions: the column is Shim-pack Scepter C18-120,33*3.0 mm, 3 μm, operating at 30 °C with 1.5 mL/min of a binary gradient consisting of water + 5 mM NH_4HCO_3 (A) and acetonitrile (B). The retention time is expressed in minutes based on UV-trace at 254 nm.

Gradient: 0.01 min 10% B

1.20 min 95% B

1.80 min 95% B

1.82 min 10% B

Total run time: 2.0 min

[0690] Method C: The analytical LC-MS system is equipped with Shimadzu LCMS-2020, PDA detector (operating at 254 nm), ELSD detector, and ESI-source operating in positive ion mode. LC conditions: the column is HALO C18 30*3.0 mm, 2 μm, operating at 40°C with 1.5 mL/min of a binary gradient consisting of water + 0.05 % trifluoroacetic acid (A) and acetonitrile + 0.05 % trifluoroacetic acid (B). The retention time is expressed in minutes based on UV-trace at 254 nm.

Gradient: 0.01 min 5% B

1.20 min 100% B

1.80 min 100% B

1.82 min 5% B

Total run time: 2.0 min

[0691] Method D: The analytical LC-MS system is equipped with Shimadzu LCMS-2020, PDA detector (operating at 254 nm), ELSD detector, and ESI-source operating in positive ion mode. LC conditions: the column is Shim-pack ScepterC18-120,33*3.0 mm, 3 μm, operating at 30 °C with 1.5 mL/min of a binary gradient consisting of water + 6.5 mM NH_4HCO_3 +

ammonia (pH=10) (A) and acetonitrile (B). The retention time is expressed in minutes based on UV-trace at 254 nm.

Gradient: 0.01 min 10% B

1.20 min 95% B

1.80 min 95% B

1.82 min 10% B

Total run time: 2.0 min

[0692] Method E: The analytical LC-MS system is equipped with Shimadzu LCMS-2020, PDA detector (operating at 254 nm), ELSD detector, and ESI-source operating in positive ion mode. LC conditions: the column is Kinetex EVO C18 50*3.0 mm,2.6 μm, operating at 40 °C with 1.2 mL/min of a binary gradient consisting of water + 0.04% NH_4OH (A) and acetonitrile (B). The retention time is expressed in minutes based on UV-trace at 254 nm.

Gradient: 0.01 min 10% B

1.20 min 95% B

1.80 min 95% B

1.82 min 10% B

Total run time: 2.0 min

[0693] Method F: The analytical LC-MS system is equipped with Shimadzu LCMS-2020, PDA detector (operating at 254 nm), ELSD detector, and ESI-source operating in positive ion mode. LC conditions: the column is Kinetex EVO C18 50*3.0 mm, 2.6 μm, operating at 40 °C with 1.2 mL/min of a binary gradient consisting of water + 0.04% NH_4OH (A) and acetonitrile (B). The retention time is expressed in minutes based on UV-trace at 254 nm.

Gradient: 0.01 min 10% B

2.00 min 95% B

2.60 min 95% B

2.70 min 10% B

Total run time: 2.80 min

[0694] Method G: The analytical LC-MS system is equipped with Shimadzu LCMS-2020, PDA detector (operating at 254 nm), ELSD detector, and ESI-source operating in positive ion

mode. LC conditions: the column is Poroshell HPH-C18 50*3.0 mm, 4 μm, operating at 40 °C with 1.5 mL/min of a binary gradient consisting of water + 5 mM NH_4HCO_3 (A) and acetonitrile (B). The retention time is expressed in minutes based on UV-trace at 254 nm.

Gradient: 0.01 min 10% B

1.20 min 95% B

1.80 min 95% B

1.85 min 10% B

Total run time: 2.0 min

[0695] Method H: The analytical LC-MS system is equipped with Shimadzu LCMS-2020, PDA detector (operating at 254 nm), ELSD detector, and ESI-source operating in positive ion mode. LC conditions: the column is Shim-Pack-Scepter C18 33*3.0 mm, 3.0 μm, operating at 40°C with 1.2 mL/min of a binary gradient consisting of water + 0.1 % Formic acid (A) and acetonitrile + 0.07 % Formic acid (B). The retention time is expressed in minutes based on UV-trace at 254 nm.

Gradient: 0.01 min 5% B

1.30 min 95% B

1.75 min 95% B

1.80 min 5% B

Total run time: 1.85 min

[0696] Method I: The analytical LC-MS system is equipped with Shimadzu LCMS-2020, PDA detector (operating at 220/254 nm), and ESI-source operating in positive ion mode. LC conditions: the column is Kinetex EVO C18 30*2.1 mm, 5 μm, operating at 50°C with 1.5 mL/min of a binary gradient consisting of water + 0.0375% TFA (A) and acetonitrile + 0.01875% TFA (B). The retention times (t_R) are expressed in minutes based on UV-trace at 254 nm.

Gradient: 0.01 min 5% B

0.80 min 95% B

1.20 min 95% B

1.21 min 5% B

1.55 min 5% B

Total run time: 1.55 min

[0697] Method J: The analytical LC-MS system is equipped with Shimadzu LCMS-2020, PDA detector (operating at 220/254 nm), and ESI-source operating in positive ion mode. LC conditions: the column is HALO C18 30*3.0 mm, 5 μm, operating at 50°C with 2.0 mL/min of a binary gradient consisting of water + 0.0375% TFA (A) and acetonitrile + 0.01875% TFA (B). The retention times (t_R) are expressed in minutes based on UV-trace at 254 nm.

Gradient: 0.01 min 5% B

0.40 min 95% B

0.75 min 95% B

0.76 min 5% B

1.05 min 5% B

Total run time: 1.05 min

[0698] Method K: Column: Waters Acquity UPLC CSH C18, 1.8 μm, 2.1 x 30 mm at 40 °C; Gradient: 5% to 100% B in 2.0 minutes; hold 100% B for 0.7 minute; run time: 2.7 min; flow 0.9 mL/min; Eluents: A = Milli-Q H_2O + 10mM ammonium formate; pH: 3.8; Eluent B : acetonitrile (no additive); Waters UPLC system equipped with: UV Detector = Waters Acquity PDA (198-360nm), 20 pts/sec, 220 and 254nm. MS Detector Waters SQD, ESI (ES+/ES-, 120-1200 amu).

[0699] Method L: HPLC-MS method: Waters Alliance UPLC CSH C18, 3.5 μm, 4.6 x 30 mm at 40°C; 5% B for 0.2 min, 5% to 100% B in 1.8 minutes; hold 100% B for 1 minute, run time = 3.0 min, flow 3 mL/min; Eluents: A = Milli-Q H_2O + 10 mM ammonium formate pH= 3.8; B = acetonitrile. Waters Alliance HPLC system. UV Detector = Waters 2996 PDA, 198-360 nm. MS Detector = Waters ZQ 2000.

[0700] Method M: HPLC-MS method: Waters Alliance UPLC CSH C18, 3.5 μm, 4.6 x 30 mm at 40 °C; 5% B for 0.5 min, 5% to 100% B in 5.0 minutes; hold 100% B for 0.7 minute, 100% B for 1.5 min, run time = 7.0 min, flow 3 mL/min; Eluents: A = Milli-Q H_2O + 10 mM ammonium formate, pH 3.8; B = MeCN. Waters Alliance HPLC system. UV Detector = Waters 2996 PDA, 198-360 nm. MS Detector = Waters ZQ 2000.

[0701] GCMS method (method Z): The GC-MS system consists of Agilent GCMS 7890B and Detector Channel FID.

The MS detector of acquisition mode:

Start Time: 2.00 min; End Time: 11.75 min; Acquisition Mode: Scan; Interface Type: EI

Threshold: 150; Scan Speed: 1562; Start m/z: 50.00; End m/z: 600.00; MS Source: 230.00 °C; MS Quad: 150.00 °C; Solvent Cut Time: 2.00 min.

GC Parameters:

Column: HP-5MS, 30 m x 0.25 mm x 0.25 μm; Column Oven Temp: 50.0 °C; injection volume: 1 μL;

Column Flow: 1.0 ml/min; Injection temperature: 300 °C; Injection Mode: Split; Split Ratio: 20:1;

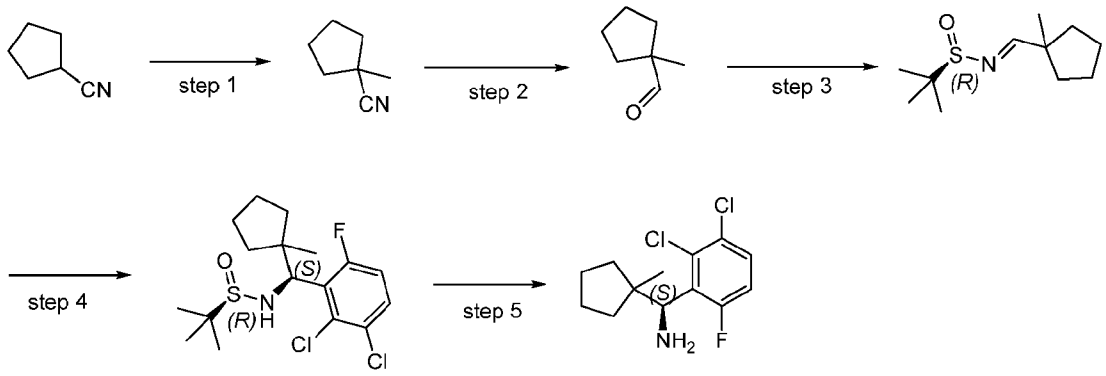
Detector temperature: 300 °C; Initial temperature: 50 °C for 0.5 min then 40 °C/min to 300 °C for 11.75 min.

Makeup Gas: He; Makeup Flow: 25.0 mL/min; H_2; Flow: 30.0 mL/min; Air Flow: 400.0 mL/min;

Final temperature: 325 °C.

Example 1

(S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methanamine



Step 1. Synthesis of 1-methylcyclopentane-1-carbonitrile

[0702] To a solution of LiHMDS (1.00 M, 1.50 L) was a solution of cyclopentanecarbonitrile (130 g, 1.37 mol) in THF (650 mL) added dropwise at -60 °C under N_2. After the addition, the reaction mixture was stirred at -60 °C for 1 hour. Then MeI (111 mL, 1.78 mol) was added dropwise at -60 °C. The reaction mixture was allowed to warm to 20 °C and stirred at 20 °C

for 12 hours. The mixture was poured into saturated aqueous NH_4Cl solution (2.00 L) and extracted with ethyl acetate (1.50 L * 2). The combined organic layer was washed with 1N HCl (1.00 L) and brine (1.50 L * 2), dried over Na_2SO_4, filtered and concentrated under reduced pressure to give 1-methylcyclopentane-1-carbonitrile (150 g, crude) as a yellow oil. ^1H NMR: (400 MHz, $CDCl_3$) δ 2.16 - 2.14 (m, 2H), 1.85 - 1.77 (m, 4H), 1.63 - 1.59 (m, 2H), 1.41 (s, 3H).

Step 2. Synthesis of 1-methylcyclopentane-1-carbaldehyde

[0703] To a solution of DIBAL-H (1.00 M in THF, 1.51 L) was added dropwise a solution of 1-methylcyclopentane-1-carbonitrile (150 g, 1.37 mol) in DCM (150 mL) at - 65 °C under N_2. The mixture was stirred at -65 °C for 1 hour and poured into saturated aqueous NH_4Cl solution (5.00 L) under stirring. The pH was adjusted to ~3 with HCl (6 N, 1.20 L), then extracted with DCM (2.00 L * 2). The combined organic layer was washed with brine (1.50 L * 2), dried over Na_2SO_4, filtered and concentrated (15 °C) under reduced pressure to give 1-methylcyclopentane-1-carbaldehyde (130 g, crude) as a colorless liquid. The crude product was used in the next step without purification.

Step 3. Synthesis of (R)-2-methyl-N-((1-methylcyclopentyl)methylene)propane-2-sulfinamide

[0704] To a mixture of 1-methylcyclopentane-1-carbaldehyde (120 g, 1.07 mol) in THF (600 mL) was added (R)-2-methylpropane-2-sulfinamide (156 g, 1.28 mol), $Ti(O^iPr)_4$ (608 g, 2.14 mol) at 20 °C. The mixture was heated to 75 °C and stirred at 75 °C for 2 hours. The mixture was poured into brine (4.00 L). The mixture was filtered, and the filtrate was washed with ethyl acetate (1.50 L * 3). The filtrate was washed with brine (2.00 L) and concentrated to give a residue. The residue was purified by column chromatography (SiO_2, petroleum ether/ethyl acetate = 10/1 to 5/1) to give (R)-2-methyl-N-((1-methylcyclopentyl)methylene)propane-2-sulfinamide (120 g, 557 mmol) as a yellow oil. ^1H NMR: (400 MHz, $CDCl_3$) δ 7.95 (s, 1H), 1.94 - 1.92 (m, 2H), 1.75 - 1.68 (m, 4H), 1.50 - 1.46 (m, 2H), 1.22 (s, 3H), 1.19 (s, 9H).

Step 4. Synthesis of (R)-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2-methylpropane-2-sulfinamide

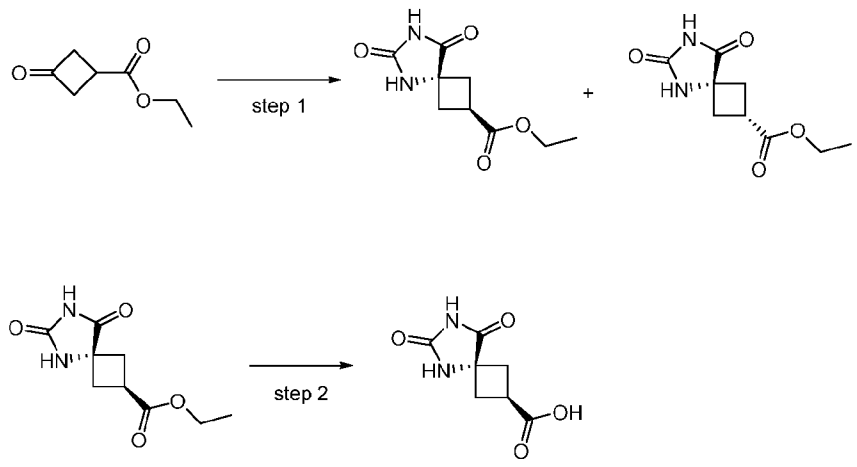
[0705] To a mixture of 1,2-dichloro-4-fluorobenzene (99.6 g, 604 mmol) in THF (1.00 L) was added dropwise n-BuLi (2.50 M in hexanes, 241 mL) at -65 °C under N_2, then the mixture was stirred at -65 °C for 0.5 hour. To the mixture was added (R)-2-methyl-N-((1-methylcyclopentyl)methylene)propane-2-sulfinamide (100 g, 464 mmol) in THF (100 mL). It was stirred at -65 °C for 1 hour. The mixture was poured into saturated aqueous NH_4Cl solution (10%, 2.00 L) and extracted with ethyl acetate (1.00 L * 2). The combined organic layers were washed with brine (1.00 L * 2) and concentrated under reduced pressure to give a residue. The residue was purified by preparative HPLC (column: Phenomenex luna C18 250 mm*100 mm, 10 μm; mobile phase A: water (formic acid) B: acetonitrile; B: 60%-80% over 25min) to give (R)-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2-methylpropane-2-sulfinamide (120 g, 316 mmol) as a yellow oil. ^{1}H NMR: (400 MHz, DMSO-d_6) δ 7.66 - 7.62 (m, 1H), 7.32 -7.27 (m, 1H), 5.13 (d, J = 8.4 Hz, 1H), 4.91 (d, J = 8.4 Hz, 1H), 1.74 - 1.62 (m, 6H), 1.39 - 1.36 (m, 1H), 1.26 - 1.22 (m, 1H), 0.97 - 0.95 (m, 12H).

[0706] Step 5. Synthesis of (S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methanamine

[0707] To a mixture of (R)-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2-methylpropane-2-sulfinamide (110 g, 289 mmol) in ethyl acetate (1.10 L) was added HCl in EtOAc (4 M, 275 mL). The mixture was stirred at 20 °C for 1 hour. The mixture was concentrated. To the residue was added H_2O (1.50 L), and it was washed with ethyl acetate (1.00 L * 2). To the aqueous layer was added saturated aqueous $NaHCO_3$ solution (800 mL) until pH = 9. The mixture was extracted with ethyl acetate (1.00 L * 2) and the combined organic layers were washed with brine (500 mL * 2), dried over Na_2SO_4, filtered and concentrated under reduced pressure to give (S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methanamine (52.23 g, 188 mmol) as a yellow oil. ^{1}H NMR: (400 MHz, DMSO-d_6) δ 7.59 - 7.56 (m, 1H), 7.27 - 7.22 (m, 1H), 4.32 (s, 1H), 2.10 (s, 2H), 1.79 - 1.59 (m, 6H), 1.29 - 1.26 (m, 1H), 1.14 - 1.11 (m, 1H), 0.86 (d, J = 2.4 Hz, 3H).

Example 2

(2r,4r)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylic acid



Step 1. Synthesis of Ethyl 6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylate

[0708] To a mixture of ethyl 3-oxocyclobutane-1-carboxylate (113 g, 791 mmol), $(NH_4)_2CO_3$ (114 g, 1.19 mol) in EtOH (1.50 L) and H_2O (500 mL) was added NaCN (38.8 g, 791 mmol) at 20 °C. The mixture was heated to 35 °C and stirred at 35 °C for 12 hours. Four such batches were combined. The reaction mixture was extracted with ethyl acetate (2.00 L * 3). The combined organic layers were dried over anhydrous Na_2SO_4, filtered and concentrated to give a white solid. It was purified by preparative HPLC (column: Phenomenex luna C18 250*50 mm * 10 μm; mobile phase A: water (0.1%TFA) B: acetonitrile; gradient: B% 10%-35% over 21 minutes). The eluent was concentrated to remove most of acetonitrile and extracted with ethyl acetate (5.00 L * 6). The combined organic layer was dried over anhydrous sodium sulfate, filtered and concentrated under vacuum. Ethyl (2r,4r)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylate (90.0 g, 411 mmol) was obtained as a white solid. ^1H NMR: (400 MHz, DMSO-*d6*) δ 10.6 (s, 1H), 8.48 (s, 1H), 8.46 (s, 1H), 4.12 - 4.05 (m, 2H), 3.25 - 3.18 (m, 1H), 2.69 - 2.65 (m, 2H), 2.41 - 2.34 (m, 2H), 1.19 (t, J = 6.8 Hz, 3H).

[0709] Ethyl (2s,4s)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylate (150 g, 66% purity, containing 30% ethyl (2r,4r)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylate) was also obtained.

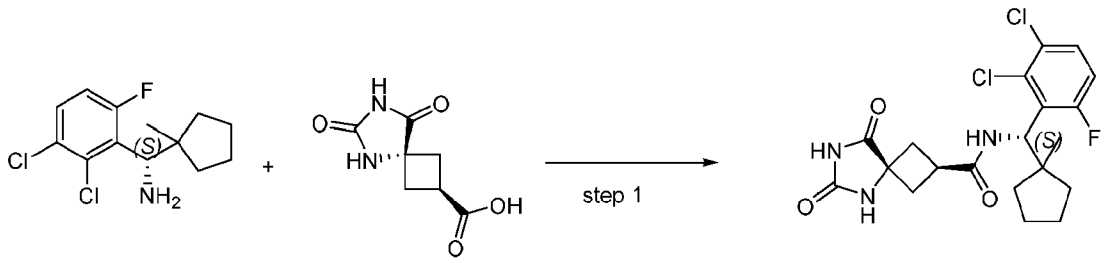
Step 2. Synthesis of (2r,4r)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylic acid

[0710] To a solution of ethyl (2r,4r)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylate (90.0 g, 424 mmol) in MeOH (450 mL) and H_2O (200 mL) was added LiOH H_2O (44.5 g, 1.06 mol) at 20 °C. The mixture was stirred at 20 °C for 1 hour. The mixture was adjusted to pH =

1 ~ 2 with 3 N HCl. The precipitate was collected by filtration. The filter cake was triturated with ethyl acetate (300 mL) at 25 °C for 2 hours and filtered. The filter cake was dried over vacuum to afford (2r,4r)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylic acid (52.0 g, 279 mmol) as a white solid. ^{1}H NMR: (400 MHz, DMSO-d_6) δ 12.33 (s, 1H), 10.60 (s, 1H), 8.48 (s, 1H), 3.16 - 3.13 (m, 1H), 2.70 - 2.64 (m, 2H), 2.35 - 2.29 (m, 2H).

Example 3

(2r,4S)-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide

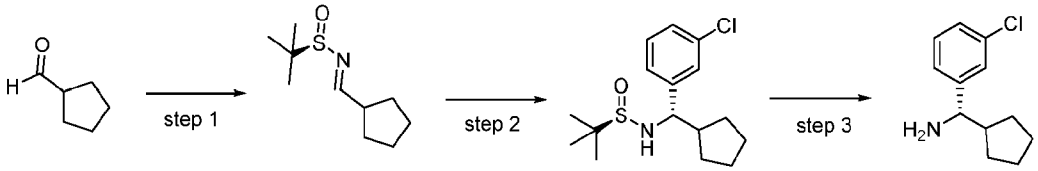


Step 1. Synthesis of (2r,4S)-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide

[0711] A mixture of (S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methanamine (40 mg, 0.14 mmol), (2r,4r)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylic acid (27 mg, 0 .14 mmol), TEA (44 mg, 0.43 mmol) and T_3P (0.14 g, 50% wt, 0.22 mmol) in DMF (1 mL) was stirred at 25 °C for 1 h. The reaction was quenched with water (5 ml) and extracted wit h ethyl acetate (10 ml*3). The combined organic layers were washed with brine (5 ml). The mixture was dried over Na_2SO_4 and concentrated. The residue was purified by C18 flash chr omatography (CH_3CN/water, 25%-60% CH_3CN over 20 min) to afford (2r,4S)-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane -2-carboxamide (43.1 mg, 97.4 µmol)as a white solid. ^{1}H NMR (400 MHz, DMSO-d6) δ 10. 57 (s, 1H), 8.62 (s, 1H), 8.23 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 9.0 Hz, 1H), 5.50 (d, J = 8.5 Hz, 1H), 3.30-3.26 (m, 1H), 2.71-2.53 (m, 2H), 2.21 (dd, J = 24.5, 11.2 Hz, 2H), 1.59 (s, 6H), 1.37 (s, 1H), 1.27 (s, 1H), 0.96 (d, J = 2.8 Hz, 3H). LC MS RT 0.928 min, $[M+H]^+$ 442, LCMS method C.

Example 4

(S)-(3-chlorophenyl)(cyclopentyl)methanamine



Step 1. Synthesis of (R)-N-(cyclopentylmethylene)-2-methylpropane-2-sulfinamide

[0712] To a solution of cyclopentanecarbaldehyde (112 g, 1.15 mol) and (R)-2-methylpropane-2-sulfinamide (167 g, 1.38 mol) in THF (560 mL) was added $Ti(O^{i}Pr)_4$ (651 g, 2.29 mol) under N_2 atmosphere at 25 °C. The mixture was heated to 75 °C and stirred at 75 °C for 2 hours. Two batches were carried out in parallel and combined in the workup. After cooling to room temperature, to the mixture was added brine (3.00 L). The suspension was filtered. The filter cake was washed with ethyl acetate (5.00 L* 2). The organic phase was separated and the aqueous phase was extracted with ethyl acetate (3.00 L). The combined organic phase was washed with brine (3.00 L), dried over Na_2SO_4, filtered and concentrated. The residue was purified by column chromatography (SiO_2, petroleum ether : ethyl acetate 1 : 0 to 10 : 1). (R)-N-(cyclopentylmethylene)-2-methylpropane-2-sulfinamide (357 g, 1.77 mol) was obtained as a yellow oil. ^{1}H NMR: (400 MHz, $CDCl_3$) δ 8.00 (d, J = 5.6 Hz, 1H), 2.98 - 2.94 (m, 1H), 1.94 - 1.83 (m, 2H), 1.77 - 1.62 (m, 6H), 1.19 (s, 9H)

Step 2. Synthesis of (R)-N-((S)-(3-chlorophenyl)(cyclopentyl)methyl)-2-methylpropane-2-sulfinamide

[0713] Two batches were carried out in parallel and combined in the workup. To a solution of (R)-N-(cyclopentylmethylene)-2-methylpropane-2-sulfinamide (160 g, 795 mmol) and 1-bromo-3-chlorobenzene (228 g, 1.19 mol) in THF (800 mL) was added n-BuLi (2.50 M in hexanes, 477 mL) dropwise at -70 ~ -60 °C under N_2. The reaction was stirred at -70 ~ -60 °C for 2 hours.

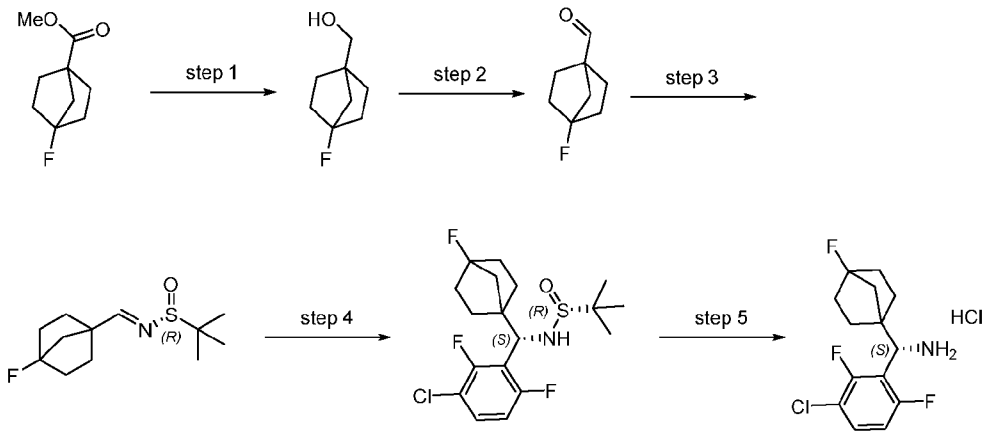
[0714] The mixture was poured into saturated NH_4Cl solution (5.00 L) and extracted with ethyl acetate (2.00 L * 3). The combined organic phase was washed with brine (2.00 L), dried over Na_2SO_4, filtered and concentrated to give a yellow oil (563 g). The crude product was used in the next step without purification. LCMS: RT 1.030 min, $[M+H]^+$ 314.1, LCMS method I.

Step 3. Synthesis of (S)-(3-chlorophenyl)(cyclopentyl)methanamine

[0715] Two equal batches were carried out in parallel. To a solution of (R)-N-((S)-(3-chlorophenyl)(cyclopentyl)methyl)-2-methylpropane-2-sulfinamide (264 g, 757 mmol) in ethyl acetate (2.60 L) was added HCl in EtOAc (4.00 M, 473 mL) at 25 °C. The mixture was stirred at 25 °C for 1 hour. A large amount of white solid was formed. The two batches of reaction mixture were combined. The suspension was concentrated to 4.0 L and the suspension was filtered. The filter cake was washed with ethyl acetate (200 mL * 2). The filter cake was partitioned between ethyl acetate (2.00 L) and saturated $NaHCO_3$ solution (2.50 L). The suspension was stirred for 10 minutes until the solid disappeared. The organic phase was separated and the aqueous phase was extracted with ethyl acetate (1.00 L *2). The combined organic phase was washed with brine (2.00 L), dried over Na_2SO_4, filtered and concentrated to give (S)-(3-chlorophenyl)(cyclopentyl)methanamine (220 g, crude) as a yellow oil. To a solution of (2R,3R)-2,3-dihydroxysuccinic acid (80.0 g, 535 mmol) in MeOH (1.30 L) was added crude (S)-(3-chlorophenyl)(cyclopentyl)methanamine (110 g, 525 mmol) at 25 °C. The reaction was stirred at 25 °C for 10 minutes, and a white solid was formed. The reaction mixture was set aside for 3 hours. The suspension was filtered. The filter cake was washed with methanol (100 mL * 2), dried under vacuum to give a solid (260 g, ee% = 98.0%). The product was diluted with methanol (1.00 L) and heated at 80 °C for 1.0 hour until the solid fully dissolved. The reaction was set aside for 72 hours. A white solid precipitated. The reaction mixture was filtered and the filter cake was washed with methanol (100 mL * 2). The filter cake was partitioned between saturated aq. $NaHCO_3$ (2.50 L) and ethyl acetate (2.00 L). The organic phase was separated. The aqueous phase was extracted with ethyl acetate : methanol = 10 : 1 (2.00 L * 2). The combined organic layers were dried over Na_2SO_4, filtered and concentrated under reduced pressure to give (S)-(3-chlorophenyl)(cyclopentyl)methanamine (94.0 g, ee% = 100%). ^{1}H NMR: (400 MHz DMSO-d_6) δ 7.40 (s, 1H), 7.32 - 7.22 (m, 3H), 3.54 (d J = 8.4 Hz, 1H), 2.18 (s, 2H), 2.00 - 1.90 (m, 1H), 1.79 - 1.71 (m, 1H), 1.60 - 1.45 (m, 3H), 1.42 - 1.30 (m, 2H), 1.25 - 1.17 (m, 1H), 1.11 – 1.02 (m, 1H).

Example 5

(S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methanamine hydrochloride



Step 1. Synthesis of (4-fluorobicyclo[2.2.1]heptan-1-yl)methanol

[0716] To a solution of methyl 4-fluorobicyclo[2.2.1]heptane-1-carboxylate (165 g, 958 mmol) in THF (1.65 L) was added dropwise $LiAlH_4$ (2.5 M in THF, 460 mL) at 0 ~ 10 °C. The mixture was warmed to 20 °C and stirred at 20 °C for 2 hours. The reaction mixture was slowly poured into 1 M aqueous HCl (5.00 L) and extracted with ethyl acetate (5.00 L * 2). The organic phase was washed with brine (5.00 L), dried over anhydrous Na_2SO_4, filtered and concentrated under vacuum to give (4-fluorobicyclo[2.2.1]heptan-1-yl)methanol (146 g, crude) as a light yellow oil. ^1H NMR (400 MHz, $CDCl_3$) δ 3.61 (s, 2H), 2.05 - 1.93 (m, 2H), 1.85 - 1.72 (m, 4H), 1.52 - 1.39 (m, 4H).

Step 2. Synthesis of 4-fluorobicyclo[2.2.1]heptane-1-carbaldehyde

[0717] To a solution of (4-fluorobicyclo[2.2.1]heptan-1-yl)methanol (150 g, 1.04 mol) in DCM (1.13 L) was added DMSO (244 mL, 3.12 mol), TEA (724 mL, 5.20 mol) at 20 °C. The mixture was cooled to 0 ~ 5 °C. SO_3 Py (745 g, 4.68 mol) was added to the mixture at 0 ~ 5 °C. The mixture was warmed to 20 °C and stirred at 20 °C for 2 hours. The mixture was poured into water (5.00 L) and extracted with DCM (5.00 L * 2). The organic phase was dried over anhydrous Na_2SO_4, filtered and concentrated under vacuum at 25 °C. The residue was dissolved in ethyl acetate (2.00 L). The organic phase was washed with 1 N aqueous HCl (1.50 L * 2), brine (1.50 L), dried over anhydrous Na_2SO_4, filtered and concentrated under vacuum to give 4-fluorobicyclo[2.2.1]heptane-1-carbaldehyde (112 g, crude) as a yellow oil. ^1H NMR (400 MHz, $CDCl_3$) δ 9.72 (s, 1H), 2.21 - 2.10 (m, 2H), 2.04 - 1.95 (m, 2H), 1.90 - 1.82 (m, 4H), 1.65 - 1.58 (m, 2H).

Step 3. Synthesis of (R)-N-((4-fluorobicyclo[2.2.1]heptan-1-yl)methylene)-2-methylpropane-2-sulfinamide

[0718] To a solution of 4-fluorobicyclo[2.2.1]heptane-1-carbaldehyde (110 g, 774 mmol), (R)-2-methylpropane-2-sulfinamide (93.8 g, 774 mmol) in THF (1.10 L) was added, followed by $Ti(O^iPr)_4$ (440 g, 1.55 mol) at 25 °C. The mixture was heated to 75 °C and stirred at 75 °C for 2 hours. The mixture was cooled to 25 °C, diluted with ethyl acetate (4.00 L) and poured into water (4.00 L). The mixture was filtered. The filtrate was separated, and the organic phase was washed with brine (3.00 L), dried over anhydrous Na_2SO_4, filtered and concentrated under vacuum. The residue was combined with another batch (which started with 20.0 g of the aldehyde) and purified by column chromatography (SiO_2, petroleum ether : ethyl acetate 1 : 0 to 10 : 1) to give (R)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-methylpropane-2-sulfinamide (150 g, 599 mmol) as a white solid. ^{1}H NMR (400 MHz, $CDCl_3$) δ 8.09 (s, 1H), 2.13 - 1.94 (m, 4H), 1.91 - 1.80 (m, 4H), 1.72 - 1.63 (m, 2H), 1.19 (s, 9H); ^{19}F NMR (376 MHz, $CDCl_3$) δ -176.81

Step 4. Synthesis of (R)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-methylpropane-2-sulfinamide

[0719] To a solution of 1-chloro-2,4-difluorobenzene (8.97 g, 60.4 mmol) in THF (114 mL) was added n-BuLi (2.50 M in hexanes, 24.1 mL) at -65 °C. The mixture was stirred at -65 °C for 0.5 hour, then a solution of (R)-N-((4-fluorobicyclo[2.2.1]heptan-1-yl)methylene)-2-methylpropane-2-sulfinamide (11.4 g, 46.4 mmol) in THF (114 mL) was added at -65 °C. The mixture was stirred at -65 °C for 2 hours. The reaction mixture was poured into saturated NH_4Cl solution (500 mL). The aqueous phase was extracted with ethyl acetate (300 mL * 2). The combined organic phase was washed with saturated brine (500 mL * 2), dried over anhydrous Na_2SO_4, filtered and concentrated in vacuum to give (R)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-methylpropane-2-sulfinamide (20.0 g, crude) as a yellow solid. LCMS RT 0.598 min, $[M+H]^+$ 394.1, LCMS method J.

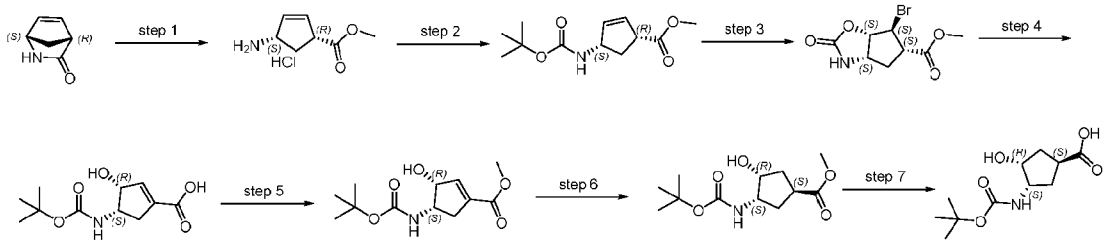
Step 5. Synthesis of (S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methanamine hydrochloride

[0720] To a solution of (R)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-methylpropane-2-sulfinamide (20.0 g, 50.7 mmol) in MeOH (100 mL) was added HCl (4.00 N in MeOH, 100 mL) at 25 °C. The mixture was

stirred at 25 °C for 1 hour. The reaction mixture was concentrated in vacuum to give the crude product. The residue was triturated with ethyl acetate (100 mL) at 20 °C for 30 minutes, filtered and the filter cake was dried under vacuum at 50 °C to give (S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methanamine hydrochloride (10.0 g, 30.6 mmol) as a white solid. LCMS: RT 0.423 min, $[M+H]^+$ 290.1, LCMS method J; ^1H NMR (400 MHz, MeOH-d4) δ 7.69 - 7.64 (m, 1H), 7.22 - 7.17 (m, 1H), 3.32 - 3.31 (m, 1H), 1.99 - 1.81 (m, 8H), 1.77 - 1.57 (m, 2H).

Example 6

(1S,3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylic acid



Step 1. Synthesis of methyl (1R,4S)-4-aminocyclopent-2-ene-1-carboxylate hydrochloride

[0721] To a solution of (1S,4R)-2-azabicyclo[2.2.1]hept-5-en-3-one (535 g, 4.90 mol) in MeOH (1605 mL) was added $SOCl_2$ (213 mL, 2.94 mol) at 0 °C and the solution was stirred at 0 °C for 2 hours. The solution was concentrated under vacuum. The crude product was triturated with MTBE (1000 mL) at 20 °C for 30 minutes to give methyl (1R,4S)-4-aminocyclopent-2-ene-1-carboxylate hydrochloride (860 g, 4.84 mol). ^{1}HNMR: (400 MHz DMSO-d6) δ 8.37 (s, 3H), 6.05-6.07 (m, 1H), 5.87-5.89 (m, 1H), 4.16 (s, 1H), 3.68-3.70 (m, 1H), 3.64 (m, 3H), 2.53-2.59 (m, 1H), 1.90-1.97 (m, 1H).

Step 2. Synthesis of methyl (1R,4S)-4-((tert-butoxycarbonyl)amino)cyclopent-2-ene-1-carboxylate

[0722] To a solution of methyl (1R,4S)-4-aminocyclopent-2-ene-1-carboxylate hydrochloride (750 g, 4.22 mol) and Boc_2O (919 g, 4.22 mol) in DCM (4.5 L) was added TEA (728 mL, 4.22 mol) at 0 °C and the solution was stirred at 25 °C for 12 hours. The reaction reaction was quenched by water (1000 mL) and extracted with dichloromethane (500 mL * 2). The combined organic layers were washed with brine (500 mL), dried over sodium sulfate,

filtered and concentrated under reduced pressure to give methyl (1R,4S)-4-((tert-butoxycarbonyl)amino)cyclopent-2-ene-1-carboxylate (1.00 kg, 4.13 mol). ^{1}HNMR: (400 MHz $CDCl_3$) δ 5.83-5.87 (m, 1H), 4.88 (s, 1H), 4.77 (s, 1H), 3.69 (s, 3H), 3.45-3.47 (m, 1 H), 2.45-2.53 (m, 1 H), 1.83-1.87 (m, 1H), 1.25 (s, 9 H).

Step 3. Synthesis of methyl (3aS,5S,6S,6aS)-6-bromo-2-oxohexahydro-2H-cyclopenta[d]oxazole-5-carboxylate

[0723] To a solution of methyl (1R,4S)-4-((tert-butoxycarbonyl)amino)cyclopent-2-ene-1-carboxylate (630 g, 2.61 mol) in THF (2.0 L) and H_2O (189 mL) was added NBS (511 g, 2.87 mol) at 0 °C and the solution was stirred at 25 °C for 12 hours. The reaction was concentrated under reduced pressure. The residue was dissolved in dichloromethane (2000 mL) and washed sequentially with HCl (500 mL, 1 M), saturated Na_2SO_3 (aq., 1000 mL) and brine (500 mL) before drying over $MgSO_4$. The organic phase was concentrated under reduced pressure to give methyl (3aS,5S,6S,6aS)-6-bromo-2-oxohexahydro-2H-cyclopenta[d]oxazole-5-carboxylate (854 g, 3.23 mol) as a white solid. ^{1}HNMR: (400 MHz $CDCl_3$) δ 6.27 (s, 1H), 5.13-5.15 (d, J = 8 Hz, 1H), 4.76 (s, 1H), 4.40-4.43 (m, 1H), 3.74 (s, 1H), 3.19-3.23 (m, 1H), 2.23-2.54 (m, 2H).

Step 4. Synthesis of (3R,4S)-4-((tert-butoxycarbonyl)amino)-3-hydroxycyclopent-1-ene-1-carboxylic acid

[0724] Two reactions were run in parallel. To a solution of methyl (3aS,5S,6S,6aS)-6-bromo-2-oxohexahydro-2H-cyclopenta[d]oxazole-5-carboxylate (375 g, 1.42 mol) in H_2O (1.6 L) and MeOH (1.6 L) was added KOH (318 g, 5.68 mol) at 0 °C and the solution was stirred at 90 °C for 12 hours. The above solution was concentrated and dissolved in THF (700 mL) and Boc_2O (309 g, 1.42 mol) was added. The solution was stirred at 20 °C for 4 h. The two reactions were combined for work up. The resulting mixture was concentrated in vacuum and then ethyl acetate (500 mL) and H_2O (400 mL) were added. The aqueous phase was separaaed and the pH was adjusted to 3 with HCl (1 M). The solution was extracted with ethyl acetate (1000 mL * 2). The combined organic layers were washed with brine (500 mL), dried over sodium sulfate, filtered and concentrated under reduced pressure to give (3R,4S)-4-((tert-butoxycarbonyl)amino)-3-hydroxycyclopent-1-ene-1-carboxylic acid (600 g, 2.47 mol) as a white solid. ^{1}HNMR (400 MHz DMSO-d6) δ 12.49 (s, 1H), 6.51 (s, 1H), 6.31-6.33

(m, 1H), 5.03 (s, 1H), 4.50 (s, 1H), 3.97-4.00 (m, 1H), 2.55-2.61 (m, 1H), 2.31-2.37 (m, 1H), 1.45 9s,9H).

Step 5. Synthesis of methyl (3R,4S)-4-((tert-butoxycarbonyl)amino)-3-hydroxycyclopent-1-ene-1-carboxylate

[0725] To a solution of (3R,4S)-4-((tert-butoxycarbonyl)amino)-3-hydroxycyclopent-1-ene-1-carboxylic acid (400 g, 1.64 mol) in MeOH (2.8 L) was added TEA (389 mL, 2.80 mol). The mixture was cooled to 0 °C and methyl chloroformate (216 mL, 2.80 mol) was added dropwise. The mixture was stirred at 0 °C for 1 hour, then stirred at 15 °C for 12 hours. The reaction mixture was concentrated under reduced pressure. The residue was diluted with DCM (1000 mL). The organic layer was washed with 1 M potassium hydrogen sulfate (aq) (500 ml * 2), saturated $NaHCO_3$ solution (500 ml * 2), dried over Na_2SO_4, filtered and concentrated under reduced pressure to give methyl (3R,4S)-4-((tert-butoxycarbonyl)amino)-3-hydroxycyclopent-1-ene-1-carboxylate (300 g, 1.10 mol) as a white solid. ^{1}HNMR: (400 MHz $CDCl_3$) δ 6.69 (s, 1H), 5.134 (d, J = 8 Hz, 1H), 4.76 (s, 1H), 4.24 (s, 1H), 3.75 (s, 3H), 2.88-2.94 (m, 1H), 2.03-2.51 (m, 2H), 1.26 (s, 9H).

Step 6. Synthesis of methyl (1S,3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylate

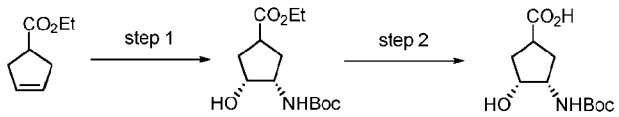
[0726] Three reactions were run in parallel. [(S,S)-(Me-DuPHOS)-Rh(COD)]BF_4 (2.36 g, 3.89 mmol) was added to a degassed solution of methyl (3R,4S)-4-((tert-butoxycarbonyl)amino)-3-hydroxycyclopent-1-ene-1-carboxylate (50 g, 194 mmol) in MeOH (250 mL). The reaction mixture was transferred to a hydrogenation bomb and after purging with N_2 and then H_2, an H_2 pressure of 2 MPa was applied and the reaction was stirred for 14 hours at 25 °C. The pressure was released and the bomb was purged with N_2. Concentration of the reaction mixture gave a residue which was dissolved in DCM (500 mL). Addition of silica (150 g) with stirring removed the catalyst from the reaction and filtration and concentration of the organic solution gave methyl (1S,3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylate (150 g, 501 mmol). HNMR: (400 MHz $CDCl_3$) δ 4.81 (s, 1H), 4.28 (s, 1H), 3.67 (s, 3H), 3.08-3.15 (m, 1H), 2.07-2.27 (m, 1H), 2.02-2.05 (m, 2H), 1.84-1.86 (m, 2H), 1.44 (s, 9H).

Step 7. Synthesis of Synthesis of (1S,3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylic acid

[0727] To a solution of methyl (1S,3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylate (170 g, 655 mmol) in MeOH (200 mL) and H_2O (200 mL) was added $LiOH.H_2O$ (33.0 g, 786 mmol) at 20 °C and the suspension was stirred at 20 °C for 12 hours. After concentration in vacuo, the pH of the solution was adjusted to 4 with citric acid and it was extracted with ethyl acetate (100.0 mL * 3). The combined organic layers were washed with brine (10.0 mL), dried over sodium sulfate, filtered and concentrated under reduced pressure. The crude product was triturated with petroleum ether : MTBE 3 :1 (200 mL) at 20 °C for 30 minutes to give (1S,3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylic acid (93.5 g, 379 mmol). The mother liquor was purified by column chromatography (SiO_2, petroleum ether/ethyl acetate 5/1 to 0/1) to give more (1S,3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylic acid (18.0 g, 72.9 mmol). ^{1}HNMR: (400 MHz $CDCl_3$) δ 5.11 (s, 1H), 4.25 (s, 1H), 4.00 (s, 1H), 3.11 (s, 1H), 2.24-2.32 (m, 1H), 1.91-2.09 (m, 2H), 1.82-1.88 (s, 1H), 1.43 (s, 9H).

Example 7

(3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylic acid



Step 1. Synthesis of ethyl (3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylate

[0728] To a mixture of $BocNH_2$ (98.4 g, 840 mmol) in n-propanol (690 mL) was added NaOH (0.5 M in water, 949 mL), tert-butyl hypochlorite (88.23 g, 813 mmol) at 25 °C. The mixture was stirred at 25 °C for 30 minutes. A solution of ethyl cyclopent-3-ene-1-carboxylate (38.0 g, 271 mmol) and $(DHQD)_2AQN$ (4.45 g, 5.42 mmol) in n-propanol (450 mL) was added, followed by $K_2[OsO_2(OH)_4]$ (2.00 g, 5.42 mmol) in aqueous NaOH solution (0.5 M, 152 mL) at 25 °C. The mixture was stirred at 25 °C for 12 hours. The mixture was poured into H_2O (2.00 L) with stirring. The aqueous phase was extracted with ethyl acetate (1.00 L * 3). The combined organic phase was dried over Na_2SO_4, filtered and concentrated under reduced pressure. The residue was purified by column chromatography (SiO_2, petroleum ether : ethyl acetate 30 : 1 to 0 : 1) and the fraction was concentrated under reduced pressure. The crude product was purified by preparative HPLC. The combined

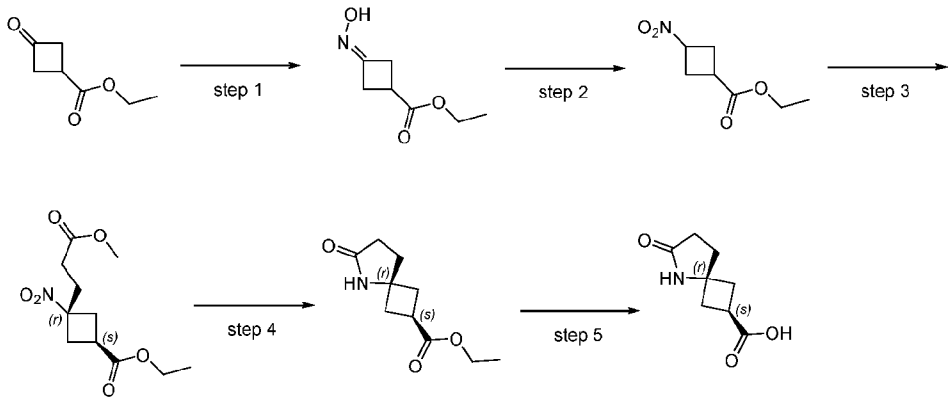
fractions were concentrated and the pH was adjusted to 7 with saturated aqueous $NaHCO_3$ solution. The solution was extracted with ethyl acetate (1.00 L * 3). The combined organic layer was washed with brine (500 mL * 2), dried over Na_2SO_4, filtered and concentrated under reduced pressure to give ethyl (3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylate (42.0 g, 152 mmol) as a yellow oil. ^1H NMR (400 MHz, $CDCl_3$) δ 4.89 (d, J = 6.4 Hz, 1H), 4.28 (s, 1H), 4.20 - 4.08 (m, 2H), 4.05 - 3.90 (m, 1H), 3.14 - 3.01 (m, 1H), 2.27 - 2.20 (m, 1H), 2.15 - 1.98 (m, 2H), 1.89 - 1.81 (m, 1H), 1.45 (s, 9H), 1.32 - 1.21 (m, 3H).

Step 2. Synthesis of (3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylic acid

[0729] This step was done similarly to step 7 in Example 6.

Example 8

(2s,4r)-6-oxo-5-azaspiro[3.4]octane-2-carboxylic acid and (2r,4s)-6-oxo-5-azaspiro[3.4]octane-2-carboxylic acid



Step 1. Synthesis of ethyl 3-(hydroxyimino)cyclobutane-1-carboxylate

[0730] To a solution of ethyl 3-oxocyclobutane-1-carboxylate (150 g, 1.06 mol) in EtOH (1.50 L) was added NH_2OH HCl (90.0 g, 1.30 mol) and NaOAc (106 g, 1.29 mol) at 20 °C. The reaction mixture was heated to 90 °C and stirred at 90 °C for 15 hours. The reaction mixture was filtered and the filtrate was concentrated under reduced pressure. The residue was diluted with H_2O (1.00 L) and extracted with ethyl acetate (1.00 L * 3). The combined organic layers were washed with brine (500 mL * 3), dried over Na_2SO_4 and concentrated under reduced pressure. The residue was purified by column chromatography (silica gel,

petroleum ether : ethyl acetate 30 : 1 to 1 : 1) to give ethyl 3-(hydroxyimino)cyclobutane-1-carboxylate (155 g, 986 mmol) as a colorless oil. ^{1}H NMR: (400 MHz, $CDCl_3$) δ 8.36 (br s, 1H), 4.18 (q, J = 7.2 Hz, 2H), 3.21 - 3.16 (m, 5H), 1.28 (t, J = 7.2 Hz, 3H).

Step 2. Synthesis of ethyl 3-nitrocyclobutane-1-carboxylate

[0731] Two batches were carried out in parallel. To a mixture of ethyl 3-(hydroxyimino)cyclobutane-1-carboxylate (100 g, 636 mmol) in acetonitrile (600 mL) were Na_2HPO_4 (452 g, 3.18 mol) and urea-hydrogen peroxide (91.5 g, 973 mmol) added at 20 °C, then to the mixture was added dropwise a solution of TFAA (266 mL, 1.91 mol) in acetonitrile (400 mL) at 30 ~ 40 °C. The mixture was heated to 80 °C and stirred at 80 °C for 1 hour. The two batches were worked up together. The reaction mixture was poured into H_2O (3.00 L) and extracted with ethyl acetate (1.50 L * 2). The combined organic layers were washed by Na_2SO_3 solution (10%, 1.50 L * 2), brine (1.00 L * 2), concentrated under reduced pressure to give ethyl 3-nitrocyclobutane-1-carboxylate (130 g, 751 mmol) as a yellow oil. ^{1}H NMR: (400 MHz, $CDCl_3$) δ 5.11 - 4.82 (m, 1H), 4.22 - 4.16 (m, 2H), 3.44 - 3.25 (m, 1H), 2.97 - 2.80 (m, 4H), 1.32 - 1.25 (m, 3H).

Step 3. Synthesis of ethyl (1s,3r)-3-(3-methoxy-3-oxopropyl)-3-nitrocyclobutane-1-carboxylate

[0732] To a mixture of ethyl 3-nitrocyclobutane-1-carboxylate (120 g, 693 mmol) in acetonitrile (1.20 L) was added methyl acrylate (246 mL, 2.73 mol) and DBU (104 mL, 693 mmol) dropwise at 0 ~ 10 °C. The mixture was warmed to 20 °C and stirred for 2 hours. The reaction mixture was quenched with aqueous NH_4Cl solution (10%, 3.00 L) and extracted with ethyl acetate (2.00 L * 2). The combined organic layers were washed by brine (1.50 L * 2) and concentrated under reduced pressure The residue was purified by preparative HPLC (column: Welch Ultimate XB-CN 250 * 50 mm, 10 μm; mobile phase A: hexane, mobile phase B: EtOH; gradient: 7% B isocratic) to give ethyl (1s,3r)-3-(3-methoxy-3-oxopropyl)-3-nitrocyclobutane-1-carboxylate

[0733] (38.0 g) as a yellow oil. ^{1}H NMR: (400 MHz, $CDCl_3$) δ 4.21 - 4.12 (m, 2H), 3.69 (s, 3H), 3.26 - 3.18 (m, 1H), 3.09 - 3.03 (m, 2H), 2.64 - 2.59 (m, 2H), 2.48 - 2.44 (m, 2H), 2.31 - 2.27 (m, 2H), 1.28 (t, J = 7.2 Hz, 3H).

Step 4. Synthesis of ethyl (2s,4r)-6-oxo-5-azaspiro[3.4]octane-2-carboxylate

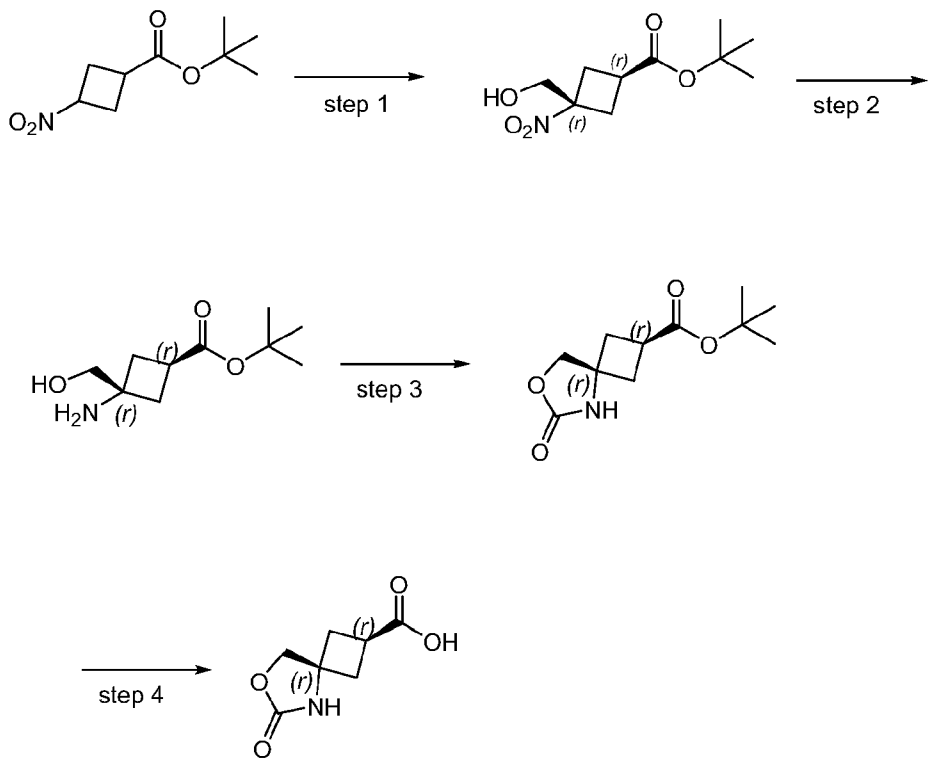
[0734] To a mixture of compound ethyl (1s,3r)-3-(3-methoxy-3-oxopropyl)-3-nitrocyclobutane-1-carboxylate (38.0 g, 147 mmol) in EtOH (570 mL) was added acetic acid (83.8 mL, 1.47 mol) at 20 °C, then iron powder (40.9 g, 733 mmol) was added to the mixture in portions at 50 °C. The mixture was stirred at 50 °C for 12 hours. The mixture was cooled to 25 °C. To the mixture was added H_2O (500 mL) and it was filtered. The filtrate was concentrated to remove EtOH. Then the mixture was extracted with ethyl acetate (500 mL * 2). The combined organic layers were washed with brine (500 mL * 2), aqueous $NaHCO_3$ solution (10%, 500 mL), brine (500 mL * 2), concentrated under reduced pressure to give ethyl (2s,4r)-6-oxo-5-azaspiro[3.4]octane-2-carboxylate (25.0 g, 127 mmol) as a yellow solid. ^{1}H NMR: (400 MHz, DMSO-d_6) δ 8.15 (s, 1H), 4.10 - 4.02 (m, 2H), 3.04 - 2.99 (m, 1H), 2.41 - 2.32 (m, 4H), 2.11 - 2.09 (m, 2H), 2.04 - 1.91 (m, 2H), 1.20 - 1.16 (m, 3H).

Step 5. Synthesis of (2s,4r)-6-oxo-5-azaspiro[3.4]octane-2-carboxylic acid

[0735] To a mixture of compound ethyl (2s,4r)-6-oxo-5-azaspiro[3.4]octane-2-carboxylate (25.0 g, 127 mmol) in MeOH (225 mL) was added a solution of NaOH (15.2 g, 380 mmol) in H_2O (75.0 mL). The mixture was stirred at 20 °C for 12 hours. The mixture's pH was adjusted to 4 with HCl (4 N). The solution was concentrated to remove MeOH, then the mixture was filtered and the filter cake was dried over vacuum (part 1). The filtrate was concentrated. To the residue was added MeOH (100 mL) and the suspension was filtered. The filtrate was concentrated and the residue was purified by prep-HPLC (column: Phenomenex Luna C18 (250*80 mm*15 μm); mobile phase A: water; mobile phase B: acetonitrile; gradient: 1%-20% B over 20 minutes) to give more product (part 2). Part 1 and part 2 were combined and to give (2s,4r)-6-oxo-5-azaspiro[3.4]octane-2-carboxylic acid (15.5 g, 91.4 mmol) as a yellow amorphous solid. ^{1}H NMR: (400 MHz, DMSO-d_6) δ 12.17 (s, 1H), 7.98 (s, 1H), 2.79 - 2.70 (m, 1H), 2.29 - 2.20 (m, 4H), 2.14 - 2.08 (m, 4H).

Example 9

(2r,4r)-6-oxo-7-oxa-5-azaspiro[3.4]octane-2-carboxylic acid



Step 1. Synthesis of tert-butyl (1r,3r)-3-(hydroxymethyl)-3-nitrocyclobutane-1-carboxylate

[0736] To a solution of tert-butyl 3-nitrocyclobutane-1-carboxylate (81.0 g, 403 mmol) in acetonitrile (810 mL) was added (HCHO)n (48.6 g) at 25 °C. To the mixture was added TEA (57.2 mL, 411 mmol) dropwise at 0 °C. The mixture was stirred at 25 °C for 12 hours. The mixture was poured into water (2.00 L) and extracted with ethyl acetate (1.00 L * 3). The combined organic layer was washed with brine (1.00 L), dried over Na_2SO_4, filtered and concentrated. The residue was purified by column chromatography (silica gel, petroleum ether/ethyl acetate 1/0 to 10/1) to give tert-butyl (1r,3r)-3-(hydroxymethyl)-3-nitrocyclobutane-1-carboxylate (22.4 g, 96.8 mmol) as a white solid. The other isomer is tert-butyl (1s,3s)-3-(hydroxymethyl)-3-nitrocyclobutane-1-carboxylate (49.2 g, 213 mmol).

[0737] tert-butyl (1r,3r)-3-(hydroxymethyl)-3-nitrocyclobutane-1-carboxylate ^{1}H NMR: (400 MHz, $CDCl_3$) δ 4.10 (d, J = 6.4 Hz, 2H), 3.27 - 3.16 (m, 1H), 3.03 - 2.93 (m, 2H), 2.68 - 2.58 (m, 2H), 2.26 (t, J = 6.6 Hz, 1H), 1.47 (s, 9H).

[0738] tert-butyl (1s,3s)-3-(hydroxymethyl)-3-nitrocyclobutane-1-carboxylate ^{1}H NMR: (400 MHz, $CDCl_3$) δ 4.03 (d, J = 6.4 Hz, 2H), 3.00 - 2.91 (m, 2H), 2.88 - 2.78 (m, 1H), 2.64 - 2.56 (m, 2H), 2.41 (t, J = 6.6 Hz, 1H), 1.46 (s, 9H).

Step 2. Synthesis of tert-butyl (1r,3r)-3-amino-3-(hydroxymethyl)cyclobutane-1-carboxylate

[0739] To a mixture of tert-butyl (1r,3r)-3-(hydroxymethyl)-3-nitrocyclobutane-1-carboxylate (38.5 g, 166 mmol) in isopropanol (400 mL) was added Raney Ni (8.00 g) under N_2 at 25 °C. The mixture was degassed under vacuum and purged with H_2 3 times. The mixture was heated to 70 °C and stirred at 70 °C under H_2 (50 psi) for 12 hours. The mixture was filtered and the filtrate was concentrated to give tert-butyl (1r,3r)-3-amino-3-(hydroxymethyl)cyclobutane-1-carboxylate (33.0 g, crude) as an off-white solid. ^{1}H NMR: (400 MHz, $CDCl_3$) δ 3.47 (s, 2H), 3.13 - 2.98 (m, 1H), 2.32 - 2.27 (m, 2H), 2.09 - 1.96 (m, 2H), 1.43 (s, 9H).

Step 3. Synthesis of tert-butyl (2r,4r)-6-oxo-7-oxa-5-azaspiro[3.4]octane-2-carboxylate

[0740] To a solution of compound tert-butyl (1r,3r)-3-amino-3-(hydroxymethyl)cyclobutane-1-carboxylate (33.0 g, 164 mmol) in THF (330 mL) was added TEA (48.7 mL, 350 mmol) at 25 °C. To the mixture was added a solution of triphosgene (17.3 g, 58.4 mmol) in THF (120 mL) dropwise at -10 °C and the mixture was stirred at -10 °C for 0.5 hour. The reaction mixture was warmed to 25 °C and stirred for 2 hours. The mixture was poured into cold water (1.50 L) and extracted with ethyl acetate (1.00 L * 3). The combined organic layer was washed with brine (1.00 L), dried over Na_2SO_4, filtered and concentrated. The residue was purified by column chromatography (silica gel, petroleum ether/ethyl acetate 1/0 to 5/1) to give tert-butyl (2r,4r)-6-oxo-7-oxa-5-azaspiro[3.4]octane-2-carboxylate (27.6 g, 121 mmol) as a light yellow solid. ^{1}H NMR: (400 MHz, $CDCl_3$) δ 6.78 (s, 1H), 4.47 (s, 2H), 2.90 - 2.84 (m, 1H), 2.66 - 2.56 (m, 2H), 2.51 - 2.44 (m, 2H), 1.46 (s, 9H).

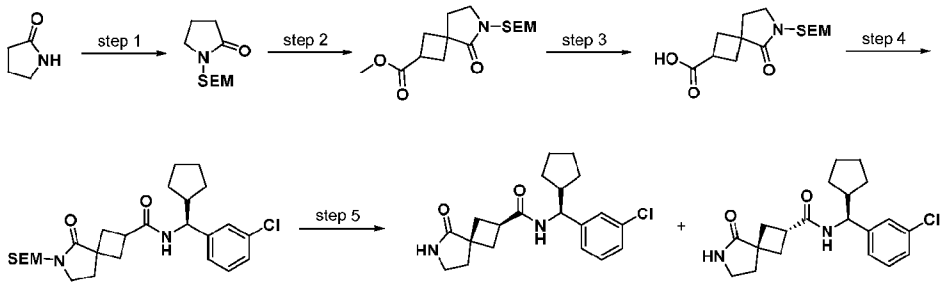
Step 4. Synthesis of (2r,4r)-6-oxo-7-oxa-5-azaspiro[3.4]octane-2-carboxylic acid

[0741] To tert-butyl (2r,4r)-6-oxo-7-oxa-5-azaspiro[3.4]octane-2-carboxylate (25.6 g, 113 mmol) was added TFA (250 mL, 3.38 mol) at 0 °C. The mixture was stirred at 25 °C for 6 hours. The reaction mixture was concentrated. The residue was triturated with petroleum ether/ethyl acetate 1/1 (100 mL) at 25 °C for 0.5 hour. The mixture was filtered and the filter

cake was dried under vacuum. To the solid was added water (250 mL) and it was lyophilized to give (2r,4r)-6-oxo-7-oxa-5-azaspiro[3.4]octane-2-carboxylic acid (18.0 g, 99.6 mmol) an off-white amorphous solid. ^{1}H NMR: (400 MHz, DMSO-d_6) δ 12.27 (br s, 1 H), 8.21 (s, 1H), 4.28 (s, 2H), 2.94 - 2.80 (m, 1H), 2.48 - 2.36 (m, 4H).

Example 10

(2r,4S)-N-((S)-(3-chlorophenyl)(cyclopentyl)methyl)-5-oxo-6-azaspiro[3.4]octane-2-carboxamide and (2s,4R)-N-((S)-(3-chlorophenyl)(cyclopentyl)methyl)-5-oxo-6-azaspiro[3.4]octane-2-carboxamide



Step 1. Synthesis of 1-((2-(trimethylsilyl)ethoxy)methyl)pyrrolidin-2-one

[0745] To a mixture of pyrrolidin-2-one (5 g, 0.059 mol) in THF (100 mL) was added NaH (1.69 g, 0.07 mol) in portions at 0 °C under a nitrogen atmosphere. The mixture was stirred for 1 h at 0 °C prior to the addition of (2-(chloromethoxy) ethyl) trimethylsilane (11.8 g, 0.07 mol) dropwise at 0 °C. The mixture was stirred for 1 h at room temperature. The reaction was quenched with saturated NH_4Cl (aq.) and the aqueous phase was extracted with ethyl acetate (150 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by silica gel chromatography (100 g column; eluting with petroleum ether : ethyl acetate 5 : 1) to give 1-((2-(trimethylsilyl) ethoxy) methyl) pyrrolidin-2-one (4.0 g, 0.019 mol) as a yellow oil. ^{1}H NMR (400 MHz, DMSO-d6) δ 4.59 (s, 2H), 3.50-3.34 (m, 4H), 2.28 (t, J = 8.0 Hz, 2H), 2.04-1.82 (m, 2H), 0.92-0.79 (m, 2H), 0.00 (s, 9H).

Step 2. Synthesis of methyl 5-oxo-6-((2-(trimethylsilyl)ethoxy)methyl)-6-azaspiro[3.4]octane-2-carboxylate

[0746] To a mixture of 1-((2-(trimethylsilyl) ethoxy) methyl) pyrrolidin-2-one (5.0 g, 0.023 mol) in THF (100 mL) was added LDA (24.4 mL, 2 M in THF, 0.049 mol) dropwise at -78

°C under a nitrogen atmosphere. The mixture was stirred for 1 h at -78°C prior to the addition of methyl 3-bromo-2-(bromomethyl) propanoate (6.0 g, 0.023 mol) dropwise at -78 °C. The mixture was then stirred for 1 h at room temperature. The reaction was quenched with saturated NH_4Cl (aq.) and the aqueous phase was extracted with ethyl acetate (100 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, B: Acetonitrile; gradient: 30% to 80% B in 10 min; detector: UV 220 nm to afford methyl 5-oxo-6-((2-(trimethylsilyl) ethoxy) methyl)-6-azaspiro [3.4] octane-2-carboxylate (200 mg, 0.64 mmol). LCMS RT 1.202 min, $[M+H]^+$ 314.2, LCMS method C.

Step 3. Synthesis of 5-oxo-6-((2-(trimethylsilyl)ethoxy)methyl)-6-azaspiro[3.4]octane-2-carboxylic acid

[0747] A mixture of methyl 5-oxo-6-((2-(trimethylsilyl) ethoxy) methyl)-6-azaspiro [3.4] octane-2-carboxylate (190 mg, 0.61 mmol) and NaOH (72.7 mg, 1.82 mmol) in MeOH/H_2O (1:1, 3 mL) was stirred for 1 h at room temperature. Concentration in vacuo gave the sodium salt of 5-oxo-6-((2-(trimethylsilyl)ethoxy)methyl)-6-azaspiro[3.4]octane-2-carboxylic acid (160 mg, 0.50 mmol) as a yellow oil. LCMS RT 0.655 min, $[M+H]^+$ 300.2, LCMS method B.

Step 4. Synthesis of (S)-N-((3-chlorophenyl)(cyclopentyl)methyl)-5-oxo-6-((2-(trimethylsilyl)ethoxy)methyl)-6-azaspiro[3.4]octane-2-carboxamide

[0748] A mixture of 5-oxo-6-((2-(trimethylsilyl) ethoxy) methyl)-6-azaspiro [3.4] octane-2-carboxylic acid (150 mg, 501 μmol), (S)-(3-chlorophenyl) (cyclopentyl)methanamine (105 mg, 501 μmol), DIEA (194 mg, 1.50 mmol) and HATU (381 mg, 1.00 mmol) in DMF (3 mL) was stirred for 1 h at room temperature. The reaction mixture was diluted with water (20 mL), and the aqueous phase was extracted with ethyl acetate (30 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by preparative HPLC (column: Xselect CSH C18 OBD Column 30*150 mm, 5 μm; mobile phase A: water (0.05%TFA), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 66% B to 75% B in 9 min, then 75% B; wavelength: 254/220 nm; RT: 7.15 min) to give (S)-N-((3-

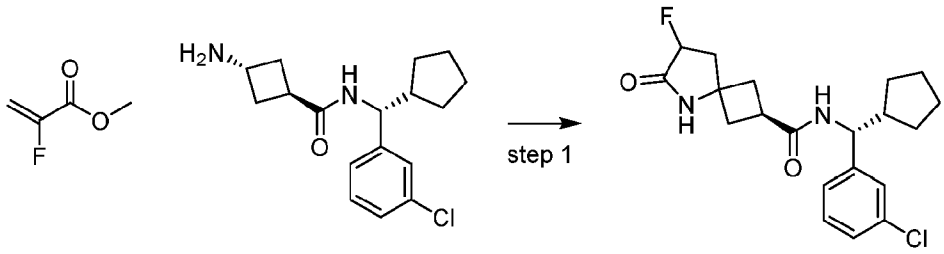
chlorophenyl) (cyclopentyl)methyl)-5-oxo-6-((2-(trimethylsilyl) ethoxy) methyl)-6-azaspiro [3.4] octane-2-carboxamide (70 mg, 0.14 mmol) as an off-white amorphous solid. LCMS RT 1.402 min, $[M+H]^+$ 491.40, LCMS method B.

[0749] Step 5. Synthesis of (2r,4S)-N-((S)-(3-chlorophenyl)(cyclopentyl)methyl)-5-oxo-6-azaspiro[3.4]octane-2-carboxamide and (2s,4R)-N-((S)-(3-chlorophenyl)(cyclopentyl)methyl)-5-oxo-6-azaspiro[3.4]octane-2-carboxamide

[0750] A mixture of (S)-N-((3-chlorophenyl) (cyclopentyl)methyl)-5-oxo-6-((2-(trimethylsilyl) ethoxy) methyl)-6-azaspiro [3.4] octane-2-carboxamide (50 mg, 0.10 mmol) in TFA (2 mL) was stirred for 1 h at room temperature. The mixture was concentrated in vacuo. Then the residue was dissolved in MeOH (1 mL). Ethylenediamine (61 mg, 1.0 mmol) was added, and the solution was stirred for 2 h at 80 °C. After concentration in vacuo, the resulting crude material was purified by preparative HPLC (column: CHIRALPAK IC, 2*25 cm, 5 μm; mobile phase A: hexane, mobile phase B: EtOH; flow rate: 20 mL/min; gradient: 20% B; wavelength: 220/254 nm; RT1 (min): 9.15; RT2 (min): 14.23; sample solvent: EtOH; injection volume: 1.35 mL), then further purified by chiral preparative HPLC (column: DZ-CHIRALPAK ID-3, 4.6*50 mm, 3.0 μm; mobile phase: Hexane : EtOH 80 : 20; flow rate: 1 mL/min; gradient: isocratic; injection volume: 5 mL) to give one isomer (1 mg, 3 μmol) as an off-white amorphous solid. LCMS RT 1.496 min, $[M+H]^+$ 361.2, LCMS method F; 1H NMR (400 MHz, DMSO) δ 1.08 (dq, J = 17.0, 8.1 Hz, 1H), 1.27 (d, J = 24.3 Hz, 3H), 1.37-1.67 (m, 5H), 1.80 (s, 1H), 1.95-2.07 (m, 2H), 2.31 (p, J = 8.8 Hz, 2H), 2.50 (s, 1H), 2.52 (s, 1H), 2.74 (dd, J = 14.4, 3.8 Hz, 1H), 3.04-3.17 (m, 2H), 4.58 (dd, J = 10.5, 8.6 Hz, 1H), 5.36 (s, 1H), 5.59 (s, 1H), 7.24-7.38 (m, 3H), 7.45 (d, J = 1.9 Hz, 1H), 7.61 (s, 1H), 8.49 (d, J = 8.7 Hz, 1H). The other isomer (1 mg, 3 μmol) was also obtained as an off-white amorphous solid. LCMS RT 1.497 min, $[M+H]^+$ 361.2, LCMS method F; 1H NMR (400 MHz, DMSO) δ 1.10 (dd, J = 12.5, 8.3 Hz, 1H), 1.27 (dt, J = 20.7, 6.5 Hz, 2H), 1.37-1.76 (m, 5H), 1.83 (s, 1H), 2.01 (td, J = 15.5, 14.9, 10.7 Hz, 2H), 2.13-2.4 (m, 2H), 2.50 (s, 1H), 2.52 (s, 1H), 2.73 (dd, J = 14.4, 3.8 Hz, 1H), 3.01-3.17 (m, 2H), 4.55 (dd, J = 10.5, 8.6 Hz, 1H), 5.35 (s, 1H), 5.61 (s, 1H), 7.23-7.38 (m, 3H), 7.44 (d, J = 1.7 Hz, 1H), 7.60 (s, 1H), 8.50 (d, J = 8.6 Hz, 1H).

Example 11

N-((R)-(3-chlorophenyl)(cyclopentyl)methyl)-7-fluoro-6-oxo-5-azaspiro[3.4]octane-2-carboxamide

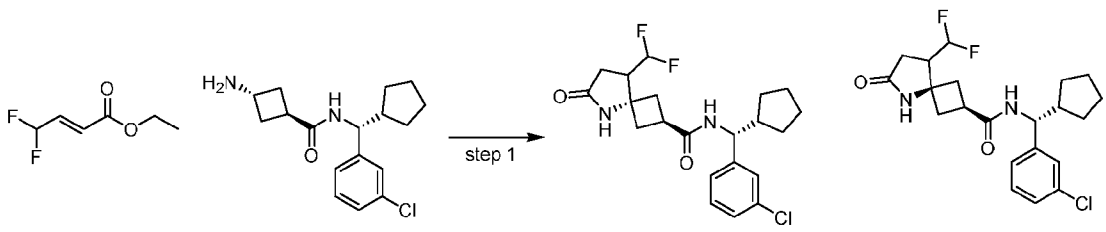


Step 1. Synthesis of N-((R)-(3-chlorophenyl)(cyclopentyl)methyl)-7-fluoro-6-oxo-5-azaspiro[3.4]octane-2-carboxamide

[0751] To a 4-mL vial there was added (1r,3R)-3-amino-N-((R)-(3-chlorophenyl)(cyclopentyl)methyl)cyclobutane-1-carboxamide (50 mg, 0.16 mmol), tetrabutylammonium azide (4.6 mg, 16 μmol), 4CzIPN (1.3 mg, 1.6 μmol), and Cs_2CO_3 (53 mg, 0.16 mmol). The vial was capped and purged with nitrogen. Acetonitrile (1.1 mL) was added. The vial was sparged with nitrogen and while sparging, methyl 2-fluoroacrylate (15 μL, 0.16 mmol) was added via syringe. The reaction was then placed in the Merch photoreactor for 16 hours at 100% light intensity. The solution was concentrated and placed on the AccQ prep system eluting with 30-60% water with 0.1% formic acid to give N-((R)-(3-chlorophenyl)(cyclopentyl)methyl)-7-fluoro-6-oxo-5-azaspiro[3.4]octane-2-carboxamide (3.3 mg, 8.7 μmol) as an off-white solid. LCMS RT 1.44 min, $[M+H]^+$ 379.23, LCMS method K.

Example 12

(2r,4R)-N-((R)-(3-chlorophenyl)(cyclopentyl)methyl)-8-(difluoromethyl)-6-oxo-5-azaspiro[3.4]octane-2-carboxamide and (2s,4S)-N-((R)-(3-chlorophenyl)(cyclopentyl)methyl)-8-(difluoromethyl)-6-oxo-5-azaspiro[3.4]octane-2-carboxamide



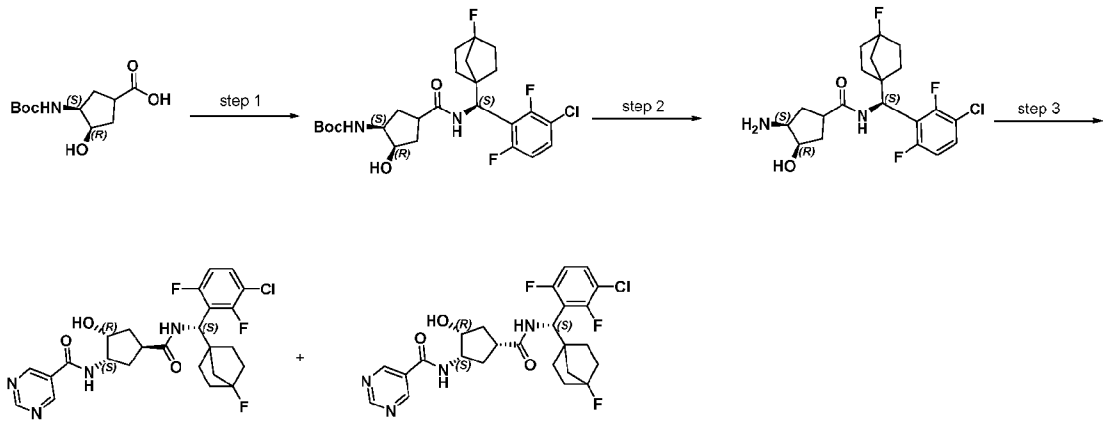
Step 1. Synthesis of (2r,4R)-N-((R)-(3-chlorophenyl)(cyclopentyl)methyl)-8-(difluoromethyl)-6-oxo-5-azaspiro[3.4]octane-2-carboxamide and (2s,4S)-N-((R)-(3-chlorophenyl)(cyclopentyl)methyl)-8-(difluoromethyl)-6-oxo-5-azaspiro[3.4]octane-2-carboxamide

[0752] To a 8-mL vial there was added (1r,3R)-3-amino-N-((R)-(3-chlorophenyl)(cyclopentyl)methyl)cyclobutane-1-carboxamide (150 mg, 489 μmol) which was stirred with Cs_2CO_3 (159 mg, 489 μmol) in MeOH for 1 hour before filtering off the Cs_2CO_3 to convert the material to the free base. Tetrabutylammonium azide (13.9 mg, 48.9 μmol) and 4CzIPN (3.86 mg, 4.89 μmol) were added. The vial was capped and purged with nitrogen and dissolved in acetonitrile (2 mL). The vial was sparged with nitrogen and while sparging ethyl (E)-4,4-difluorobut-2-enoate (66.5 μL, 489 μmol) was added via syringe. The reaction was then placed in the Merch photoreactor for 8 hours at 100% light intensity. Reaction was concentrated and the vial was placed on the AccQ prep system, eluting with 20-50% water with 0.1% formic acid to give (2r,4R)-N-((R)-(3-chlorophenyl)(cyclopentyl)methyl)-8-(difluoromethyl)-6-oxo-5-azaspiro[3.4]octane-2-carboxamide and (2s,4S)-N-((R)-(3-chlorophenyl)(cyclopentyl)methyl)-8-(difluoromethyl)-6-oxo-5-azaspiro[3.4]octane-2-carboxamide, both as an off-white solid.Peak 1: 4.2 mg, LCMS RT 1.51 min, $[M+H]^+$ 411.34, LCMS method K.

[0753] Peak 2: 5 mg, LCMS RT 1.53 min, $[M+H]^+$ 411.34, LCMS method K.

Example 13

N-((1S,2R,4S)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)pyrimidine-5-carboxamide and N-((1S,2R,4R)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)pyrimidine-5-carboxamide



Step 1. Synthesis of (3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylic acid

[0754] A round bottomed flask was charged with (3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylic acid (110 mg, 449 μmol), (S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methanamine (130 mg, 449 μmol), T3P (256 mg, 673 μmol), TEA (113 mg, 1.35 mmol) and a stirbar. DMF (1 mL) was added, and the solution was stirred for 1 h at 25 °C. The reaction mixture was diluted with water (50 mL), and the aqueous phase was extracted with ethyl acetate three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography with the following condition: column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% B in 10 min; detector: UV 220 nm. Lyophilization yielded tert-butyl ((1S,2R)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)carbamate (150 mg, 290 μmol) as an amorphous off-white solid. LCMS RT 1.094 min, $[M+H]^+$ 517, LCMS method D.

Step 2. Synthesis of (3S,4R)-3-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide

[0755] A round bottomed flask was charged with tert-butyl ((1S,2R)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)carbamate (1.5 g, 2.9 mmol) and a stirbar. HCl (15 mL, 4 molar in MeOH, 60 mmol) was added, and the solution was stirred for 30 minutes at 25 °C. Concentration in vacuo resulted in (3S,4R)-3-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide (1.0 g, 2

mmol, crude) as a white solid. No workup was performed. LCMS RT 0.898 min, $[M+H]^+$ 417.25, LCMS method D.

Step 3. Synthesis of N-((1S,2R,4S)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo [2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)pyrimidine-5-carboxamide and N-((1S,2R,4R)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)pyrimidine-5-carboxamide

[0756] A mixture of (3S,4R)-3-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo [2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide (350 mg, 840 μmol), pyrimidine-5-carboxylic acid (104 mg, 840 μmol), $NaHCO_3$ (212 mg, 2.52 mmol) and HATU (638 mg, 1.68 mmol) in DMF (5 mL) was stirred for 1 hour at 25 °C. The reaction mixture was diluted with water (10 mL), and the aqueous phase was extracted with ethyl acetate (10 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water; mobile phase B: acetonitrile. Gradient: 40% to 60% B in 10 min; detector: UV 220 nm, which afforded N-((1S,2R)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)pyrimidine-5-carboxamide (335 mg, 76.3 %) as an off-white amorphous solid. LCMS RT 0.842 min, $[M+H]^+$ 523, LCMS method C.

[0757] The resulting material was purified by chiral preparative HPLC (column: CHIRALPAKIF3; mobile phase A: hexane (0.2%DEA); B: MeOH : DCM 1 : 1) gradient: 75: 25 isocratic; flow rate: 1mL/min; injection volume: 3 mL). Lyophilization yielded one isomer (12 mg, 23 μmol) as an off-white amorphous solid and the other isomer (15 mg, 29 μmol, 60 %), also as an off-white amorphous solid. Peak 1: ^{1}H NMR (400 MHz, DMSO-d_6) δ 9.29 (d, J = 1.2 Hz, 1H), 9.17 (d, J = 1.1 Hz, 2H), 8.43 (d, J = 7.5 Hz, 1H), 8.26 (d, J = 8.2 Hz, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.15 (t, J = 9.1 Hz, 1H), 5.29 (d, J = 8.1 Hz, 1H), 4.88 (d, J = 3.4 Hz, 1H), 4.20 - 4.12 (m, 1H), 4.10 (d, J = 3.9 Hz, 1H), 3.17 (dt, J = 13.0, 6.4 Hz, 1H), 2.06 - 1.88 (m, 2H), 1.86 - 1.61 (d, J = 8.4 Hz, 10H), 1.47 (d, J = 8.3 Hz, 2H). LCMS RT 1.398 min, $[M+H]^+$ 523, LCMS method D. Peak 2: ^{1}H NMR (400 MHz, DMSO-d_6) δ 9.28 (s, 1H), 9.15 (s, 2H), 8.42 (d, J = 7.2 Hz, 1H), 8.26 (d, J = 8.3 Hz, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.15 (td, J = 9.5, 1.6 Hz, 1H), 5.28 (d, J = 8.1 Hz, 1H), 4.88 (d, J = 3.2 Hz, 1H), 4.19 - 4.08 (m, 2H), 3.21 - 3.13 (m, 1H), 1.96 - 1.68 (m, 11H), 1.61 (d, J

= 8.5 Hz, 1H), 1.47 (d, J = 8.9 Hz, 2H). LCMS RT 1.404 min, $[M+H]^+$ 523, LCMS method D.

Example 14

(1S,3S,4R)-3-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide

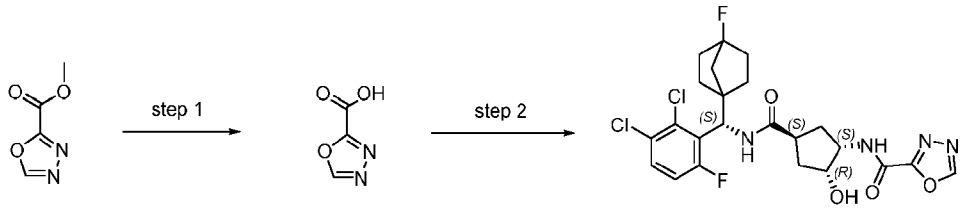


Step 1. Synthesis of (1S,3S,4R)-3-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide

[0758] A round bottomed flask was charged with (1S,3S,4R)-3-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide (1.45 g, 3.48 mmol), acetic acid (209 mg, 3.48 mmol), $NaHCO_3$ (1.46 g, 17.4 mmol), HATU (2.64 g, 6.96 mmol) and a stir bar. DMF (15 mL) was added, and the solution was stirred for 1 hour at room temperature. The resulting crude material was purified by preparative HPLC (column: LuxCellulose-34.6*100 mm, 3 μm; mobile phase A: water, mobile phase B: MeOH (0.5% 2M NH_3 in MeOH); flow rate: 4 mL/min; gradient: 20% B isocratic) to give (1S,3S,4R)-3-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide (1.34 g, 2.93 mmol) as an off-white amorphous solid. ^{1}H NMR (400 MHz, DMSO-d_6) δ 8.22 (d, J = 8.2 Hz, 1H), 7.61-7.48 (m, 2H), 7.19-7.09 (m, 1H), 5.26 (d, J = 8.1 Hz, 1H), 4.78 (d, J = 3.3 Hz, 1H), 3.96-3.85 (m, 2H), 3.15-3.03 (m, 1H), 1.82 (d, J = 5.0 Hz, 2H), 1.81 (s, 3H), 1.75 (ddd, J = 21.1, 11.5, 8.1 Hz, 8H), 1.59 (d, J = 8.8 Hz, 2H), 1.45 (d, J = 9.6 Hz, 2H). LCMS RT 0.833 min, $[M+H]^+$ 459.05, LCMS method C.

Example 15

N-((1S,2R,4S)-4-(((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)-1,3,4-oxadiazole-2-carboxamide



Step 1. Synthesis of 1,3,4-oxadiazole-2-carboxylic acid

To a stirred mixture of methyl 1,3,4-oxadiazole-2-carboxylate (200 mg, 1.56 mmol) in THF (1 mL) and H_2O (1 mL) was added LiOH (74.8 mg, 3.12 mmol) at 25 °C under a nitrogen atmosphere. The resulting mixture was stirred for 1 hour at 25 °C under nitrogen. The mixture was acidified to pH 7 with HCl (aq. 1M). The resulting mixture was concentrated under reduced pressure to afford 1,3,4-oxadiazole-2-carboxylic acid (260 mg, 2.28 mmol, crude) as a white solid. LCMS RT 0.177 min, $[M-H]^-$ 113.0, LCMS method E.

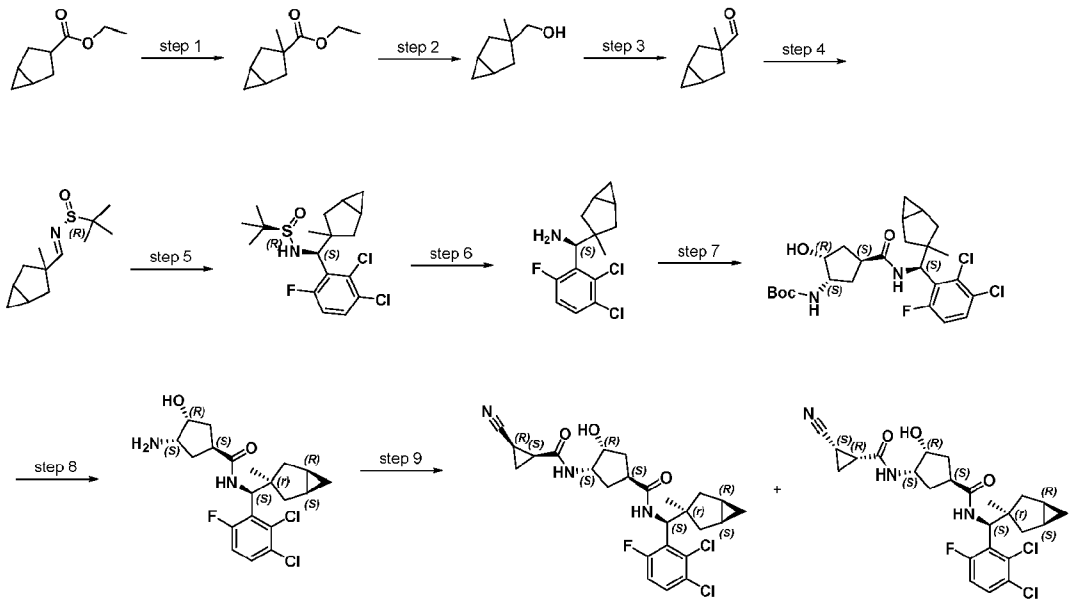
Step 2. Synthesis of N-((1S,2R,4S)-4-(((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)-1,3,4-oxadiazole-2-carboxamide

[0759] To a stirred mixture of (1S,3S,4R)-3-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide (150 mg, 346 μmol) and 1,3,4-oxadiazole-2-carboxylic acid (47.4 mg, 415 μmol) in DMF (2 mL) was added sodium bicarbonate (145 mg, 1.73 mmol) and HATU (395 mg, 1.04 mmol) at 25 °C under a nitrogen atmosphere. The resulting mixture was stirred for 2 hours at 25 °C. The resulting mixture was filtered and purified by preparative HPLC (column: Xbridge Prep OBD C18 Column, 50*250 mm, 10 μm; mobile phase A: water (10mM NH_4HCO_3 + 0.05% NH_4OH), mobile phase B: acetonitrile; flow rate: 100 mL/min; gradient: 25% B to 55% B in 8 min; wavelength: 254nm/220nm; RT (min): 9.58) to give a white solid. This was further purified by prep chiral HPLC (column: CHIRALPAK IG, 3*25 cm, 5 μm; mobile phase A: hexane : MTBE 1 : 1 (0.5% 2M NH_3 in MeOH), mobile phase B: MeOH; flow rate: 40 mL/min; gradient: 20% B isocratic; wavelength: 212/230 nm; RT1 (min): 4.62; RT2 (min): 6.96; sample solvent: MeOH; injection volume: 0.9 mL) to give N-((1S,2R,4S)-4-(((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)-1,3,4-oxadiazole-2-carboxamide (14.6 mg, 26.9 μmol) as a white solid. LCMS RT 1.838 min, $[M-H]^-$ 527.10, LCMS method E. ^1H NMR (300 MHz, DMSO-d6) δ

9.44 (s, 1H), 8.50 (d, J = 6.8 Hz, 1H), 8.26 (d, J = 8.2 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.28 (dd, J = 10.6, 8.9 Hz, 1H), 5.52 (d, J = 8.0 Hz, 1H), 5.12 (d, J = 3.0 Hz, 1H), 4.11 (s, 2H), 3.16 (t, J = 7.1 Hz, 1H), 2.03 - 1.46 (m, 14H). ^{19}F NMR (282 MHz, DMSO-d6) δ -109.304, -173.540.

Example 16

(1S,3S,4R)-3-((1R,2S)-2-cyanocyclopropane-1-carboxamido)-N-((S)-(2,3-dichloro-6-fluorophenyl)((1R,3r,5S)-3-methylbicyclo[3.1.0]hexan-3-yl)methyl)-4-hydroxycyclopentane-1-carboxamide and (1S,3S,4R)-3-((1S,2R)-2-cyanocyclopropane-1-carboxamido)-N-((S)-(2,3-dichloro-6-fluorophenyl)((1R,3r,5S)-3-methylbicyclo[3.1.0]hexan-3-yl)methyl)-4-hydroxycyclopentane-1-carboxamide



Step 1. Synthesis of ethyl 3-methylbicyclo[3.1.0]hexane-3-carboxylate

[0760] To a mixture of ethyl bicycle [3.1.0] hexane-3-carboxylate (9.0 g, 0.058 mol) in THF (120 mL) was added LDA (45 ml, 2 M in THF, 0.09 mol) dropwise at -78 °C under a nitrogen atmosphere. The mixture was stirred for 1 h at -78 °C prior to addition of MeI (5 mL, 0.09 mol). The mixture was stirred for 2 h at 25 °C. The reaction was quenched with saturated NH_4Cl (aq., 30 ml). The reaction mixture was diluted with water (100 mL), and the aqueous phase was extracted with ethyl acetate (100 mL*3). The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo

to give ethyl 3-methylbicyclo [3.1.0] hexane-3-carboxylate (9.0 g, 0.053 mol) as a yellow oil. GCMS RT 4.141 min, [M] 168.1, GC Method Z.

Step 2. Synthesis of (3-methylbicyclo[3.1.0]hexan-3-yl)methanol

[0761] To a mixture of ethyl 3-methylbicyclo [3.1.0] hexane-3-carboxylate (10 g, 59 mmol) in THF (120 mL) was added $LiAlH_4$ (2.3 g, 59 mmol) in portions at 0 °C under a nitrogen atmosphere. The mixture was stirred for 2 hours at 25 °C. The reaction was quenched with water (2.3 mL), NaOH (15%, 4.6 mL) and water (2.3 mL). The reaction mixture was filtered through a pad of Celite. The pad was washed with THF (100 mL), and the filtrate was concentrated in vacuo to give (3-methylbicyclo [3.1.0] hexan-3-yl) methanol (7.0 g) as a yellow oil. GCMS RT 3.760 min, [M] 126.0, GC Method Z.

[0762] Step 3. Synthesis of 3-methylbicyclo[3.1.0]hexane-3-carbaldehyde

[0763] To a mixture of (3-methylbicyclo [3.1.0] hexan-3-yl) methanol (7.0 g, 55.47 mmol) in DCM (90 mL) was added PCC (13.15 g, 61.01 mmol) in portions at 0 °C under a nitrogen atmosphere. The mixture was stirred for 2 hours at 25 °C. The reaction mixture was filtered (through pad of silica gel), the pad was washed with DCM. The filtrate was concentrated under reduced pressure to afford 3-methylbicyclo [3.1.0] hexane-3-carbaldehyde (6.0 g) as a brown oil. GCMS RT 3.484 min, [M] 124.1, GC Method Z.

Step 4. Synthesis of (R)-2-methyl-N-((E)-(3-methylbicyclo[3.1.0]hexan-3-yl)methylene)propane-2-sulfinamide

[0764] To a solution of (R)-2-methylpropane-2-sulfinamide (6000 mg, 1 Eq, 49.50 mmol) and 3-methylbicyclo [3.1.0] hexane-3-carbaldehyde (6.762 g, 1.1 Eq, 54.46 mmol) in THF (75 mL) was added titanium(IV) isopropoxide (15.48 g, 16.5 mL, 1.1 Eq, 54.46 mmol). The mixture was heated at 50 °C for 16 hours. The reaction was quenched with water (100 mL). The reaction mixture was filtered (through a pad of Celite), the pad was washed with ethyl acetate (150 mL), and the filtrate was concentrated in vacuo.
The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile;10% to 50% gradient in 10 min; detector: UV 220 nm. This resulted in (R)-2-methyl-N-((E)-(3-methylbicyclo [3.1.0] hexan-3-yl) methylene) propane-2-sulfinamide (9.2 g, 40 mmol, 82 %) as a white solid. LCMS RT 0.997 min, $[M+H]^+$ 228.15, LCMS method C.

Step 5. Synthesis of (R)-N-((1S)-(2,3-dichloro-6-fluorophenyl)(3-methylbicyclo[3.1.0]hexan-3-yl)methyl)-2-methylpropane-2-sulfinamide

[0765] To a mixture of 1,2-dichloro-4-fluorobenzene (1.742 g, 10.56 mmol) in THF (25 mL) was added LDA (6.6 ml, 2M in THF, 13.2 mmol) dropwise at -78 °C under a nitrogen atmosphere. The mixture was stirred for 1 h at -78 °C prior to the addition of (R)-2-methyl-N-((E)-(3-methylbicyclo [3.1.0] hexan-3-yl) methylene) propane-2-sulfinamide (2.0 g, 8.796 mmol). The mixture was stirred for 2 h at 25 °C. The reaction was quenched with saturated NH_4Cl (aq., 15ml). The reaction mixture was diluted with water (20 mL), and the aqueous phase was extracted with ethyl acetate (50 mL*3). The combined organic layers were washed with brine, dried over sodium sulfate, filtered,and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 10% to 50% B in 10 min; detector: UV 220 nm) to give (R)-N-((1S)-(2,3-dichloro-6-fluorophenyl) (3-methylbicyclo [3.1.0] hexan-3-yl) methyl)-2-methylpropane-2-sulfinamide (2.5 g, 6.4 mmol) as a yellow oil. LCMS RT 1.183 min, $[M+H]^+$ 392, LCMS method A.

Step 6. Synthesis of (1S)-(2,3-dichloro-6-fluorophenyl)(3-methylbicyclo[3.1.0]hexan-3-yl)methanamine

[0766] A mixture of (R)-N-((1S)-(2,3-dichloro-6-fluorophenyl) (3-methylbicyclo [3.1.0] hexan-3-yl) methyl)-2-methylpropane-2-sulfinamide (5.5 g, 14 mmol) and HCl (14 mL, 4 molar in MeOH, 56 mmol) was stirred for 1 h at 25 °C. The mixture's pH was adjusted to 7-8 with saturated $NaHCO_3$ solution. The mixture was extracted with ethyl acetate (70 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. This resulted in (1S)-(2,3-dichloro-6-fluorophenyl) (3-methylbicyclo [3.1.0] hexan-3-yl) methanamine (3.8 g, 13 mmol) as a yellow oil. LCMS RT 0.738 min, $[M+H]^+$ 288.0, LCMS method C.

Step 7. Synthesis of tert-butyl ((1S,2R,4S)-4-(((1S)-(2,3-dichloro-6-fluorophenyl)(3-methylbicyclo[3.1.0]hexan-3-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)carbamate

[0767] A mixture of (1S)-(2,3-dichloro-6-fluorophenyl) (3-methylbicyclo [3.1.0] hexan-3-yl) methanamine (4 g, 0.01 mol), (1S,3S,4R)-3-((tert-butoxycarbonyl) amino)-4-hydroxycyclopentane-1-carboxylic acid (3 g, 0.01 mol), HATU (8 g) and $NaHCO_3$ (3 g) in DMF (40 mL) was stirred for 1 h at 25 °C. The reaction mixture was diluted with water (50 mL), and the aqueous phase was extracted with ethyl acetate (60 mL*3). The

combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 10% to 50% B in 10 min; detector: UV 220 nm) to give tert-butyl ((1S,2R,4S)-4-(((1S)-(2,3-dichloro-6-fluorophenyl) (3-methylbicyclo [3.1.0] hexan-3-yl) methyl) carbamoyl)-2-hydroxycyclopentyl) carbamate (5.1 g, 9.9 mmol) as an off-white solid. LCMS RT 1.080 min, $[M+H]^+$ 515, LCMS method C.

Step 8. Synthesis of (1S,3S,4R)-3-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)((1R,3r,5S)-3-methylbicyclo[3.1.0]hexan-3-yl)methyl)-4-hydroxycyclopentane-1-carboxamide

[0768] A mixture of tert-butyl ((1S,2R,4S)-4-(((1S)-(2,3-dichloro-6-fluorophenyl) (3-methylbicyclo [3.1.0] hexan-3-yl) methyl) carbamoyl)-2-hydroxycyclopentyl) carbamate (2.0 g, 3.9 mmol) and HCl (19.40 mL, 4 N in MeOH, 77.60 mmol) in MeOH (20 mL) was stirred for 1 h at 25 °C. The mixture's pH was adjusted to 7-8 with saturated $NaHCO_3$ solution. The reaction mixture was diluted with water (50 mL), and the aqueous phase was extracted with ethyl acetate (70 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo to give (1S,3S,4R)-3-amino-N-((1S)-(2,3-dichloro-6-fluorophenyl) (3-methylbicyclo [3.1.0] hexan-3-yl) methyl)-4-hydroxycyclopentane-1-carboxamide (1.5 g, 3.6 mmol) as a white amorphous solid. LCMS RT 0.780 min, $[M+H]^+$ 415, LCMS method C.

Step 9. Synthesis of (1S,3S,4R)-3-((1R,2S)-2-cyanocyclopropane-1-carboxamido)-N-((S)-(2,3-dichloro-6-fluorophenyl)((1R,3r,5S)-3-methylbicyclo[3.1.0]hexan-3-yl)methyl)-4-hydroxycyclopentane-1-carboxamide and (1S,3S,4R)-3-((1S,2R)-2-cyanocyclopropane-1-carboxamido)-N-((S)-(2,3-dichloro-6-fluorophenyl)((1R,3r,5S)-3-methylbicyclo[3.1.0]hexan-3-yl)methyl)-4-hydroxycyclopentane-1-carboxamide

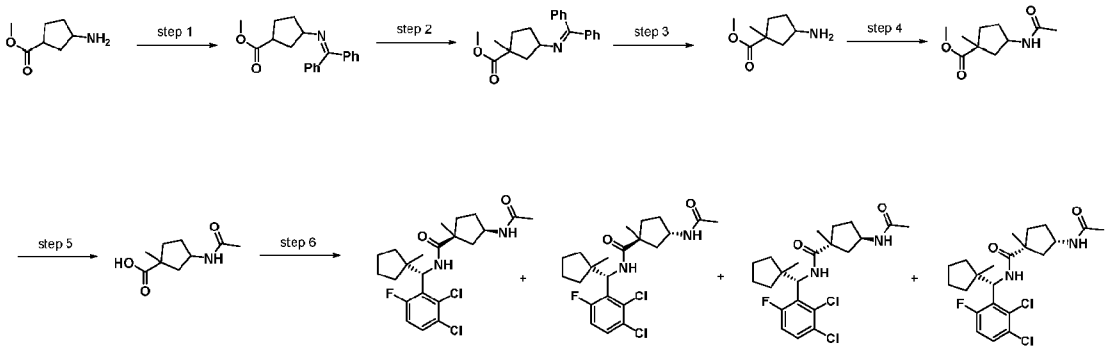
[0769] A mixture of (1S,3S,4R)-3-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)((1S,3r,5R)-3-methylbicyclo[3.1.0]hexan-3-yl)methyl)-4-hydroxycyclopentanecarboxamide (45 mg, 0.11 mmol), (±)-(1S,2R)-2-cyanocyclopropane-1-carboxylic acid (12 mg, 0.11 mmol), HATU (62 mg, 0.16 mmol) and $NaHCO_3$ (36 mg, 0.43 mmol) in DMF (1 mL) was stirred at room temperature for 1 hour. The reaction mixture was diluted with water (10 mL), and the aqueous phase was extracted with ethyl acetate (10 mL*3). The combined organic layers were washed with brine, dried over sodium sulfate, filtered and

concentrated in vacuo. The resulting crude material was purified by preparative HPLC (column: XBridge Prep OBD C18 Column, 30*150 mm, 5 μm; mobile phase A: water (10mM NH_4HCO_3) + 0.05% NH_4OH, mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 35% B to 62% B in 7 min; wavelength: 254nm/220nm; RT (min): 7.64) to give (1S,3S,4R)-3-((1S,2R)-2-cyanocyclopropane-1-carboxamido)-N-((S)-(2,3-dichloro-6-fluorophenyl) ((1R,3r,5S)-3-methylbicyclo [3.1.0] hexan-3-yl) methyl)-4-hydroxycyclopentane-1-carboxamide (51 mg, 0.10 mmol) as an off white amorphous solid. LCMS RT 1.118 min, $[M+H]^+$ 508, LCMS method B. This material was further purified by chiral preparative HPLC(column: CHIRALPAK IE3; mobile phase A: hexane (0.2% diethylamine) : (EtOH: DCM 1: 1) 60 : 40; flow rate: 1 mL/min; gradient: isocratic; injection volume: 8 mL) to give (1S,3S,4R)-3-((1S,2R)-2-cyanocyclopropane-1-carboxamido)-N-((S)-(2,3-dichloro-6-fluorophenyl) ((1R,3r,5S)-3-methylbicyclo [3.1.0] hexan-3-yl) methyl)-4-hydroxycyclopentane-1-carboxamide and (1S,3S,4R)-3-((1R,2S)-2-cyanocyclopropane-1-carboxamido)-N-((S)-(2,3-dichloro-6-fluorophenyl) ((1R,3r,5S)-3-methylbicyclo [3.1.0] hexan-3-yl) methyl)-4-hydroxycyclopentane-1-carboxamide, both as an off white amorphous solid. One isomer is 10.5 mg (20.3 μmol), and the other is 12.5 mg (24.0 μmol). Isomer 1: ^{1}H NMR (400 MHz, DMSO-d_6) δ 8.12 (d, J = 7.8 Hz, 1H), 8.01 (d, J = 8.7 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.7, 8.9 Hz, 1H), 5.41 (d, J = 8.6 Hz, 1H), 4.88 (d, J = 3.5 Hz, 1H), 3.98 (dt, J = 14.8, 4.6 Hz, 2H), 3.13 (dt, J = 14.0, 6.9 Hz, 1H), 2.23 (td, J = 7.9, 6.3 Hz, 1H), 2.02 (td, J = 8.6, 6.6 Hz, 1H), 1.86 - 1.59 (m, 5H), 1.52 (dd, J = 12.8, 5.8 Hz, 1H), 1.44 - 1.21 (m, 6H), 1.14 - 1.02 (m, 3H), 0.85 (td, J = 7.9, 4.0 Hz, 1H), 0.11 (q, J = 3.9 Hz, 1H). LCMS RT 1.096 min, $[M+H]^+$ 508, LCMS method B; isomer 2: ^{1}H NMR (400 MHz, DMSO-d_6) 8.07 (d, J = 8.0 Hz, 1H), 7.98 (d, J = 8.7 Hz, 1H), 7.60 (dd, J = 9.0, 5.0 Hz, 1H), 7.24 (t, J = 9.8 Hz, 1H), 5.41 (d, J = 8.6 Hz, 1H), 4.93 (d, J = 3.5 Hz, 1H), 4.10 - 3.91 (m, 2H), 3.14 (d, J = 9.0 Hz, 1H), 2.26 (q, J = 7.5 Hz, 1H), 2.03 (q, J = 7.9 Hz, 1H), 1.80 (q, J = 10.6, 7.9 Hz, 2H), 1.74 - 1.58 (m, 3H), 1.57 - 1.45 (m, 1H), 1.44 - 1.18 (m, 6H), 1.07 (s, 3H), 0.85 (s, 1H), 0.10 (d, J = 4.1 Hz, 1H). LCMS RT 1.115 min, $[M+H]^+$ 508, LCMS method B.

Example 17

(1S,3R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-1-methylcyclopentane-1-carboxamide, (1R,3R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-1-methylcyclopentane-1-carboxamide, (1S,3S)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-

1-methylcyclopentane-1-carboxamide and (1R,3S)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-1-methylcyclopentane-1-carboxamide



Step 1. Synthesis of methyl 3-((diphenylmethylene)amino)cyclopentane-1-carboxylate

[0772] To a mixture of methyl 3-aminocyclopentane-1-carboxylate (4.6 g, 32 mmol) and T EA (18 mL, 0.13 mol) in DCM (50 mL) was added diphenylmethanimine (5.8 g, 32 mmol). The mixture was stirred at room temperature for 1 hour. The reaction mixture was filtered th rough a pad of Celite and the pad was washed with DCM (20 mL*3). The filtrate was conce ntrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile, gradient: 0% to 100% B in 20 min; detector: UV 254 nm) to give methyl 3-((diphenylmethylene) amino) cyclopenta ne-1-carboxylate (6.0 g) as a yellow oil. LCMS RT 0.670 min, $[M+H]^+$ 308, LCMS method C.

Step 2. Synthesis of methyl 3-((diphenylmethylene)amino)-1-methylcyclopentane-1-carboxylate

[0773] To a mixture of methyl 3-((diphenylmethylene)amino) cyclopentane-1-carboxylate (2.0 g, 6.51 mmol) in THF (30 mL) was added lithium diisopropylamide (3.9 mL, 2 molar, 7. 8 mmol) dropwise at -78 °C under a nitrogen atmosphere. The mixture was stirred at -78 °C for 30 min prior to the addition of iodomethane (1.02 g, 7.16 mmol) dropwise at -78°C. The mixture was stirred at 25 °C for 1 hour. The reaction was quenched with saturated NH_4Cl (a q., 6 mL). The reaction mixture was diluted with water (40 mL), and the aqueous phase was extracted with ethyl acetate (50 mL*3). The combined organic layers were washed with brin e, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% in 20 min; detector: UV 254 nm) to give methy

l 3-((diphenylmethylene)amino)-1-methylcyclopentane-1-carboxylate (1.5 g, 4.7 mmol) as a yellow oil. LCMS RT 0.712 min, $[M+H]^+$ 322, LCMS method C.

Step 3. Synthesis of methyl 3-amino-1-methylcyclopentane-1-carboxylate

[0774] A mixture of methyl 3-((diphenylmethylene)amino)-1-methylcyclopentane-1-carbox ylate (1.5 g, 4.7 mmol) in HCl (20 ml, 4 N) was stirred at 80 °C for 1 hour. The mixture was concentrated under reduced pressure to give methyl 3-amino-1-methylcyclopentane-1-carbo xylate (0.7 g, 4 mmol) as a yellow oil which was used in the next step directly without purifi cation. LCMS RT 0.479 min, $[M+H]^+$ 158, LCMS method C.

Step 4. Synthesis of methyl 3-acetamido-1-methylcyclopentane-1-carboxylate

[0775] To a mixture of methyl 3-amino-1-methylcyclopentane-1-carboxylate (700 mg, 4.45 mmol) and TEA (3.72 mL, 26.7 mmol) in DCM (10 mL) was added acetyl chloride (315 mg, 4.01 mmol) dropwise at 0 °C. The mixture was stirred at room temperature for 1 hour. The reaction was quenched with MeOH (3 mL). The solution was concentrated under reduced pressure. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% B in 15 min; detector: UV 254 nm) to give methyl 3-acetamido-1-methylcyclopentane-1-carboxylate (590 mg, 2.96 mmol) as a yellow oil. LCMS RT 0.612 min, $[M+H]^+$ 200, LCMS method C.

Step 5. Synthesis of 3-acetamido-1-methylcyclopentane-1-carboxylic acid

[0776] A mixture of methyl 3-acetamido-1-methylcyclopentane-1-carboxylate (590 mg, 2.9 6 mmol) and NaOH (5 mL, 4 N, aq.) in MeOH (5 mL) was stirred at room temperature for 1 hour. The solution was concentrated under reduced pressure. The mixture was acidified to p H of 4-6 with HCl (4 N). The solution was concentrated under reduced pressure. The residu e was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 50% B in 10 min; detector: UV 254 nm) to give 3-acetamido-1-methylcyclopentane-1-carboxylic acid (510 mg, 2.75 mmol) as a yellow oil. LCMS RT 0.496 min, $[M+H]^+$ 185, LCMS method C.

Step 6. Synthesis of (1S,3R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-1-methylcyclopentane-1-carboxamide, (1R,3R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-1-methylcyclopentane-1-carboxamide, (1S,3S)-3-acetamido-N-((S)-(2,3-dichloro-6-

fluorophenyl)(1-methylcyclopentyl)methyl)-1-methylcyclopentane-1-carboxamide and (1R,3S)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-1-methylcyclopentane-1-carboxamide

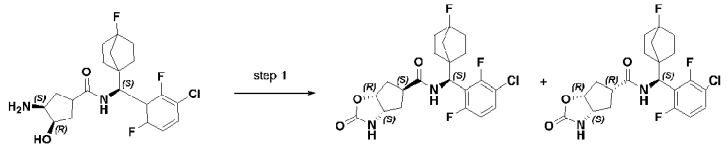
[0777] A mixture of (S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methanamine (500 mg, 1.81 mmol), 3-acetamido-1-methylcyclopentane-1-carboxylic acid (671 mg, 3.62 mmol), HATU (1.38 g, 3.62 mmol) and $NaHCO_3$ (0.61 g, 7.24 mmol) in DMF (5 mL) was stirred at room temperature for 1 hour. The reaction mixture was diluted with water (6 mL), and the aqueous phase was extracted with ethyl acetate (10 mL*3). The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated *in vacuo*. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% B in 20 min; detector: UV 254 nm) to give 3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl) (1-methylcyclopentyl) methyl)-1-methylcyclopentane-1-carboxamide (570 mg, 1.29 mmol) as a yellow oil. LCMS RT 1.146 min, $[M+H]^+$ 443, LCMS method C.

[0778] The material was further purified by chiral preparative HPLC (column: (R, R)-WHELK-O1-Kromasi, 5*25 cm, 5 μm; mobile phase A: hexane (0.5% 2M NH3-MeOH), mobile phase B: EtOH; flow rate: 20 mL/min; gradient: 35% B isocratic; wavelength: 220/254 nm; RT1 (min): 5.41; RT2 (min): 7.55; sample solvent: EtOH; injection volume: 0.4 mL) to give 3 peaks, then the peak that was still a mixture was purified by chiral preparative HPLC again (column: CHIRALPAK IH, 2*25 cm, 5 μm; mobile phase A: hexane (0.5% 2M NH3-MeOH), mobile phase B: EtOH; flow rate: 20 mL/min; gradient: 50% B isocratic; wavelength: 220/254 nm; RT1 (min): 3.65; RT2 (min): 37.12; sample solvent: EtOH; injection volume: 2.65 mL) to give 4 compounds in total, all as a white amorphous solid. Product 1: 15 mg, 34 μmol. ^{1}H NMR (400 MHz, DMSO-d_6) δ 7.77 (d, J = 7.2 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.29 (dd, J = 11.0, 8.9 Hz, 1H), 7.17 (d, J = 8.8 Hz, 1H), 5.53 (d, J = 8.6 Hz, 1H), 4.07 (h, J = 7.4 Hz, 1H), 2.11-2.00 (m, 1H), 1.89 (dt, J = 16.1, 7.1 Hz, 2H), 1.80 (dd, J = 13.1, 8.3 Hz, 1H), 1.73 (s, 3H), 1.61 (s, 6H), 1.61 -1.51 (m, 1H), 1.45-1.26 (m, 2H), 1.24 (s, 2H), 1.18 (s, 3H), 0.99 (d, J = 2.9 Hz, 3H). LCMS RT 1.042 min, $[M+H]^+$ 443, LC Method C. Product 2: 4.9 mg, 11 μmol. ^{1}H NMR (400 MHz, DMSO-d_6) δ 7.76 (d, J = 7.4 Hz, 1H), 7.63 (dd, J = 9.0, 5.1 Hz, 1H), 7.30 (dd, J = 11.0, 9.0 Hz, 1H), 7.13 (d, J = 9.0 Hz, 1H), 5.57 (d, J = 8.8 Hz, 1H), 4.08 (h, J = 7.6 Hz, 1H), 2.11 (ddd, J = 12.6, 8.8, 6.0 Hz, 1H), 1.88 (ddd, J = 24.6, 12.7, 6.9 Hz, 2H), 1.73 (s, 3H), 1.76-

1.64 (m, 1H), 1.61 (s, 6H), 1.39 (ddt, *J* = 36.1, 20.2, 7.5 Hz, 2H), 1.31 (s, 2H), 1.20 (s, 3H), 0.99 (d, *J* = 2.9 Hz, 3H). LCMS RT 1.042 min, $[M+H]^+$ 443, LCMS method C. Product 3: 80 mg, 0.18 mmol. ^{1}H NMR (400 MHz, DMSO-d_6) δ 7.82 (d, *J* = 7.3 Hz, 1H), 7.62 (dd, *J* = 9.0, 5.1 Hz, 1H), 7.32-7.19 (m, 2H), 5.51 (d, *J* = 8.7 Hz, 1H), 3.92 (h, *J* = 7.7 Hz, 1H), 2.34 (dd, *J* = 13.2, 8.1 Hz, 1H), 2.00 (dt, *J* = 12.6, 7.6 Hz, 1H), 1.84-1.71 (m, 1H), 1.75 (s, 3H), 1.60 (s, 6H), 1.61-1.49 (m, 1H), 1.42 (dq, *J* = 15.3, 7.4 Hz, 2H), 1.30 (s, 1H), 1.25 (s, 3H), 1.21 (dd, *J* = 13.1, 7.6 Hz, 1H), 0.99 (d, *J* = 2.9 Hz, 3H). LCMS RT 1.452 min, $[M+H]^+$ 443, LCMS method B. Product 4: 64 mg, 0.14 mmol. ^{1}H NMR (400 MHz, DMSO-d_6) δ 7.82 (d, *J* = 7.3 Hz, 1H), 7.62 (dd, *J* = 8.9, 5.0 Hz, 1H), 7.37-7.19 (m, 2H), 5.50 (d, *J* = 8.5 Hz, 1H), 3.92 (p, *J* = 7.6, 7.0 Hz, 1H), 2.40 (dd, *J* = 13.2, 8.0 Hz, 1H), 1.96 (dt, *J* = 12.4, 7.4 Hz, 1H), 1.75 (s, 3H), 1.78-1.67 (m, 1H), 1.61 (s, 6H), 1.56-1.34 (m, 3H), 1.25 (s, 3H), 1.33-1.18 (m, 2H), 0.99 (d, *J* = 2.9 Hz, 3H). LCMS RT 1.425 min, $[M+H]^+$ 443, LCMS method B.

Example 18

(3aS,5S,6aR)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-oxohexahydro-2H-cyclopenta[d]oxazole-5-carboxamide and (3aS,5R,6aR)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-oxohexahydro-2H-cyclopenta[d]oxazole-5-carboxamide



Step 1. Synthesis of (3aS,5S,6aR)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-oxohexahydro-2H-cyclopenta[d]oxazole-5-carboxamide and (3aS,5R,6aR)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-oxohexahydro-2H-cyclopenta[d]oxazole-5-carboxamide

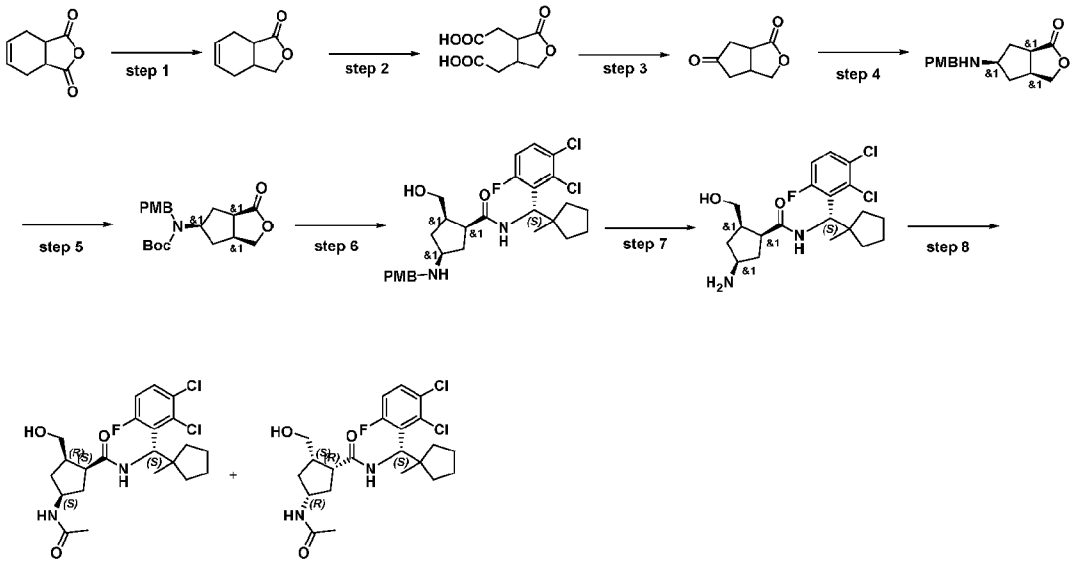
[0779] To a mixture of (3S,4R)-3-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide (50 mg, 0.12 mmol) and pyridine (47 mg, 0.60 mmol) in DCM (5 mL) was added a solution of triphosgene (18 mg, 60 μmol) in DCM (0.5mL) dropwise at 0°C. The mixture was stirred for 12 hours at 25 °C. The reaction was quenched with saturated NH_4Cl (aq.). The reaction

mixture was diluted with water (10 mL), and the aqueous phase was extracted with ethyl acetate (10 mL*3). The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 10% to 80% B in 25 min; detector: UV 254 nm) to give (3aS,6aR)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-oxohexahydro-2H-cyclopenta[d]oxazole-5-carboxamide (35 mg, 79 μmol) as a white amorphous solid. LCMS RT 0.951 min, $[M+H]^-$ 443.1, LCMS method C.

[0780] The material was purified by prep chiral-HPLC (column: CHIRALPAK-IG3; mobile phase A: hexane (0.2% diethylamine), mobile phase B: EtOH:DCM 1:1, gradient: 40% B isocratic; flow rate: 1 mL/min; injection volume: 3 mL) to give (3aS,5S,6aR)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-oxohexahydro-2H-cyclopenta[d]oxazole-5-carboxamide and (3aS,5R,6aR)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-oxohexahydro-2H-cyclopenta[d]oxazole-5-carboxamide, both as a white amorphous solid. One isomer is 5.3 mg, 12 μmol. ^{1}HNMR (400 MHz, $CDCl_3$) δ 7.49 - 7.26 (m, 1H), 6.88 (t, J = 9.5 Hz, 1H), 6.74 (d, J = 9.7 Hz, 1H), 5.64 (d, J = 9.8 Hz, 1H), 5.45 (s, 1H), 5.26 - 4.93 (m, 1H), 4.42 (s, 1H), 3.00 (d, J = 12.9 Hz, 1H), 2.38 - 2.16 (m, 1H), 2.10 - 1.31 (m, 13H). LCMS RT 0.882 min, $[M+H]^+$ 443.1, LCMS method C; the other isomer is 11.5 mg, 26.0 μmol. ^{1}H NMR (400 MHz, DMSO-d6) 8.48 (d, J = 8.5 Hz, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 2H), 7.32 - 7.00 (m, 1H), 5.27 (d, J = 8.1 Hz, 1H), 5.14 - 4.81 (m, 1H), 4.19 (t, J = 6.5 Hz, 1H), 3.11 (tt, J = 12.0, 6.1 Hz, 1H), 2.09 - 1.87 (m, 1H), 1.88 - 1.31 (m, 13H). LCMS RT 0.879 min, $[M+H]^+$ 443.1, LCMS method C.

Example 19

(1S,2R,4S)-4-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2-(hydroxymethyl)cyclopentane-1-carboxamide and (1R,2S,4R)-4-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2-(hydroxymethyl)cyclopentane-1-carboxamide



Step 1. Synthesis of 3a,4,7,7a-tetrahydroisobenzofuran-1(3H)-one

[0783] To a mixture of 3a,4,7,7a-tetrahydroisobenzofuran-1,3-dione (20 g, 0.13 mol) in THF (200 mL) was added $LiAlH_4$ (5.0 g, 0.13 mol) in portions at 0 °C. The mixture was stirred for 3 hours at room temperature. The resulting mixture was poured into 25 g of ice (mixed with 50 mL of 6% HCl in water) and extracted three times with ethyl acetate (200 ml*3). The combined organic layers were washed with brine and dried over anhydrous $MgSO_4$. The crude product was purified by silica gel chromatography (200 g column; eluting with petroleum ether/ethyl acetate; ratio: 10/1) to give 3a,4,7,7a-tetrahydroisobenzofuran-1(3H)-one (7 g, 0.05 mol) as a yellow oil. ^1H NMR (400 MHz, DMSO-d_6) δ 5.77 - 5.64 (m, 2H), 4.29 (dd, J = 8.6, 4.9 Hz, 1H), 3.98 (dd, J = 8.6, 1.5 Hz, 1H), 3.17 (d, J = 5.2 Hz, 1H), 2.93 (td, J = 7.3, 3.6 Hz, 1H), 2.64 - 2.52 (m, 1H), 2.44 - 2.01 (m, 3H).

Step 2. Synthesis of 2,2'-(2-oxotetrahydrofuran-3,4-diyl)diacetic acid

[0784] To a mixture of $KMnO_4$ (15 g, 98 mmol) in H_2O (180 mL) was added a solution of 3 a,4,7,7a-tetrahydroisobenzofuran-1(3H)-one (4.5 g, 33 mmol) in acetone (36 mL) dropwise at 0 °C. The brown slurry was stirred for 1 h at 0 °C, warmed to room temperature and stirre d overnight. The reaction was quenched with $NaHSO_3$. The resulting slurry was filtered thro ugh a pad of Celite and the Celite was washed with water/THF (1/1, 250 mL). The combine d filtrate was acidified to pH 2. The mixture was diluted with saturated NaCl (aq.) and extra

cted with tert-butyl methyl ether/THF (2/3, 6 x 120 mL). The combined organic layers were dried over Na_2SO_4, filtered and concentrated under reduced pressure (the bath temperature n ot exceeding 30 °C) to give 2,2'-(2-oxotetrahydrofuran-3,4-diyl)diacetic acid (5.5 g, 27 mmo l) as an off-white solid. LCMS RT 0.238 min, $[M+H]^+$ 203.05. LCMS method B.

Step 3. Synthesis of tetrahydro-1H-cyclopenta[c]furan-1,5(3H)-dione

[0785] A mixture of 2,2'-(2-oxotetrahydrofuran-3,4-diyl) diacetic acid (7.3 g, 36 mmol) in acetic anhydride (50 mL) was stirred for 1 h at 130 °C. After cooling to room temperature, the mixture was diluted with THF (10 mL) before K_2CO_3 (5.0 g, 36 mmol) was added. The resulting mixture was stirred at 60 °C overnight. After cooling to 0 °C, the reaction was quenched with MeOH (5 mL) and the mixture was stirred for 30 min at 0 °C. Saturated NH_4Cl solution (10 ml, aq.) and DCM (10 mL) were added and stirring continued for 20 min at 0 °C. Phase separation followed by extraction of the aqueous layer with DCM (3 x 200 mL) gave a combined organic phase, which was dried over Na_2SO_4. The crude product was purified by silica gel chromatography (10 g column; eluting with petroleum ether/ethyl acetate; ratio: 1/1) to give tetrahydro-1H-cyclopenta[c]furan-1,5(3H)-dione (3.5 g, 25 mmol) as a pale yellow solid. ^{1}H NMR (400 MHz, Chloroform-*d*) δ 4.54 (dd, J = 9.6, 5.9 Hz, 1H), 4.25 (dd, J = 9.6, 1.9 Hz, 1H), 3.44 - 3.23 (m, 2H), 2.82 - 2.54 (m, 3H), 2.35 - 2.14 (m, 1H).

Step 4. Synthesis of (±)-(3aS,5R,6aR)-5-((4-methoxybenzyl)amino)hexahydro-1H-cyclopenta[c]furan-1-one

[0786] To a mixture of tetrahydro-1H-cyclopenta[c]furan-1,5(3H)-dione (3.5 g, 25 mmol) a nd (4-methoxyphenyl) methanamine (4.1 g, 30mmol) in MeOH (20 mL) was added $NaBH_3$ CN (2.4 g, 37 mmol) in portions at 0 °C. The resulting mixture was stirred for 1 h at room te mperature. The reaction mixture was diluted with water (120 mL), and the aqueous phase w as extracted with ethyl acetate (150 mL) three times. The combined organic layers were was hed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting c rude material was purified by flash chromatography (acetonitrile/water) to give (±)-(3aS,5R, 6aR)-5-((4-methoxybenzyl)amino)hexahydro-1H-cyclopenta[c]furan-1-one (850 mg, 3.25 m mol) as colorless oil. LCMS RT 0.451 min, $[M+H]^+$ 262, LCMS method C.

Step 5. Synthesis of (±)-tert-butyl (4-methoxybenzyl)((3aS,5R,6aR)-1-oxohexahydro-1H-cyclopenta[c]furan-5-yl)carbamate

[0787] To a mixture of (3aS,5R,6aR)-5-((4-methoxybenzyl) amino) hexahydro-1H-cyclopenta[c]furan-1-one (630 mg, 2.41 mmol) and triethylamine (732 mg, 7.23 mmol) in DCM (10 mL) was added di-tert-butyl dicarbonate (789 mg, 3.62 mmol) dropwise at 0 °C. The mixture was stirred for 2 hours at room temperature. The reaction mixture was diluted with water (20 mL), and the aqueous phase was extracted with ethyl acetate (30 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by flash chromatography (acetonitrile/water) to give (±)-tert-butyl (4-methoxybenzyl) ((3aS,5R,6aR)-1-oxohexahydro-1H-cyclopenta[c]furan-5-yl) carbamate (500 mg, 1.38mmol, 57.4 %) as an off-white solid. LCMS RT 1.178 min), $[M+H]^+$=361, LCMS method C.

Step 6. Synthesis of (±)-(1S,2R,4S)-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2-(hydroxymethyl)-4-((4-methoxybenzyl)amino)cyclopentane-1-carboxamide

[0788] To a mixture of (±)-tert-butyl (4-methoxybenzyl)((3aS,5R,6aR)-1-oxohexahydro-1H -cyclopenta[c]furan-5-yl)carbamate (450 mg, 1.25 mmol) in THF (5 mL) was added trimeth ylaluminum (359 mg, 4.98 mmol) dropwise at 0 °C under a nitrogen atmosphere. The mixtu re was stirred for 15 min at 0 °C prior to the addition of (S)-(2,3-dichloro-6-fluorophenyl) (1 -methylcyclopentyl) methanamine (1.38 g, 4.98mmol). The mixture was stirred for 2 h at 50 °C. The reaction mixture was diluted with water (10 mL), and the aqueous phase was extrac ted with ethyl acetate (15 mL) three times. The combined organic layers were washed with b rine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mob ile phase B: acetonitrile; gradient: 0% to 100% B in 10 min; detector: UV 220 nm) to give (±)-(1S,2R,4S)-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2-(hydro xymethyl)-4-((4-methoxybenzyl)amino)cyclopentane-1-carboxamide (150 mg, 279 µmol) a s a yellow oil. LCMS RT 0.909 min, $[M+H]^+$ 537.20, LCMS method C.

Step 7. Synthesis of (±)-(1S,2R,4S)-4-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2-(hydroxymethyl)cyclopentane-1-carboxamide

[0789] A mixture of (±)-(1S,2R,4S)-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclope ntyl)methyl)-2-(hydroxymethyl)-4-((4-methoxybenzyl)amino)cyclopentane-1-carboxamide (120 mg, 223 µmol) and $Ce(NH_4)_2(NO_3)_6$ (1.22 g, 2.23mmol) in acetonitrile (10 mL) was sti

rred for 12 h at room temperature. The mixture was concentrated. The resulting crude materi al was purified by C18 flash (acetonitrile/water) to give (±)-(1S,2R,4S)-4-amino-N-((S)-(2,3 -dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2-(hydroxymethyl)cyclopentane-1-carboxamide (50 mg, 0.12 mmol) as a colorless oil. LCMS RT 0.750 min, $[M+H]^+$ 417, LC MS method C.

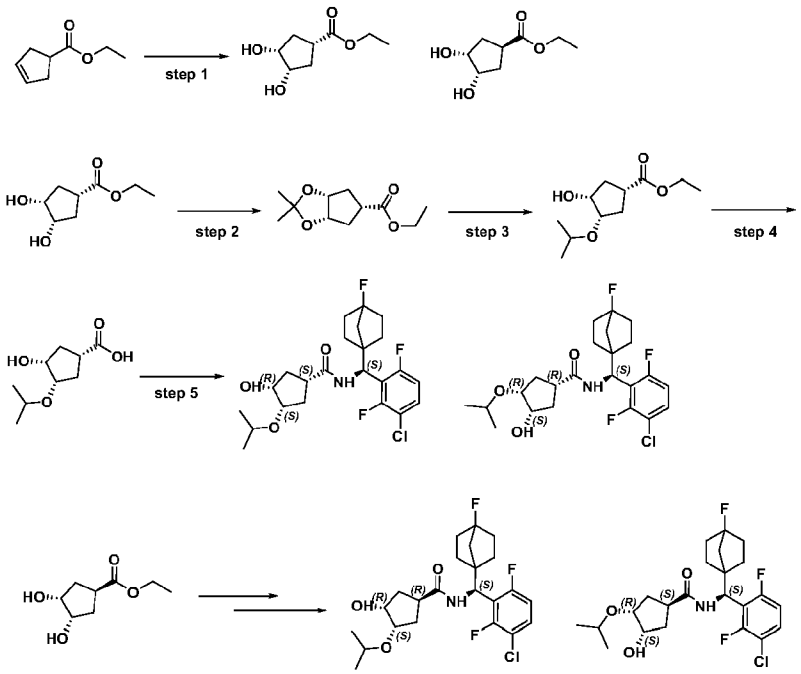
Step 8. Synthesis of (1S,2R,4S)-4-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2-(hydroxymethyl)cyclopentane-1-carboxamide and (1R,2S,4R)-4-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2-(hydroxymethyl)cyclopentane-1-carboxamide

[0790] A mixture of (±)-(1S,2R,4S)-4-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methy lcyclopentyl)methyl)-2-(hydroxymethyl)cyclopentane-1-carboxamide (45 mg, 0.11 mmol), TEA (45 µL, 0.32 mmol), acetic acid (13 mg, 0.22 mmol) and T_3P (51 mg, 0.16 mmol) in D MF (2 mL) was stirred for 1 h at room temperature. The reaction mixture was diluted with w ater (10 mL), and the aqueous phase was extracted with ethyl acetate (20 mL) three times. T he combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by preparative HPLC (colu mn: XBridge Shield RP18 OBD Column, 30*150 mm, 5 µm; mobile phase A: water (10 m M NH_4HCO_3 + 0.1% NH_4OH), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient : 31% B to 51% B in 8 min, then 51% B; wavelength: 220/254 nm; RT1 (min): 7.40) to give (±)-(1R,2S,4R)-4-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)me thyl)-2-(hydroxymethyl)cyclopentane-1-carboxamide (17 mg, 37 µmol) as a colorless oil. L CMS RT 1.077 min, $[M+H]^+$ 459, LCMS method C. The material was further purified by c hiral preparative HPLC (column: CHIRALPAK IC, 2*25 cm, 5 µm; mobile phase A: hexan e (0.5% 2M NH_3 in MeOH), mobile phase B: EtOH : DCM 1 : 1; flow rate: 20 mL/min; gra dient: 15% B isocratic; wavelength: 220/254 nm; RT1 (min): 15.95; RT2 (min): 21.01; sam ple solvent: EtOH : DCM 1 : 1; injection volume: 1 mL) to give (1S,2R,4S)-4-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2-(hydroxymethyl)cyclope ntane-1-carboxamide and (1R,2S,4R)-4-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2-(hydroxymethyl)cyclopentane-1-carboxamide, both as an off-white amorphous solid. Isomer 1 is 1 mg, 2 µmol. ^{1}HNMR (400 MHz, DMSO-d_6) δ 8.08 (d, J = 8.7 Hz, 1H), 7.79 (d, J = 7.1 Hz, 1H), 7.61 (dd, J = 9.0, 4.9 Hz, 1H), 7.24 (t, J = 9.9 Hz, 1H), 5.49 (d, J = 8.5 Hz, 1H), 4.22 (t, J = 5.1 Hz, 1H), 4.17 (s, 1H), 3.10 (d, J = 7.4 Hz, 1H), 3.06 - 2.99 (m, 1H), 2.77 (q, J = 6.7, 4.7 Hz, 1H), 2.29 (q, J = 9.5, 8.7 Hz, 1H), 2.07 (dt, J =

13.8, 6.7 Hz, 1H), 1.75 (s, 3H), 1.71 (t, J = 7.0 Hz, 1H), 1.59 (s, 6H), 1.54 - 1.44 (m, 2H), 1.36 (s, 1H), 1.25 (s, 1H), 0.95 (s, 3H). LCMS RT 0.911 min, [M+H] 459, LCMS method C. Isomer 22 is 2 mg, 4 μmol. ^{1}HNMR (400 MHz, DMSO-d_6) δ 8.11 (d, J = 8.5 Hz, 1H), 7.80 (d, J = 7.0 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (t, J = 9.9 Hz, 1H), 5.46 (d, J = 8.4 Hz, 1H), 4.50 (t, J = 5.2 Hz, 1H), 4.14 (s, 1H), 3.44 - 3.36 (m, 1H), 3.21 (td, J = 9.6, 5.6 Hz, 1H), 3.03 (q, J = 8.0, 7.5 Hz, 1H), 2.42 - 2.32 (m, 1H), 1.93 (dd, J = 13.1, 6.9 Hz, 1H), 1.74 (s, 3H), 1.61 (s, 6H), 1.53 (d, J = 8.9 Hz, 2H), 1.40 (t, J = 6.8 Hz, 2H), 1.24 (s, 1H), 1.00 - 0.91 (m, 3H). LCMS RT 0.933 min, $[M+H]^+$ 459, LCMS method C.

Example 20

(1S,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-isopropoxycyclopentane-1-carboxamide, (1R,3S,4R)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-isopropoxycyclopentane-1-carboxamide, (1R,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-isopropoxycyclopentane-1-carboxamide and (1S,3S,4R)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-isopropoxycyclopentane-1-carboxamide



Step 1. Synthesis of ethyl (1r,3R,4S)-3,4-dihydroxycyclopentane-1-carboxylate and ethyl (1s,3R,4S)-3,4-dihydroxycyclopentane-1-carboxylate

[0791] To a stirred mixture of ethyl cyclopent-3-ene-1-carboxylate (5 g, 0.04 mol) and NMO (5 g, 0.04 mol) in acetone (10 mL) and H_2O (10 mL) was added $K_2OsO_2(OH)_4$ (3 g, 7 mmol) at room temperature under a nitrogen atmosphere. The resulting mixture was stirred overnight at room temperature. The mixture was extracted with DCM (3 x 250 mL). The combined organic layers were washed with brine (1x100 mL), dried over anhydrous Na_2SO_4. After filtration, the filtrate was concentrated under reduced pressure. The residue was purified by silica gel column chromatography, eluting with petroleum ether:ethyl acetate (1:5) to afford ethyl (3R,4S)-3,4-dihydroxycyclopentane-1-carboxylate (4.14 g, 23.8 mmol, including 1.5 g isomer 1, 420 mg isomer 2, and 2.2 g mixture of the two) as a yellow oil. Isomer 1: ^{1}H NMR (400 MHz, DMSO-d6) δ 4.47 (d, J = 4.2 Hz, 2H), 4.04 (q, J = 7.1 Hz, 2H), 3.88 (h, J = 4.0 Hz, 2H), 2.95 (tt, J = 9.6, 6.7 Hz, 1H), 1.90 – 1.70 (m, 4H), 1.17 (t, J = 7.1 Hz, 3H). Isomer 2: ^{1}H NMR (400 MHz, DMSO-d6) δ 4.37 (d, J = 4.3 Hz, 2H), 4.04 (dd, J = 7.1, 3.2 Hz, 2H), 3.76 (dp, J = 7.5, 4.5 Hz, 2H), 2.67 (tt, J = 9.3, 8.0 Hz, 1H), 1.95 (tdd, J = 9.4, 4.8,

1.7 Hz, 2H), 1.83 – 1.76 (m, 2H), 1.17 (t, *J* = 7.1 Hz, 3H).

[0792] Step 2. Synthesis of ethyl (3aR,5r,6aS)-2,2-dimethyltetrahydro-4H-cyclopenta[d][1,3]dioxole-5-carboxylate

[0793] To a stirred mixture of ethyl (1r,3R,4S)-3,4-dihydroxycyclopentane-1-carboxylate (500 mg, 2.87 mmol, isomer 2) and 2,2-dimethoxypropane (299 mg, 2.87 mmol) in acetone (1 mL) was added 4-methylbenzene-1-sulfonic acid (98.9 mg, 574 μmol) at 25°C under a nitrogen atmosphere. The resulting mixture was stirred for 16 hours at 25°C under nitrogen. The resulting mixture was extracted with EtOAc (3 x 20 mL). The combined organic layers were washed with water (1x20 mL) and brine (1x20 mL), and dried over anhydrous Na_2SO_4. After filtration, the filtrate was concentrated under reduced pressure to afford ethyl (3aR,5r,6aS)-2,2-dimethyltetrahydro-4H-cyclopenta[d][1,3]dioxole-5-carboxylate (649 mg, 3.03 mmol, crude) as a colorless oil. ^{1}H NMR (400 MHz, DMSO-d6) δ 4.62 (dd, J = 3.7, 1.6 Hz, 2H), 4.06 (q, J = 7.1 Hz, 2H), 2.89-2.80 (m, 1H), 1.98 – 1.87 (m, 2H), 1.67-1.59 (m, 2H), 1.34 (s, 3H), 1.23 – 1.12 (m, 6H).

[0794] Step 3. Synthesis of (±)-ethyl (1S,3R,4S)-3-hydroxy-4-isopropoxycyclopentane-1-carboxylate

[0795] To a stirred mixture of ethyl (3aR,5r,6aS)-2,2-dimethyltetrahydro-4H-cyclopenta[d][1,3]dioxole-5-carboxylate (200 mg, 0.93 mmol) and triethylsilane (139 mg, 1.20 mmol) in DCM (5 mL) was added $TiCl_4$ (1.02 mL, 1 M in DCM, 1.02 mmol) dropwise at -40 °C under a nitrogen atmosphere. The resulting mixture was stirred at -40 °C for 1 hour under nitrogen. The reaction was quenched with water/ice at 0°C. The resulting mixture was extracted with DCM (3 x 50 mL). The combined organic layers were washed with brine (1x100 mL) and $NaHCO_3$ (1x100 mL), and dried over anhydrous Na_2SO_4. After filtration, the filtrate was concentrated under reduced pressure. The residue was purified by silica gel column chromatography, eluting with petroleum ether : ethyl acetate (5:1) to afford (±)-ethyl (1S,3R,4S)-3-hydroxy-4-isopropoxycyclopentane-1-carboxylate (120 mg, 555 μmol) as a colorless oil. ^{1}H NMR (400 MHz, DMSO-d6) δ 4.16 (d, J = 4.4 Hz, 1H), 4.05 (q, J = 7.1 Hz, 2H), 3.98 (q, J = 4.3 Hz, 1H), 3.77 (td, J = 6.9, 3.7 Hz, 1H), 3.70-3.64 (m, 1H), 3.00 – 2.87 (m, 1H), 1.94 – 1.76 (m, 4H), 1.17 (t, J = 7.1 Hz, 3H), 1.09 (t, J = 6.3 Hz, 6H).

Step 4. Synthesis of (±)-(1S,3R,4S)-3-hydroxy-4-isopropoxycyclopentane-1-carboxylic acid

[0796] To a stirred mixture of (±)-ethyl (1S,3R,4S)-3-hydroxy-4-isopropoxycyclopentane-1-carboxylate (120 mg, 555 μmol) in MeOH (2 mL) and H_2O (2 mL) was added NaOH (44.4 mg, 1.11 mmol) at 25 °C under a nitrogen atmosphere. The resulting mixture was stirred for 1 hour at 25 °C under nitrogen. The mixture was acidified to pH 4 with conc. HCl. The resulting mixture was extracted with DCM (3 x 250 mL). The combined organic layers were washed with brine (1x100 mL) and dried over anhydrous Na_2SO_4. After filtration, the filtrate was concentrated under reduced pressure to afford (±)-(1S,3R,4S)-3-hydroxy-4-isopropoxycyclopentane-1-carboxylic acid (110 mg, 584 μmol). 1H NMR (300 MHz, DMSO-d6) δ 12.05 (s, 1H), 4.13 (d, J = 4.4 Hz, 1H), 3.97 (p, J = 4.3 Hz, 1H), 3.76 (td, J = 7.0, 3.7 Hz, 1H), 3.70 – 3.62 (m, 1H), 2.87 (qd, J = 8.6, 5.5 Hz, 1H), 1.95 – 1.74 (m, 4H), 1.09 (dd, J = 6.1, 4.7 Hz, 6H).

Step 5. Synthesis of (1S,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-isopropoxycyclopentane-1-carboxamide and (1R,3S,4R)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-isopropoxycyclopentane-1-carboxamide

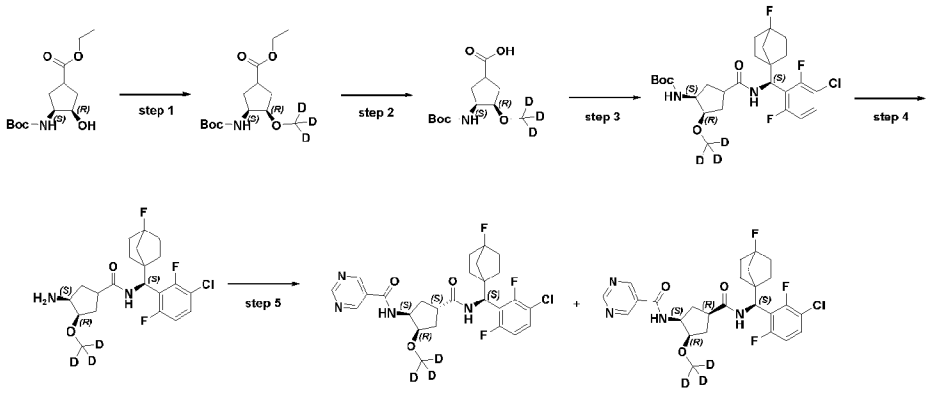
[0797] To a stirred mixture of (±)-(1S,3R,4S)-3-hydroxy-4-isopropoxycyclopentane-1-carboxylic acid (100 mg, 531 μmol) and (S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methanamine (169 mg, 584 μmol) in DMF (5 mL) was added T3P (507 mg, 50% wt. in EtOAc, 797 μmol) and TEA (69.9 mg, 691 μmol) at 25 °C under a nitrogen atmosphere. The resulting mixture was stirred for 1 hour at 25 °C under nitrogen. The resulting mixture was purified by preparative HPLC with the following conditions (column: XBridge Prep OBD C18 Column, 30*150 mm, 10 μm; mobile phase A: water (10 mM NH_4HCO_3 + 0.05% NH_4OH), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 35% B to 65% B in 30 min; wavelength: 254nm/220nm; RT (min): 9.58) to afford the desired product (140 mg, 304 μmol) as a white solid, which was further purified by preparative chiral HPLC (column: CHIRAL ART Cellulose-SZ, 3*25 cm, 5 μm; mobile phase A: hexane (0.5% of 2M NH_3 in MeOH), mobile phase B: EtOH; flow rate: 40 mL/min; gradient: 10% B isocratic; wavelength: 254/220 nm; RT1 (min): 8.63; RT2 (min): 10.525; sample solvent: EtOH : DCM 1 : 1) to give (1S,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-

isopropoxycyclopentane-1-carboxamide and (1R,3S,4R)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-isopropoxycyclopentane-1-carboxamide, both as a white solid. Isomer 1: 34.6 mg, 73.4 μmol, LCMS RT 1.700 min, $[M+H]^+$ 460.20, LCMS method F, ^{1}H NMR (400 MHz, DMSO-d6) δ 8.20 (d, J = 8.4 Hz, 1H), 7.58 (td, J = 8.7, 5.4 Hz, 1H), 7.16 (td, J = 9.4, 1.6 Hz, 1H), 5.27 (d, J = 8.3 Hz, 1H), 4.44 (d, J = 5.1 Hz, 1H), 3.89 (p, J = 4.7 Hz, 1H), 3.72 - 3.62 (m, 2H), 2.66 (qd, J = 8.9, 6.2 Hz, 1H), 2.05 - 1.39 (m, 14H), 1.09 (dd, J = 12.0, 6.0 Hz, 6H). Isomer 2: 46.0 mg, 97.5 μmol, LCMS RT 1.696 min, $[M+H]^+$ 460.15, LCMS method F. ^{1}H NMR (300 MHz, DMSO-d6) δ 8.20 (d, J = 8.3 Hz, 1H), 7.58 (td, J = 8.7, 5.5 Hz, 1H), 7.16 (td, J = 9.5, 1.7 Hz, 1H), 5.26 (d, J = 8.2 Hz, 1H), 4.45 (d, J = 5.2 Hz, 1H), 3.90 (p, J = 4.6 Hz, 1H), 3.73 - 3.59 (m, 2H), 2.68 (qd, J = 8.9, 6.1 Hz, 1H), 2.06 - 1.54 (m, 12H), 1.46 (s, 2H), 1.08 (dd, J = 13.2, 6.1 Hz, 6H).

[0798] Similarly, (1R,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-isopropoxycyclopentane-1-carboxamide and (1S,3S,4R)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-isopropoxycyclopentane-1-carboxamide, both as a white solid, can be prepared from ethyl (1s,3R,4S)-3,4-dihydroxycyclopentane-1-carboxylate after chiral separation by preparative chiral HPLC with the following conditions (column: Lux Cellulose-4, 2.12*25 cm, 5 μm; mobile phase A: hexane (0.5% of 2 M NH_3 in MeOH), mobile phase B: EtOH; flow rate: 20 mL/min; gradient: 3% B isocratic; wavelength: 210/220 nm; RT1 (min): 5.49; RT2 (min): 7.80; sample solvent: EtOH; injection volume: 0.4 mL). Isomer 3: 22.2 mg, 47.4 μmol. LCMS RT 1.534 min, $[M+H]^+$ 460.20, LCMS method F, ^{1}H NMR (400 MHz, DMSO-d6) δ 8.22 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (td, J = 9.5, 1.6 Hz, 1H), 5.24 (d, J = 8.1 Hz, 1H), 4.07 (d, J = 4.3 Hz, 1H), 3.95 (p, J = 4.2 Hz, 1H), 3.72 - 3.58 (m, 2H), 3.06 (ddd, J = 15.8, 8.9, 6.2 Hz, 1H), 1.84 - 1.54 (m, 12H), 1.45 (d, J = 9.2 Hz, 2H), 1.06 (dd, J = 8.9, 6.1 Hz, 6H). Isomer 4: 34.2 mg, 72.0 μmol, LCMS RT 1.662 min, $[M+H]^+$ 460.20, LCMS method F, ^{1}H NMR (400 MHz, DMSO-d6) δ 8.21 (d, J = 8.1 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.19 - 7.08 (m, 1H), 5.24 (d, J = 8.1 Hz, 1H), 4.06 (d, J = 4.1 Hz, 1H), 3.92 (p, J = 4.1 Hz, 1H), 3.73 (td, J = 6.8, 3.6 Hz, 1H), 3.64 (h, J = 6.1 Hz, 1H), 3.14 - 3.00 (m, 1H), 1.87 - 1.66 (m, 10H), 1.59 (d, J = 8.5 Hz, 1H), 1.48 (ddd, J = 20.7, 10.3, 6.7 Hz, 3H), 1.08 (t, J = 5.7 Hz, 6H).

Example 21

Synthesis of N-((1S,2R,4S)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-(methoxy-d3)cyclopentyl)pyrimidine-5-carboxamide and N-((1S,2R,4R)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-(methoxy-d3)cyclopentyl)pyrimidine-5-carboxamide



Step 1. Synthesis of ethyl (3S,4R)-3-((tert-butoxycarbonyl)amino)-4-(methoxy-d3)cyclopentane-1-carboxylate

[0802] To a stirred solution of ethyl (3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylate (600 mg, 2.20 mmol) and Ag_2O (5.09 g, 22.00 mmol) in DCE (30 mL) was added iodomethane-d_3 (1.59 g, 11.00 mmol) dropwise at room temperature under a nitrogen atmosphere. The resulting mixture was stirred for 12 hours at 80 °C under nitrogen. The mixture was cooled to room temperature and filtered. The filter cake was washed with CH_2Cl_2 (3 x 100 mL). The filtrate was concentrated under reduced pressure. The residue was purified by silica gel column chromatography, eluting with petroleum ether / EtOAc (0% to 50% of EtOAc over 30 min) to afford ethyl (3S,4R)-3-((tert-butoxycarbonyl)amino)-4-(methoxy-d3)cyclopentane-1-carboxylate (400 mg, 1.30 mmol) as a light yellow solid. ^{1}H NMR (400 MHz, DMSO-d6) δ 6.49 (d, J = 8.2 Hz, 1H), 4.05 (q, J = 7.1 Hz, 2H), 3.91 – 3.80 (m, 1H), 3.68 – 3.61 (m, 1H), 2.90 – 2.76 (m, 1H), 2.04 – 1.90 (m, 2H), 1.79 – 1.72 (m, 2H), 1.38 (s, 9H), 1.17 (t, J = 7.1 Hz, 3H).

Step 2. Synthesis of (3S,4R)-3-((tert-butoxycarbonyl)amino)-4-(methoxy-d3)cyclopentane-1-carboxylic acid

[0803] To a stirred solution of ethyl (3S,4R)-3-((tert-butoxycarbonyl)amino)-4-(methoxy-d3)cyclopentane-1-carboxylate (290 mg, 999 μmol) in THF (3 mL) and H_2O (1 mL) was added LiOH (71 mg, 3.00 mmol) at room temperature under a nitrogen atmosphere. The resulting mixture was stirred for 4 hours at 30 °C under nitrogen. The mixture was acidified to pH 5 with HCl (1 N, aq.). The resulting mixture was extracted with EtOAc (3 x 100 mL). The combined organic layers were washed with brine (3 x 50 mL), and dried over anhydrous Na_2SO_4. After filtration, the filtrate was concentrated under reduced pressure. The crude product (3S,4R)-3-((tert-butoxycarbonyl)amino)-4-(methoxy-d3)cyclopentane-1-carboxylic acid (200 mg, 762 μmol) was used in the next step directly without purification. LCMS RT 0.539 min, $[M+H]^+$=263.1, LCMS method G.

Step 3. Synthesis of tert-butyl ((1S,2R)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-(methoxy-d3)cyclopentyl)carbamate

[0804] To a stirred solution of (3S,4R)-3-((tert-butoxycarbonyl)amino)-4-(methoxy-d3)cyclopentane-1-carboxylic acid (80 mg, 0.30 mmol) and (S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methanamine (88 mg, 0.30 mmol) in DMF (2 mL) was added sodium bicarbonate (77 mg, 0.91 mmol) and HATU (170 mg, 0.46 mmol) at room temperature under a nitrogen atmosphere. The resulting mixture was stirred for 3 hours at 30 °C under nitrogen. After concentration *in vacuo*, the residue was purified by reversed-phase flash chromatography (column: C18 gel; mobile phase A: water (0.1% NH_4OH), mobile phase B: acetonitrile; gradient: 10% to 90% B in 40 min; detector: UV 254/220 nm) to give tert-butyl ((1S,2R)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-(methoxy-d3)cyclopentyl)carbamate (80 mg, 0.14 mmol) as a white solid. LCMS RT 1.291 min, m/z $[M-H]^-$ 532.2, LCMS method G.

Step 4. Synthesis of (3S,4R)-3-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-(methoxy-d3)cyclopentane-1-carboxamide hydrochloride

[0805] To a stirred solution of tert-butyl ((1S,2R)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-(methoxy-d3)cyclopentyl)carbamate (40 mg, 75.00 μmol) in 1,4-dioxane (1 mL) was added HCl in 1,4-dioxane (4M, 1 mL) dropwise at room temperature under a nitrogen atmosphere. The resulting mixture was stirred

for 2 hours at 30 °C under nitrogen. The mixture was concentrated and triturated with Et_2O (2 mL) twice. The crude product (3S,4R)-3-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-(methoxy-d3)cyclopentane-1-carboxamide hydrochloride (40 mg, crude) was used in the next step directly without further purification. LCMS RT 0.985 min, $[M+H]^+$ 434.2, LCMS method G.

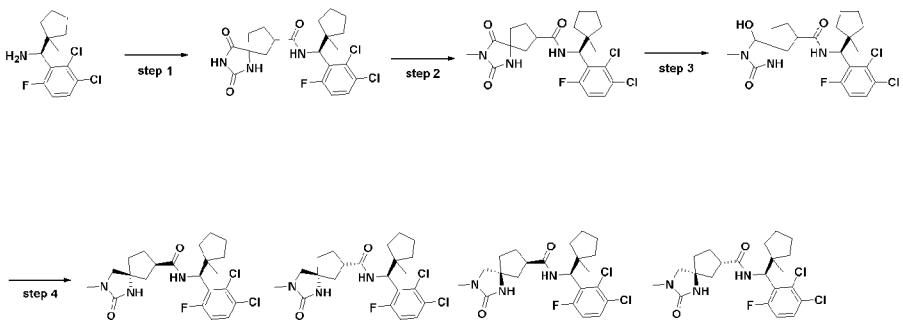
Step 5. Synthesis of N-((1S,2R,4S)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-(methoxy-d3)cyclopentyl)pyrimidine-5-carboxamide and N-((1S,2R,4R)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-(methoxy-d3)cyclopentyl)pyrimidine-5-carboxamide

[0806] To a stirred solution of (3S,4R)-3-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-(methoxy-d3)cyclopentane-1-carboxamide hydrochloride (30 mg, 69 μmol) and pyrimidine-5-carboxylic acid (9 mg, 69 μmol) in DMF (1 mL) was added sodium bicarbonate (17 mg, 0.21 mmol) and HATU (39 mg, 0.10 mmol) at room temperature under a nitrogen atmosphere. The resulting mixture was stirred for 3 hours at 30 °C under nitrogen. After concentration under reduced pressure, the residue was purified by reversed-phase flash chromatography (column: C18 gel; mobile phase A: water (0.1% NH_4OH), mobile phase B: acetonitrile; gradient: 10% to 90% B in 40 min; detector: UV 254/220 nm) to give N-((1S,2R)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-(methoxy-d3)cyclopentyl)pyrimidine-5-carboxamide (20 mg, 51 %) as a white solid. LCMS RT 1.177 min, $[M+H]^+$ 540.2, LCMS method. It was further purified by preparative chiral HPLC with the following conditions (column: CHIRALPAK IA, 2*25 cm, 5 μm; mobile phase A: hexane (0.5% of 2M NH_3 in MeOH), mobile phase B: EtOH; flow rate: 20 mL/min; gradient: 50% B isocratic; wavelength: 200/215 nm; RT1 (min): 6.3; RT2 (min): 17.48; sample solvent: EtOH : CH_2Cl_2 1 : 1; injection volume: 1 mL) to give N-((1S,2R,4S)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-(methoxy-d3)cyclopentyl)pyrimidine-5-carboxamide and N-((1S,2R,4R)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-(methoxy-d3)cyclopentyl)pyrimidine-5-carboxamide, both as a white solid. Isomer 1: 7.1 mg, 13 μmol, LCMS RT 1.875 min, $[M+H]^+$ 540.25, LCMS method F, ^1H NMR (400 MHz, DMSO-d6) δ 9.30 (d, J = 3.2 Hz, 1H), 9.17-9.08 (m, 2H), 8.57 (d, J = 7.7 Hz, 1H), 8.28 (d, J = 8.1 Hz, 1H), 7.58 (td, J = 8.7, 5.4 Hz, 1H), 7.16 (t, J = 9.5 Hz, 1H), 5.30 (d, J = 8.2 Hz, 1H), 4.30 (dt, J = 12.6, 6.2 Hz, 1H),

3.77 (s, 1H), 3.16-3.02 (m, 1H), 2.07-1.93 (m, 3H), 1.86-1.56 (m, 9H), 1.46 (s, 2H). ^{19}F NMR (282 MHz, DMSO) δ -111.047, -113.597, -173.563. Isomer 2: 3.0 mg, 5.5 μmol, LCMS RT 1.875 min, $[M+H]^+$ 540.25, LCMS method F. ^{1}H NMR (400 MHz, DMSO-d6) δ 9.30 (s, 1H), 9.14 (d, J = 1.4 Hz, 2H), 8.56 (d, J = 8.0 Hz, 1H), 8.28 (d, J = 8.3 Hz, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.23-7.09 (m, 1H), 5.29 (d, J = 8.2 Hz, 1H), 4.35-4.18 (m, 1H), 3.80 (td, J = 4.5, 2.4 Hz, 1H), 3.10 (d, J = 10.5 Hz, 1H), 2.12 (ddd, J = 13.6, 8.8, 2.5 Hz, 1H), 1.94 (q, J = 10.5 Hz, 1H), 1.85-1.68 (m, 9H), 1.61 (d, J = 8.4 Hz, 1H), 1.47 (d, J = 8.0 Hz, 2H). ^{19}F NMR (282 MHz, DMSO) δ -111.635, -113.401, -173.565.

Example 22

(5R,7R)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2-oxo-1,3-diazaspiro[4.4]nonane-7-carboxamide, (5R,7S)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2-oxo-1,3-diazaspiro[4.4]nonane-7-carboxamide, (5S,7S)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2-oxo-1,3-diazaspiro[4.4]nonane-7-carboxamide and (5S,7R)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2-oxo-1,3-diazaspiro[4.4]nonane-7-carboxamide



Step 1. Synthesis of N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2,4-dioxo-1,3-diazaspiro[4.4]nonane-7-carboxamide

[0807] To a mixture of 2,4-dioxo-1,3-diazaspiro [4.4] nonane-7-carboxylic acid (300 mg, 1.51 mmol), (S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methanamine (418 mg, 1.51 mmol) and TEA (917 mg, 9.08 mmol) in DMF (3 mL) was added T_3P (1.93 g, 50% wt, 3.03 mmol). The mixture was stirred for 2 hours at 25 °C. The reaction mixture was diluted with water (20 mL), and the aqueous phase was extracted with ethyl acetate (20 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate,

filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% B in 25 min; detector: UV 254 nm). Concentration in vacuo resulted in N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2,4-dioxo-1,3-diazaspiro[4.4]nonane-7-carboxamide (0.23 g, 33 %) as a colorless oil. LCMS RT 0.981 min, $[M+H]^+$ 456, LC method C.

Step 2. Synthesis of N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2,4-dioxo-1,3-diazaspiro[4.4]nonane-7-carboxamide

[0808] A mixture of N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-2,4-dioxo-1,3-diazaspiro[4.4]nonane-7-carboxamide (220 mg, 482 μmol) and 1,1-dimethoxy-N, N-dimethylethan-1-amine (193 mg, 1.45 mmol) in toluene (2 mL) was stirred for 2 hours at 110 °C. The reaction mixture was concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% B in 25 min; detector: UV 254 nm) to give N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2,4-dioxo-1,3-diazaspiro[4.4]nonane-7-carboxamide (0.19 g, 0.40 mmol) as a colorless oil. LCMS RT 0.994 min, $[M+H]^+$ 470, LCMS method C.

Step 3. Synthesis of N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-4-hydroxy-3-methyl-2-oxo-1,3-diazaspiro[4.4]nonane-7-carboxamide

[0809] To a mixture of N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2,4-dioxo-1,3-diazaspiro[4.4]nonane-7-carboxamide (180 mg, 383 μmol) in THF (3 mL) was added $LiAlH_4$ (22 mg, 574 μmol) in portions at 0 °C under a nitrogen atmosphere. The mixture was stirred for 2 hours at 25 °C. The reaction was then cooled to 0°C and quenched with water (0.18 mL), sodium hydroxide (0.36 mL, 4M) and then water (0.18 mL). The mixture was filtered through a pad of Celite. The pad was washed with ethyl acetate, and the filtrate was concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% in 25 min; detector: UV 254 nm) to give N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2,4-dioxo-1,3-diazaspiro[4.4]nonane-7-carboxamide (0.15 g, 0.32 mmol) as a colorless oil. LCMS RT 0.941 min, $[M+H]^+$ 472, LCMS method C.

Step 4. Synthesis of (5R,7R)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2-oxo-1,3-diazaspiro[4.4]nonane-7-carboxamide, (5R,7S)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2-oxo-1,3-diazaspiro[4.4]nonane-7-carboxamide, (5S,7S)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2-oxo-1,3-diazaspiro[4.4]nonane-7-carboxamide and (5S,7R)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2-oxo-1,3-diazaspiro[4.4]nonane-7-carboxamide

[0810] To a mixture of N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2,4-dioxo-1,3-diazaspiro[4.4]nonane-7-carboxamide (140 mg, 335 μmol) in THF (2 mL) was added Et_3SiH (78.3 mg, 669 μmol) dropwise at room temperature, and then TFA (76.3 mg, 669 μmol) was added. The mixture was stirred for 2 hours at 70 °C. The reaction mixture was concentrated in vacuo. The resulting crude material was purified by preparative HPLC (mobile phase A: water with 0.1% formic acid, mobile phase B: acetonitrile) to give N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2-oxo-1,3-diazaspiro[4.4]nonane-7-carboxamide (0.10 g) as a colorless oil. LCMS RT 1.020 min, $[M+H]^+$ 456, LCMS method C.

[0811] The product was further purified by chiral preparative HPLC (column: CHIRALPAK IG, 2*25 cm, 5 μm; mobile phase A: hexane, mobile phase B: EtOH; flow rate: 20 mL/min; gradient: 15% B isocratic; wavelength: 220/254 nm; RT1 (min): 9.259; RT2 (min): 11.358; sample solvent: EtOH : DCM 1 : 1; injection volume: 1.5 mL) to (5R,7R)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2-oxo-1,3-diazaspiro[4.4]nonane-7-carboxamide, (5R,7S)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2-oxo-1,3-diazaspiro[4.4]nonane-7-carboxamide, (5S,7S)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2-oxo-1,3-diazaspiro[4.4]nonane-7-carboxamide and (5S,7R)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-methyl-2-oxo-1,3-diazaspiro[4.4]nonane-7-carboxamide, all as an off-white amorphous solid.

[0812] Isomer 1: 6.8 mg, 15 μmol. ^1H NMR (400 MHz, DMSO-d6) δ 8.12 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (dd, J = 10.8, 9.0 Hz, 1H), 6.63 (s, 1H), 5.48 (d, J = 8.5 Hz, 1H), 3.17 - 3.06 (m, 2H), 3.06 - 2.98 (m, 1H), 2.56 (s, 3H), 1.92 (td, J = 9.0, 8.5, 5.6

Hz, 1H), 1.82 - 1.54 (m, 4H), 1.60 (s, 7H), 1.37 (s, 1H), 1.26 (t, J = 9.2 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H), LCMS RT 1.205 min, $[M+H]^+$ 456.10, LC method B

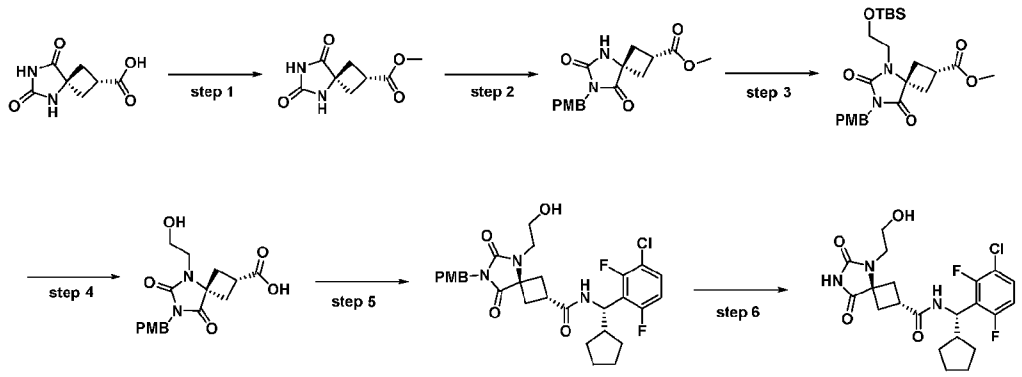
[0813] Isomer 2: 7.4 mg, 16 µmol. ^{1}H NMR (400 MHz, DMSO-d6) δ 8.11 (d, J = 8.6 Hz, 1H), 7.61 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.7, 9.0 Hz, 1H), 6.65 (s, 1H), 5.48 (d, J = 8.5 Hz, 1H), 3.22 (d, J = 8.8 Hz, 1H), 3.12 (d, J = 8.8 Hz, 1H), 3.02 (p, J = 7.7 Hz, 1H), 2.58 (s, 3H), 1.89 (dd, J = 13.2, 9.3 Hz, 1H), 1.78 (dt, J = 13.0, 5.9 Hz, 2H), 1.72 - 1.44 (m, 9H), 1.38 (d, J = 6.7 Hz, 1H), 1.31 - 1.22 (m, 1H), 0.97 (d, J = 2.8 Hz, 3H), LCMS RT 1.195 min, $[M+H]^+$ 456.10, LCMS method B

[0814] Isomer 3: 27.4 mg, 60.0 µmol. ^{1}H NMR (400 MHz, DMSO-d6) δ 8.08 (d, J = 8.7 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.31 - 7.21 (m, 1H), 6.45 (s, 1H), 5.50 (d, J = 8.5 Hz, 1H), 3.14 (q, J = 8.5 Hz, 2H), 2.94 (p, J = 8.2 Hz, 1H), 2.51 (p, J = 1.8 Hz, 3H), 1.85 - 1.71 (m, 3H), 1.71 - 1.50 (m, 9H), 1.41 - 1.33 (m, 1H), 1.27 (d, J = 8.1 Hz, 1H), 0.97 (d, J = 2.8 Hz, 3H), LCMS RT 1.210 min, $[M+H]^+$, 456.10, LCMS method B

[0815] Isomer 4: 27.4 mg, 60.0 µmol. ^{1}H NMR (400 MHz, DMSO-d6) δ 8.09 (d, J = 8.7 Hz, 1H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.7, 8.9 Hz, 1H), 6.49 (s, 1H), 5.52 (d, J = 8.6 Hz, 1H), 3.19 (d, J = 8.6 Hz, 1H), 3.13 (d, J = 8.5 Hz, 1H), 2.98 - 2.90 (m, 1H), 2.61 (s, 3H), 1.89 (dd, J = 12.4, 7.8 Hz, 1H), 1.79 - 1.49 (m, 10H), 1.40 - 1.33 (m, 1H), 1.27 (d, J = 8.1 Hz, 1H), 0.96 (d, J = 2.8 Hz, 3H), LCMS RT 1.198 min, $[M+H]^+$ 456.10, LCMS method B.

Example 23

(2r,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-5-(2-hydroxyethyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide



Step 1. Synthesis of methyl (2r,4r)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylate

To a mixture of (2r,4r)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylic acid (1 g, 5 mmol) in DCM/MeOH (2:1, 10 mL) was added $TMSCHN_2$ (8 mL, 2 M, 16 mmol) dropwise at 0 °C under a nitrogen atmosphere. The mixture was stirred for 2 h at room temperature. The reaction was quenched with saturated NH_4Cl (aq.) and the aqueous phase was extracted with DCM (20 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 5% to 40% B in 10 min; detector: UV 220 nm) to afford methyl (2r,4r)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylate (500 mg, 2.52 mmol) as a colorless oil. LCMS RT 0.535 min, $[M+H]^+$ 199, LCMS method C.

Step 2. Synthesis of methyl (2s,4s)-7-(4-methoxybenzyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylate

[0818] To a mixture of methyl (2r,4r)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylate (1. 7 g, 8.6 mmol), Cs_2CO_3 (5.6 g, 17 mmol) in DMF (20 mL) was added 1-(chloromethyl)-4-m ethoxybenzene (1.5 g, 9.4 mmol) dropwise at 0 °C under a nitrogen atmosphere. The mixtur e was stirred for 16 hours at 0 °C. The reaction mixture was diluted with water (100 mL), an d the aqueous phase was extracted with ethyl acetate (100 mL) three times. The combined or ganic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% B in 25 min; detector: UV 254 nm) to give methyl (2s,4s)-7-(4-methoxybenzyl)-6,8-dioxo-5,7-diazaspiro [3.4]octane-2-carboxylate (1 g, 3 mmol) as a colorless oil. LCMS RT 0.696 min, $[M+H]^+$ 31 9, LCMS method A.

Step 3. Synthesis of methyl (2s,4s)-5-(2-((tert-butyldimethylsilyl)oxy)ethyl)-7-(4-methoxybenzyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylate

[0819] To a mixture of methyl (2s,4s)-7-(4-methoxybenzyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylate (290 mg, 911 μmol) and Cs_2CO_3 (594 mg, 1.82 mmol) in DMF (5 mL) was added (2-bromoethoxy)(tert-butyl)dimethylsilane (262 mg, 1.09 mmol) at -78 °C. The mixture was stirred for 2 h at room temperature. The reaction mixture was diluted with water (10 ml) and extracted with ethyl acetate (50 mL*3). The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by C18 flash (acetonitrile/water) to give methyl (2s,4s)-5-(2-((tert-butyldimethylsilyl)oxy)ethyl)-7-(4-methoxybenzyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylate (275 mg, 577 μmol) as a colorless oil. LCMS RT 1.456 min, $[M+H]^+$ 477, LCMS method C.

Step 4. Synthesis of (2s,4s)-5-(2-hydroxyethyl)-7-(4-methoxybenzyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylic acid

[0820] A mixture of methyl (2s,4s)-5-{2-[(tert-butyldimethylsilyl)oxy]ethyl}-7-[(4-methoxyphenyl)methyl]-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylate (1 g, 2.098 mmol) and NaOH (0.25 g, 6.294 mmol) in MeOH (10 mL) was stirred for 1 h at 25°C. The mixture was acidified to pH 5 with HCl (1N). The precipitated solids were collected by filtration and washed with MeOH to give (2s,4s)-5-(2-hydroxyethyl)-7-[(4-methoxyphenyl)methyl]-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylic acid (530 mg,) as an off-white solid. LCMS RT 0.640 min, $[M+H]^+$ 349, LCMS method C.

Step 5. Synthesis of (2r,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-5-(2-hydroxyethyl)-7-(4-methoxybenzyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide

[0821] A mixture of (2s,4s)-5-(2-hydroxyethyl)-7-[(4-methoxyphenyl)methyl]-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylic acid (530 mg, 1.521 mmol), (1S)-1-(3-chloro-2,6-difluorophenyl)-1-cyclopentylmethanamine (373.82 mg, 1.521 mmol), T_3P (726.14 mg, 2.281 mmol) and TEA (461.88 mg, 4.563 mmol) in DCM (8 mL) was stirred for 1 h at 25 °C. The reaction mixture was diluted with water (10 mL), and the aqueous phase was extracted with DCM (10 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column, C18 silica gel; mobile phase A:

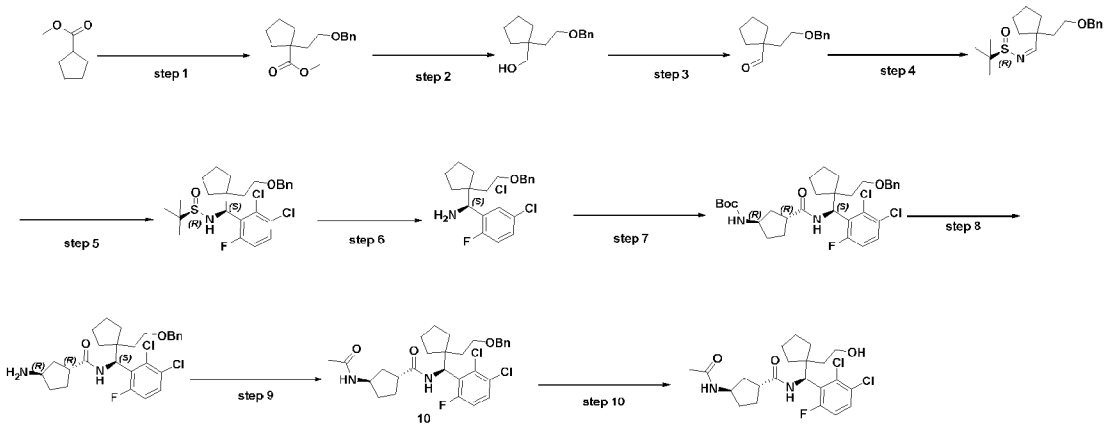
water, mobile phase B: acetonitrile; gradient: 0% to 100% B in 10 min; detector: UV 220 nm) to give (2r,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-5-(2-hydroxyethyl)-7-(4-methoxybenzyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide (540 mg) as an off-white solid. LCMS RT 1.227 min, $[M+H]^+$ 576, LCMS method C.

Step 6. Synthesis of (2r,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-5-(2-hydroxyethyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide

[0822] A mixture of (2r,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-5-(2-hydroxyethyl)-7-(4-methoxybenzyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide (540 mg, 0.937 mmol) and $Ce(NH_4)_2(NO_3)_6$ (515.81 mg, 0.937 mmol) in acetonitrile/H_2O (10 mL, 4:1) was stirred for 1 h at 70 °C. The reaction mixture was diluted with water (20 mL), and the aqueous phase was extracted with ethyl acetate (20 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column, C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0%to 100% B in 10 min; detector: UV 220 nm) to give (2r,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-5-(2-hydroxyethyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide (10 mg) as an off-white solid. ^1H NMR (400 MHz, DMSO-d6) δ 10.62 (s, 1H), 8.38 (d, J = 7.4 Hz, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.21 – 7.03 (m, 1H), 4.97 – 4.72 (m, 2H), 3.61 (q, J = 5.9 Hz, 2H), 3.42 (t, J = 6.1 Hz, 2H), 3.19 (q, J = 9.3 Hz, 1H), 2.62 (ddd, J = 21.6, 12.6, 8.7 Hz, 3H), 2.47 – 2.33 (m, 2H), 1.88 (dt, J = 12.4, 5.1 Hz, 1H), 1.69 – 1.42 (m, 4H), 1.32 (ddd, J = 26.8, 12.2, 6.2 Hz, 2H), 1.02 (d, J = 9.8 Hz, 1H). LCMS RT 1.078 min, $[M+H]^+$ 456.10, LCMS method B.

Example 24

(1R,3R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-(2-hydroxyethyl)cyclopentyl)methyl)cyclopentane-1-carboxamide



Step 1. Synthesis of methyl 1-(2-(benzyloxy)ethyl)cyclopentane-1-carboxylate

[0826] To a mixture of methyl cyclopentanecarboxylate (5 g, 0.04 mol) in THF (70 mL) was added LDA (30 mL, 2 molar, 0.06 mol) dropwise at -78 °C under a nitrogen atmosphere. The mixture was stirred for 1 h at -78°C prior to the addition of ((2-bromoethoxy) methyl) benzene (10 g, 0.05 mol) dropwise at -78°C. The mixture was stirred for 16 h at room temperature. The reaction was quenched with saturated NH_4Cl (aq.) and the aqueous phase was extracted with ethyl acetate (250 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by C18 flash chromatography (mobile phase A: water, mobile phase B: acetonitrile) to give methyl 1-(2-(benzyloxy) ethyl) cyclopentane-1-carboxylate (7.2 g, 27 mmol) as a colorless oil. LCMS RT 1.123 min, $[M+H]^+$ 263, LCMS method
C.

Step 2. Synthesis of (1-(2-(benzyloxy)ethyl)cyclopentyl)methanol

[0827] To a mixture of methyl 1-(2-(benzyloxy) ethyl) cyclopentane-1-carboxylate (7.1 g, 27 mmol) in THF (100 mL) was added $LiAlH_4$ (1.2 g, 32 mmol) in portions at 0 °C. The mixture was stirred for 2 h at room temperature. The reaction was cooled to 0°C and quenched with water (1.5 mL), sodium hydroxide (3 mL, 4N) and water (1.5 mL). The mixture was filtered through a pad of Celite. The pad was washed with DCM, and the filtrate was concentrated in vacuo resulted in (1-(2-(benzyloxy)ethyl)cyclopentyl)methanol (5 g, 0.02 mol) as a colorless oil. LCMS RT 0.988 min, $[M+H]^-$ 235, LCMS method C.

Step 3. Synthesis of 1-(2-(benzyloxy)ethyl)cyclopentane-1-carbaldehyde

[0828] To a mixture of (1-(2-(benzyloxy)ethyl)cyclopentyl)methanol (4.9 g, 21 mmol) and molecule sieve 4 Å activated powder (500 mg) in DCM (100 mL) was added PCC (5.4 g, 25 mmol) at 0 °C. The mixture was stirred at 0 °C for 2 h. The mixture was diluted with ether/pentane (1:1, 500 mL). The mixture was then filtered through Celite (50 g). The pad was washed with ether. The combined filtrate was concentrated (water bath temperature <15 °C) to ~2 mL to give 1-(2-(benzyloxy)ethyl)cyclopentane-1-carbaldehyde (5 g, 0.02 mol, crude). LCMS RT 1.107 min, $[M+Na]^+$ 255, LCMS method C.

Step 4. Synthesis of (R)-N-((1-(2-(benzyloxy)ethyl)cyclopentyl)methylene)-2-methylpropane-2-sulfinamide

[0829] A mixture of 1-(2-(benzyloxy) ethyl) cyclopentane-1-carbaldehyde (5.5 g, 24 mmol), (R)-2-methylpropane-2-sulfinamide (3.2 g, 26 mmol) and $Ti(O^iPr)_4$ (6.7 g, 24 mmol) in THF (100 mL) was stirred for 2 h at 50°C. The reaction mixture was diluted with water (300 mL) and filtrated. The filtrate was extracted with ethyl acetate (350 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by C18 flash chromatography (acetonitrile/water) to give (R)-N-((1-(2-(benzyloxy)ethyl)cyclopentyl)methylene)-2-methylpropane-2-sulfinamide (2.9 g, 8.6 mmol) as a colorless oil. LCMS RT1.210 min, $[M+H]^+$ 336, LCMS method C.

Step 5. Synthesis of (R)-N-((S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methyl)-2-methylpropane-2-sulfinamide

[0830] To a mixture of 1,2-dichloro-4-fluorobenzene (1.7 g, 10 mmol) in THF (50 mL) was added LDA (6.3 mL, 2 molar, 13 mmol) dropwise at -78 °C under a nitrogen atmosphere. The mixture was stirred for 1 h at -78°C prior to the addition of (R)-N-((1-(2-(benzyloxy)ethyl)cyclopentyl)methylene)-2-methylpropane-2-sulfinamide (2.8 g, 8.3 mmol) at -78°C. The mixture was stirred for 16 h at room temperature. The reaction was quenched with saturated NH_4Cl (aq.) and the aqueous phase was extracted with ethyl acetate (300 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by C18 flash chromatography (acetonitrile/water) to give (R)-N-((S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methyl)-2-methylpropane-2-sulfinamide (2.5 g, 5.0 mmol) as a yellow oil. LCMS RT1.342 min, $[M+H]^+$ 500, LCMS method C.

Step 6. Synthesis of (S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methanamine

[0831] A mixture of (R)-N-((S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methyl)-2-methylpropane-2-sulfinamide (2.5 g, 5.0 mmol) in HCl (30 ml, 4 N in dioxane) was stirred for 1 h at room temperature. The mixture was concentrated in vacuo to afford (S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methanamine (1.9 g, 4.8 mmol) as a yellow oil. LCMS RT 0.896 min, $[M+H]^+$ 396, LCMS method C.

Step 7. Synthesis of tert-butyl ((1R,3R)-3-(((S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methyl)carbamoyl)cyclopentyl)carbamate

[0832] To a mixture of (S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methanamine (400 mg, 1.01 mmol), (1R,3R)-3-((tert-butoxycarbonyl)amino) cyclopentane-1-carboxylic acid (231 mg, 1.01 mmol), TEA (306 mg, 3.03 mmol) in DMF (8 mL) was added T_3P (642 mg, 2.02 mmol). The mixture was stirred for 1 h at room temperature. The reaction mixture was diluted with water (50 mL), and the aqueous phase was extracted with ethyl acetate (60 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by C18 flash chromatography (acetonitrile/water) to give tert-butyl ((1R,3R)-3-(((S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methyl)carbamoyl)cyclopentyl)carbamate (360 mg, 593 µmol) as a yellow oil. LCMS RT1.469 min, $[M+H]^+$ 607, LCMS method C.

Step 8. Synthesis of (1R,3R)-3-amino-N-((S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methyl)cyclopentane-1-carboxamide

[0833] A mixture of tert-butyl ((1R,3R)-3-(((S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methyl)carbamoyl)cyclopentyl)carbamate (340 mg, 560 µmol) in HCl (5 ml, 4 N in dioxane) was stirred for 1 h at room temperature. The mixture was concentrated in vacuo to afford (1R,3R)-3-amino-N-((S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methyl)cyclopentane-1-carboxamide (230 mg, 453 µmol) as a yellow oil. LCMS RT 0.921 min, $[M+H]^+$ 507, LCMS method C.

Step 9. Synthesis of (1R,3R)-3-acetamido-N-((S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methyl)cyclopentane-1-carboxamide

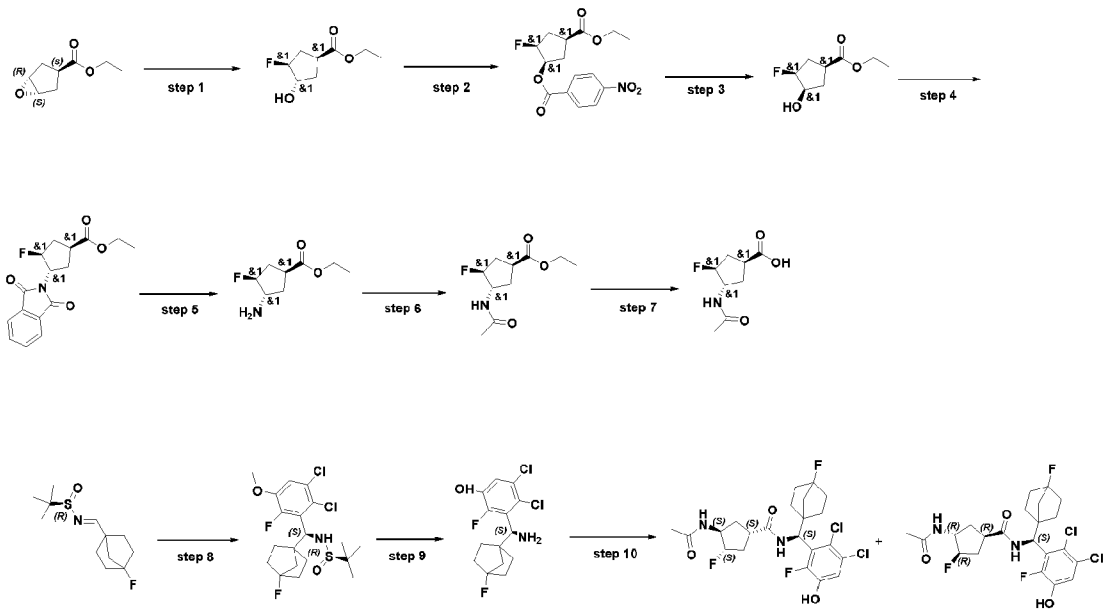
[0834] To a mixture of (1R,3R)-3-amino-N-((S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methyl)cyclopentane-1-carboxamide (200 mg, 394 μmol) and TEA (119 mg, 1.18 mmol) in DCM (5 mL) was added acetyl chloride (30.9 mg, 394 μmol) dropwise at 0°C. The solution was stirred for 1 h at room temperature. The reaction was quenched with water. The aqueous phase was extracted with ethyl acetate (50 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by C18 flash chromatography (acetonitrile/water) to give (1R,3R)-3-acetamido-N-((S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methyl)cyclopentane-1-carboxamide (190 mg, 346 μmol) as an off-white amorphous solid. LCMS RT 1.129 min, $[M+H]^+$ 549, LCMS method C.

Step 10. Synthesis of (1R,3R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-(2-hydroxyethyl)cyclopentyl)methyl)cyclopentane-1-carboxamide

[0835] A mixture of (1R,3R)-3-acetamido-N-((S)-(1-(2-(benzyloxy)ethyl)cyclopentyl)(2,3-dichloro-6-fluorophenyl)methyl)cyclopentane-1-carboxamide (100 mg, 182 μmol) and $Ce(NH_4)_2(NO_3)_6$ (997 mg, 1.82 mmol) in acetonitrile/H_2O (2:1, 10 mL) was stirred for 16 h at room temperature. The mixture was diluted with water. The mixture was extracted with ethyl acetate (100 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by preparative HPLC (column: Xselect CSH C18 OBD Column 30*150 mm 5 μm; mobile phase A: water (0.1% formic acid), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 36% B to 47% B in 7 min, then 47% B; wavelength: 254/220 nm; RT1 (min): 6.29) to give (1R,3R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-(2-hydroxyethyl)cyclopentyl)methyl)cyclopentane-1-carboxamide (16.3 mg, 35.5 μmol) as an off-white amorphous solid. ^1H NMR (400 MHz, DMSO-d6) δ 8.15 (d, J = 8.6 Hz, 1H), 7.77 (d, J = 7.0 Hz, 1H), 7.61 (dd, J = 9.0, 5.0 Hz, 1H), 7.25 (dd, J = 10.8, 8.9 Hz, 1H), 5.51 (d, J = 8.5 Hz, 1H), 4.40 (t, J = 4.7 Hz, 1H), 4.00 (q, J = 6.5 Hz, 1H), 3.43 (s, 2H), 2.99 – 2.91 (m, 1H), 1.94 – 1.72 (m, 7H), 1.62 (dt, J = 14.0, 8.2 Hz, 3H), 1.56 – 1.30 (m, 8H), 1.15 (t, J = 10.6 Hz, 1H). LCMS RT 0.817 min, $[M+H]^+$ 459, LCMS method C.

Example 25

(1S,3S,4S)-3-acetamido-N-((S)-(2,3-dichloro-6-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-fluorocyclopentane-1-carboxamide and (1R,3R,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-fluorocyclopentane-1-carboxamide



Step 1. Synthesis of (±)-ethyl (1S,3S,4S)-3-fluoro-4-hydroxycyclopentane-1-carboxylate

[0838] A mixture of ethyl (1R,3s,5S)-6-oxabicyclo [3.1.0] hexane-3-carboxylate (9.5 g, 61 mmol) and Et_3N-$(HF)_3$ (20 g, 0.12 mol) was stirred for 5 h at 110 °C. After cooling to room temperature the reaction was quenched by the addition of water (100 mL). The resulting mixture was extracted with ethyl acetate (3 x 100 mL). The combined organic layers were washed with water (1x100 mL) and dried over anhydrous Na_2SO_4. After filtration, the filtrate was concentrated under reduced pressure. The crude product was purified by silica gel chromatography (120 g column; eluting with petroleum ether/ethyl acetate; ratio:10/1) to give (±)-ethyl (1S,3S,4S)-3-fluoro-4-hydroxycyclopentane-1-carboxylate (8.0 g, 0.05 mol) as a yellow oil. ^{1}H NMR (400 MHz, Chloroform-d) δ 4.85 (dddd, J = 51.5, 5.6, 3.8, 1.6 Hz, 1H), 4.39 (ddt, J = 10.8, 5.2, 2.4 Hz, 1H), 4.16 (q, J = 7.1 Hz, 2H), 3.09 (dtd, J = 10.0, 8.4, 6.1 Hz, 1H), 2.43 (dddd, J = 29.4, 15.4, 10.0, 5.6 Hz, 1H), 2.34 – 2.08 (m, 2H), 1.97 (ddd, J = 14.1, 8.4, 2.7 Hz, 1H), 1.27 (t, J = 7.1 Hz, 3H).

Step 2. Synthesis of (±)-(1R,2S,4S)-4-(ethoxycarbonyl)-2-fluorocyclopentyl 4-nitrobenzoate

[0839] To a mixture of (±)-ethyl (1S,3S,4S)-3-fluoro-4-hydroxycyclopentane-1-carboxylate (7.5 g, 43 mmol), 4-nitrobenzoic acid (8.5 g, 51 mmol) and triphenylphosphine (26 g, 98 mmol) was DIAD (20 g, 98 mmol) adde dropwise at 0 °C under N_2. The solution was stirred for 12 h at 25 °C. The reaction was quenched by the addition of water (100 mL) at room temperature. The resulting mixture was extracted with ethyl acetate (3 x 150 mL). The combined organic layers were washed with water (1x100 mL) and dried over anhydrous Na_2SO_4. After filtration, the filtrate was concentrated under reduced pressure. The crude product was purified by silica gel chromatography (120 g column; eluting with petroleum ether/ethyl acetate; ratio: 15/1) to give (±)-(1R,2S,4S)-4-(ethoxycarbonyl)-2-fluorocyclopentyl 4-nitrobenzoate (11.5 g, 35.4 mmol) as a yellow oil. ^{1}H NMR (400 MHz, DMSO-d6) δ 8.44 – 8.32 (m, 2H), 8.26 – 8.13 (m, 2H), 5.37 – 5.08 (m, 2H), 4.11 (q, J = 7.1 Hz, 2H), 3.05 (dtd, J = 10.3, 8.5, 6.0 Hz, 1H), 2.40 (tdd, J = 22.3, 9.5, 5.7 Hz, 2H), 2.22 (dddd, J = 23.6, 15.5, 6.9, 2.7 Hz, 2H), 1.22 (dt, J = 14.3, 6.3 Hz, 3H).

Step 3. Synthesis of (±)-ethyl (1S,3S,4R)-3-fluoro-4-hydroxycyclopentane-1-carboxylate

[0840] A mixture of (±)-(1R,2S,4S)-4-(ethoxycarbonyl)-2-fluorocyclopentyl 4-nitrobenzoate (9.5 g, 29 mmol) and lithium hydroxide (0.77 g, 32 mmol) in THF/EtOH/H_2O (30 ml, 4/1/1) was stirred for 2 hours at 25 °C. The mixture was concentrated and the aqueous solution's pH was adjusted to 6. The reaction mixture was extracted with ethyl acetate (150 mL) three times. The organic layers were combined, dried over Na_2SO_4 and concentrated. The residue was purified by silica gel chromatography, eluting with petroleum ether/ethyl acetate 3/1 to give (±)-ethyl (1S,3S,4R)-3-fluoro-4-hydroxycyclopentane-1-carboxylate (4 g, 0.02 mol) as a colorless oil. ^{1}H NMR (400 MHz, Chloroform-d) δ 4.87 (dq, J = 54.3, 3.9 Hz, 1H), 4.17 (q, J = 7.1 Hz, 2H), 4.11 – 3.97 (m, 1H), 2.90 – 2.71 (m, 1H), 2.53 (s, 1H), 2.36 (dt, J = 6.2, 3.1 Hz, 3H), 2.31 – 2.13 (m, 1H), 1.27 (t, J = 7.0 Hz, 3H).

Step 4. Synthesis of (±)-ethyl (1S,3S,4S)-3-(1,3-dioxoisoindolin-2-yl)-4-fluorocyclopentane-1-carboxylate

[0841] To a mixture of (±)-ethyl (1S,3S,4R)-3-fluoro-4-hydroxycyclopentane-1-carboxylate (5.7 g, 32 mmol), triphenylphosphane (10 g, 39 mmol) and isoindoline-1,3-dione (5.7 g, 39 mmol) in THF (100 mL) was DIAD (7.9 g, 39 mmol) added dropwise. The solution was stirred for 12 hours at 25 °C. The reaction was quenched with water and extracted with ethyl acetate (200mL*3). The combined organic layers were washed with brine, dried over

sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 10% to 80% B in 25 min; detector: UV 254 nm) to give (±)-ethyl (1S,3S,4S)-3-(1,3-dioxoisoindolin-2-yl)-4-fluorocyclopentane-1-carboxylate (3 g, 0.01 mol) as a white amorphous solid. ^{1}H NMR (400 MHz, DMSO-d_6) δ 7.98 – 7.75 (m, 4H), 5.45 (ddt, J = 53.7, 6.6, 4.7 Hz, 1H), 4.70 (dtd, J = 24.9, 8.6, 4.4 Hz, 1H), 4.11 (qd, J = 7.1, 1.4 Hz, 2H), 3.23 (td, J = 8.5, 4.2 Hz, 1H), 2.71 – 2.50 (m, 1H), 2.36 (ddd, J = 14.1, 9.5, 4.8 Hz,1H), 2.26 – 2.04 (m, 2H), 1.21 (t, J = 7.1 Hz, 3H).

Step 5. Synthesis of (±)-ethyl (1S,3S,4S)-3-amino-4-fluorocyclopentane-1-carboxylate

[0842] A mixture of (±)-ethyl (1S,3S,4S)-3-(1,3-dioxoisoindolin-2-yl)-4-fluorocyclopentane-1-carboxylate (500 mg, 1.64 mmol) and $N_2H_4.H_2O$ (164 mg, 3.28 mmol) in EtOH (20 mL) was stirred for 2 hours at 70 °C. The reaction mixture was filtered, the pad was washed with EtOH, and the filtrate was concentrated in vacuo to give (±)-ethyl (1S,3S,4S)-3-amino-4-fluorocyclopentane-1-carboxylate (235 mg, 1.1 mmol) as a yellow oil. LCMS RT 0.481 min, $[M+H]^+$ 176, LCMS method B.

Step 6. Synthesis of (±)-ethyl (1S,3S,4S)-3-acetamido-4-fluorocyclopentane-1-carboxylate

[0843] To a mixture of (±)-ethyl (1S,3S,4S)-3-amino-4-fluorocyclopentane-1-carboxylate (235 mg, 1.34 mmol) and triethylamine (407 mg, 4.02 mmol) in DCM (5 mL) was added acetyl chloride (158 mg, 2.01 mmol) dropwise. The solution was stirred for 2 hours at 0 °C. The reaction was quenched with water (10 mL) and extracted with ethyl acetate (50 mL*3). The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo to give (±)-ethyl (1S,3S,4S)-3-acetamido-4-fluorocyclopentane-1-carboxylate (200 mg, 921 μmol) as a yellow oil. LCMS RT 0.542 min, $[M+H]^+$ 218, LCMS method C.

Step 7. Synthesis of (±)-(1S,3S,4S)-3-acetamido-4-fluorocyclopentane-1-carboxylic acid

[0844] A mixture of (±)-ethyl (1S,3S,4S)-3-acetamido-4-fluorocyclopentane-1-carboxylate (240 mg, 1.10 mmol) and LiOH (79.4 mg, 3.31 mmol) was dissolved in MeOH/H_2O (4 ml, 3/1). The solution was stirred at 25 °C for 3 hours. The mixture was concentrated and the residue's pH was adjusted to 6. The solution was concentrated in vacuo to give (±)-(1S,3S,4S)-3-acetamido-4-fluorocyclopentane-1-carboxylic acid (200 mg, 1.06 mmol) as a

white amorphous solid, which was used in the next step without purification. LCMS RT 0.278 min, $[M+H]^+$ 190, LCMS method A.

Step 8. Synthesis of (R)-N-((S)-(2,3-dichloro-6-fluoro-5-methoxyphenyl) (4-fluorobicyclo [2.2.1] heptan-1-yl) methyl)-2-methylpropane-2-sulfinamide

[0845] To a solution of 1,2-dichloro-4-fluoro-5-methoxybenzene (1 g, 6 mmol) in THF (80 mL) was added LDA (2 M in THF, 5.5 mL, 11 mmol) dropwise at -78 °C under a N_2 atmosphere. The reaction mixture was stirred at -78 °C for 1 hour prior to the addition of a solution of (R)-N-((4-fluorobicyclo[2.2.1]heptan-1-yl)methylene)-2-methylpropane-2-sulfinamide (1 g, 4 mmol) in THF (5 mL) at -78 °C under N_2. The mixture was stirred for 2 hours at -78 °C. The reaction was quenched with saturated NH_4Cl solution (100 mL), and the mixture was extracted with EtOAc (3*100mL). The combined organic extracts were washed with brine (100 mL) and dried over anhydrous Na_2SO_4. The resulting crude material was purified by flash chromatography (acetonitrile/water) to give (R)-N-((S)-(2,3-dichloro-6-fluoro-5-methoxyphenyl) (4-fluorobicyclo [2.2.1] heptan-1-yl) methyl)-2-methylpropane-2-sulfinamide (880 mg, 2.00 mmol) as a yellow oil. LCMS RT 1.10 min, $[M+H]^+$ 440, LCMS method C.

Step 9. Synthesis of (S)-3-(amino(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4,5-dichloro-2-fluorophenol

[0846] To (R)-N-((S)-(2,3-dichloro-6-fluoro-5-methoxyphenyl) (4-fluorobicyclo [2.2.1] heptan-1-yl) methyl)-2-methylpropane-2-sulfinamide (940 mg, 2.13 mmol) was added HBr (40 ml, 33% in AcOH). The solution was stirred for 24 hours at 100 °C. The resulting mixture was concentrated under reduced pressure. The mixture was adjusted to pH 7 with NaOH (4 N, aq.). The resulting mixture was extracted with ethyl acetate (3 x 50 mL). The combined organic layers were washed with water (50 mL) and dried over anhydrous Na_2SO_4. After filtration, the filtrate was concentrated under reduced pressure. The resulting crude material was purified by flash chromatography (acetonitrile/water) to give (S)-3-(amino(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4,5-dichloro-2-fluorophenol (630 mg, 1.96 mmol) as a colorless oil. LCMS RT 0.66 min, $[M+H]^+$ 322, LCMS method D.

Step 10. Synthesis of (1S,3S,4S)-3-acetamido-N-((S)-(2,3-dichloro-6-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-fluorocyclopentane-1-carboxamide and (1R,3R,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluoro-5-

hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-fluorocyclopentane-1-carboxamide

[0847] To a mixture of (S)-3-(amino(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4,5-dichloro-2-fluorophenol (50 mg, 0.16 mmol), (±)-(1S,3S,4S)-3-acetamido-4-fluorocyclopentane-1-carboxylic acid (29 mg, 0.16 mmol) and $NaHCO_3$ (39 mg, 0.47 mmol) in DMF (1 mL) was added HATU (88 mg, 0.23 mmol). The mixture was stirred for 1 h at 25 °C. The reaction mixture was diluted with water (50 mL), and the aqueous phase was extracted with ethyl acetate (50 ml) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column, C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile;0% to 100% gradient in 10min; detector: UV 220 nm. The resulting crude material was purified by chiral preparative HPLC (column: Sunfire prep C18 column, 30*150 mm, 5 μm; mobile phase A: water (0.1% formic acid), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 40% B to 51% B in 7 min, then 51% B; wavelength: 254/220 nm; RT1 (min): 6.5) to give (±)-(1S,3S,4S)-3-acetamido-N-((S)-(2,3-dichloro-6-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-fluorocyclopentane-1-carboxamide (40 mg, 81 μmol) as an off-white solid.

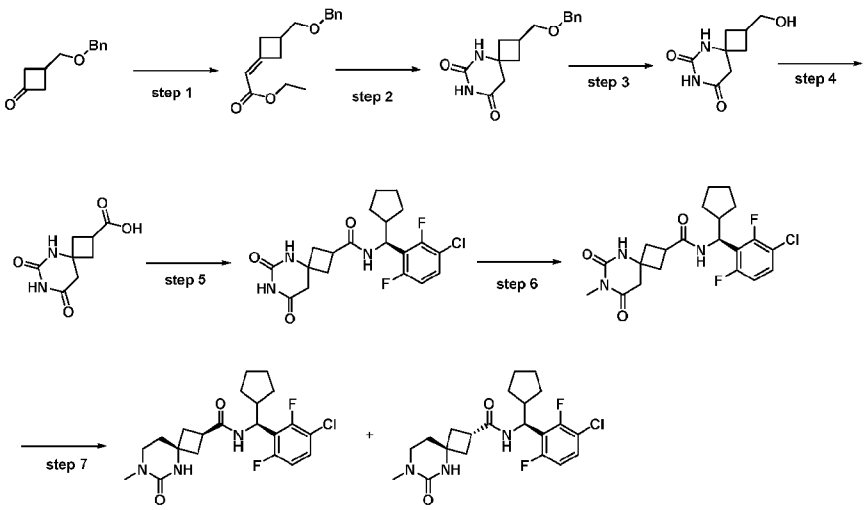
[0848] The product was further purified by chiral preparative HPLC (column: CHIRALPAK IE, 2*25 cm, 5 μm; mobile phase A: hexane (0.5% 2M NH_3-MeOH), mobile phase B: EtOH; flow rate: 20 mL/min; gradient: 20% B isocratic; wavelength: 220/254 nm; RT1 (min): 6.18; RT2 (min): 7.67; sample solvent: EtOH; injection volume: 0.35 mL) to give (1S,3S,4S)-3-acetamido-N-((S)-(2,3-dichloro-6-fluoro-5-hydroxyphenyl) (4-fluorobicyclo [2.2.1] heptan-1-yl) methyl)-4-fluorocyclopentane-1-carboxamide and (1R,3R,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluoro-5-hydroxyphenyl) (4-fluorobicyclo [2.2.1] heptan-1-yl) methyl)-4-fluorocyclopentane-1-carboxamide, both as an off-white amorphous solid.

[0849] Isomer 1: 5.2 mg, 10 μmol. ^{1}H NMR (400 MHz, DMSO-*d*6) δ 8.14 (d, *J* = 8.4 Hz, 1H), 7.93 (d, *J* = 6.9 Hz, 1H), 7.08 (d, *J* = 8.2 Hz, 1H), 5.51 – 5.35 (m, 1H), 4.83 (dq, *J* = 53.3, 5.0 Hz, 1H), 4.07 (d, *J* = 11.8 Hz, 1H), 3.00 (p, *J* = 7.9 Hz, 1H), 2.34 – 2.15 (m, 1H), 1.99 (dt, *J* = 14.0, 7.7 Hz, 1H), 1.80 (d, *J* = 4.6 Hz, 6H), 1.75 – 1.61 (m, 5H), 1.60 – 1.35 (m, 4H). LCMS RT 0.958 min, $[M+H]^+$ 493.15, LCMS method B.

[0850] Isomer 2: 5.7 mg, 11 μmol. ^{1}H NMR (400 MHz, DMSO-*d*6) δ 10.60 (s, 1H), 8.36 – 8.11 (m, 1H), 7.93 (d, *J* = 6.7 Hz, 1H), 7.11 (d, *J* = 8.2 Hz, 1H), 5.51 – 5.29 (m, 1H), 4.86 (dq, *J* = 53.2, 4.6 Hz, 1H), 4.28 – 3.97 (m, 1H), 3.08 – 2.89 (m, 1H), 2.39 – 2.24 (m, 1H), 2.04 – 1.83 (m, 4H), 1.80 (s, 5H), 1.74 – 1.60 (m, 4H), 1.54 (dq, *J* = 21.6, 10.1, 9.0 Hz, 3H). LCMS RT 1.522 min, $[M+H]^+$ 493.10, LCMS method B.

Example 26

(2r,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-7-methyl-6-oxo-5,7-diazaspiro[3.5]nonane-2-carboxamide and (2s,4R)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-7-methyl-6-oxo-5,7-diazaspiro[3.5]nonane-2-carboxamide



Step 1. Synthesis of ethyl 2-(3-((benzyloxy)methyl)cyclobutylidene)acetate

[0854] To a mixture of 3-((benzyloxy)methyl) cyclobutan-1-one (10 g, 53 mmol) and ethyl 2-(diethoxyphosphoryl) acetate (14 g, 63 mmol) in THF (100 mL) was added NaH (1.3 g, 53 mmol) in portions at 0°C. The mixture was stirred for 1 hour at room temperature. The reaction was quenched with saturated NH_4Cl (aq.) (30ml) and the aqueous phase was extracted with ethyl acetate (100 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by silica gel chromatography (100 g column; eluting with petroleum ether : ethyl acetate 5:1) to give ethyl 2-(3-((benzyloxy)methyl)cyclobutylidene)acetate (13.46 g, 51.70 mmol) as a colorless oil. LCMS RT 1.082 min, $[M+H]^+$ 261, LCMS method C.

Step 2. Synthesis of 2-((benzyloxy)methyl)-5,7-diazaspiro[3.5]nonane-6,8-dione

[0855] To a mixture of ethyl 2-(3-((benzyloxy)methyl)cyclobutylidene)acetate (11 g, 42 mmol) and urea (15 g, 0.2 mol) in NMP (120 mL) was added DBU (25 mL, 0.17 mol) at room temperature. The mixture was stirred for 16 h at 140 °C. After cooling to room temperature, the reaction mixture was diluted with water (150 mL), and the aqueous phase was extracted with ethyl acetate (150 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 10% to 60% B in 10 min; detector: UV 220 nm) to give 2-((benzyloxy)methyl)-5,7-diazaspiro[3.5]nonane-6,8-dione (7.07 g, 25.8 mmol) as a yellow oil. LCMS RT 0.902 min, $[M+H]^+$ 275, LCMS method C.

Step 3. Synthesis of 2-(hydroxymethyl)-5,7-diazaspiro[3.5]nonane-6,8-dione

[0856] A mixture of 2-((benzyloxy)methyl)-5,7-diazaspiro[3.5]nonane-6,8-dione (5.5 g, 20 mmol) and Pd/C (0.21 g) in MeOH (60 mL) was treated with H_2 (20 atm) and stirred at room temperature overnight. The reaction mixture was filtered through a pad of Celite, the pad was washed with MeOH (200 mL), and the filtrate was concentrated in vacuo. The resulting crude material was purified by silica gel chromatography (100 g column; eluting with DCM : MeOH 25:1) to give 2-(hydroxymethyl)-5,7-diazaspiro[3.5]nonane-6,8-dione (3.22 g, 17.5 mmol) as a white solid. LCMS RT 0.202 min, $[M+H]^+$ 185, LCMS method C.

Step 4. Synthesis of 6,8-dioxo-5,7-diazaspiro[3.5]nonane-2-carboxylic acid

[0857] To a mixture of 2-(hydroxymethyl)-5,7-diazaspiro[3.5]nonane-6,8-dione (400 mg, 2.17 mmol) in H_2O (5 mL) was added a solution of $KMnO_4$ (343 mg, 2.17 mmol) in H_2O (5 mL) at 0°C. The mixture was stirred for 3 hours at room temperature. The reaction mixture was filtered through a pad of Celite, the pad was washed with MeOH (50 mL), and the filtrate was concentrated in vacuo to afford 6,8-dioxo-5,7-diazaspiro[3.5]nonane-2-carboxylic acid (400 mg, 2.02 mmol) as a brown solid. LCMS RT 0.119 min, $[M+H]^+$ 199, LCMS method D.

Step 5. Synthesis of (S)-N-((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-6,8-dioxo-5,7-diazaspiro[3.5]nonane-2-carboxamide

[0858] To a mixture of 6,8-dioxo-5,7-diazaspiro [3.5] nonane-2-carboxylic acid (400 mg, 2.02 mmol), (S)-(3-chloro-2,6-difluorophenyl) (cyclopentyl)methanamine (496 mg, 2.02

mmol) and TEA (612 mg, 6.0m mol) in DMF (4 mL) was added T_3P (1.93 g, 6.06 mmol) at room temperature. The mixture was stirred for 1 h at room temperature. The reaction mixture was diluted with water (20 mL), and the aqueous phase was extracted with ethyl acetate (20 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by preparative HPLC (column: XB ridge Prep OBD C18 Column, 30*150 mm, 5 μm; mobile phase A: water (10 mM NH_4HCO_3), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 25% B to 55% B in 8 min, then 55% B; wavelength: 220 nm; RT1 (min): 7.68) to give (S)-N-((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-6,8-dioxo-5,7-diazaspiro[3.5]nonane-2-carboxamide [3.5] nonane-2-carboxamide (380 mg, 892 μmol) as a white amorphous solid. LCMS RT 1.060 min, $[M+H]^+$ 390, LCMS method C.

Step 6. Synthesis of (S)-N-((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-7-methyl-6,8-dioxo-5,7-diazaspiro[3.5]nonane-2-carboxamide

[0859] To a mixture of (S)-N-((3-chloro-2,6-difluorophenyl) (cyclopentyl)methyl)-6,8-dioxo-5,7-diazaspiro [3.5] nonane-2-carboxamide (140 mg, 329 μmol) in toluene (2 mL) was added 1,1-dimethoxy-N,N-dimethylethan-1-amine (131 mg, 986 μmol). The mixture was stirred for 2 h at 110 °C. The mixture was concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 45% to 65% B in 15 min; detector: UV 220 nm) to give (S)-N-((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-7-methyl-6,8-dioxo-5,7-diazaspiro[3.5]nonane-2-carboxamide (100 mg, 227 μmol) as a colorless oil. LCMS RT 1.135 min, $[M+H]^+$ 440, LCMS method C.

Step 7. Synthesis of (2r,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-7-methyl-6-oxo-5,7-diazaspiro[3.5]nonane-2-carboxamide and (2s,4R)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-7-methyl-6-oxo-5,7-diazaspiro[3.5]nonane-2-carboxamide

[0861] To a mixture of (S)-N-((3-chloro-2,6-difluorophenyl) (cyclopentyl)methyl)-7-methyl-6,8-dioxo-5,7-diazaspiro[3.5]nonane-2-carboxamide (80 mg, 0.18 mmol) in THF (2 mL) were added BF_3-Et_2O (31 mg, 0.22 mmol) and $NaBH_4$ (6.9 mg, 0.18m mol) at 0 °C. The mixture was stirred for 1 h at room temperature. The reaction mixture was diluted with water (10 mL), and the aqueous phase was extracted with ethyl acetate (10 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered

and concentrated in vacuo. The resulting crude material was purified by preparative HPLC (column: YMC-Actus Triart C18 Ex RS, 30*150 mm, 5 μm; mobile phase A: water (10 mM NH_4HCO_3 + 0.1% NH_4OH), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 30% B to 55% B in 9 min, 55% B to 60% B in 9.5 min, then 60% B; wavelength: 220 nm; RT1 (min): 9.13) to give (S)-N-((3-chloro-2,6-difluorophenyl) (cyclopentyl) methyl)-7-methyl-6-oxo-5,7-diazaspiro [3.5] nonane-2-carboxamide (35 mg, 82 μmol) as an off-white solid. LCMS RT 1.503 min, $[M+H]^+$ 426, LCMS method D.

[0862] The product was purified by preparative chiral HPLC (column: DZ-CHIRALPAK IC-3, 4.6*50 mm, 3.0 μm; mobile phase A: hexane : EtOH 70 : 30; flow rate: 1 mL/min; gradient: 0% B isocratic; injection volume: 0.5 mL). Lyophilization yielded (2r,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-7-methyl-6-oxo-5,7-diazaspiro[3.5]nonane-2-carboxamide and (2s,4R)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-7-methyl-6-oxo-5,7-diazaspiro[3.5]nonane-2-carboxamide, both as an off-white amorphous solid.

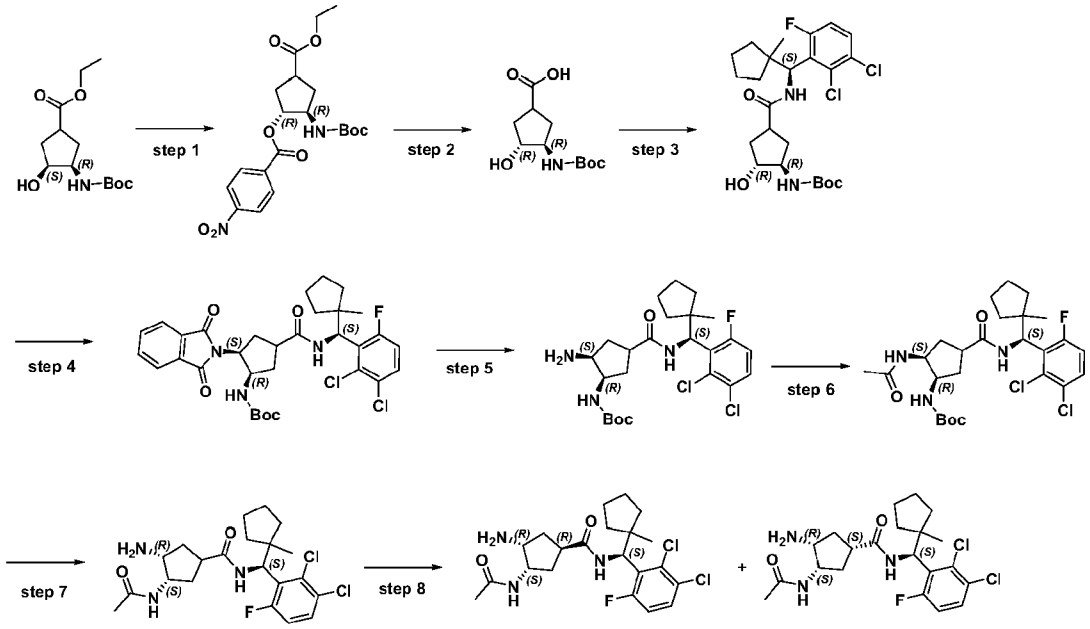
[0863] Isomer 1: 2.3 mg, 5.4 μmol. ^{1}H NMR (400 MHz, DMSO-d_6) δ 8.37 (d, J = 7.4 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.12 (t, J = 9.6 Hz, 1H), 6.70 (s, 1H), 4.82 (dd, J = 11.1, 7.4 Hz, 1H), 3.04 (t, J = 6.0 Hz, 2H), 2.94 (dq, J = 10.0, 4.9 Hz, 1H), 2.71 (s, 3H), 2.41 (d, J = 9.1 Hz, 1H), 2.25 (t, J = 11.0 Hz, 1H), 2.15 (q, J = 14.3, 12.8 Hz, 2H), 2.03 (d, J = 12.6 Hz, 1H), 1.90 (d, J = 8.2 Hz, 1H), 1.74 (dd, J = 7.4, 4.7 Hz, 2H), 1.59 (s, 3H), 1.51 (dt, J = 16.6, 9.3 Hz, 1H), 1.38-1.30 (m, 1H), 1.24 (s, 1H), 1.00 (s, 1H). LCMS RT 1.537 min, $[M+H]^+$ 426, LCMS method D;

[0864] Isomer 2: 3.1 mg, 7.3 μmol. ^{1}H NMR (400 MHz, DMSO-d_6) δ 8.27 (d, J = 7.5 Hz, 1H), 7.53 (td, J = 8.7, 5.5 Hz, 1H), 7.12 (t, J = 9.3 Hz, 1H), 6.54 (s, 1H), 4.83 (dd, J = 11.2, 7.5 Hz, 1H), 3.14 (t, J = 5.9 Hz, 2H), 2.72 (s, 3H), 2.41 (d, J = 9.0 Hz, 1H), 2.26 (t, J = 11.0 Hz, 1H), 2.16 (t, J = 10.1 Hz, 1H), 2.11-2.01 (m, 2H), 2.00 (s, 1H), 1.94-1.85 (m, 1H), 1.80 (t, J = 5.9 Hz, 2H), 1.64-1.51 (m, 4H), 1.49 (dd, J = 15.5, 7.5 Hz, 1H), 1.38-1.30 (m, 1H), 1.00 (s, 1H). LCMS RT 1.537 min, $[M+H]^+$ 426, LCMS method D.

Example 27

(1R,3S,4R)-3-acetamido-4-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)cyclopentane-1-carboxamide and (1S,3S,4R)-3-acetamido-4-

amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)cyclopentane-1-carboxamide



Step 1. Synthesis of (1R,2R)-2-((tert-butoxycarbonyl)amino)-4-(ethoxycarbonyl)cyclopentyl 4-nitrobenzoate

[0868] To a stirred solution of ethyl (3R,4S)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylate (1.91 g, 7 mmol), 4-nitrobenzoic acid (1.17 g, 7 mmol) and triphenylphosphine (1.83 g, 7 mmol) in THF (20 mL) was added DIAD (1.41 g, 7 mmol) dropwise at 0 °C. The resulting mixture was stirred for 2 h at **25 °C**. The reaction mixture was diluted with water (30 mL), and the aqueous phase was extracted with ethyl acetate (30 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in *vacuo*. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 10% to 100% B in 30 min; detector: UV 254 nm) to afford (1R,2R)-2-((tert-butoxycarbonyl)amino)-4-(ethoxycarbonyl) cyclopentyl 4-nitrobenzoate (1.2 g, 2.8 mmol) as a white solid. LCMS RT=1.23 min, $[M+H]^+$ 423, LCMS method A.

Step 2. Synthesis of (3R,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylic acid

[0869] To a solution of (1R,2R)-2-((tert-butoxycarbonyl) amino)-4-(ethoxycarbonyl) cyclopentyl 4-nitrobenzoate (500 mg, 1.18 mmol) in MeOH (4 mL) was added lithium hydroxide

(142 mg, 5.92 mmol) in H_2O (1 mL). The mixture was stirred at 25 °C for 1 hour. The soluti on was concentrated under reduced pressure to remove MeOH. The residue was acidified to pH 5-6 with HCl (2N). The solution was concentrated to dryness under reduced pressure to give (3R,4R)-3-((tert-butoxycarbonyl) amino)-4-hydroxycyclopentane-1-carboxylic acid (27 0 mg, 1.10 mmol) as a white amorphous solid. LCMS RT 0.388 min, $[M-H]^-$ 244, LCMS method B.

Step 3. Synthesis of tert-butyl ((1R,2R)-4-(((S)-(2,3-dichloro-6-fluorophenyl) (1-methylcyclopentyl) methyl) carbamoyl)-2-hydroxycyclopentyl) carbamate

[0870] To a mixture of (3R,4R)-3-((tert-butoxycarbonyl) amino)-4-hydroxycyclopentane-1-carboxylic acid (270 mg, 1.10 mmol), (S)-(2,3-dichloro-6-fluorophenyl) (1-methylcyclopent yl) methanamine (365 mg, 1.32 mmol) and $NaHCO_3$ (370 mg, 4.40 mmol) in DMF (5 mL) was added HATU (837 mg, 2.20 mmol). The mixture was stirred at room temperature for 1 hour. The reaction was quenched with water (10 ml) and extracted with ethyl acetate (20 ml *3). The combined organic layers were washed with brine, dried over Na_2SO_4 and concentra ted. The residue was purified by reverse phase flash chromatography (column: C18 silica ge l; mobile phase A: water, mobile phase B: acetonitrile; gradient: 10% to 50% B in 10 min; d etector: UV 254 nm) to give tert-butyl ((1R,2R)-4-(((S)-(2,3-dichloro-6-fluorophenyl) (1-me thylcyclopentyl) methyl) carbamoyl)-2-hydroxycyclopentyl) carbamate (300 mg, 596 μmol) as a yellow oil. LCMS RT 1.129 min, m/z $[M-56+H]^+$ 446, LCMS method C.

Step 4. Synthesis of tert-butyl ((1R,2S)-4-(((S)-(2,3-dichloro-6-fluorophenyl)(1-methylc yclopentyl)methyl)carbamoyl)-2-(1,3-dioxoisoindolin-2-yl)cyclopentyl)carbamate

[0871] To a mixture of tert-butyl ((1R,2R)-4-(((S)-(2,3-dichloro-6-fluorophenyl) (1-methylc yclopentyl) methyl) carbamoyl)-2-hydroxycyclopentyl) carbamate (105 mg, 715 μmol) and triphenylphosphine (234 mg, 894 μmol) in THF (6 mL) was added DIAD (174 μL, 894 μmo l) dropwise at 0 °C under a nitrogen atmosphere. The mixture was stirred for 16 hours at 25 °C. The reaction mixture was diluted with water (10 mL), and the aqueous phase was extract ed with ethyl acetate (40 mL) three times. The combined organic layers were washed with b rine, dried over sodium sulfate, filtered and concentrated *in vacuo*. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mob ile phase B: acetonitrile; gradient: 0% to 100% B in 20 min; detector: UV 254 nm) to give te rt-butyl ((1R,2S)-4-(((S)-(2,3-dichloro-6-fluorophenyl) (1-methylcyclopentyl) methyl) carba

moyl)-2-(1,3-dioxoisoindolin-2-yl) cyclopentyl) carbamate (240 mg, 379 μmol) as a yellow oil. LCMS RT 1.279min, $[M-56+H]^+$ 576, LCMS method C.

Step 5. Synthesis of tert-butyl ((1R,2S)-2-amino-4-(((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)carbamoyl)cyclopentyl)carbamate

[0872] To a solution of tert-butyl ((1R,2S)-4-(((S)-(2,3-dichloro-6-fluorophenyl) (1-methyl cyclopentyl) methyl) carbamoyl)-2-(1,3-dioxoisoindolin-2-yl) cyclopentyl) carbamate (220 mg, 348 μmol) in EtOH (4 mL) was added hydrazine hydrate (34.8 mg, 696 μmol). The mixture was heated at 70 °C for 2 hours. The reaction mixture was filtered, the collected solid was washed with EtOH, and the filtrate was concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 10% to 50% B in 10 min; detector: UV 254 nm) to give tert-butyl ((1R,2S)-2-amino-4-(((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)carbamoyl)cyclopentyl)carbamate (130 mg, 259 μmol) as a white amorphous solid. LCMS RT 1.035 min, $[M+H]^+$ 502, LCMS method C.

Step 6. Synthesis of tert-butyl ((1R,2S)-2-acetamido-4-(((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)carbamoyl)cyclopentyl)carbamate

[0873] To a mixture of tert-butyl ((1R,2S)-2-amino-4-(((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)carbamoyl)cyclopentyl)carbamate (120 mg, 239 μmol), acetic acid (17.2 mg, 287 μmol) and $NaHCO_3$ (80.2 mg, 955 μmol) in DMF (4 mL) was added HATU (182 mg, 478 μmol). The mixture was stirred at room temperature for 1 hour. The reaction was quenched with water (10 ml) and extracted with ethyl acetate (20 mL*3). The combined organic layers were washed with brine, dried over Na_2SO_4 and concentrated. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 10% to 50% B in 10 min; detector: UV 254 nm) to give tert-butyl ((1R,2S)-2-acetamido-4-(((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)carbamoyl)cyclopentyl)carbamate (100 mg, 184 μmol) as a yellow oil. LCMS RT 1.238 min, $[M-100+H]^+$ 444, LCMS method B.

Step 7. Synthesis of (1R,3S,4R)-3-acetamido-4-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)cyclopentane-1-carboxamide and (1S,3S,4R)-3-acetamido-4-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)cyclopentane-1-carboxamide

[0874] A solution of tert-butyl ((1R,2S)-2-acetamido-4-(((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)carbamoyl)cyclopentyl)carbamate (100 mg, 184 μmol) in HCl (4mL, 4 N in MeOH) was stirred at 25 °C for 1 hour. The solution was concentrated under reduced pressure. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 10% to 50% B in 10 min; detector: UV 254 nm) to give (3S,4R)-3-acetamido-4-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)cyclopentane-1-carboxamide (50 mg, 0.11 mmol) as a white amorphous solid. LCMS RT 0.927 min, $[M+H]^+$ 444, LCMS method C.

Step 8. Synthesis of (1R,3S,4R)-3-acetamido-4-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)cyclopentane-1-carboxamide and (1S,3S,4R)-3-acetamido-4-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)cyclopentane-1-carboxamide

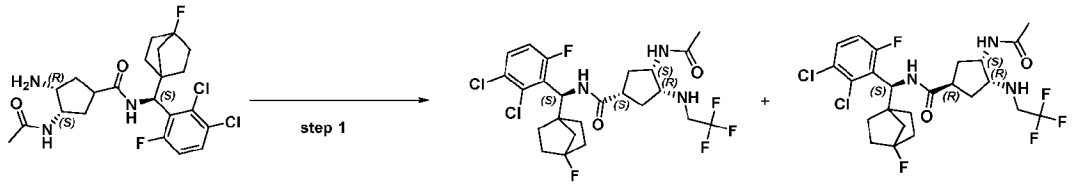
[0875] (3S,4R)-3-acetamido-4-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)cyclopentane-1-carboxamide (50 mg, 0.11 mmol) was purified by chiral preparative HPLC (column: CHIRALPAK IH, 2*25 cm, 5 μm; mobile phase A: hexane (0.5% 2 M NH_3 in MeOH), mobile phase B: EtOH : DCM 1 : 1; flow rate: 20 mL/min; gradient: 15 % B isocratic; wavelength: 220/254 nm; RT1 (min): 6.23; RT2 (min): 7.94; sample solvent: EtOH : DCM 1 : 1; injection volume: 0.25 mL) to give (1R,3S,4R)-3-acetamido-4-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)cyclopentane-1-carboxamide and (1S,3S,4R)-3-acetamido-4-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)cyclopentane-1-carboxamide, both as a white amorphous solid.

[0876] Isomer 1: 5.7 mg, 13 μmol. ^{1}H NMR (400 MHz, DMSO-d_6) δ 8.08 (d, J = 8.9 Hz, 1H), 7.59 (s, 2H), 7.25 (t, J = 9.9 Hz, 1H), 5.47 (d, J = 8.5 Hz, 1H), 3.90 (s, 1H), 3.31 (s, 1H), 3.12-3.04 (m, 2H), 2.31 (s, 1H), 1.82 (d, J = 6.8 Hz, 3H), 1.59 (s, 9H), 1.37 (s, 1H), 1.23 (s, 3H), 0.96 (s, 3H). LCMS RT 1.298 min, $[M+H]^+$ 444.15, LCMS method C

[0877] Isomer 2: 4.8 mg, 11 μmol. ^{1}H NMR (400 MHz, DMSO-d_6) δ 8.10 (s, 1H), 7.61 (dd, J = 9.0, 4.9 Hz, 2H), 7.25 (t, J = 9.9 Hz, 1H), 5.46 (d, J = 8.4 Hz, 1H), 3.89 (s, 1H), 1.82 (s, 3H), 1.70 (d, J = 9.6 Hz, 4H), 1.59 (s, 9H), 1.36 (d, J = 10.6 Hz, 1H), 1.25 (d, J = 11.8 Hz, 2H), 0.99-0.93 (m, 3H). LCMS RT 0.938 min, $[M+H]^+$ 444, LCMS method D.

Example 28

(1R,3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-((2,2,2-trifluoroethyl)amino)cyclopentane-1-carboxamide and (1S,3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-((2,2,2-trifluoroethyl)amino)cyclopentane-1-carboxamide



Step 1. Synthesis of (1R,3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-((2,2,2-trifluoroethyl)amino)cyclopentane-1-carboxamide and (1S,3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-((2,2,2-trifluoroethyl)amino)cyclopentane-1-carboxamide

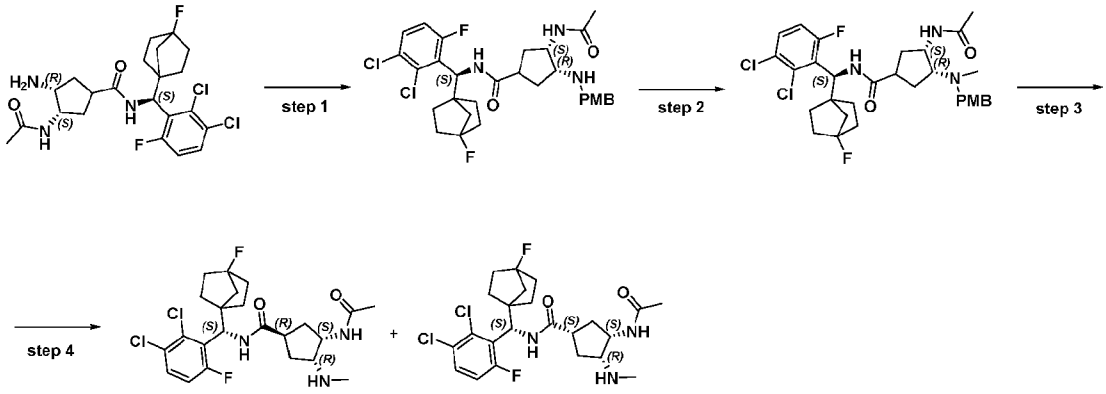
[0880] To a mixture of (3S,4R)-3-acetamido-4-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)cyclopentane-1-carboxamide (70 mg, 0.15 mmol) and 4 Å molecular sieves (200 mg) in MeOH (4 mL) was added 2,2,2-trifluoroacetaldehyde (22 mg, 0.22 mmol). The mixture was stirred at 25 °C for 30 min prior to the addition of Na BH_3CN (28 mg, 0.44 mmol). The mixture was stirred for 16 hours at 25 °C. The reaction mixture was diluted with water (5 mL), and the aqueous phase was extracted with ethyl acetate (10 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated *in vacuo*. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 10% to 50% B in 10 min; detector: UV 254 nm) to give a yellow oil, which was further purified by chiral preparative HPLC (column: (R, R)-WHELK-O1-Kromasil, 2.11*25 cm, 5 μm; mobile phase A: hexane (0.5% 2M NH_3 in MeOH), mobile phase B: isopropanol : DCM 1 : 1; flow rate: 20 mL/min; gradient: 40% B isocratic; wavelength: 220/254 nm; RT1 (min): 14.62; RT2 (min): 22.08; sample solvent: EtOH : DCM 1 : 1; injection volume: 0.7 mL) to give (1S,3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-((2,2,2-trifluoroethyl)amino)cyclopentane-1-carboxamide and (1R,3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-((2,2,2-trifluoroethyl)amino)cyclopentane-1-carboxamide, both as a white amorphous solid.

[0881] Isomer 1: 10 mg, 0.022 mmol. LCMS RT 1.078 min, $[M+H]^+$ 556, LCMS method D . ^{1}H NMR (400 MHz, DMSO-d_6) δ 8.13 (d, J = 8.2 Hz, 1H), 7.61 (dd, J = 8.9, 5.0 Hz, 1H), 7.48 (d, J = 7.4 Hz, 1H), 7.25 (dd, J = 10.7, 9.0 Hz, 1H), 5.48 (d, J = 7.9 Hz, 1H), 4.12-3.84 (m, 1H), 3.28-3.11 (m, 3H), 2.96 (d, J = 6.3 Hz, 1H), 2.11 (q, J = 7.4 Hz, 1H), 1.95 -1.43 (m , 16H).

[0882] Isomer 2: 7 mg, 0.016 mmol. LCMS RT 1.078 min, $[M+H]^+$ 556, LCMS method D. ^{1}H NMR (400 MHz, DMSO-d_6) δ 8.14 (d, J = 8.2 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7. 49 (d, J = 7.5 Hz, 1H), 7.26 (dd, J = 10.6, 9.0 Hz, 1H), 5.50 (d, J = 8.1 Hz, 1H), 4.06 (p, J = 6.0 Hz, 1H), 3.24-3.04 (m, 1H), 3.00 -2.92 (m, 3H), 2.09 (q, J = 7.3 Hz, 1H), 1.84 (s, 4H), 1. 91-1.75 (m, 4H), 1.68 (qd, J = 18.8, 17.1, 7.3 Hz, 5H), 1.57 (d, J = 8.1 Hz, 2H), 0.06 (s, 2H) .

Example 29

(1R,3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-(methylamino)cyclopentane-1-carboxamide and (1S,3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-(methylamino)cyclopentane-1-carboxamide



Step 1. Synthesis of (3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-((4-methoxybenzyl)amino)cyclopentane-1-carboxamide

[0886] To a mixture of (3S,4R)-3-acetamido-4-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)cyclopentane-1-carboxamide (70 mg, 0.15 mmol) in MeOH (5 mL) was added 4-methoxybenzaldehyde (30 mg, 0.22 mmol). The mixture was stirred at room temperature for 2 hours prior to the addition of $NaBH_3CN$ (28 mg, 0.44 mm

ol) in portions at 0 °C under a nitrogen atmosphere. The mixture was stirred for 16 hours at r oom temperature. The mixture was diluted with water (5 mL), and the aqueous phase was ex tracted with ethyl acetate (10 mL*3). The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by re verse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile p hase B: acetonitrile; gradient: 10% to 50% B in 10 min; detector: UV 254 nm) to give (3S,4 R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl) (4-fluorobicyclo[2.2.1]heptan-1-yl)me thyl)-4-((4-methoxybenzyl)amino)cyclopentane-1-carboxamide (50 mg, 84 μmol) as a yello w oil. LCMS RT 0.847 min, $[M+H]^+$ 594, LCMS method C.

Step 2. Synthesis of (3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-((4-methoxybenzyl)(methyl)amino)cyclopentane-1-carboxamide

[0887] To a mixture of (3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluoro bicyclo[2.2.1]heptan-1-yl)methyl)-4-((4-methoxybenzyl)amino)cyclopentane-1-carboxamid e (50 mg, 84 μmol) and paraformaldehyde (3.8 mg, 0.13 mmol) in MeOH (4 mL) was added $NaBH_3CN$ (16 mg, 0.25 mmol) in portions at 0 °C under a nitrogen atmosphere. The mixtur e was stirred for 16 hours at room temperature. The mixture was diluted with water (5 mL), and the aqueous phase was extracted with ethyl acetate (10mL*3). The combined organic la yers were washed with brine, dried over sodium sulfate, filtered and concentrated *in vacuo*. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; m obile phase A: water, mobile phase B: acetonitrile; gradient: 10% to 50% B in 10 min; detec tor: UV 254 nm) to give (3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluor obicyclo[2.2.1]heptan-1-yl)methyl)-4-((4-methoxybenzyl)(methyl)amino)cyclopentane-1-ca rboxamide (40 mg, 66 μmol) as a yellow oil. LCMS RT 0.896 min, $[M+H]^+$ 608, LCMS me thod C.

Step 3. Synthesis of (3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl) (4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-(methylamino)cyclopentane-1-carboxamide

[0888] To a mixture of (3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluoro bicyclo[2.2.1]heptan-1-yl)methyl)-4-((4-methoxybenzyl)(methyl)amino)cyclopentane-1-car boxamide (40 mg, 66 μmol) in acetonitrile/H_2O (2.2 ml,10:1) was added ceric ammonium ni trate (0.36 g, 0.66 mmol). The mixture was stirred at 20 °C for 3 hours. The reaction was qu enched with water and extracted with ethyl acetate. The organic layer was washed with brin

e, dried over Na_2SO_4 and evaporated. The residue was purified by reverse phase flash chrom atography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gra dient: 10% to 50% B in 10 min; detector: UV 254 nm) to give (3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-(methylamino)cy clopentane-1-carboxamide (24 mg, 49 μmol) as a yellow oil. LCMS RT 0.755 min, $[M+H]^+$ 488, LCMS method C.

Step 4. Synthesis of (1R,3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-(methylamino)cyclopentane-1-carboxamide and (1S,3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-(methylamino)cyclopentane-1-carboxamide

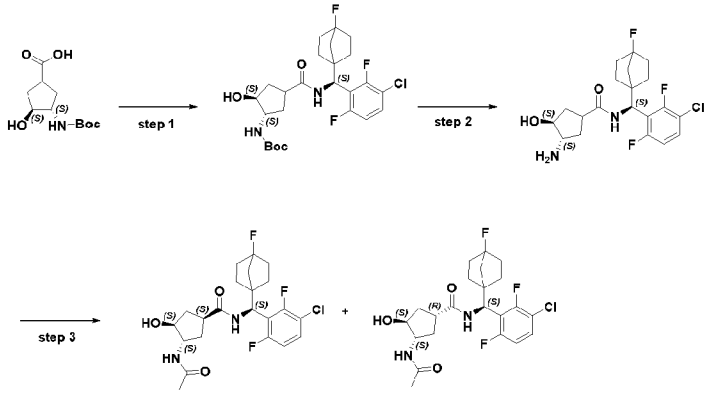
[0889] (3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]he ptan-1-yl)methyl)-4-(methylamino)cyclopentane-1-carboxamide (24 mg, 49 μmol) was purif ied by chiral preparative HPLC (column: CHIRALPAK IE, 2*25 cm, 5 μm; mobile phase A : hexane (0.5% 2M NH_3 in MeOH), mobile phase B: EtOH : DCM 1 : 1; flow rate: 20 mL/m in; gradient: 30% B isocratic; wavelength: 220/254 nm; RT1 (min): 8.86; RT2 (min): 10.32; sample solvent: EtOH : DCM 1 : 1; injection volume: 0.5 mL) to give (1R,3S,4R)-3-acetami do-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-(meth ylamino)cyclopentane-1-carboxamide and (1S,3S,4R)-3-acetamido-N-((S)-(2,3-dichloro-6-f luorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-(methylamino)cyclopentane-1-ca rboxamide, both as a white amorphous solid.

[0890] Isomer 1: 2 mg, 4 μmol. LCMS RT 1.772 min). ^{1}HNMR (400 MHz, DMSO-d_6) δ 8. 07 (d, J = 8.4 Hz, 1H), 7.82 (d, J = 7.2 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (t, J = 9. 8 Hz, 1H), 5.52 (d, J = 8.1 Hz, 1H), 3.92 (td, J = 7.4, 3.6 Hz, 1H), 3.57 (p, J = 6.0 Hz, 1H), 3.21 (d, J = 13.8 Hz, 3H), 2.90 (p, J = 8.4 Hz, 1H), 2.25-2.05 (m, 1H), 1.92 (dt, J = 13.6, 8.2 Hz, 1H), 1.78 (d, J = 3.5 Hz, 5H), 1.73 (s, 4H), 1.71 (dd, J = 12.4, 8.7 Hz, 1H), 1.70-1.55 (m, 3H), 1.50 (s, 1H).

[0891] Isomer 2: 2.9 mg, 5.9 μmol. ^{1}H NMR (400 MHz, DMSO-d_6) δ 8.07 (d, J = 8.3 Hz, 1 H), 7.82 (d, J = 7.3 Hz, 1H), 7.62 (dd, J = 9.0, 5.1 Hz, 1H), 7.26 (t, J = 9.8 Hz, 1H), 5.52 (d, J = 8.2 Hz, 1H), 3.92 (tq, J = 10.6, 5.4 Hz, 1H), 3.57 (p, J = 6.1 Hz, 1H), 3.19 (s, 2H), 2.90 (p, J = 8.4 Hz, 1H), 2.15 (ddt, J = 28.7, 14.6, 7.6 Hz, 1H), 1.98-1.82 (m, 2H), 1.78 (d, J = 3.5 Hz, 5H), 1.72 (s, 2H), 1.70-1.56 (m, 5H), 1.58- 1.40 (m, 1H).

Example 30

(1S,3S,4S)-3-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide and (1R,3S,4S)-3-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide



Step 1. Synthesis of tert-butyl ((1S,2S)-4-(((S)-(3-chloro-2,6-difluorophenyl) (4-fluorobicyclo [2.2.1] heptan-1-yl) methyl) carbamoyl)-2-hydroxycyclopentyl)

[0895] (3S,4S)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylic acid was prepared using the same procedure in Example 31, from ethyl (3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylate. To a mixture of (3S,4S)-3-((tert-butoxycarbonyl) amino)-4-hydroxycyclopentane-1-carboxylic acid (0.98 g, 4.0 mmol), (S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methanamine (1.16 g, 4 mmol), $NaHCO_3$ (0.84 g, 0.01 mol) in DMF (10 mL) was added HATU (2.28 g, 6 mmol). The mixture was stirred for 1 h at 25 °C. The reaction mixture was diluted with water (50 mL). The aqueous phase was extracted with ethyl acetate (50 ml) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% B in 10 min; detector: UV 220 nm) to give tert-butyl ((1S,2S)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)carbamate (1.03 g, 2 mmol) as an off-white amorphous solid. LCMS RT 0.972 min, $[M+H]^+$ 517.40, LCMS method C.

Step 2. Synthesis of (3S,4S)-3-amino-N-((S)-(3-chloro-2,6-difluorophenyl) (4-fluorobicyclo [2.2.1] heptan-1-yl) methyl)-4-hydroxycyclopentane-1-carboxamide

[0896] A mixture of tert-butyl ((1S,2S)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)carbamate (500 mg, 967 μmol) in HCl (5 mL, 4 N in MeOH) was stirred for 30 min at 25 °C. Concentration in vacuo gave (3S,4S)-3-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide (400 mg, 960 μmol) as a white solid. LCMS RT 0.918 min, $[M+H]^+$ 417.15, LCMS method B.

Step 3. Synthesis of (1S,3S,4S)-3-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide and (1R,3S,4S)-3-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide

[0897] To mixture of (3S,4S)-3-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide (390 mg, 936 μmol), acetic acid (169 mg, 2.81 mmol), TEA (283 mg, 2.81 mmol) in DMF (1 mL) was added T_3P (446 mg, 1.40 mmol). The mixture was stirred for 1 h at 25 °C. The reaction mixture was diluted with water (10 mL), and the aqueous phase was extracted with ethyl acetate (20 ml) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% B in 10 min; detector: UV 220 nm) to give an amorphous off-white solid. LCMS RT 0.721 min, $[M+H]^+$ 517, LCMS method C.

[0898] The product was further purified by chiral preparative HPLC (column: CHIRALPAK ID, 2*25 cm, 5 μm; mobile phase A: hexane (0.5% 2M NH_3 in MeOH), mobile phase B: EtOH : DCM 1 : 1; flow rate: 20 mL/min; gradient: 15% B isocratic; wavelength: 220/254 nm; RT1 (min): 7.41; RT2 (min): 9.34; sample solvent: EtOH : DCM 1 : 1; injection volume: 0.6 mL) to give (1S,3S,4S)-3-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide and (1R,3S,4S)-3-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide, both as an off-white amorphous solid.

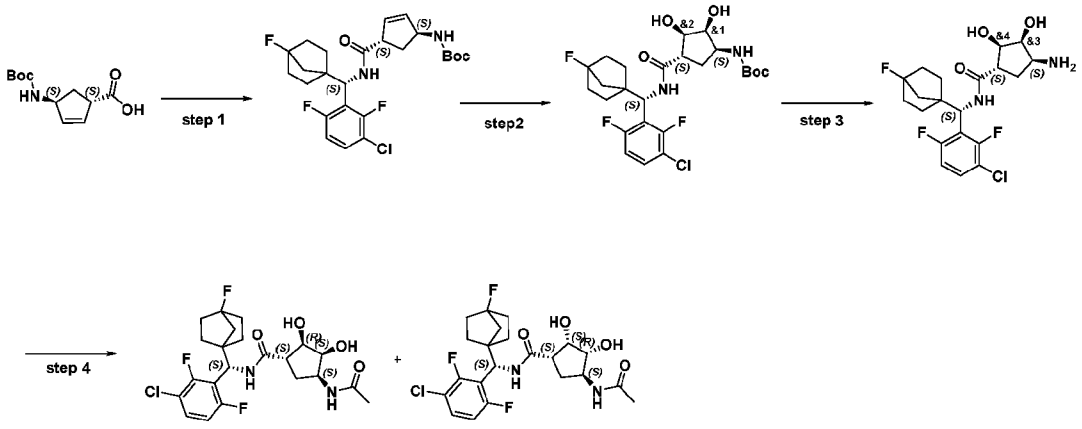
[0899] Isomer 1: 27.0 mg, 58.6 μmol. ^1H NMR (400 MHz, DMSO-*d6*) δ 8.24 (d, J = 8.3 Hz, 1H), 7.79 (d, J = 6.9 Hz, 1H), 7.57 (td, J = 8.6, 5.4 Hz, 1H), 7.20 – 7.11 (m, 1H), 5.26 (d, J = 8.3 Hz, 1H), 5.13 (d, J = 4.6 Hz, 1H), 3.89 – 3.70 (m, 2H), 2.88 (p, J = 8.1 Hz, 1H),

2.12 – 2.01 (m, 1H), 1.88 (dt, *J* = 14.4, 7.6 Hz, 1H), 1.78 (s, 6H), 1.71 (d, *J* = 13.5 Hz, 4H), 1.56 (ddd, *J* = 13.7, 11.1, 6.7 Hz, 3H), 1.44 (q, *J* = 7.4, 5.2 Hz, 2H). LCMS RT 0.878 min, $[M+H]^+$ 459.35, LCMS method D.

[0900] Isomer 2: 15.5 mg, 33.4 μmol. ^{1}H NMR (400 MHz, DMSO-*d*6) δ 8.23 (d, *J* = 8.3 Hz, 1H), 7.79 (d, *J* = 6.7 Hz, 1H), 7.57 (td, *J* = 8.7, 5.4 Hz, 1H), 7.16 (t, *J* = 9.4 Hz, 1H), 5.26 (d, *J* = 8.2 Hz, 1H), 5.10 (d, *J* = 4.7 Hz, 1H), 3.79 (dp, *J* = 19.7, 5.9 Hz, 2H), 2.88 (p, *J* = 8.3 Hz, 1H), 2.06 – 1.95 (m, 2H), 1.79 (s, 7H), 1.71 (d, *J* = 9.3 Hz, 4H), 1.63 – 1.54 (m, 2H), 1.45 (p, *J* = 6.6 Hz, 3H). LCMS RT 0.888 min, $[M+H]^+$ 459.35, LCMS method D.

Example 31

(1S,2R,3S,4S)-4-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2,3-dihydroxycyclopentane-1-carboxamide and (1S,2S,3R,4S)-4-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2,3-dihydroxycyclopentane-1-carboxamide



Step 1. Synthesis of tert-butyl ((1S,4S)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)cyclopent-2-en-1-yl)carbamate

[0904] To a solution of (1S,4S)-4-((tert-butoxycarbonyl)amino)cyclopent-2-ene-1-carboxylic acid (150 mg, 660 μmol), (S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methanamine (191 mg, 660 μmol) and $NaHCO_3$ (277 mg, 3.30 mmol) in DMF (2 mL) was added HATU (318 mg, 1.32 mmol). The mixture was stirred for 1 hour at 25 °C. The reaction mixture was diluted with water (10 mL), and the

aqueous phase was extracted with ethyl acetate (15 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by preparative HPLC (column: XBridge Prep OBD C18 Column, 30*150 mm, 5 μm; mobile phase A: water (10 mM NH_4HCO_3), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 56% B to 79% B in 8 min, then 79% B; wavelength: 254 nm; RT1 (min): 7.63; injection volume: 0.8 mL). Lyophilization yielded tert-butyl ((1S,4S)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)cyclopent-2-en-1-yl)carbamate (190 mg, 381 μmol) as an off-white amorphous solid. LCMS RT 1.217 min, $[M+H]^+$ 499.10, LCMS method B.

Step 2. Synthesis of tert-butyl ((1S,2RS,3SR,4S)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2,3-dihydroxycyclopentyl)carbamate

[0905] A mixture of tert-butyl ((1S,4S)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)cyclopent-2-en-1-yl)carbamate (180 mg, 361 μmol), NMO (10.8 mg, 361 μmol), $K_2OsO_4.2H_2O$ (11.1 mg, 36.1 μmol) in DCM (2 mL) was stirred for 1 hour at 25 °C. The reaction mixture was diluted with water (10 mL), and the aqueous phase was extracted with ethyl acetate (15 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by preparative HPLC (column: XBridge Prep OBD C18 Column, 30*150 mm, 5 μm; mobile phase A: water (10 mM NH_4HCO_3), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 56% B to 79% B in 8 min, then 79% B; wavelength: 254 nm; RT (min): 7.63; injection volume: 0.8 mL) to give tert-butyl ((1S,2RS,3SR,4S)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2,3-dihydroxycyclopentyl)carbamate (140 mg, 263 μmol) as an off-white amorphous solid. LCMS RT 1.105 min, $[M+H]^+$ 533.10, LCMS method C.

Step 3. Synthesis of (1S,2RS,3SR,4S)-4-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2,3-dihydroxycyclopentane-1-carboxamide

[0906] A mixture of tert-butyl ((1S,2RS,3SR,4S)-4-(((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2,3-dihydroxycyclopentyl)carbamate (130 mg, 244 μmol) in HCl (3 mL, 4 N in MeOH) was stirred for 2 hours at 25 °C. The

mixture was concentrated in vacuo to give (1S,2RS,3SR,4S)-4-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2,3-dihydroxycyclopentane-1-carboxamide (150 mg) as a white amorphous solid. LCMS RT 0.913min, $[M+H]^+$ 433.30, LCMS method C.

Step 4. Synthesis of (1S,2R,3S,4S)-4-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2,3-dihydroxycyclopentane-1-carboxamide and (1S,2S,3R,4S)-4-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2,3-dihydroxycyclopentane-1-carboxamide

[0907] To a solution of (1S,2RS,3SR,4S)-4-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2,3-dihydroxycyclopentane-1-carboxamide (140 mg, 323 μmol), acetic acid (25.2 mg, 420 μmol) and $NaHCO_3$ (136 mg, 1.62 mmol) in DMF (2 mL) was added HATU (160 mg, 420 μmol). The mixture was stirred for 12 hours at 25 °C. The reaction mixture was diluted with water (10 mL), and the aqueous phase was extracted with ethyl acetate (20 mL*3). The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 10% to 80% B in 25 min; detector: UV 254 nm) to give a white amorphous solid. LCMS RT 0.681 min, $[M+H]^+$ 475.15, LCMS method B.

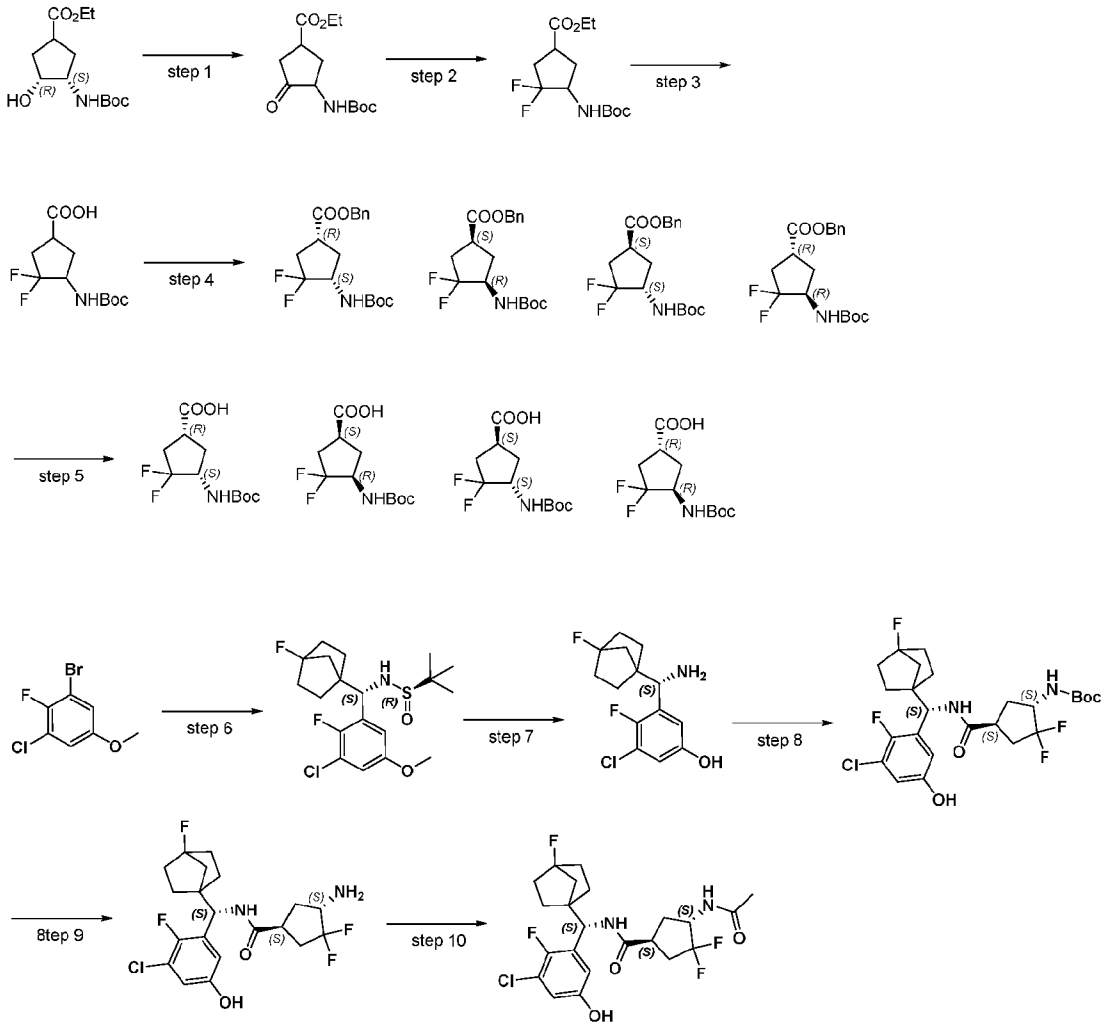
[0908] The material was further purified by preparative chiral HPLC (Column: CHIRALPAK IH3; mobile phase A: hexane (0.2% diethylamine), mobile phase B: EtOH : DCM 1 : 1); gradient: A:B 80:20 isocratic; flow rate: 1 mL/min; injection volume: 3 mL) to give (1S,2R,3S,4S)-4-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2,3-dihydroxycyclopentane-1-carboxamide and (1S,2S,3R,4S)-4-acetamido-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2,3-dihydroxycyclopentane-1-carboxamide, both as a white amorphous solid.

[0909] Isomer 1: 23.7 mg, 49.9 μmol. LCMS RT 0.950 min, $[M+H]^+$ 475.10, LCMS method B. ^{1}HNMR (400 MHz, DMSO-d6) δ 8.16 (d, J = 8.5 Hz, 1H), 7.87 (d, J = 7.7 Hz, 1H), 7.69 - 7.48 (m, 1H), 7.16 (t, J = 9.4 Hz, 1H), 5.31 (d, J = 8.4 Hz, 1H), 4.93 - 4.52 (m, 2H), 3.86 (dd, J = 7.9, 4.2 Hz, 2H), 3.56 (d, J = 4.9 Hz, 1H), 2.94 - 2.63 (m, 1H), 2.05 (dt, J = 13.2, 8.6 Hz, 1H), 1.91 - 1.53 (m, 11H), 1.44 (d, J = 10.8 Hz, 2H), 1.27 - 1.07 (m, 1H).

[0910] Isomer 2: 2.8 mg, 5.9 μmol. LCMS RT 0.806 min, $[M+H]^+$ 475.00, LCMS method C. ^{1}H NMR (400 MHz, DMSO-d6) δ 8.53 (d, J = 8.4 Hz, 1H), 7.58 (t, J = 5.8 Hz, 2H), 7.16 (t, J = 9.3 Hz, 1H), 5.32 (d, J = 8.3 Hz, 1H), 5.13 (d, J = 7.9 Hz, 1H), 4.97 (d, J = 5.3 Hz, 1H), 4.14 (d, J = 8.6 Hz, 1H), 4.04 - 3.89 (m, 1H), 3.67 - 3.59 (m, 1H), 2.96 (q, J = 8.4 Hz, 1H), 1.75 (d, J = 31.7 Hz, 13H), 1.51 - 1.34 (m, 1H).

Example 32

(1S,4S)-4-acetamido-N-((S)-(3-chloro-2-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3,3-difluorocyclopentane-1-carboxamide, (1R,4S)-4-acetamido-N-((S)-(3-chloro-2-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3,3-difluorocyclopentane-1-carboxamide, (1S,4R)-4-acetamido-N-((S)-(3-chloro-2-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3,3-difluorocyclopentane-1-carboxamide and (1R,4R)-4-acetamido-N-((S)-(3-chloro-2-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3,3-difluorocyclopentane-1-carboxamide



Step 1. Synthesis of ethyl 3-((tert-butoxycarbonyl)amino)-4-oxocyclopentane-1-carboxylate

[0914] To a mixture of ethyl (3S,4R)-3-((tert-butoxycarbonyl)amino)-4-hydroxycyclopentane-1-carboxylate (130 g, 475 mmol) and 4 Å molecular sieves (40.0 g) in DCM (1.30 L) was added PCC (133 g, 618 mmol) at 25 °C. The mixture was stirred at 25 °C for 1 hour. The mixture was diluted with MTBE (4.50 L) and filtered through celite under reduced pressure. The filtrate was concentrated under reduced pressure. The residue was purified by column chromatography (SiO_2, petroleum ether: ethyl acetate 20: 1 to 0: 1) to give ethyl 3-((tert-butoxycarbonyl)amino)-4-oxocyclopentane-1-carboxylate (71.1 g, 262 mmol) as a yellow oil. ^{1}H NMR: (400 MHz, DMSO-d_6) δ 7.09 (dd, J = 8.0, 20.0 Hz, 1H),

4.10 (q, J = 6.8 Hz, 2H), 3.99 - 3.77 (m, 1H), 3.26 - 3.01 (m, 1H), 2.48 - 2.40 (m, 1H), 2.39 - 2.20 (m, 2H), 2.12 - 1.81 (m, 1H), 1.37 (s, 9H), 1.19 (t, J = 7.2 Hz, 3H).

Step 2. Synthesis of ethyl 4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylate

[0915] To a mixture of ethyl 3-((tert-butoxycarbonyl)amino)-4-oxocyclopentane-1-carboxylate (31.7 g, 117 mmol) in DCM (317 mL) was added DAST (77.3 mL, 585 mmol) at 0 °C under N_2. The mixture was warmed to 25 °C and stirred at 25 °C for 2 hours. The mixture was cooled to 0 °C and quenched with MeOH (150 mL). The mixture was stirred at 25 °C for 12 hours and concentrated under reduced pressure. The residue was purified by column chromatography (SiO_2, petroleum ether : ethyl acetate 50 : 1 to 3 : 1) to give ethyl 4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylate (27.5 g, 93.8 mmol) as a brown oil. ^{1}H NMR: (400 MHz, DMSO-d_6) δ 7.19 (dd, J = 9.2 Hz, 12.8 Hz, 1H), 4.20 - 3.98 (m, 3H), 3.13 - 2.95 (m, 1H), 2.45 - 2.08 (m, 3H), 1.95 - 1.69 (m, 1H), 1.39 (s, 9H), 1.21 - 1.16 (m, 3H).

Step 3. Synthesis of 4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylic acid

[0916] To a mixture of ethyl 4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylate (28.5 g, 97.2 mmol) in MeOH (427 mL) and H_2O (140 mL) was added LiOH H_2O (20.4 g, 486 mmol) at 0 °C. The mixture was warmed to 25 °C and stirred at 25 °C for 2 hours. The mixture was concentrated under reduced pressure to remove most of MeOH. The residue was diluted with H_2O (300 mL). The mixture's pH was adjusted to 4 with saturated citric acid aqueous solution and extracted with DCM (300 mL * 3). The combined organic layer was washed with brine (100 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure to obtain 4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylic acid (25.7 g, crude) as a brown oil.

Step 4. Synthesis of benzyl (1R,4S)-4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylate, benzyl (1S,4S)-4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylate, benzyl (1S,4R)-4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylate and benzyl (1R,4R)-4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylate

[0917] To a mixture of 4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylic acid (25.7 g, 96.9 mmol) in DMF (260 mL) was added K_2CO_3 (26.8 g, 194 mmol) and BnBr (19.9 g, 116 mmol) at 25 °C. The mixture was stirred at 25 °C for 2 hours. The mixture was poured into H_2O (1.00 L) under stirring. The mixture was extracted with ethyl acetate (500 mL * 3), then combined organic phase was dried with Na_2SO_4, filtered and concentrated under reduced pressure. The residue was purified by column chromatography (SiO_2, petroleum ether: ethyl acetate 10 : 1 to 0 : 1) to give the product (34.0 g, crude) as a white solid.

[0918] The product (33.0 g) was purified by reverse phase HPLC (mobile phase A: 0.1% NH_4OH in water, mobile phase B: acetonitrile). The collected fractions were concentrated under reduced pressure to remove acetonitrile. The remaining aqueous solution was extracted with ethyl acetate (500 mL * 3). The combined organic phase was dried over Na_2SO_4, filtered and concentrated under reduced pressure to give a solid (30.0 g). The residue was purified by chiral SFC (column: Daicel Chiralcel OJ 250 mm * 50 mm, 10 μm; mobile phase: 12% isopropanol in hexane) to obtain peak 1 and peak 2.

[0919] Peak 1, after concentration, was further purified by chiral SFC (column: Daicel Chiralpak IG 250 mm * 50 mm, 10 μm; mobile phase: 20% MeOH in 0.1% NH_4OH]) to obtain peak 3 and peak 4.

[0920] Peak 3 was concentrated under reduced pressure to give a white solid (5.20 g, 14.6 mmol). ^{19}F NMR (376 MHz, DMSO-d_6) δ -101.23 ppm, -101.83 ppm, -107.06 ppm, -107.66 ppm. ^1H NMR: (400 MHz, DMSO-d_6) δ 7.41 - 7.31 (m, 5H), 7.22 (d, J = 7.6 Hz, 1H), 5.12 (s, 2H), 4.26 - 4.05 (m, 1H), 3.27 - 3.09 (m, 1H), 2.46 - 2.32 (m, 2H), 2.26 - 2.12 (m, 1H), 1.98 - 1.83 (m, 1H), 1.39 (s, 9H).

[0921] Peak 4 was concentrated under reduced pressure to give a yellow solid (9.00 g, 25.3 mmol). ^{19}F NMR: (376 MHz, DMSO-d_6) δ -101.23 ppm, -101.83 ppm, -107.07 ppm, -107.67 ppm. ^1H NMR: (400 MHz, DMSO-d_6) δ 7.41 - 7.31 (m, 5H), 7.22 (d, J = 7.2 Hz, 1H), 5.12 (s, 2H), 4.26 - 4.05 (m, 1H), 3.27 - 3.09 (m, 1H), 2.46 - 2.32 (m, 2H), 2.26 - 2.12 (m, 1H), 1.98 - 1.83 (m, 1H), 1.39 (s, 9H).

[0922] Peak 2, after concentration, was further purified by chiral SFC (column: Daicel Chiralpak IG (250 mm * 50 mm, 10 μm); mobile phase: 15% MeOH in 0.1% NH_4OH) to obtain peak 5 and peak 6.

[0923] Peak 5 was concentrated under reduced pressure to give a white solid (4.30 g, 12.1 mmol). ^{19}F NMR: (376 MHz, DMSO-d_6) δ -100.03 ppm, -100.62 ppm, -103.25 ppm, -103.85 ppm. ^1H NMR (400 MHz, DMSO-d_6) δ 7.43 - 7.30 (m, 5H), 7.19 (d, J = 8.8 Hz, 1H), 5.12 (s, 2H), 4.24 - 4.06 (m, 1H), 3.11 (br s, 1H), 2.46 - 2.16 (m, 3H), 1.85 - 7.30 (m, 1H), 1.38 (s, 9H).

[0924] Peak 6 was concentrated under reduced pressure to give a yellow solid (8.90 g, 25.0 mmol). ^{19}F NMR: (376 MHz, DMSO-d_6) δ -100.03 ppm, -100.62 ppm, -103.25 ppm, -103.85 ppm

[0925] ^1H NMR: (400 MHz, DMSO-d_6) δ 7.43 - 7.30 (m, 5H), 7.19 (d, J = 9.2 Hz, 1H), 5.12 (s, 2H), 4.25 - 4.02 (m, 1H), 3.10 - 3.00 (m, 1H), 2.48 - 2.17 (m, 3H), 1.88 - 1.74 (m, 1H), 1.38 (s, 9H).

Step 5. Synthesis of (1R,4S)-4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylic acid, (1S,4S)-4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylic acid, (1S,4R)-4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylic acid and (1R,4R)-4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylic acid

[0926] To a solution of peak 4 in step 4 (9.00 g, 25.3 mmol) in MeOH (135 mL) was added Pd/C (1.80 g, 10%) at 25 °C under N_2. The mixture was degassed and purged with H_2 3 times. The mixture was stirred at 25 °C for 4 hours under H_2 (50 psi). The mixture was filtered through celite under reduced pressure. The filtrate was concentrated under reduced pressure to give a white solid (6.36 g, 25.6 mmol) as a white solid. ^{19}F NMR: (376 MHz, DMSO-d_6) δ -101.09 ppm, -101.69 ppm, -106.70 ppm, -107.30 ppm. ^1H NMR: (400 MHz, DMSO-d_6) δ 12.58 (s, 1H), 7.19 (d, J = 8.8 Hz, 1H), 4.30 - 3.96 (m, 1H), 3.08 - 2.88 (m, 1H), 2.38 - 2.28 (m, 2H), 2.17 - 2.11 (m, 1H), 1.90 - 1.80 (m, 1H), 1.39 (s, 9H).

[0927] The other 3 isomers were synthesized similarly.

Step 6. Synthesis of (R)-N-((S)-(3-chloro-2-fluoro-5-methoxyphenyl) (4-fluorobicyclo [2.2.1] heptan-1-yl) methyl)-2-methylpropane-2-sulfinamide

[0928] To a mixture of 1-bromo-3-chloro-2-fluoro-5-methoxybenzene (1.2 g, 5.0 mmol) in THF (12 mL) was added n-butyllithium (2.4 mL, 2.5 M in THF, 6.0 mmol) dropwise at -78 °C under a nitrogen atmosphere. The mixture was stirred for 1 h at -78 °C prior to the additi on of (R)-N-((4-fluorobicyclo [2.2.1] heptan-1-yl) methylene)-2-methylpropane-2-sulfinami de (981 mg, 4.0 mmol) at -78°C. The mixture was stirred for 1 hour at -78 °C. The reaction was quenched with saturated NH_4Cl (aq.) and the aqueous phase was extracted with ethyl ac etate (30 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phas e flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: ac etonitrile; gradient: 0% to 100% B in 20 min; detector: UV 220 nm) to afford (R)-N-((S)-(3-chloro-2-fluoro-5-methoxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-methylprop ane-2-sulfinamide (1.21 g, 2.98 mmol) as a colorless oil. LCMS RT 1.118 min, $[M+H]^+$ 405 .90, LCMS method B.

Step 7. (S)-3-(amino(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-5-chloro-4-fluorophenol

[0929] A mixture of (R)-N-((S)-(3-chloro-2-fluoro-5-methoxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-methylpropane-2-sulfinamide (1.2 g, 3.0 mmol) in HBr (5 ml, 33% in AcOH) was stirred at 100 °C for 4 hours. The mixture was concentrated. The resulting crude material was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% B in 10 min; detector: UV 220 nm) to give (S)-3-(amino(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-5-chloro-4-fluorophenol (700 mg, 2.43 mmol) as an off-white solid. LCMS RT 0.917 min, $[M+H]^+$ 288.05, LCMS method D.

Step 8. Synthesis of tert-butyl ((1S,4S)-4-(((S)-(3-chloro-2-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2,2-difluorocyclopentyl)carbamate

[0930] To a solution of (S)-3-(amino(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-5-chloro-4-fluorophenol (100 mg, 348 μmol), (1S,4S)-4-((tert-butoxycarbonyl)amino)-3,3-difluorocyclopentane-1-carboxylic acid (111 mg, 417 μmol), TEA (145 μL, 1.04 mmol) in DMF (1 mL) was added T_3P (166 mg, 521 μmol) at room temperature. The resulting mixture was stirred for 2 hours at room temperature. The reaction mixture was diluted with water (15 mL), and the aqueous phase was extracted with DCM (20 mL) three times. The combined

organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by reverse phase flash chromatography (acetonitrile/water) to give tert-butyl ((1S,4S)-4-(((S)-(3-chloro-2-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2,2-difluorocyclopentyl)carbamate (130 mg, 69.9 %) as a colorless oil. LCMS RT 0.892 min, $[M+H]^+$ 535.00. LCMS method C.

Step 9. Synthesis of (1S,4S)-4-amino-N-((S)-(3-chloro-2-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3,3-difluorocyclopentane-1-carboxamide

[0931] A mixture of tert-butyl ((1S,4S)-4-(((S)-(3-chloro-2-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2,2-difluorocyclopentyl)carbamate (125 mg, 234 μmol) in HCl (4 N in MeOH, 3 mL) was stirred at room temperature for 2 hours. The mixture was concentrated. The resulting crude material was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% B in 10 min; detector: UV 220 nm) to give (1S,4S)-4-amino-N-((S)-(3-chloro-2-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3,3-difluorocyclopentane-1-carboxamide (100 mg, 230 μmol) as a colorless oil. LCMS RT 0.717 min, $[M+H]^+$ 435.00, LCMS method C.

Step 10. Synthesis of (1S,4S)-4-acetamido-N-((S)-(3-chloro-2-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3,3-difluorocyclopentane-1-carboxamide

[0932] To a mixture of (1S,4S)-4-amino-N-((S)-(3-chloro-2-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3,3-difluorocyclopentane-1-carboxamide (50 mg, 0.11 mmol), $NaHCO_3$ (48 mg, 0.57mmol) and acetic acid (8.3 mg, 0.14 mmol) in DMF (1 mL) was added HATU (66 mg, 0.17 mmol) at room temperature. The resulting mixture was stirred for 2 hours at room temperature. The reaction mixture was diluted with water (10 mL), and the aqueous phase was extracted with ethyl acetate (20 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by preparative HPLC (column: XBridge Prep OBD C18 Column, 30*150 mm, 5 μm; flow rate: 60 mL/min; gradient: 23% B to 50% B in 8 min, then 50% B; wavelength: 220 nm; RT1 (min): 7.58) to give (1S,4S)-4-acetamido-N-((S)-(3-chloro-2-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3,3-difluorocyclopentane-1-carboxamide (29.7 mg, 62.3 μmol) as an off-white amorphous solid. ^1H NMR (400 MHz, DMSO-d6) δ 9.81 (s, 1H), 8.37 (d, J = 8.6 Hz, 1H), 8.08 (d, J = 8.8 Hz

, 1H), 6.79 (dd, J = 5.8, 2.9 Hz, 1H), 6.65 (dd, J = 5.4, 2.9 Hz, 1H), 5.20 (d, J = 8.7 Hz, 1H), 4.48 (dt, J = 18.1, 9.2 Hz, 1H), 3.08 (s, 1H), 2.37 - 2.17 (m, 2H), 2.04 - 1.94 (m, 1H), 1.86 (s , 4H), 1.81 - 1.64 (m, 6H), 1.62 - 1.52 (m, 2H), 1.36 (s, 2H). LCMS RT 0.899 min, $[M-H]^-$ 4 75.15, LCMS method D.

[0933] Additional compounds prepared according to the methods of Examples 1-32 are listed in Table 2 below. Corresponding ^1H NMR and mass spectrometry characterization for these compounds are described in Table 1. Certain compounds in Table 2 below were prepared with other compounds whose preparation is described further below in the Examples.

Table 2. Additional exemplary compounds

I-83	I-247	I-248	I-252	I-253
I-257	I-258	I-259	I-260	I-263
I-266	I-325	I-327	I-333	I-334
I-337	I-338	I-339	I-340	I-341
I-342	I-343	I-344	I-348	I-349
I-351	I-352	I-353	I-354	I-369
I-370	I-371	I-372	I-378	I-384
I-403	I-406	I-424	I-427	I-432
I-445	I-446	I-454	I-455	I-460
I-461	I-466	I-467	I-469	I-479
I-494	I-507	I-510	I-621	I-630
I-634	I-635	I-666	I-670	I-691
I-692	I-693	I-694	I-695	I-696

I-700	I-701	I-702	I-703	I-704
I-709	I-710	I-711	I-712	I-717
I-718	I-719	I-724	I-725	I-730
I-794	I-802	I-803	I-804	I-806
I-808	I-817	I-823	I-825	I-830
I-838	I-841	I-842	I-843	I-844
I-846	I-847	I-848	I-849	I-850
I-851	I-852	I-858	I-859	I-860
I-861	I-862	I-863	I-872	I-877
I-878	I-879	I-882	I-883	I-887
I-891	I-897	I-898	I-900	I-901
I-902	I-903	I-904	I-905	I-906
I-907	I-908	I-909	I-910	I-911
I-912	I-913	I-914	I-915	I-916
I-917	I-918	I-919	I-925	I-927
I-929	I-931	I-932	I-934	I-935
I-936	I-937	I-941	I-942	I-943
I-944	I-945	I-946	I-948	I-949
I-950	I-951	I-952	I-953	I-954
I-955	I-956	I-957	I-958	I-959

I-960	I-961	I-962	I-963	I-964
I-965	I-966	I-967	I-968	I-980
I-981	I-982	I-983	I-984	I-985
I-986	I-987	I-988	I-989	I-992
I-993	I-996	I-997	I-998	I-999
I-1000	I-1001	I-1002	I-1003	I-1004
I-1005	I-1011	I-1012	I-1013	I-1014
I-1017	I-1018	I-1019	I-1025	I-1026
I-1028	I-1029	I-1030	I-1031	I-1032
I-1033	I-1034	I-1035	I-1036	I-1037
I-1038	I-1039	I-1040	I-1041	I-1045
I-1046	I-1047	I-1048	I-1049	I-1050
I-1051	I-1052	I-1053	I-1054	I-1055
I-1056	I-1057	I-1058	I-1059	I-1060
I-1061	I-1062	I-1063	I-1064	I-1065
I-1066	I-1067	I-1068	I-1069	I-1070
I-1071	I-1072	I-1073	I-1074	I-1075
I-1076	I-1077	I-1078	I-1079	I-1080
I-1081	I-1082	I-1083	I-1084	I-1085
I-1086	I-1087	I-1088	I-1089	I-1090

I-1091	I-1092	I-1093	I-1094	I-1095
I-1096	I-1097	I-1098	I-1099	I-1100
I-1101	I-1102	I-1103	I-1104	I-1105
I-1106	I-1107	I-1108	I-1109	I-1110
I-1111	I-1115	I-1120	I-1121	I-1122
I-1123	I-1124	I-1125	I-1126	I-1127
I-1128	I-1129	I-1130	I-1131	I-1132
I-1133	I-1134	I-1135	I-1136	I-1137
I-1138	I-1139	I-1140	I-1141	I-1142
I-1143	I-1144	I-1145	I-1146	I-1147
I-1148	I-1149	I-1150	I-1151	I-1152
I-1153	I-1154	I-1155	I-1156	I-1157
I-1158	I-1159	I-1160	I-1161	I-1162
I-1163	I-1164	I-1165	I-1166	I-1167
I-1168	I-1169	I-1170	I-1171	I-1172
I-1173	I-1174	I-1175	I-1176	I-1177
I-1178	I-1179	I-1180	I-1181	I-1182
I-1183	I-1184	I-1185	I-1186	I-1187
I-1188	I-1189	I-1190	I-1191	I-1192
I-1193	I-1194	I-1195	I-1196	I-1197

I-1198	I-1200	I-1201	I-1203	I-1204
I-1205	I-1206	I-1207	I-1208	I-1209
I-1210	I-1211	I-1212	I-1213	I-1217
I-1218	I-1219	I-1221	I-1226	I-1227
I-1228	I-1229	I-1230	I-1231	I-1232
I-1233	I-1234	I-1235	I-1236	I-1237
I-1238	I-1239	I-1240	I-1241	I-1242
I-1243	I-1244	I-1245	I-1246	I-1247
I-1248	I-1249	I-1250	I-1251	I-1252
I-1253	I-1254	I-1255	I-1256	I-1257
I-1258	I-1261	I-1262	I-1263	I-1264
I-1265	I-1266	I-1267	I-1268	I-1269
I-1270	I-1271	I-1272	I-1273	I-1274
I-1279	I-1280	I-1281	I-1282	I-1283
I-1284	I-1285	I-1286	I-1287	I-1288
I-1289	I-1290	I-1291	I-1292	I-1293
I-1294	I-1295	I-1296	I-1297	I-1298
I-1299	I-1300	I-1301	I-1302	I-1303
I-1304	I-1305	I-1306	I-1307	I-1308
I-1309	I-1310	I-1311	I-1312	I-1313

I-1314	I-1315	I-1316	I-1317	I-1318
I-1319	I-1320	I-1321	I-1322	I-1323
I-1324	I-1325	I-1326	I-1327	I-1336
I-1337	I-1338	I-1339	I-1340	I-1341
I-1342	I-1344	I-1345	I-1346	I-1347
I-1348	I-1349	I-1350	I-1351	I-1352
I-1353	I-1354	I-1355	I-1356	I-1357
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I-1379	I-1380	I-1381	I-1382	I-1383
I-1384	I-1385	I-1386	I-1387	I-1388
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I-1394	I-1395	I-1396	I-1397	I-1398
I-1399	I-1400	I-1401	I-1402	I-1403
I-1404	I-1405	I-1406	I-1407	I-1408
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I-1419	I-1420	I-1421	I-1422	I-1423

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I-1429	I-1430	I-1431	I-1432	I-1433
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I-1449	I-1450	I-1451	I-1452	I-1453
I-1454	I-1455	I-1456	I-1457	I-1458
I-1459	I-1460	I-1461	I-1462	I-1463
I-1464	I-1465	I-1466	I-1467	I-1468
I-1469	I-1470	I-1471	I-1472	I-1473
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I-1484	I-1485	I-1486	I-1487	I-1488
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I-1526	I-1527	I-1528	I-1529	I-1530
I-1531	I-1532	I-1533	I-1534	I-1535

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I-1541	I-1542	I-1543	I-1544	I-1545
I-1546	I-1547	I-1548	I-1549	I-1550
I-1551	I-1552	I-1553	I-1554	I-1555
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I-1561	I-1562	I-1563	I-1564	I-1565
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I-1581	I-1582	I-1583	I-1584	I-1585
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I-1717	I-1718	I-1719	I-1720	I-1721
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I-1732	I-1733	I-1734	I-1735	I-1736
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I-1747	I-1748	I-1749	I-1750	I-1751
I-1752	I-1753	I-1754	I-1755	I-1756
I-1757	I-1758	I-1759	I-1760	I-1761
I-1762	I-1763	I-1764	I-1765	I-1766
I-1767	I-1768	I-1769	I-1770	I-1771
I-1772	I-1773	I-1774	I-1775	I-1776
I-1777	I-1778	I-1779	I-1780	I-1781
I-1782	I-1783	I-1784	I-1785	I-1786
I-1787	I-1788	I-1789	I-1791	I-1792
I-1793	I-1794	I-1795	I-1796	I-1797
I-1798	I-1799	I-1800	I-1801	I-1814
I-1815	I-1828	I-1829	I-1833	I-1834
I-1835	I-1836	I-1837	I-1838	I-1840
I-1841	I-1842	I-1843	I-1845	I-1846
I-1847	I-1848	I-1849	I-1850	I-1851
I-1852	I-1854	I-1855	I-1856	I-1857
I-1858	I-1859	I-1860	I-1861	I-1862
I-1863	I-1864	I-1865	I-1866	I-1867
I-1868	I-1869	I-1870	I-1871	I-1873

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I-1879	I-1880	I-1881	I-1882	I-1883
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I-1889	I-1890	I-1891	I-1892	I-1893
I-1895	I-1896	I-1897	I-1898	I-1899
I-1900	I-1901	I-1902	I-1903	I-1904
I-1906	I-1907	I-1908	I-1909	I-1910
I-1911	I-1912	I-1913	I-1914	I-1916
I-1917	I-1918	I-1921	I-1922	I-1923
I-1924	I-1925	I-1926	I-1927	I-1928
I-1929	I-1930	I-1931	I-1932	I-1934
I-1935	I-1936	I-1937	I-1938	I-1939
I-1940	I-1941	I-1942	I-1943	I-1944
I-1945	I-1946	I-1947	I-1948	I-1949
I-1950	I-1951	I-1952	I-1953	I-1954
I-1955	I-1956	I-1957	I-1961	I-1962
I-1963	I-1964	I-1965	I-1966	I-1967
I-1968	I-1970	I-1971	I-1972	I-1973
I-1974	I-1975	I-1976	I-1977	I-1978
I-1979	I-1980	I-1981	I-1984	I-1985

I-1986	I-1987	I-1988	I-1989	I-1990
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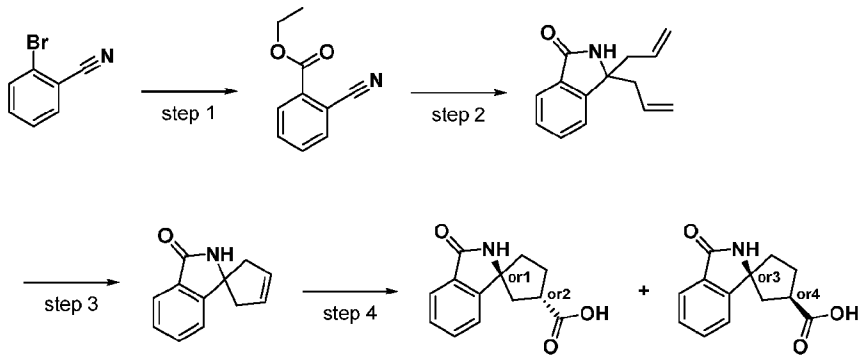
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Example 33

rac-(1R,3R)-3'-oxospiro[cyclopentane-1,1'-isoindoline]-3-carboxylic acid and rac-(1R,3S)-3'-oxospiro[cyclopentane-1,1'-isoindoline]-3-carboxylic acid



Step 1. Synthesis of ethyl 2-cyanobenzoate

[0934] A 50 mL flame dried flask was charged with 2-bromobenzonitrile (1.00 g, 5.49 mmol). Dry THF (50 mL) was added under a N_2 atmosphere and the reaction media was cooled down to -78 °C. *n*-butyllithium (2.64 mL, 2.5 molar in THF, 6.59 mmol) was added dropwise and the reaction was stirred for 15 minutes. Ethyl carbonocyanidate (651 µL, 6.59 mmol) was added and the reaction was slowly warmed up to room temperature. After 1 hour the reaction was quenched with saturated NH_4Cl solution. The aqueous layer was extracted twice with EtOAc. The organic layers were combined and washed once with water, then dried over Na_2SO_4 and concentrated under reduced pressure. The material was purified by normal phase column chromatography (hexanes : EtOAc 100:0 to 80:20) to give ethyl 2-cyanobenzoate (396 mg) as a viscous colorless oil. 1H NMR: (400 MHz, $CDCl_3$) δ 8.12 – 8.08 (m, 1H), 7.76 (dd,J = 7.0, 1.6 Hz, 1H), 7.67 – 7.59 (m, 2H), 4.42 (q,J = 7.1 Hz, 2H), 1.40 (t, J = 7.1 Hz, 3H).

Step 2. Synthesis of 3,3-diallylisoindolin-1-one

[0935] To a suspension of zinc dust (224 mg, 3.42 mmol) in THF (5 mL) were successively added ethyl 2-cyanobenzoate (200 mg, 1.14 mmol) in THF (0.5 mL) and allyl bromide (294 µL, 3.42 mmol). The solution was heated to reflux and cooled down to room temperature after 15 min of heating. HCl (1N, 5 mL) was added to the reaction and the aqueous layer was extracted with EtOAc (2 × 5 mL). The combined organic layers were washed with 2 N NaOH and brine, dried over anhydrous Na_2SO_4 and filtered. The solvent was removed in *vacuo* to afford 3,3-diallylisoindolin-1-one (240 mg, crude) as a yellow viscous oil. LCMS RT 1.39 min, $[M+H]^+$ 214.1, LCMS method L.

Step 3. Synthesis of spiro[cyclopentane-1,1'-isoindolin]-3-en-3'-one

[0936] A 150 mL flame-dried flask was charged with 3,3-diallylisoindolin-1-one (240 mg, 1.13 mmol). Dry toluene (40 mL) was added under a N_2 atmosphere and the reaction was heated to 70 °C. Benzylidene(dichloro)(1,3-dimesityl-2-imidazolidinylidene)ruthenium - tricyclohexylphosphine (1:1) (47.8 mg, 56.3 µmol) was added and the reaction was kept at this temperature for 90 min. After cooling to room temperature, the reaction media was concentrated under reduced pressure and the crude material was purified using normal phase column chromatography (DCM:EtOAc 100:0 to 50:50) to give spiro[cyclopentane-1,1'-isoindolin]-3-en-3'-one (98 mg) as a colorless oil. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.79 (d, J = 7.5 Hz, 1H), 7.60 – 7.51 (m, 2H), 7.50 – 7.40 (m, 2H), 5.90 (d, J = 8.2 Hz, 1H), 5.88 (d, J = 8.3 Hz, 1H), 2.89 (d, J = 15.8 Hz, 1H), 2.89 (d, J = 15.8 Hz, 1H), 2.77 (d, J = 15.7 Hz, 1H). LCMS RT 1.23 min, $[M+H]^+$ 186.1, LCMS method L.

Step 4. Synthesis of rac-(1R,3R)-3'-oxospiro[cyclopentane-1,1'-isoindoline]-3-carboxylic acid and rac-(1R,3S)-3'-oxospiro[cyclopentane-1,1'-isoindoline]-3-carboxylic acid

[0937] To a flame dried 10 mL flask was added palladium diacetate (6.06 mg, 27.0 µmol) and 4,5-bis(diphenylphosphino)-9,9-dimethyl xanthene (15.6 mg, 27.0 µmol). Dry PhMe (0.2 mL) was added under a N_2 atmosphere followed by spiro[cyclopentane-1,1'-isoindolin]-3-en-3'- one (100 mg, 540 µmol), formic acid (41.2 µL, 1.08 mmol), and acetic anhydride (10.2 µL, 108 µmol) successively via syringe. The vial was purged with N_2 and tightly sealed with a septum cap. The reaction mixture was stirred at 70 °C for 24 hours. The reaction media was cooled down to room temperature and diluted with DCM and HCl (1 N). The aqueous layer was extracted with DCM 3 times. The organic layers were dried over Na_2SO_4 and concentrated under reduced pressure. The crude material was diluted in DMF and purified on a 30 g C18 column (mobile phase A: 10 mM ammonium formate in water, mobile phase B: acetonitrile, gradient: A:B 95:5 to 70:30) to give rac-(1R,3R)-3'-oxospiro[cyclopentane-1,1'-isoindoline]-3-carboxylic acid and rac-(1R,3S)-3'-oxospiro[cyclopentane-1,1'-isoindoline]-3-carboxylic acid. Isomer 1: 28 mg, LCMS RT 1.04 min, $[M+H]^+$ 232.0, LCMS method L. Isomer 2: 29 mg, LCMS RT 1.09 min, $[M+H]^+$ 232.0, LCMS method L.

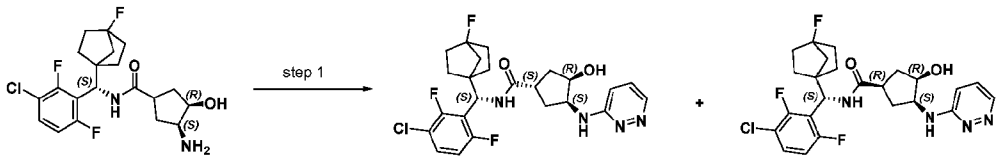
[0938] Additional compounds prepared according to the methods of Example 33 are listed in Table 3 below. Corresponding ^{1}H NMR and mass spectrometry characterization for these compounds are described in Table 1. Certain compounds in Table 3 below were prepared with other compounds whose preparation is described further below in the Examples.

Table 3. Additional exemplary compounds

I-1898	I-1905	I-1982	I-1983	I-2022
I-2023	I-2024	I-2025	I-2026	I-2027
I-2028	I-2029	I-2120	I-2121	I-2122
I-2123	I-2124	I-2125	I-2126	I-2127

Example 34

(1S,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-(pyridazin-3-ylamino)cyclopentane-1-carboxamide and (1R,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-(pyridazin-3-ylamino)cyclopentane-1-carboxamide



Step 1. Synthesis of (1S,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-(pyridazin-3-ylamino)cyclopentane-1-carboxamide and (1R,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-(pyridazin-3-ylamino)cyclopentane-1-carboxamide

[0939] A mixture of (3S,4R)-3-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide (100 mg, 240 μmol), 3-bromopyridazine (45.8 mg, 288 μmol), Cs_2CO_3 (235 mg, 720 μmol) and Pd-PEPPSI-IHcpt-Cl (46.7 mg, 48.0 μmol) in 1,4-dioxane (5 mL) was stirred for 6 hours at 90 °C under a N_2 atmosphere. The resulting crude material was purified by preparative HPLC (column: XBridge Prep OBD C18 Column, 30*150 mm, 5μm; mobile phase A: water (10 mmol/L NH_4HCO_3+0.05% NH_4OH), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 42% B to 62% B in 8 min; wavelength: 220 nm; RT (min): 8.52) to give an off-

white solid (50 mg, 42 %). The solid was further purified by chiral HPLC (column: CHIRALPAKIG3; mobile phase A: hexane (0.2 % diethylamine); mobile phase B: (EtOH : DCM 1: 1); flow rate: 1 mL/min; gradient: isocratic ; injection volume: 3 mL) to give (1S,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-(pyridazin-3-ylamino)cyclopentane-1-carboxamide and (1R,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-hydroxy-4-(pyridazin-3-ylamino)cyclopentane-1-carboxamide, both as an amorphous off-white solid. Peak 1: 10.9 mg (22.0 µmol). ^{1}H NMR (400 MHz, DMSO-d6) δ 8.37 (dd, J = 4.3, 1.4 Hz, 1H), 8.24 (d, J = 8.2 Hz, 1H), 7.56 (td, J = 8.7, 5.4 Hz, 1H), 7.22 - 7.10 (m, 2H), 6.87 (dd, J = 9.0, 1.5 Hz, 1H), 6.47 (d, J = 7.0 Hz, 1H), 5.27 (d, J = 8.2 Hz, 1H), 4.88 (d, J = 3.7 Hz, 1H), 4.17 (d, J = 5.5 Hz, 2H), 3.15 (qd, J = 8.6, 6.0 Hz, 1H), 1.93 - 1.85 (m, 2H), 1.84 - 1.74 (m, 6H), 1.71 (d, J = 12.3 Hz, 3H), 1.60 (d, J = 8.4 Hz, 1H), 1.46 (d, J = 9.1 Hz, 2H). LCMS RT 0.94 min, $[M+H]^+$ 495, LCMS method D; Peak 2: 20.0 mg (40.4 µmol) ^{1}H NMR (400 MHz, DMSO-d6) δ 8.38 (dd, J = 4.4, 1.4 Hz, 1H), 8.24 (d, J = 8.2 Hz, 1H), 7.57 (td, J = 8.7, 5.4 Hz, 1H), 7.30 - 7.04 (m, 2H), 6.90 (dd, J = 9.1, 1.4 Hz, 1H), 6.50 (d, J = 7.5 Hz, 1H), 5.29 (d, J = 8.2 Hz, 1H), 4.88 (d, J = 3.6 Hz, 1H), 4.28 - 4.10 (m, 2H), 3.14 (dd, J = 12.7, 7.9 Hz, 1H), 2.02 (ddd, J = 12.7, 8.1, 4.8 Hz, 1H), 1.90 - 1.78 (m, 4H), 1.77 - 1.65 (m, 6H), 1.60 (d, J = 8.4 Hz, 1H), 1.46 (d, J = 8.6 Hz, 2H). LCMS RT 0.94 min, $[M+H]^+$ 495, LCMS method D.

[0940] Additional compounds prepared according to the methods of Example 34 are listed in Table 4 below. Corresponding ^{1}H NMR and mass spectrometry characterization for these compounds are described in Table 1. Certain compounds in Table 4 below were prepared with other compounds whose preparation is described further below in the Examples.

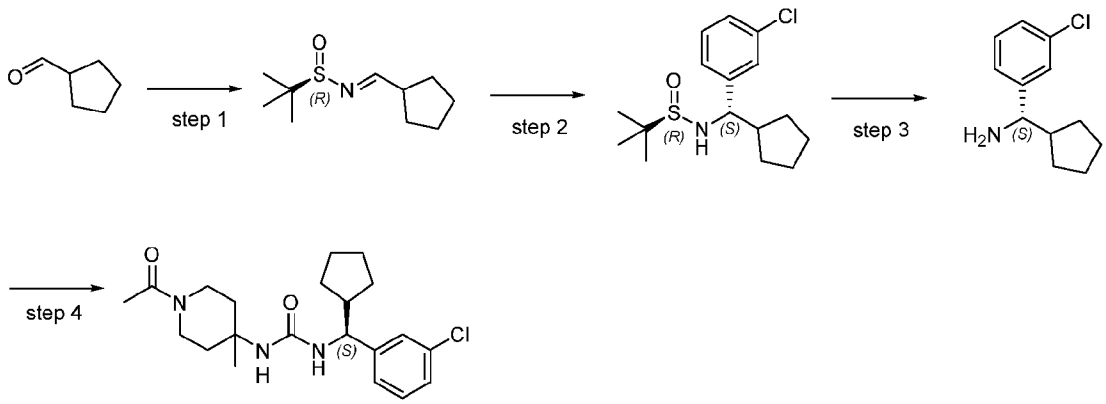
Table 4. Additional exemplary compounds

I-2015	I-2016	I-2094	I-2108	I-2111
I-2128	I-2130	I-2132	I-2135	I-2156
I-2159	I-2160	I-2221	I-2312	I-2315
I-2321	I-2324	I-2343	I-2800	I-2806
I-2807	I-2841	I-2842	I-2924	I-3439

I-3440	I-3542	I-3543	I-3623	I-3625
I-3628	I-3674	I-3675	I-3690	I-3696
I-3711	I-3719	I-3725	I-3726	

Example 35

(S)-1-(1-acetyl-4-methylpiperidin-4-yl)-3-((3-chlorophenyl)(cyclopentyl)methyl)urea



Step 1. Synthesis of (R)-N-(cyclopentylmethylene)-2-methylpropane-2-sulfinamide

[0941] To a solution of cyclopentanecarbaldehyde (112 g, 1.15 mol) and (R)-2-methylpropane-2-sulfinamide (167 g, 1.38 mol) in THF (560 mL) was added $Ti(O^iPr)_4$ (651 g, 2.29 mol) under a N_2 atmosphere at 25 °C. The mixture was heated to 75 °C and stirred for 2 hours. After cooling to room temperature, to the mixture was added brine (3.00 L). The suspension was filtered. The filter cake was washed with ethyl acetate (5.00 L* 2). The organic phase in the filtrate was separated and the aqueous phase was extracted with ethyl acetate (3.00 L). The combined organic phase was washed with brine (3.0 L), dried over Na_2SO_4, filtered and concentrated. The residue was purified by column chromatography (silica gel, petroleum ether: ethyl acetate 1 : 0 to 10 : 1) to give (R)-N-(cyclopentylmethylene)-2-methylpropane-2-sulfinamide (357 g, 1.77 mol) as a yellow oil. ^1H NMR (400 MHz $CDCl_3$)

[0942] δ 8.00 (d, J = 5.6 Hz, 1H), 2.98 - 2.94 (m, 1H), 1.94 - 1.83 (m, 2H), 1.77 - 1.62 (m, 6H), 1.19 (s, 9H).

Step 2. Synthesis of (R)-N-((S)-(3-chlorophenyl)(cyclopentyl)methyl)-2-methylpropane-2-sulfinamide

[0943] Two batches were executed. To a solution of (R)-N-(cyclopentylmethylene)-2-methylpropane-2-sulfinamide (160 g, 795 mmol) and 1-bromo-3-chlorobenzene (140 mL, 1.19 mol) in THF (800 mL) was added n-BuLi (2.50 M in THF, 477 mL) dropwise at -60 ~ -70 °C under N_2. The reaction was stirred between -70 and -60 °C for 2 hours. Two batches of mixture were combined. The mixture was poured into saturated NH_4Cl solution (5.0 L) and extracted with ethyl acetate (2.00 L * 3). Then the combined organic phase was washed with brine (2.00 L), dried over Na_2SO_4, filtered and concentrated to give the crude product (R)-N-((S)-(3-chlorophenyl)(cyclopentyl)methyl)-2-methylpropane-2-sulfinamide as a yellow oil (563 g), which was used in the next step without purification.

Step 3. Synthesis of (S)-(3-chlorophenyl)(cyclopentyl)methanamine

[0944] Two batches were carried out in parallel. To a solution of (R)-N-((S)-(3-chlorophenyl)(cyclopentyl)methyl)-2-methylpropane-2-sulfinamide (264 g, 757 mmol) in ethyl acetate (2.60 L) was added HCl (4 N in EtOAc, 473 mL) at 25 °C. The mixture was stirred at 25 °C for 1 hour. After 1 hour of stirring, a large amount of white solid was formed. Two batches of reaction mixture were combined. The suspension was concentrated to 4.0 L. The suspension was filtered and the filter cake was washed with ethyl acetate (200 mL * 2). Then the filter cake was partitioned between ethyl acetate (2.00 L) and saturated $NaHCO_3$ solution (2.50 L). The suspension was stirred for 10 minutes until the solid disappeared. The organic phase was separated and the aqueous phase was extracted with ethyl acetate (1.00 L *2). The combined organic phase was washed with brine (2.00 L), dried over Na_2SO_4, filtered and concentrated to give the crude product (S)-(3-chlorophenyl)(cyclopentyl)methanamine (220 g) as a yellow oil, which was used in the next step without purification.

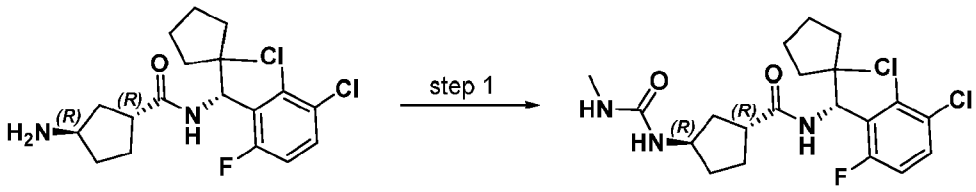
Step 4. Synthesis of (S)-1-(1-acetyl-4-methylpiperidin-4-yl)-3-((3-chlorophenyl)(cyclopentyl)methyl)urea

[0945] (3-chlorophenyl)(cyclopentyl)methanamine (100 mg, 477 μmol) was dissolved in DCM (5 mL). The solution was cooled to 0 °C. CDI (92.8 mg, 572 μmol) was added, followed by DMAP (5.83 mg, 47.7 μmol). The solution was stirred at 0 °C for 1 hour. 1-(4-

amino-4-methylpiperidin-1-yl)ethan-1-one hydrochloride (91.9 mg, 477 μmol) and triethylamine (199 μL, 1.43 mmol) were added, and the solution was stirred at 40 °C for 1.5 h, and then at room temperature overnight. It was then heated at 40 °C for 4.5 h, concentrated and purified by HPLC to give the product 1-(1-acetyl-4-methylpiperidin-4-yl)-3-((3-chlorophenyl)(cyclopentyl)methyl)urea (53.1 mg, 135 μmol) as a colorless solid. LCMS: RT 1.410 min, $[M+H]^+$ 392.46, LCMS method I.

Example 36

(1R,3R)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-(3-methylureido)cyclopentane-1-carboxamide



Step 1. Synthesis of (1R,3R)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)-3-(3-methylureido)cyclopentane-1-carboxamide

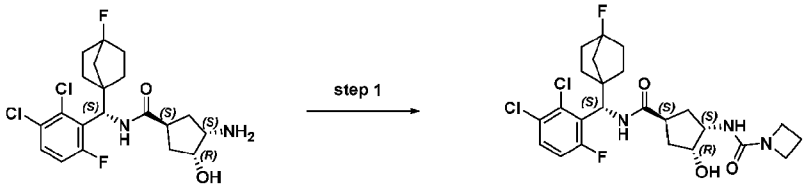
[0949]

A mixture of (1R,3R)-3-amino-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl)methyl)cyclopentane-1-carboxamide (50 mg, 0.13 mmol), N-methyl-1H-imidazole-1-carboxamide (16 mg, 0.13 mmol) and TEA (26 mg, 0.26 mmol) in CH_3CN (1 mL) was stirred for 2 h at 25 °C. The reaction was quenched with MeOH (1 mL) and concentrated. The resulting crude material was purified by preparative HPLC (column: XBridge Prep OBD C18 Column, 30*150 mm, 5 μm; mobile phase A: water (10 mM NH_4HCO_3), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 35% B to 65% B in 8 min, then 65% B; wavelength: 220 nm; RT1 (min): 7.53) to give (1R,3R)-N-((R)-(2,3-dichloro-6-fluorophenyl)(1-methylcyclopentyl) methyl)-3-(3-methylureido)cyclopentane-1-carboxamide (17.4 mg, 39.2 μmol) as an off-white solid. ^1H NMR (400 MHz, DMSO-d_6) δ 8.05 (d, J = 8.7 Hz, 1H), 7.60 (d, J = 9.6 Hz, 1H), 7.25 (t, J = 9.8 Hz, 1H), 5.81 (d, J = 7.1 Hz, 1H), 5.56 (s, 1H), 5.49 (d, J = 8.6 Hz, 1H), 3.88 (q, J = 6.5 Hz, 1H), 2.99-2.91 (m, 1H), 2.53 (s, 3H), 1.88-

1.70 (m, 3H), 1.68-1.57 (m, 7H), 1.44 (dd, J = 12.6, 7.5 Hz, 1H), 1.37 (s, 1H), 1.35-1.24 (m, 2H), 0.96 (d, J = 2.8 Hz, 3H). LCMS RT 1.158 min, $[M+H]^+$ 444, LCMS method C.

Example 37

N-((1S,2R,4S)-4-(((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)azetidine-1-carboxamide



Step 1. Synthesis of N-((1S,2R,4S)-4-(((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)azetidine-1-carboxamide

[0950] (1S,3S,4R)-3-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide was synthesized similarly as example 5. To a stirred solution of azetidine (13 mg, 231 μmol) and TEA (70 mg, 692 μmol) in CH_2Cl_2 (3 mL) was added triphosgene (20 mg, 0.30 Eq, 69.2 μmol) dropwise at 0°C under a nitrogen atmosphere. The resulting mixture was stirred for 1 hour at 30 °C under nitrogen. To the above mixture was added (1S,3S,4R)-3-amino-N-((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide (100 mg, 231 μmol) at room temperature. The resulting mixture was stirred for 1 hour at room temperature. The resulting mixture was purified by reversed-phase flash chromatography (column: XBridge Prep OBD C18 Column, 30*150 mm, 10 μm; mobile phase A: water (10mM NH_4HCO_3 + 0.05% NH_4OH), mobile phase B: Acetonitrile; flow rate: 60 mL/min; gradient: 32% B to 49% B in 8 minutes; wavelength: 254nm/220nm; RT (min): 9.48) to give N-((1S,2R,4S)-4-(((S)-(2,3-dichloro-6-fluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)-2-hydroxycyclopentyl)azetidine-1-carboxamide (4.3 mg, 8.0 μmol) as a white solid.

[0951] LCMS RT 1.389 min, $[M+H]^+$ 516.20. LCMS Method F. ^1H NMR (300 MHz, DMSO-d6) δ 8.17 (d, J = 8.2 Hz, 1H), 7.62 (dd, J = 8.9, 5.1 Hz, 1H), 7.26 (dd, J = 10.6, 9.0 Hz, 1H), 5.49 (d, J = 7.7 Hz, 2H), 4.77 (d, J = 3.5 Hz, 1H), 3.91-3.85 (m, 1H), 3.78 (dd, J =

9.9, 5.1 Hz, 4H), 3.12-2.98 (m, 1H), 2.15-2.07 (m, 2H), 1.85-1.49 (m, 15H). ^{19}F NMR (282 MHz, DMSO) δ -109.27, -173.53, -173.77.

[0952] Additional compounds prepared according to the methods of Examples 35-37 are listed in Table 5 below. Corresponding ^{1}H NMR and mass spectrometry characterization for these compounds are described in Table 1. Certain compounds in Table 5 below were prepared with other compounds whose preparation is described further below in the Examples.

Table 5. Additional Exemplary Compounds

I-1	I-2	I-4	I-5	I-7
I-8	I-9	I-10	I-11	I-12
I-13	I-14	I-15	I-16	I-17
I-18	I-19	I-20	I-21	I-22
I-23	I-24	I-25	I-26	I-27
I-28	I-29	I-30	I-31	I-32
I-33	I-34	I-35	I-36	I-37
I-38	I-39	I-40	I-41	I-42
I-43	I-44	I-45	I-46	I-47
I-48	I-49	I-50	I-51	I-52
I-53	I-54	I-55	I-56	I-57
I-58	I-59	I-60	I-61	I-62
I-63	I-64	I-65	I-66	I-67
I-68	I-69	I-70	I-71	I-72
I-73	I-74	I-75	I-76	I-77
I-78	I-79	I-80	I-81	I-82
I-84	I-85	I-86	I-87	I-88
I-89	I-90	I-91	I-92	I-93
I-94	I-95	I-96	I-97	I-98
I-99	I-100	I-101	I-102	I-103
I-104	I-105	I-106	I-107	I-108
I-109	I-110	I-111	I-112	I-113

I-114	I-115	I-116	I-117	I-118
I-119	I-120	I-121	I-122	I-123
I-124	I-125	I-126	I-127	I-128
I-129	I-130	I-131	I-132	I-133
I-134	I-135	I-136	I-137	I-138
I-139	I-140	I-141	I-142	I-143
I-144	I-145	I-146	I-147	I-148
I-149	I-150	I-151	I-152	I-153
I-154	I-155	I-156	I-157	I-158
I-159	I-160	I-161	I-162	I-163
I-164	I-165	I-166	I-167	I-168
I-169	I-170	I-171	I-172	I-173
I-174	I-175	I-176	I-177	I-178
I-179	I-182	I-184	I-185	I-186
I-187	I-188	I-189	I-190	I-195
I-196	I-197	I-204	I-205	I-206
I-207	I-215	I-219	I-220	I-221
I-223	I-225	I-230	I-231	I-232
I-233	I-235	I-254	I-255	I-256
I-261	I-262	I-264	I-265	I-267
I-268	I-274	I-275	I-276	I-277
I-278	I-279	I-280	I-281	I-282
I-283	I-284	I-285	I-286	I-287
I-288	I-289	I-290	I-291	I-292
I-293	I-299	I-300	I-301	I-302
I-303	I-304	I-305	I-306	I-307
I-308	I-309	I-310	I-311	I-312
I-313	I-314	I-315	I-316	I-317
I-318	I-319	I-320	I-321	I-322
I-323	I-324	I-326	I-328	I-329

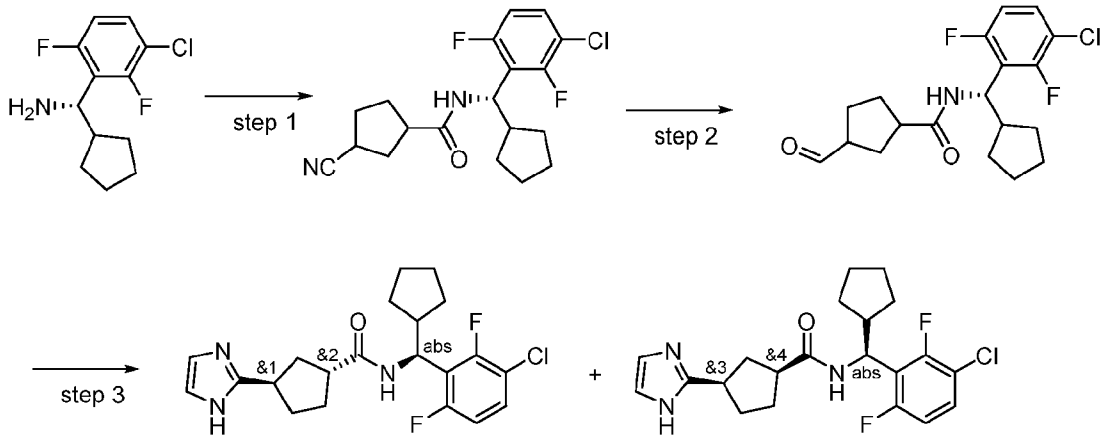
I-330	I-331	I-332	I-335	I-336
I-345	I-346	I-347	I-350	I-355
I-356	I-357	I-359	I-361	I-363
I-365	I-368	I-374	I-379	I-380
I-381	I-382	I-383	I-385	I-386
I-387	I-388	I-389	I-390	I-391
I-392	I-393	I-394	I-395	I-396
I-397	I-398	I-399	I-400	I-401
I-402	I-404	I-405	I-407	I-408
I-409	I-410	I-412	I-413	I-414
I-415	I-416	I-417	I-418	I-419
I-420	I-421	I-422	I-423	I-425
I-426	I-428	I-431	I-433	I-434
I-435	I-436	I-443	I-444	I-447
I-448	I-449	I-450	I-451	I-452
I-453	I-456	I-457	I-458	I-459
I-462	I-463	I-464	I-465	I-468
I-472	I-473	I-474	I-480	I-481
I-482	I-483	I-486	I-487	I-495
I-496	I-497	I-499	I-500	I-501
I-502	I-503	I-516	I-517	I-518
I-519	I-520	I-523	I-529	I-530
I-531	I-532	I-533	I-534	I-535
I-548	I-565	I-584	I-585	I-586
I-587	I-588	I-589	I-590	I-591
I-592	I-593	I-594	I-595	I-596
I-597	I-599	I-601	I-602	I-603
I-604	I-605	I-617	I-618	I-623
I-624	I-625	I-626	I-627	I-628
I-629	I-631	I-632	I-633	I-636

I-637	I-638	I-646	I-647	I-648
I-649	I-653	I-654	I-655	I-656
I-662	I-663	I-664	I-677	I-697
I-698	I-699	I-705	I-706	I-707
I-708	I-713	I-714	I-715	I-716
I-720	I-721	I-722	I-723	I-726
I-727	I-728	I-729	I-731	I-732
I-733	I-734	I-735	I-736	I-737
I-738	I-739	I-740	I-741	I-742
I-743	I-749	I-750	I-751	I-752
I-753	I-754	I-759	I-779	I-805
I-807	I-810	I-813	I-815	I-687
I-880	I-881	I-884	I-885	I-886
I-888	I-889	I-890	I-892	I-893
I-894	I-895	I-896	I-899	I-926
I-928	I-930	I-933	I-969	I-970
I-971	I-972	I-991	I-994	I-995
I-1006	I-1008	I-1016	I-1112	I-1113
I-1114	I-1199	I-1678	I-1802	I-1803
I-1804	I-1805	I-1806	I-1807	I-1808
I-1809	I-1810	I-1811	I-1812	I-1813
I-1818	I-1819	I-1820	I-1821	I-1822
I-1823	I-1824	I-1825	I-1826	I-1830
I-1831	I-1832	I-1894	I-1915	I-1919
I-1920	I-1933	I-1958	I-1960	I-2014
I-2017	I-2038	I-2039	I-2093	I-2415
I-2416	I-2756	I-2764	I-2765	I-2776
I-3197	I-3271	I-3272	I-3275	I-3278
I-3397	I-3681	I-3708		

[0953] A mixture of (S)-N-((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-1-((2-(trimethylsilyl)ethoxy)methyl)-1H-benzo[d]imidazol-2-amine (150 mg, 305 μmol) in TFA (2 mL) was stirred for 1 hour at 25 °C. The reaction mixture was concentrated in vacuo. The resulting crude material was purified by preparative HPLC (column: XBridge Prep OBD C18 Column, 30*150 mm, 5 μm; mobile phase A: water (10 mM NH_4HCO_3), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 40% B to 70% B in 8 min, then 70% B; wavelength: 220 nm; RT (min): 7.83). Concentration in vacuo gave (S)-N-((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-1H-benzo[d]imidazol-2-amine (20 mg, 55 μmol) as an off-white amorphous solid. ^{1}H NMR (400 MHz, DMSO-d_6) δ 10.31 (s, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.20 - 7.09 (m, 3H), 7.07 (d, J = 8.9 Hz, 1H), 6.84 (s, 2H), 5.13 (t, J = 9.7 Hz, 1H), 2.51 (s, 1H), 1.96 - 1.88 (m, 1H), 1.64 (s, 2H), 1.57 (dt, J = 15.2, 8.1 Hz, 2H), 1.44 (td, J = 12.5, 6.6 Hz, 2H), 1.17 - 1.09 (m, 1H). LCMS RT 0.815 min, $[M+H]^+$ 362.05, LCMS method C.

Example 38

(1RS,3RS)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-3-(1H-imidazol-2-yl)cyclopentane-1-carboxamide and (1RS,3SR)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-3-(1H-imidazol-2-yl)cyclopentane-1-carboxamide



Step 1. Synthesis of N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-3-cyanocyclopentane-1-carboxamide

[0954] A flask equipped with a magnetic stirrer bar was charged with 3-cyanocyclopentane-1-carboxylic acid (160 mg, 1.15 mmol) and (S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methanamine (324 mg, 1.15 mmol). DMF (2 mL) was added,

followed by DIPEA (601 µL, 3.45 mmol) and T3P (1.10 g, 50% wt, 1.72 mmol) dropwise. The reaction mixture stirred at ambient temperature for 30 minutes. The reaction was diluted with EtOAc (10 mL) and H_2O (30 mL). The organic layer was washed twice with water, then saturated NH_4Cl solution, and finally brine. The organic layer was dried over Na_2SO_4 and concentrated under reduced pressure. The crude material was purified over a reverse phase column chromatography (mobile phase A: 10 mM ammonium formate in water, mobile phase B: acetonitrile; gradient: A:B 90:10 to 30:70) to give N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-3-cyanocyclopentane-1-carboxamide (320 mg). LCMS RT 1.79 min, $[M+H]^+$ 367.2, RT 1.82 min, $[M+H]^+$ 367.2, LCMS method L.

Step 2. Synthesis of N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-3-formylcyclopentane-1-carboxamide

[0955] A flame-dried microwave vial equipped with a magnetic stirrer bar was charged with N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-3-cyanocyclopentane-1-carboxamide (100 mg, 273 µmol). DCM (2 mL) was added under a N_2 atmosphere and the reaction was cooled down to -78 °C. Diisobutylaluminum hydride (654 µL, 1 M in DCM, 654 µmol) was added dropwise and the reaction was stirred for 40 mins at -78 °C. The reaction was warmed up to room temperature, diluted with DCM and quenched with Rochelle salt solution (10 mL). The biphasic mixture was allowed to stir for 15 minutes and the aqueous layer was extracted with DCM twice. The organic layers were combined, dried over Na_2SO_4 and concentrated under reduced pressure to afford N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-3-formylcyclopentane-1-carboxamide as a colorless viscous oil (100 mg), which was used in the next step without purification. LCMS RT 1.81 min, $[M+H]^+$ 370.2, LCMS method L.

Step 3. Synthesis of (1RS,3RS)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-3-(1H-imidazol-2-yl)cyclopentane-1-carboxamide and (1RS,3SR)-N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-3-(1H-imidazol-2-yl)cyclopentane-1-carboxamide

[0956] To a solution of N-((S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-3-formylcyclopentane-1-carboxamide (40.0 mg, 108 µmol) in ethanol (0.5 mL) at 0 °C was added a solution of glyoxal (18.6 µL, 40% wt. in water, 162 µmol) and NH_4OH (145 µL, 29% wt, 1.08 mmol). The reaction mixture was allowed to warm up to room temperature and

stirred for 5 hours. The reaction mixture was diluted with EtOAc and water. The aqueous phase was extracted twice with EtOAc. The organic phases were combined, dried over Na_2SO_4 and concentrated in *vacuo*. The crude mixture was purified on a reverse phase column (30 g), eluent: 10 mM ammonium formate in water:acetonitrile 95:5 to 50:50 in 16 minutes to give the two racemates. Racemate 1: 5.3 mg; LCMS RT 2.79 min, $[M+H]^+$ 408.3, LCMS method M.; ^{1}HNMR (400 MHz, DMSO-d6) δ 8.37 (d, J = 7.4 Hz, 1H), 8.18 (s, 1H), 7.48 (app. td, J = 8.5, 4.3 Hz, 1H), 7.08 (app. t, J = 9.3 Hz, 1H), 6.80 (s, 1H), 6.79 (s, 1H), 4.78 (dd, J = 10.8, 7.7 Hz, 1H), 3.18 – 3.05 (m, 1H), 2.89 – 2.79 (m, 1H), 2.42 – 2.34 (m, 1H), 2.03 – 1.62 (m, 6H), 1.62 – 1.36 (m, 5H), 1.35 – 1.16 (m, 2H), 1.01 – 0.87 (m, 1H). Racemate 2: 4.1 mg, 80:20 mixture of racemate 2 : racemate 1. LCMS RT 2.97 min, $[M+H]^+$ 408.3, LCMS method M. ^{1}HNMR (400 MHz, DMSO-d6) δ 8.87 (overlapping d, J = 6.3 Hz, 1H), 8.86 (overlapping d, J = 6.7 Hz, 1H),8.28 (br. ss, 1H), 7.56 – 7.47 (m, 1H), 7.16 – 7.08 (m, 1H), 6.85 (overlapping br. s, 1H), 6.83 (overlapping br. s, 1H), 4.84 (br. dd, J = 10.9, 7.6 Hz, 1H), 3.14 (overlapping m, 1H), 2.83 – 2.72 (m, 1H), 2.44 (overlapping m, 1H), 2.24 – 2.13 (m, 0.5H), 2.13 – 2.03 (m, 0.5H), 1.99 – 1.67 (m, 6H), 1.65 – 1.41 (m, 4H), 1.39 – 1.20 (m, 2H), 1.07 – 0.95 (m, 1H).

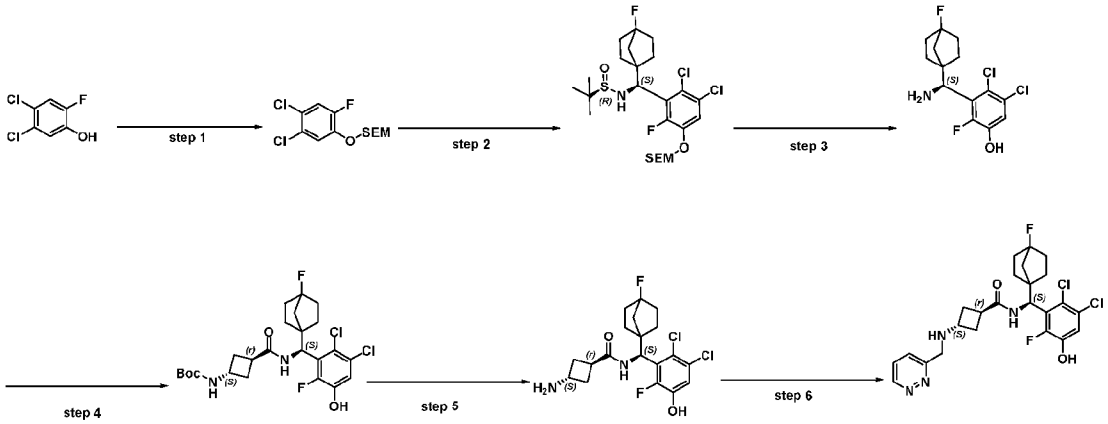
[0957] Additional compounds prepared according to the methods of Example 38 are listed in Table 6 below. Corresponding ^{1}H NMR and mass spectrometry characterization for these compounds are described in Table 1. Certain compounds in Table 6 below were prepared with other compounds whose preparation is described further below in the Examples.

Table 6. Additional exemplary compounds

I-2055	I-2058

Example 39

(1r,3S)-N-((S)-(2,3-dichloro-6-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-((pyridazin-3-ylmethyl)amino)cyclobutane-1-carboxamide



Step 1. Synthesis of (2-((4,5-dichloro-2-fluorophenoxy)methoxy)ethyl)trimethylsilane

[0960] To a mixture of 4,5-dichloro-2-fluorophenol (7.5 g, 41.4 mmol) and K_2CO_3 (11.45 g, 82.9 mmol) in acetonitrile (75 mL) was added SEM-Cl (11.0 mL, 62.2 mmol) dropwise at 0 °C under a nitrogen atmosphere. The mixture was stirred for 1 hour at 25 °C. The reaction was quenched with water (100 mL) and extracted with ethyl acetate (200 mL) three times. T he combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by silica gel chromatography (30 g column; eluting with petroleum ether) to afford (2-((4,5-dichloro-2-fluorophenoxy)methoxy)ethyl)tri methylsilane (12 g, 39 mmol) as a colorless oil. ^{1}H NMR (400 MHz, DMSO-d_6) δ 7.77 (d, J = 10.8 Hz, 1H), 7.58 (d, J = 8.1 Hz, 1H), 5.39 (s, 2H), 3.81 - 3.72 (m, 2H), 0.96 - 0.83 (m, 2 H), 0.03 - 0.01 (m, 9H).

[0961] Step 2. Synthesis of (R)-N-((S)-(2,3-dichloro-6-fluoro-5-((2-(trimethylsilyl)ethoxy) methoxy)phenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-methylpropane-2-sulfina mide

[0962] To a mixture of (2-((4,5-dichloro-2-fluorophenoxy)methoxy)ethyl)trimethylsilane (6 66 mg, 2.14 mmol) in THF (15 mL) was added LDA (1.53 mL, 2 M in THF, 3.06 mmol) dr opwise at -60 °C under a nitrogen atmosphere. The mixture was stirred for 1 h at -60 °C prio r to the addition of (R)-N-((4-fluorobicyclo[2.2.1]heptan-1-yl)methylene)-2-methylpropane-2-sulfinamide (500 mg, 2.04 mmol) at -60 °C. The mixture was stirred for 1 h at room temp erature. The reaction was quenched with saturated NH_4Cl (aq.). The reaction mixture was di luted with water (10 mL), and the aqueous phase was extracted with ethyl acetate (30 mL) t hree times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromat

ography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradi ent: 10% to 50% B in 10 min; detector: UV 254 nm) to give (R)-N-((S)-(2,3-dichloro-6-fluo ro-5-((2-(trimethylsilyl)ethoxy)methoxy)phenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-methylpropane-2-sulfinamide (990 mg, 1.78 mmol). LCMS RT 1.440 min, $[M+H]^+$ 556.1 5, LCMS method C.

[0963] Step 3. Synthesis of (S)-3-(amino(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4,5-dichloro-2-fluorophenol

[0964] A mixture of (R)-N-((S)-(2,3-dichloro-6-fluoro-5-((2-(trimethylsilyl)ethoxy)methox y)phenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-2-methylpropane-2-sulfinamide (990 mg, 1.78 mmol) in HCl (10 mL, 4 N in 1,4-dioxane) was stirred for 1 h at room temperature. The mixture was concentrated to afford (S)-3-(amino(4-fluorobicyclo[2.2.1]heptan-1-yl)me thyl)-4,5-dichloro-2-fluorophenol (543 mg, 1.69 mmol) as a yellow oil. LCMS RT 0.730 mi n, $[M+H]^+$ 322.0, LCMS method C.

[0965] Step 4. Synthesis of tert-butyl ((1S,3r)-3-(((S)-(2,3-dichloro-6-fluoro-5-hydroxyph enyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)cyclobutyl)carbamate

[0966] To a mixture of (S)-3-(amino(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4,5-dichlor o-2-fluorophenol (150 mg, 466 μmol), (1r,3r)-3-((tert-butoxycarbonyl)amino)cyclobutane-1 -carboxylic acid (100 mg, 466 μmol) and $NaHCO_3$ (117 mg, 1.40 mmol) in DMF (2 mL) wa s added HATU (266 mg, 698 μmol). The mixture was stirred for 1 h at room temperature. T he reaction mixture was diluted with water (30 mL), and the aqueous phase was extracted wi th ethyl acetate (50 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material w as purified by C18 flash to afford tert-butyl ((1S,3r)-3-(((S)-(2,3-dichloro-6-fluoro-5-hydrox yphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)carbamoyl)cyclobutyl)carbamate (178 mg, 343 μmol) as a colorless oil. LCMS RT 1.127 min, $[M+H]^+$ 463, LCMS method C.

[0967] Step 5. Synthesis of (1r,3S)-3-amino-N-((S)-(2,3-dichloro-6-fluoro-5-hydroxyphen yl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)cyclobutane-1-carboxamide

[0968] A mixture of ((1S,3r)-3-(((S)-(2,3-dichloro-6-fluoro-5-hydroxyphenyl)(4-fluorobicy clo[2.2.1]heptan-1-yl)methyl)carbamoyl)cyclobutyl)carbamate (158 mg, 304 μmol) in HCl (3 mL, 4 N in dioxane) was stirred for 1 h at 25 °C. The mixture was concentrated and the res idue was diluted with saturated $NaHCO_3$ solution. The reaction mixture was extracted with e

thyl acetate (50 mL) three times. The combined organic layers were washed with brine, drie d over sodium sulfate, filtered and concentrated in vacuo to afford (1r,3S)-3-amino-N-((S)-(2,3-dichloro-6-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)cyclobut ane-1-carboxamide (90 mg, 0.21 mmol) as an off-white solid. LCMS RT 0.431 min, $[M+H]^+$ 419. LCMS method C.

[0969] Step 6. Synthesis of (1r,3S)-N-((S)-(2,3-dichloro-6-fluoro-5-hydroxyphenyl)(4-flu orobicyclo[2.2.1]heptan-1-yl)methyl)-3-((pyridazin-3-ylmethyl)amino)cyclobutane-1-car boxamide

[0970] A mixture of pyridazine-3-carbaldehyde (7.7 mg, 72 μmol) and (1r,3S)-3-amino-N-((S)-(2,3-dichloro-6-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)cycl obutane-1-carboxamide (30 mg, 72 μmol) in MeOH (1 mL) was stirred for 0.5 h at 2 °C prio r to the addition of $NaBH_3CN$ (5.4 mg, 85 μmol). The mixture was stirred for 1 h at 25 °C. T he mixture was diluted with water (20 mL) and extracted with ethyl acetate (50 mL) three ti mes. The combined organic layers were washed with brine, dried over sodium sulfate, filtere d and concentrated in vacuo. The resulting crude material was purified by preparative HPLC (column: XBridge Shield RP18 OBD Column, 30*150 mm, 5 μm; mobile phase A: water (1 0 mM NH_4HCO_3 + 0.1% NH_4OH), mobile phase B: MeOH; flow rate: 60 mL/min; gradient: 38% B to 56% B in 11 min; wavelength: 220/254 nm; RT (min): 10.6; injection volume: 0. 475 mL) to give (1r,3S)-N-((S)-(2,3-dichloro-6-fluoro-5-hydroxyphenyl)(4-fluorobicyclo[2. 2.1]heptan-1-yl)methyl)-3-((pyridazin-3-ylmethyl)amino)cyclobutane-1-carboxamide (16 m g, 31 μmol) as an off-white amorphous solid. ^1H NMR (400 MHz, DMSO-d_6) δ 9.11 (dd, J = 4.7, 1.9 Hz, 1H), 8.04 (d, J = 8.4 Hz, 1H), 7.70 (dd, J = 8.5, 1.9 Hz, 1H), 7.65 (dd, J = 8.5, 4.7 Hz, 1H), 7.10 (d, J = 8.1 Hz, 1H), 6.53 (s, 1H), 6.29 (s, 1H), 5.51 - 5.33 (m, 1H), 3.93 (s, 2H), 3.32 (t, J = 7.4 Hz, 1H), 3.11 - 3.02 (m, 1H), 2.18 (dq, J = 7.8, 4.1, 3.2 Hz, 1H), 2.10 - 1.88 (m, 3H), 1.81 - 1.52 (dd, J = 22.7, 10.1 Hz, 10H). LCMS RT 0.872 min, $[M+H]^+$ 511.1 5, LCMS method B.

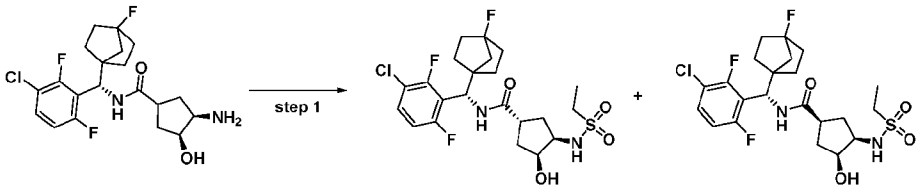
[0971] Additional compounds prepared according to the methods of Example 39 are listed in Table 7 below. Corresponding ^1H NMR and mass spectrometry characterization for these compounds are described in Table 1. Certain compounds in Table 7 below were prepared with other compounds whose preparation is described further below in the Examples.

Table 7. Additional exemplary compounds

I-2992	I-2993	I-2994	I-2995

Example 40

(1R,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-(ethylsulfonamido)-4-hydroxycyclopentane-1-carboxamide and (1S,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-(ethylsulfonamido)-4-hydroxycyclopentane-1-carboxamide



Step 1. Synthesis of (1R,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-(ethylsulfonamido)-4-hydroxycyclopentane-1-carboxamide and (1S,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-(ethylsulfonamido)-4-hydroxycyclopentane-1-carboxamide

[0972] To a mixture of (3R,4S)-3-amino-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-4-hydroxycyclopentane-1-carboxamide (50 mg, 0.12 mmol) and DIEA (63 µL, 0.36 mmol) in DCM (2 mL) was added ethanesulfonyl chloride (19 mg, 0.14 mmol) dropwise at 0 °C. The mixture was stirred for 1 h at 25°C. The mixture was concentrated in vacuum. The resulting crude material was purified by preparative HPLC (column: XBridge Prep OBD C18 Column, 30*150 mm, 5 µm; mobile phase A: water (10 mM NH_4HCO_3 + 0.05% NH_4OH), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 38% B to 52% B in 7 min; wavelength: 254/220nm nm; RT (min): 7.45) to afford (3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-(ethylsulfonamido)-4-hydroxycyclopentane-1-carboxamide (40 mg, 65 µmol) as a white amorphous solid. LCMS RT 1.098 min, $[M+H]^+$ 509.05, LCMS method B.

[0973] The product was further purified by preparative chiral HPLC (column: CHIRALPAK ID, 2*25 cm, 5 µm; mobile phase A: hexane (0.5% 2M NH_3 in MeOH),

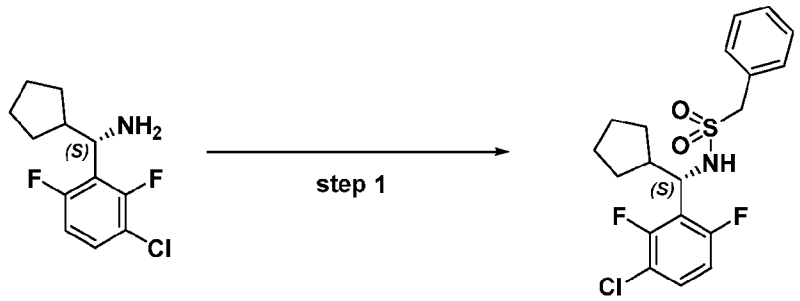
mobile phase B: EtOH: DCM 1: 1; flow rate: 20 mL/min; gradient: 30% isocratic; wavelength: 220/254 nm; RT1 (min): 6.94; RT2 (min): 11.38; sample solvent: EtOH: DCM 1: 1; injection volume: 1.9 mL） to afford (1R,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-(ethylsulfonamido)-4-hydroxycyclopentane-1-carboxamide and (1S,3R,4S)-N-((S)-(3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methyl)-3-(ethylsulfonamido)-4-hydroxycyclopentane-1-carboxamide, both as a white amorphous solid.

[0974] Isomer 1: 4 mg, 8 μmol. LCMS RT 1.094 min, $[M+H]^+$ 509.10, LCMS method B.

[0975] Isomer 2: 5.2 mg, 10 μmol. LCMS RT 1.092 min, $[M+H]^+$ 509.10, LCMS method B.

Example 41

(S)-N-((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-1-phenylmethanesulfonamide



Step 1. Synthesis of (S)-N-((3-chloro-2,6-difluorophenyl) (cyclopentyl)methyl)-1-phenylmethanesulfonamide

[0979] To a mixture of (S)-(3-chloro-2,6-difluorophenyl) (cyclopentyl)methanamine (100 mg, 407 μmol) and TEA (206 mg, 2.04 mmol) in DCM (1 mL) was added phenylmethanesulfonyl chloride (93.1 mg, 488 μmol) at room temperature. The mixture was stirred for 1 hour at room temperature. The reaction was quenched with MeOH (1 ml) and concentrated. The residue was first purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 10% to 60% B in 10 min; detector: UV 220 nm), then purified by preparative HPLC (column: XBridge Prep OBD C18 Column, 30*150 mm, 5 μm; mobile phase A: water (10 mM NH_4HCO_3), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 50% B to 80% B in 7 min, then 80% B; wavelength: 220 nm; RT1 (min): 6.6) to give (S)-N-((3-chloro-2,6-

difluorophenyl) (cyclopentyl)methyl)-1-phenylmethanesulfonamide (32.1 mg, 80 μmol) as an off-white amorphous solid. ^{1}H NMR (400 MHz, DMSO-d6) δ 7.91 (d, J = 7.8 Hz, 1H), 7.57 (td, J = 8.7, 5.5 Hz, 1H), 7.30 – 7.21 (m, 3H), 7.19 – 7.10 (m, 3H), 4.42 (dd, J = 10.7, 7.7 Hz, 1H), 4.26 – 4.07 (m, 2H), 2.39 (p, J = 8.6 Hz, 1H), 1.92 (dp, J = 12.3, 6.8, 5.8 Hz, 1H), 1.69 – 1.34 (m, 5H), 1.32 – 1.19 (m, 1H), 0.92 (dq, J = 12.2, 8.0 Hz, 1H). LCMS RT 1.692 min, $[M+Na]^+$ 422, LCMS method C.

[0980] Additional compounds prepared according to the methods of Examples 40-41 are listed in Table 8 below. Corresponding ^{1}H NMR and mass spectrometry characterization for these compounds are described in Table 1. Certain compounds in Table 8 below were prepared with other compounds whose preparation is described further below in the Examples.

Table 8. Additional exemplary compounds

I-1816	I-1827	I-1959	I-2009	I-2151
I-2152	I-2153	I-2681	I-2683	I-2694
I-2695	I-2701	I-2702	I-2703	I-2704
I-2705	I-2706	I-2707	I-2748	I-2749
I-2750	I-2751	I-2766	I-2767	I-2768
I-2769	I-2819	I-2820	I-2821	I-2822
I-2847	I-2848	I-2849	I-2850	I-2851
I-2852	I-2853	I-2854	I-2855	I-2856
I-2882	I-2883	I-2896	I-2897	I-2898
I-2899	I-2900	I-2901	I-2907	I-2908
I-2909	I-2910	I-2911	I-2912	I-2913
I-2914	I-2930	I-2931	I-2932	I-2933

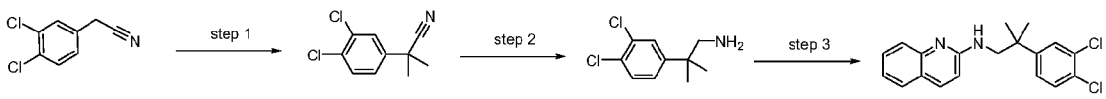
I-2934	I-2935	I-2936	I-2937	I-2938
I-2939	I-2940	I-2941	I-2968	I-2969
I-2970	I-2971	I-2972	I-2986	I-2987
I-2988	I-3030	I-3031	I-3032	I-3033
I-3034	I-3035	I-3036	I-3037	I-3038
I-3039	I-3040	I-3041	I-3042	I-3043
I-3066	I-3072	I-3074	I-3075	I-3076
I-3077	I-3078	I-3079	I-3080	I-3090
I-3097	I-3107	I-3108	I-3114	I-3116
I-3117	I-3133	I-3135	I-3136	I-3142
I-3143	I-3155	I-3158	I-3159	I-3162
I-3163	I-3165	I-3199	I-3200	I-3201
I-3205	I-3206	I-3207	I-3208	I-3209
I-3210	I-3211	I-3229	I-3230	I-3231
I-3236	I-3237	I-3295	I-3296	I-3299
I-3300	I-3301	I-3302	I-3303	I-3304
I-3305	I-3306	I-3307	I-3308	I-3309
I-3310	I-3311	I-3312	I-3313	I-3314
I-3315	I-3322	I-3323	I-3330	I-3343
I-3344	I-3345	I-3346	I-3347	I-3348

I-3349	I-3360	I-3361	I-3362	I-3363
I-3364	I-3365	I-3366	I-3368	I-3369
I-3370	I-3371	I-3372	I-3399	I-3400
I-3407	I-3412	I-3413	I-3418	I-3419
I-3420	I-3421	I-3422	I-3424	I-3445
I-3446	I-3447	I-3448	I-3452	I-3453
I-3454	I-3455	I-3456	I-3457	I-3458
I-3459	I-3460	I-3461	I-3462	I-3463
I-3464	I-3465	I-3466	I-3467	I-3468
I-3469	I-3470	I-3471	I-3472	I-3473
I-3474	I-3475	I-3476	I-3477	I-3478
I-3480	I-3481	I-3482	I-3483	I-3484
I-3485	I-3486	I-3517	I-3520	I-3523
I-3524	I-3525	I-3549	I-3550	I-3551
I-3552	I-3553	I-3554	I-3555	I-3556
I-3557	I-3558	I-3559	I-3560	I-3561
I-3562	I-3563	I-3564	I-3565	I-3566
I-3567	I-3568	I-3569	I-3570	I-3571
I-3572	I-3573	I-3574	I-3575	I-3576
I-3577	I-3578	I-3579	I-3580	I-3581

I-3582	I-3583	I-3584	I-3585	I-3594
I-3601	I-3602	I-3603	I-3604	I-3611
I-3612	I-3613	I-3614	I-3631	I-3632
I-3633	I-3651	I-3652	I-3653	I-3654
I-3655	I-3656	I-3657	I-3658	I-3659
I-3660	I-3661	I-3662	I-3663	I-3664
I-3665	I-3666	I-3667	I-3668	I-3669
I-3670	I-3672	I-3684	I-3685	I-3686
I-3687	I-3714	I-3715	I-3716	I-3741
I-3742	I-3743	I-3744	I-3745	

Example 42

N-(2-(3,4-dichlorophenyl)-2-methylpropyl)quinolin-2-amine



Step 1. Synthesis of 2-(3,4-dichlorophenyl)-2-methylpropanenitrile

[0981] To a mixture of 2-(3,4-dichlorophenyl)acetonitrile (1000 mg, 5.38 mmol) in THF (15 mL) was added LiHMDS (13.4 mL, 1 M in THF, 13.4 mmol) dropwise at 0 °C under a nitrogen atmosphere. The mixture was stirred for 1 h at 0 °C prior to the addition of MeI (1.91 g, 13.4 mmol). The mixture was stirred for 1 hour at 25 °C. The reaction was quenched with saturated NH_4Cl (aq.). The mixture was diluted with water (20 mL), and the aqueous phase was extracted with ethyl acetate (50 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by preparative TLC (petroleum ether/ethyl acetate, ratio 5/1) to afford 2-

(3,4-dichlorophenyl)-2-methylpropanenitrile (1.0 g, 4.67 mmol) as a yellow oil. ^{1}HNMR (400 MHz, DMSO-d6) 7.78 (d, J = 2.4 Hz, 1H), 7.71 (d, J = 8.5 Hz, 1H), 7.54 (dd, J = 8.5, 2.3 Hz, 1H), 1.70 (s, 6H).

Step 2. Synthesis of 2-(3,4-dichlorophenyl)-2-methylpropan-1-amine

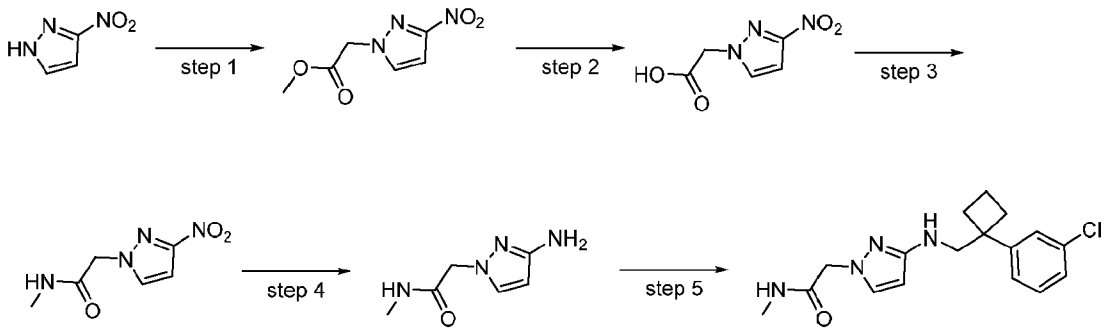
[0982] To a mixture of 2-(3,4-dichlorophenyl)-2-methylpropanenitrile (1.0 g, 4.67 mmol) in THF (10 mL) was added $LiAlH_4$ (213 mg, 5.60 mmol) in portions at 0 °C under a nitrogen atmosphere. The mixture was stirred for 2 hours at 80 °C. The reaction was then cooled to 0 °C and quenched with water (3 mL), sodium hydroxide (6 mL, 4 N in water) and water (3 m L). The reaction mixture was filtered through a pad of Celite, the pad was washed with ethyl acetate, and the filtrate was concentrated in vacuo to give 2-(3,4-dichlorophenyl)-2-methylp ropan-1-amine (900 mg, 1.38 mmol) as a yellow oil. LCMS RT 0.526 min, $[M+H]^+$ 218, LC MS method C.

Step 3. Synthesis of N-(2-(3,4-dichlorophenyl)-2-methylpropyl)quinolin-2-amine

[0983] A mixture of 2-chloroquinoline (200 mg, 1.22 mmol), 2-(3,4-dichlorophenyl)-2-methylpropan-1-amine (266 mg, 1.22 mmol), $Pd_2(dba)_3$ (111 mg, 122 μmol), BINAP (151 mg, 244 μmol) and t-BuONa (117 mg, 1.22 mmol) in toluene (4 mL) was stirred at 80 °C for 1 h. The mixture was diluted with water (20 ml) and extracted with ethyl acetate (20 ml*3). The combined organic layers were washed with brine, dried over Na_2SO_4 and concentrated. The residue was purified first by preparative TLC (MeOH:DCM 1:10) and then by preparative HPLC (column: XBridge Shield RP18 OBD Column, 30*150 mm, 5 μm; mobile phase A: water (10 mM NH_4HCO_3), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 55% B to 85% B in 7 min, then 85% B; wavelength: 254 nm; RT (min): 7.48) to give N-[2-(3,4-dichlorophenyl)-2-methylpropyl]quinolin-2-amine (91.3 mg, 264 μmol) as a colorless oil. ^{1}H NMR (400 MHz, DMSO-d6) δ 7.78 (d, J = 8.9 Hz, 1H), 7.68 (d, J = 2.2 Hz, 1H), 7.61 - 7.51 (m, 2H), 7.51 - 7.40 (m, 3H), 7.12 (ddd, J = 8.0, 6.6, 1.6 Hz, 1H), 6.84 - 6.72 (m, 2H), 3.71 (d, J = 5.8 Hz, 2H), 1.36 (s, 6H). LCMS RT 0.855 min, $[M+H]^+$ 345.00, LCMS method C.

Example 43

2-(3-(((1-(3-chlorophenyl)cyclobutyl)methyl)amino)-1H-pyrazol-1-yl)-N-methylacetamide



Step 1. Synthesis of methyl 2-(3-nitro-1H-pyrazol-1-yl)acetate

[0984] To a solution of 3-nitro-1H-pyrazole (5.00 g, 44 mmol) in DMF (30.0 mL) was added methyl 2-bromoacetate (4.18 mL, 44.2 mmol) and K_2CO_3 (12.2 g, 88.4 mmol). Then the mixture was stirred at 25 °C for 16 hours. The mixture was poured into water (30.0 mL) and extracted with ethyl acetate (30.0 mL * 5). The combined organic layers were washed with brine (30.0 mL), dried over Na_2SO_4 and concentrated under vacuum. The residue was purified by column chromatography (SiO_2, petroleum ether/ethyl acetate 1/1) to give methyl 2-(3-nitro-1H-pyrazol-1-yl)acetate (6.28 g, 28.5 mmol) as a yellow oil. ^{1}H NMR (400 MHz, DMSO-d_6) δ 8.05 (d, J = 2.6 Hz, 1H), 8.03 - 7.99 (m, 1H), 7.11 - 7.05 (m, 1H), 7.04 - 6.99 (m, 1H), 5.29 (s, 2H), 3.72 (s, 3H).

Step 2. Synthesis of 2-(3-nitro-1H-pyrazol-1-yl)acetic acid

[0985] To a solution of methyl 2-(3-nitro-1H-pyrazol-1-yl)acetate (4.00 g, 18.1 mmol) in THF (40.0 mL) and H_2O (8.00 mL) was added LiOH H_2O (3.81 g, 90.8 mmol). The mixture was stirred at 60 °C for 16 hours. Ethyl acetate (10.0 mL) and water (10.0 mL) were added and the layers were separated. The pH of the aqueous phase was adjusted to 2 with 1N HCl, and the mixture was extracted with ethyl acetate (10.0 mL*3). Combined extracts were washed with brine (10.0 mL) and dried over Na_2SO_4. The mixture was filtered and concentrated under vacuum to give 2-(3-nitro-1H-pyrazol-1-yl)acetic acid (2.45 g, 14.3 mmol) as a yellow solid. ^{1}H NMR: (400 MHz, DMSO-d_6) δ 14.04 - 13.85 (m, 1H), 8.03 (s, 1H), 7.07 (d, J = 2.4 Hz, 1H), 5.15 (s, 2H).

Step 3. Synthesis of N-methyl-2-(3-nitro-1H-pyrazol-1-yl)acetamide

[0986] To a solution of 2-(3-nitro-1H-pyrazol-1-yl)acetic acid (2.00 g, 11.7 mmol) in DMF (20.0 mL) was added methanamine HCl salt (1.58 g, 23.3 mmol), HATU (5.78 g, 15.1 mmol) and DIEA (10.1 mL, 58.4 mmol). The mixture was stirred at 25 °C for 16 hours. The

combined mixture was poured into water (20.0 mL) and extracted with ethyl acetate (20.0 mL * 3). The combined organic layers were washed with brine (20.0 mL * 3), dried over Na_2SO_4 and concentrated under vacuum. The residue was purified by silica gel column chromatography (petroleum ether/ethyl acetate 1/1) to give N-methyl-2-(3-nitro-1H-pyrazol-1-yl)acetamide (900 mg, 4.89 mmol) as a yellow oil. ^{1}H NMR: (400 MHz, DMSO-d_6) δ 8.21 - 8.13 (m, 1H), 7.99 (d, J = 2.4 Hz, 1H), 7.05 (d, J = 2.4 Hz, 1H), 4.95 - 4.93 (m, 2H), 2.64 (d, J = 4.4 Hz, 3H).

Step 4. Synthesis of 2-(3-amino-1H-pyrazol-1-yl)-N-methylacetamide

[0987] To a solution of N-methyl-2-(3-nitro-1H-pyrazol-1-yl)acetamide (800 mg, 4.34 mmol) in MeOH (10.0 mL) was added Pd/C (0.10 g, 10%) under a N_2 atmosphere. The suspension was degassed and purged with H_2 three times. The mixture was stirred under H_2 (15 psi) at 25 °C for 3 hours. The mixture was filtered and the filtrate was concentrated to give 2-(3-amino-1H-pyrazol-1-yl)-N-methylacetamide (544 mg, 3.53 mmol) as a colorless oil. ^{1}H NMR: (400 MHz, DMSO-d_6) δ 7.71 (br s, 1H), 7.30 (d, J = 2.4 Hz, 1H), 5.40 (d, J = 2.0 Hz, 1H), 4.42 (s, 2H), 2.59 (d, J = 4.4 Hz, 3H).

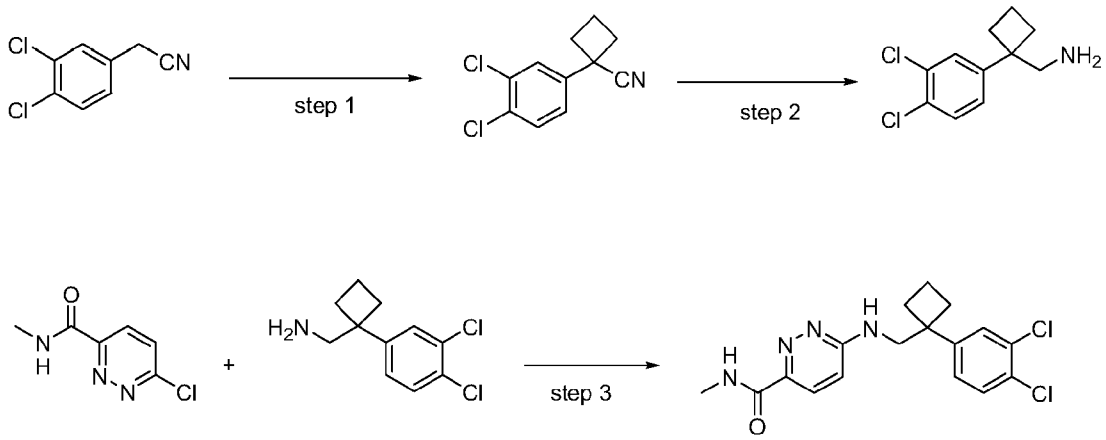
Step 5. Synthesis of 2-(3-(((1-(3-chlorophenyl)cyclobutyl)methyl)amino)-1H-pyrazol-1-yl)-N-methylacetamide

[0988] To a solution of 2-(3-amino-1H-pyrazol-1-yl)-N-methylacetamide (540 mg, 3.50 mmol) in MeOH (5.0 mL) was added 1-(3-chlorophenyl)cyclobutane-1-carbaldehyde (681 mg, 3.50 mmol). The mixture was stirred at 20 °C for 1 hour. $NaBH_3CN$ (1.10 g, 17 mmol) was added at 0 °C, and the mixture was stirred at 20 °C for 15 hours. The mixture was concentrated and the residue was purified by preparative HPLC (column: waters Xbridge 150*25mm, 5 μm; mobile phase A: water (0.05% ammonia hydroxide v/v), mobile phase B: acetonitrile; gradient: 30%-60% B over 9 min) to give 2-(3-(((1-(3-chlorophenyl)cyclobutyl)methyl)amino)-1H-pyrazol-1-yl)-N-methylacetamide (281 mg, 838 umol) as a white solid. ^{1}H NMR: (400 MHz, DMSO-d_6)

[0989] δ 7.66 (br d, J = 4.4 Hz, 1H), 7.36 - 7.28 (m, 2H), 7.24 - 7.17 (m, 2H), 7.17 - 7.12 (m, 1H), 5.37 (d, J = 2.4 Hz, 1H), 4.86 (t, J = 6.4 Hz, 1H), 4.42 (s, 2H), 3.31 (d, J = 6.4 Hz, 2H), 2.58 (d, J = 4.8 Hz, 3H), 2.31 - 2.14 (m, 4H), 2.10 - 1.97 (m, 1H), 1.84 - 1.71 (m, 1H).

Example 44

6-(((1-(3,4-dichlorophenyl)cyclobutyl)methyl)amino)-N-methylpyridazine-3-carboxamide



Step 1. Synthesis of 1-(3,4-dichlorophenyl)cyclobutane-1-carbonitrile

[0990] To a suspension of NaH (60% in mineral oil, 26.9 g, 672 mmol) in THF (100 mL) was added a solution of 2-(3,4-dichlorophenyl)acetonitrile (50.0 g, 269 mmol) in THF (200 mL) dropwise at 0 °C. The mixture was stirred at 0 °C for 1 hour. Then 1,3-dibromopropane (57.0 g, 282 mmol) was added dropwise over 1.5 hours at 0 °C. The mixture was warmed to 25 °C and stirred at 25 °C for 0.5 hr. The mixture was poured into saturated NH_4Cl solution (400 mL) and filtered. The filtrate was extracted with ethyl acetate (250 mL * 3). The organic layers were washed with brine (250 mL), dried over Na_2SO_4, filtered and concentrated. The crude product was purified by silica gel column chromatography (petroleum ether : ethyl acetate 50:1 to 6:1) to give 1-(3,4-dichlorophenyl)cyclobutane-1-carbonitrile (22.1 g, 96.0 mmol) as a colorless oil. ^1H NMR: (400 MHz, $CDCl_3$) δ 7.55 (d, J = 2.0 Hz, 1H), 7.52 (d, J = 8.0 Hz, 1H), 7.32 - 7.29 (m, 1H), 2.90 - 2.85 (m, 2H), 2.64 - 2.62 (m, 2H), 2.61 - 2.47 (m, 1H), 2.15 - 2.09 (m, 1H).

Step 2. Synthesis of (1-(3,4-dichlorophenyl)cyclobutyl)methanamine

[0991] To a suspension of $LiAlH_4$ (4.36 g, 115 mmol) in THF (100 mL) was added a solution of 1-(3,4-dichlorophenyl)cyclobutane-1-carbonitrile (20.0 g, 88.5 mmol) in THF (50.0 mL) dropwise at 0 °C. The mixture was warmed to 25 °C and stirred at 25 °C for 1 hour. The stirring mixture was cooled to 10 °C. Water (5.00 mL) was added, followed by 15% NaOH solution (5.00 mL), water (15.0 mL), and Na_2SO_4 (6.0 g). The mixture was filtered through

celite. The filtrate was extracted with ethyl acetate (50.0 mL * 2). The combined organic layers were washed with brine, dried over Na_2SO_4, filtered and concentrated to give (1-(3,4-dichlorophenyl)cyclobutyl)methanamine (11.0 g, 46.3 mmol) as a yellow oil. ^{1}H NMR: (400 MHz, $CDCl_3$) δ 7.28 (d, J = 8.4 Hz, 1H), 7.19 (d, J = 2.0 Hz, 1H), 6.96 - 6.94 (m, 1H), 2.93 (s, 2H), 2.31 - 2.26 (m, 2H), 2.16 - 2.11 (m, 2H), 2.09 - 2.02 (m, 1H), 1.92 - 1.84 (m, 1H).

Step 3. Synthesis of 6-(((1-(3,4-dichlorophenyl)cyclobutyl)methyl)amino)-N-methylpyridazine-3-carboxamide

[0992] In a vial 6-chloro-N-methylpyridazine-3-carboxamide (25 mg, 0.15 mmol) and (1-(3,4-dichlorophenyl)cyclobutyl)methanamine (34 mg, 0.15 mmol) were dissolved in NMP (0.5 mL). DIEA (38 µL, 0.22 mmol) was added. The vial was sealed and heated at 100 °C over the weekend. After cooling to room temperature, the reaction was purified on AccQprep using 35-65% of acetonitrile (0.1% formic acid) in water to give 6-(((1-(3,4-dichlorophenyl)cyclobutyl)methyl)amino)-N-methylpyridazine-3-carboxamide (22 mg, 60 µmol). LCMS: RT 1.426 min, $[M+H]^+$ 365.25. LCMS method K.

[0993] Additional compounds prepared according to the methods of Examples 42-44 are listed in Table 9 below. Corresponding ^{1}H NMR and mass spectrometry characterization for these compounds are described in Table 1. Certain compounds in Table 9 below were prepared with other compounds whose preparation is described further below in the Examples.

Table 9. Additional Exemplary Compounds that can be synthesized similarly using Buchwald, reductive amination, urea formation, or amide coupling reactions

I-3	I-6	I-180	I-181	I-191
I-192	I-193	I-194	I-198	I-199
I-200	I-201	I-202	I-203	I-209
I-210	I-211	I-212	I-213	I-214
I-216	I-217	I-218	I-222	I-358

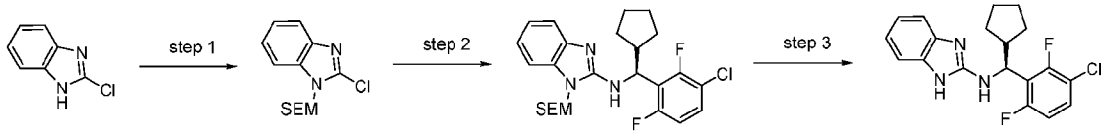
I-360	I-362	I-364	I-366	I-367
I-376	I-377	I-411	I-429	I-430
I-437	I-438	I-439	I-440	I-441
I-442	I-470	I-471	I-475	I-476
I-477	I-478	I-488	I-489	I-490
I-492	I-504	I-505	I-506	I-508
I-509	I-511	I-512	I-513	I-514
I-524	I-526	I-527	I-528	I-536
I-537	I-538	I-539	I-540	I-541
I-542	I-543	I-544	I-545	I-546
I-547	I-549	I-550	I-551	I-559
I-560	I-561	I-562	I-569	I-570
I-576	I-598	I-600	I-616	I-619
I-620	I-622	I-640	I-641	I-642
I-643	I-644	I-659	I-660	I-661
I-665	I-678	I-679	I-680	I-681
I-682	I-683	I-684	I-685	I-686
I-688	I-744	I-747	I-755	I-756
I-758	I-760	I-761	I-766	I-771

I-773	I-778	I-780	I-781	I-782
I-783	I-784	I-785	I-786	I-788
I-789	I-792	I-809	I-811	I-812
I-814	I-816	I-820	I-826	I-827
I-828	I-829	I-831	I-832	I-833
I-836	I-839	I-840	I-845	I-864
I-865	I-866	I-867	I-868	I-869
I-870	I-871	I-921	I-922	I-923
I-924	I-375	I-939	I-940	I-947
I-974	I-975	I-990	I-1007	I-1009
I-1010	I-1015	I-1020	I-1021	I-1022
I-1023	I-1024	I-1027	I-1042	I-1043
I-1044	I-1117	I-1118	I-1119	I-1202
I-1214	I-1215	I-1216	I-1220	I-1222
I-1223	I-1224	I-1225	I-1259	I-1260
I-1275	I-1276	I-1277	I-1278	I-1328
I-1329	I-1330	I-1331	I-1332	I-1333
I-1334	I-1335	I-1343	I-1363	I-1493
I-1506	I-1507	I-1508	I-1509	I-1510

I-1511	I-1512	I-1513	I-1514	I-1515
I-1516	I-1640	I-1641	I-1642	I-1685
I-2270	I-2273	I-3196	I-3198	

Example 45

(S)-N-((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-1H-benzo[d]imidazol-2-amine



Step 1. Synthesis of 2-chloro-1-((2-(trimethylsilyl)ethoxy)methyl)-1H-benzo[d]imidazole

[0994] To a mixture of 2-chloro-1H-benzo[d]imidazole (800 mg, 5.24 mmol) and Cs_2CO_3 (5.12 g, 15.7 mmol) in DMF (5 mL) was added SEM-Cl (1.39 mL, 7.86 mmol) dropwise at 0 °C under a nitrogen atmosphere. The mixture was stirred for 1 hour at 25 °C. The reaction mixture was diluted with water (30 mL), and the aqueous phase was extracted with ethyl acetate (50 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by C18 flash chromatography to afford 2-chloro-1-((2-(trimethylsilyl)ethoxy)methyl)-1H-benzo[d]imidazole (800 mg, 2.83 mmol) as an off-white solid. LCMS RT 0.987 min, $[M+H]^+$ 283, LCMS method C.

Step 2. Synthesis of (S)-N-((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-1-((2-(trimethylsilyl)ethoxy)methyl)-1H-benzo[d]imidazol-2-amine

[0995] A mixture of 2-chloro-1-((2-(trimethylsilyl)ethoxy)methyl)-1H-benzo[d]imidazole (300 mg, 1.06 mmol), (S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methanamine (261 mg, 1.06 mmol), Cs_2CO_3 (1.04 g, 3.18 mmol), BINAP (66.0 mg, 106 μmol) and $Pd_2(dba)_3$ (110 mg, 106 μmol) in dioxane (3 mL) was stirred for 16 hours at 110 °C under a N_2 atmosphere. The reaction mixture was diluted with water (20 ml) and extracted with ethyl acetate (50 ml *3). The combined organic layers were washed with brine (10 ml), dried over sodium sulfat e, filtered and concentrated in vacuo. The resulting crude material was purified by C18 flash

chromatography (CH_3CN/H_2O) to afford (S)-N-((3-chloro-2,6-difluorophenyl)(cyclopentyl) methyl)-1-((2-(trimethylsilyl)ethoxy)methyl)-1H-benzo[d]imidazol-2-amine (150 mg, 305 μ mol) as a yellow oil. LCMS RT 1.604 min, $[M+H]^+$ 492, LCMS method B.

Step 3. Synthesis of (S)-N-((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-1H-benzo[d]imidazol-2-amine

[0996] A mixture of (S)-N-((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-1-((2-(trimet hylsilyl)ethoxy)methyl)-1H-benzo[d]imidazol-2-amine (150 mg, 305 μmol) in TFA (2 mL) was stirred for 1 hour at 25 °C. The reaction mixture was concentrated in vacuo. The resulti ng crude material was purified by preparative HPLC (column: XBridge Prep OBD C18 Col umn, 30*150 mm, 5 μm; mobile phase A: water (10 mM NH_4HCO_3), mobile phase B: aceto nitrile; flow rate: 60 mL/min; gradient: 40% B to 70% B in 8 min, then 70% B; wavelength: 220 nm; RT (min): 7.83). Concentration in vacuo gave (S)-N-((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)-1H-benzo[d]imidazol-2-amine (20 mg, 55 μmol) as an off-white amo rphous solid. ^{1}H NMR (400 MHz, DMSO-d_6) δ 10.31 (s, 1H), 7.53 (td, J = 8.6, 5.4 Hz, 1H), 7.20 - 7.09 (m, 3H), 7.07 (d, J = 8.9 Hz, 1H), 6.84 (s, 2H), 5.13 (t, J = 9.7 Hz, 1H), 2.51 (s, 1 H), 1.96 - 1.88 (m, 1H), 1.64 (s, 2H), 1.57 (dt, J = 15.2, 8.1 Hz, 2H), 1.44 (td, J = 12.5, 6.6 Hz, 2H), 1.17 - 1.09 (m, 1H). LCMS RT 0.815 min, $[M+H]^+$ 362.05, LCMS method C.

[0997] Additional compounds prepared according to the methods of Example 45 are listed in Table 10 below. Corresponding ^{1}H NMR and mass spectrometry characterization for these compounds are described in Table 1. Certain compounds in Table 10 below were prepared with other compounds whose preparation is described further below in the Examples.

Table 10. Additional exemplary compounds

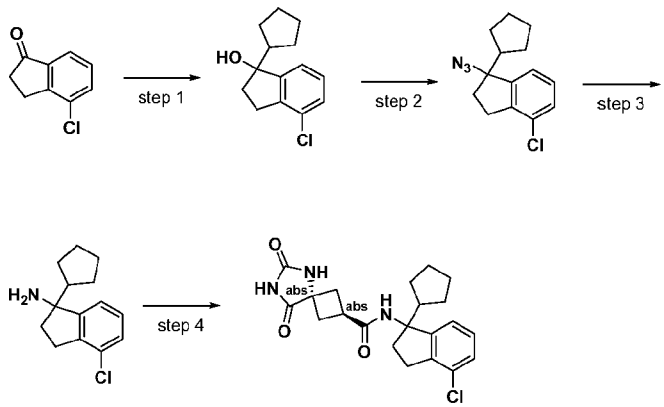
I-183	I-208	I-224	I-226	I-227
I-228	I-229	I-234	I-236	I-237
I-238	I-239	I-240	I-241	I-242
I-243	I-244	I-245	I-246	I-249
I-250	I-251	I-269	I-270	I-271
I-294	I-295	I-296	I-373	I-493

I-515	I-521	I-522	I-525	I-552
I-553	I-554	I-555	I-556	I-557
I-558	I-563	I-564	I-566	I-567
I-568	I-571	I-572	I-573	I-574
I-575	I-577	I-578	I-579	I-580
I-581	I-582	I-583	I-606	I-607
I-608	I-609	I-610	I-611	I-612
I-613	I-614	I-615	I-639	I-650
I-651	I-652	I-657	I-658	I-667
I-668	I-669	I-671	I-672	I-673
I-674	I-675	I-676	I-689	I-690
I-745	I-746	I-748	I-757	I-762
I-763	I-764	I-765	I-767	I-768
I-769	I-770	I-772	I-774	I-775
I-776	I-777	I-787	I-790	I-791
I-793	I-795	I-796	I-797	I-798
I-799	I-800	I-801	I-818	I-819
I-821	I-822	I-824	I-834	I-835
I-837	I-853	I-854	I-855	I-856
I-857	I-873	I-874	I-875	I-876

I-920	I-938	I-976	I-977	I-978
I-979	I-491	I-1651	I-1872	

Example 46

(2r,4r)-N-(4-chloro-1-cyclopentyl-2,3-dihydro-1H-inden-1-yl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide



Step 1. 4-chloro-1-cyclopentyl-2,3-dihydro-1H-inden-1-ol

[0998] A flame-dried round-bottomed flask equipped with a magnetic stirrer bar and capped with a rubber septum was charged with a solution of 4-chloro-2,3-dihydro-1H-inden-1-one (83 mg, 0.50 mmol) in THF (1.00 mL). This solution was added dropwise to a separate flame-dried round-bottomed flask containing a stirring solution of $LaCl_3$ 2LiCl (0.83 mL, 0.6 M in THF, 0.50 mmol) at ambient temperature. The resulting mixture was stirred at ambient temperature for 1 hour, then cooled to 0 °C with stirring. A solution of cyclopentylmagnesium bromide (0.28 mL, 2.0 M in Et_2O, 0.55 mmol) was then added dropwise, and the reaction mixture was stirred at 0 °C for *ca.* 45 minutes. An additional portion of cyclopentylmagnesium bromide (0.14 mL, 2.0 M in Et_2O, 0.28 mmol) was added dropwise to the reaction mixture after this time, and the mixture was stirred at 0 °C for a further *ca.* 30 minutes. The reaction was then quenched at 0 °C by slow dropwise addition of saturated aqueous NH_4Cl solution (0.5 mL). Water (0.5 mL) was added to dissolve the precipitated inorganic salts, and the mixture was warmed to ambient temperature with vigorous stirring. The mixture was further diluted with water (20 mL) and the organics were extracted with diethyl ether (3 x 10 mL). The combined organics were washed with saturated aqueous NaCl solution and dried over $MgSO_4$, filtered

and concentrated *in vacuo* to give the crude product. Purification by flash chromatography on silica gel (eluent: EtOAc in hexanes, 0:1 to 20:80) afforded 4-chloro-1-cyclopentyl-2,3-dihydro-1H-inden-1-ol (68 mg, 0.29 mmol) as a viscous colorless oil. LCMS RT 1.43 min, $(M–OH)^+$ 219.1, LCMS method K. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.25 – 7.22 (m, 2H), 7.20 – 7.15 (m, 1H), 3.04 (ddd, J = 16.8, 9.0, 4.5 Hz, 1H), 2.84 (ddd, J = 16.5, 8.3, 6.5 Hz, 1H), 2.42 – 2.34 (m, 2H), 2.06 (ddd, J = 13.5, 9.0, 6.5 Hz, 1H), 1.83 – 1.76 (m, 2H), 1.70 – 1.63 (m, 1H), 1.62 – 1.49 (m, 5H), 1.32 – 1.22 (m, 1H).

Step 2. 1-azido-4-chloro-1-cyclopentyl-2,3-dihydro-1H-indene

[0999] A flame-dried round-bottomed flask equipped with a magnetic stirrer bar and capped with a rubber septum was charged with a solution of 4-chloro-1-cyclopentyl-2,3-dihydro-1H-inden-1-ol (58 mg, 0.24 mmol) in anhydrous chloroform (0.70 mL), and the solution was cooled to 0 °C with stirring. To the cooled solution was added solid sodium azide (32 mg, 0.49 mmol) in small portions, followed by slow dropwise addition of trifluoroacetic acid (0.12 mL, 1.60 mmol). The reaction mixture was then warmed to 30 °C with stirring for *ca.* 2 h. The reaction mixture was then cooled to ambient temperature and carefully quenched under nitrogen with a 10% aqueous solution of NH_4OH until the pH was approximately equal to 8–9. The mixture was then poured into a separatory funnel and extracted with chloroform (3 x 10 mL). The combined organics were then dried over $MgSO_4$, filtered and concentrated *in vacuo* to afford crude 1-azido-4-chloro-1-cyclopentyl-2,3-dihydro-1H-indene, which was utilized immediately in the next step assuming quantitative yield.

Step 3. 4-chloro-1-cyclopentyl-2,3-dihydro-1H-inden-1-amine

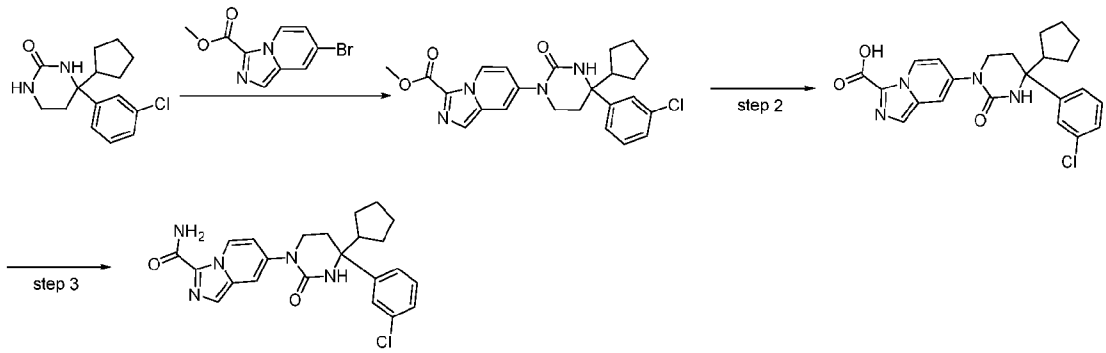
[1000] The crude azide was dissolved in THF (2.40 mL) with stirring, and a solution of trimethylphosphine (0.26 mL, 1.0 M in THF, 0.26 mmol) was added dropwise at ambient temperature, followed by dropwise addition of water (0.24 mL). The reaction mixture was then heated to 30 °C with stirring for *ca.* 18 h. The reaction mixture was then cooled to ambient temperature and diluted with EtOAc (10 mL). The phases were separated, and the organic phase was washed with saturated aqueous $NaHCO_3$ solution (3 x 5 mL) and saturated aqueous NaCl solution. The organics were then dried over $MgSO_4$, filtered and concentrated *in vacuo* to afford crude 4-chloro-1-cyclopentyl-2,3-dihydro-1H-inden-1-amine, which was utilized immediately in the next step assuming quantitative yield. LCMS RT 0.89 min, $[M–NH_2]^+$ 219.2, LCMS method K.

Step 4. (2r,4r)-N-(4-chloro-1-cyclopentyl-2,3-dihydro-1H-inden-1-yl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide

[1001] The crude amine was dissolved in DMF (2.40 mL) in a round-bottomed flask equipped with a magnetic stirbar at ambient temperature, and (2*r*,4*r*)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylic acid (47 mg, 0.25 mmol) was added in one portion with stirring. To the mixture were then added dropwise DIPEA (0.17 mL, 0.98 mmol) and a solution of T3P (0.14 mL, 50 wt.% in EtOAc, 0.24 mmol) at ambient temperature, and the reaction mixture was stirred for *ca.* 1 h. An additional portion of T3P (0.07 mL, 50 wt.% in EtOAc, 0.12 mmol) was added after this time, and the mixture was stirred at ambient temperature for a further *ca.* 30 mins. The reaction mixture was then diluted with DCM (10 mL), quenched with saturated aqueous $NaHCO_3$ solution (10 mL), and stirred at ambient temperature overnight. The phases were then separated and the aqueous phase was extracted with DCM (3 x 10 mL). The combined organics were washed with water (10 ml) and saturated aqueous NaCl solution, dried over $MgSO_4$, filtered and concentrated *in vacuo*. The residue was then dissolved in a minimum volume of DMF, loaded onto a 12g C18 cartridge, and purified by reverse-phase chromatography (mobile phase A: 10 mM ammonium formate in water, mobile phase B: acetonitrile; gradient: 40 to 60% B) to afford (2r,4r)-N-(4-chloro-1-cyclopentyl-2,3-dihydro-1H-inden-1-yl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide (4 mg) as an amorphous bright yellow solid. LCMS RT 1.21 min, $[M+H]^+$ 402.3, LCMS method K. ^{1}H NMR (400 MHz, DMSO-*d*6) δ 10.55 (br. s, 1H), 8.61 (s, 1H), 7.86 (s, 1H), 7.24 – 7.19 (m, 1H), 7.19 – 7.15 (m, 2H), 3.11 (p, *J* = 9.1 Hz, 1H), 2.99 (ddd, *J* = 16.1, 9.6, 4.8 Hz, 1H), 2.79 (ddd, *J* = 16.5, 9.3, 5.7 Hz, 1H), 2.71 – 2.43 (overlapping m, 3H), 2.36 (ddd, *J* = 11.6, 8.8, 4.6 Hz, 1H), 2.17 – 2.06 (m, 3H), 1.80 – 1.71 (m, 1H), 1.57 – 1.37 (m, 4H), 1.32 – 1.13 (m, 2H), 1.08 – 0.98 (m, 1H).

Example 47

7-(4-(3-chlorophenyl)-4-cyclopentyl-2-oxotetrahydropyrimidin-1(2H)-yl)imidazo[1,5-a]pyridine-3-carboxamide



Step 1. Synthesis of methyl 7-(4-(3-chlorophenyl)-4-cyclopentyl-2-oxotetrahydropyrimidin-1(2H)-yl)imidazo[1,5-a]pyridine-3-carboxylate

[1002] A round bottomed flask was charged with 4-(3-chlorophenyl)-4-cyclopentyltetrahydropyrimidin-2(1H)-one (100 mg, 359 μmol), methyl 7-bromoimidazo[1,5-a]pyridine-3-carboxylate (91.5 mg, 359 μmol), Pd-PEPPSI-IPentCl (105 mg, 108 μmol), Cs_2CO_3 (351 mg, 1.08 mmol) and a stirbar. 1,4-Dioxane (1 mL) was added, and the solution was stirred for 4 hours at 90 °C.The residue was purified by reverse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% in 10 minutes; detector: UV 220 nm) to give methyl 7-(4-(3-chlorophenyl)-4-cyclopentyl-2-oxotetrahydropyrimidin-1(2H)-yl)imidazo[1,5-a]pyridine-3-carboxylate (30 mg, 66 μmol) as a yellow amorphous solid. LCMS RT 0.988 min, $[M+H]^+$ 453.20, LCMS method C.

Step 2. Synthesis of 7-(4-(3-chlorophenyl)-4-cyclopentyl-2-oxotetrahydropyrimidin-1(2H)-yl)imidazo[1,5-a]pyridine-3-carboxylic acid

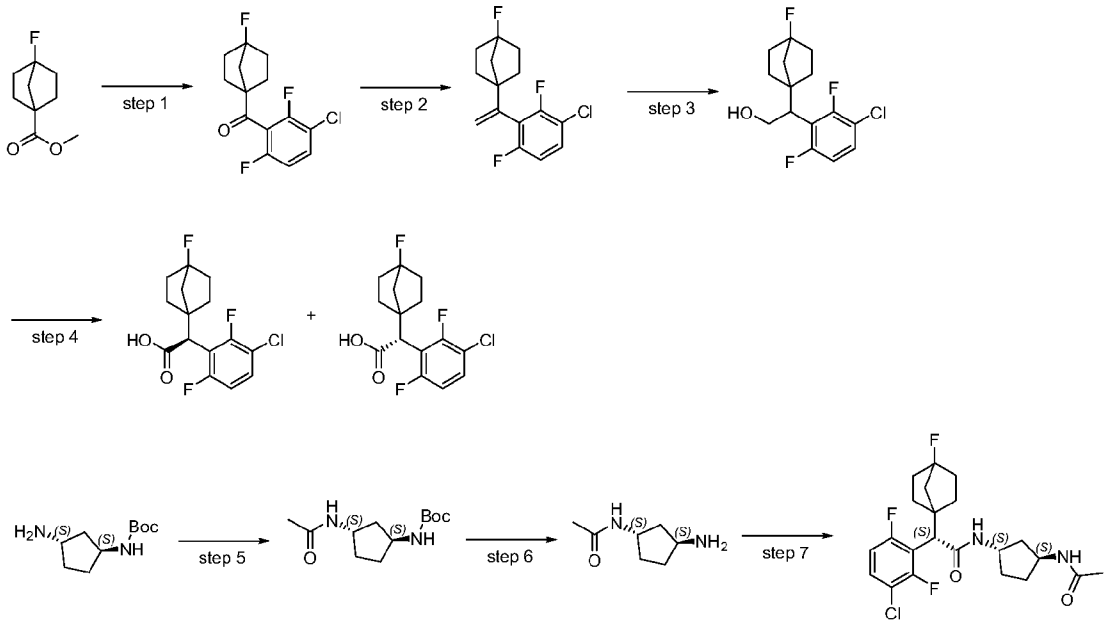
[1003] A round bottomed flask was charged with methyl 7-(4-(3-chlorophenyl)-4-cyclopentyl-2-oxotetrahydropyrimidin-1(2H)-yl)imidazo[1,5-a]pyridine-3-carboxylate (30 mg, 66 μmol), NaOH (0.33 mL, 2 molar, 0.66 mmol) and a stirbar. MeOH (1 mL) was added, and the solution was stirred for 1 hour at 25 °C. The residue was purified by reverse phase flash chromatography:(column: C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% in 10 minutes; detector: UV 220 nm) to give 7-(4-(3-chlorophenyl)-4-cyclopentyl-2-oxotetrahydropyrimidin-1(2H)-yl)imidazo[1,5-a]pyridine-3-carboxylic acid (25 mg, 57 μmol) as a yellow amorphous solid, which was used in the next step without purification.

Step 3. Synthesis of 7-(4-(3-chlorophenyl)-4-cyclopentyl-2-oxotetrahydropyrimidin-1(2H)-yl)imidazo[1,5-a]pyridine-3-carboxamide

[1004] A round bottomed flask was charged with 7-(4-(3-chlorophenyl)-4-cyclopentyl-2-oxotetrahydropyrimidin-1(2H)-yl)imidazo[1,5-a]pyridine-3-carboxylic acid (25 mg, 57 µmol), NH_4Cl (3.0 mg, 57 µmol), HATU (32 mg, 85 µmol), NaHCO3 (14 mg, 0.17 mmol) and a stirbar. DMF (1 mL) was added, and the solution was stirred for 1 hour at 25 °C.The resulting crude material was purified by chiral Pre-HPLC (Column: (R, R) WHELK-O1, 4.6*50 mm, 3.5 µm; Mobile Phase A: Hex(0.2% IPAmine): EtOH=80: 20; Flow rate: 1 mL/min; Gradient: 0% B to 0% B; Injection Volume: 5ul mL). Lyophilization yielded 7-(4-(3-chlorophenyl)-4-cyclopentyl-2-oxotetrahydropyrimidin-1(2H)-yl)imidazo[1,5-a]pyridine-3-carboxamide (7.8 mg, 18 µmol, 31 %) as an off-white amorphous solid. LCMS RT 0.903 min, $[M+H]^+$ 438.15, LCMS method C.

Example 48

(S)-N-((1S,3S)-3-acetamidocyclopentyl)-2-(3-chloro-2,6-difluorophenyl)-2-(4-fluorobicyclo[2.2.1]heptan-1-yl)acetamide



Step 1. Synthesis of (3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methanone

[1008] n-BuLi (2.5 M, 61.0 mL) was diluted with THF (175 mL). A solution of 1-chloro-2,4-difluorobenzene (18.1 g, 122 mmol) in THF (100 mL) was added dropwise at -78 °C under N_2. After stirring at -78 °C for 2 hours, a solution of methyl 4-fluorobicyclo[2.2.1]heptane-1-carboxylate (17.5 g, 102 mmol) in THF (175 mL) was added dropwise at -78 °C under N_2. The mixture was stirred at -78 °C for 4 hours. The reaction mixture was poured into sat. NH_4Cl solution (350 mL) and extracted with ethyl acetate (200 mL * 2). The combined organic layers were washed with brine (200 mL), dried over Na_2SO_4, filtered and concentrated to give a residue. The residue was purified by column chromatography (silica gel, petroleum ether : ethyl acetate 1 : 0 to 0 : 1) to give (3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methanone as a yellow oil. ^{1}H NMR: (400 MHz, $CDCl_3$) δ 7.43 (dt, J = 5.6, 8.6 Hz, 1H), 6.93 (ddd, J = 1.6, 7.8, 9.0 Hz, 1H), 2.29 - 2.15 (m, 2H), 2.06 - 1.93 (m, 4H), 1.92 - 1.77 (m, 4H).

Step 2. Synthesis of 1-(1-(3-chloro-2,6-difluorophenyl)vinyl)-4-fluorobicyclo[2.2.1]heptane

[1009] To a solution of Ph_3PMeBr (16.3 g, 45.7 mmol) in THF (66.0 mL) was added t-BuOK (1.0 M, 45.7 mL) at 0 °C. The mixture was warmed to 15 °C and stirred at 15 °C for 2 hours. Then a solution of (3-chloro-2,6-difluorophenyl)(4-fluorobicyclo[2.2.1]heptan-1-yl)methanone (6.60 g, 22.9 mmol) in THF (66.0 mL) was added at 0 °C. The mixture was stirred at 0 °C for 2 hours, then warmed to 15 °C and stirred at 15 °C for 12 hours. The reaction was quenched by addition of water (6.00 mL) and filtered. The filtrate was concentrated under reduced pressure to give a residue. The residue was purified by column chromatography (silica gel, petroleum ether : ethyl acetate 1 : 0 to 10 : 1) to give 1-(1-(3-chloro-2,6-difluorophenyl)vinyl)-4-fluorobicyclo[2.2.1]heptane (5.60 g, 17.3 mmol) as a yellow oil. ^{1}H NMR: (400 MHz, $CDCl_3$)

[1010] δ 7.31 (dt, J = 5.6, 8.4 Hz, 1H), 6.87 (br d, J = 0.6 Hz, 1H), 5.43 (s, 1H), 5.06 (s, 1H), 2.02 - 1.89 (m, 4H), 1.83 - 1.74 (m, 4H), 1.70 - 1.61 (m, 2H).

Step 3. Synthesis of 2-(3-chloro-2,6-difluorophenyl)-2-(4-fluorobicyclo[2.2.1]heptan-1-yl)ethan-1-ol

[1011] To a solution of 1-(1-(3-chloro-2,6-difluorophenyl)vinyl)-4-fluorobicyclo[2.2.1]heptane (5.50 g, 19.2 mmol) in THF (165 mL) was added BH_3-Me_2S (3.84 mL) at 25 °C under N_2. The mixture was heated to 50 °C and stirred at 50 °C 1 hour.

MeOH (18.7 mL) was added dropwise at 0 °C. After that NaOH (2 M, 28.8 mL) was added dropwise at 0 °C, then H_2O_2 (30%, 9.28 mL, 96.6 mmol) was added at 0 °C slowly. The mixture was stirred at 0 °C for 1.5 hours. The mixture was poured into sat. $Na_2S_2O_3$ aqueous solution (200 mL) slowly, stirred for 10 minutes, and extracted with ethyl acetate (200 mL * 2). The combined organic phases were washed with water (200 mL), brine (200 mL), dried over Na_2SO_4, filtered and concentrated. The residue was purified by column chromatography (silica gel, petroleum ether : ethyl acetate 1 : 0 to 0 : 1) to give 2-(3-chloro-2,6-difluorophenyl)-2-(4-fluorobicyclo[2.2.1]heptan-1-yl)ethan-1-ol (4.80 g, 15.8 mmol) as a yellow oil. ^{1}H NMR: (400 MHz, DMSO) δ 7.52 (dt, J = 5.6, 8.6 Hz, 1H), 7.19 - 7.05 (m, 1H), 4.72 - 4.63 (m, 1H), 3.93 - 3.77 (m, 2H), 3.43 - 3.35 (m, 1H), 1.88 - 1.57 (m, 7H), 1.52 - 1.29 (m, 3H).

Step 4. Synthesis of (R)-2-(3-chloro-2,6-difluorophenyl)-2-(4-fluorobicyclo[2.2.1]heptan-1-yl)acetic acid and (S)-2-(3-chloro-2,6-difluorophenyl)-2-(4-fluorobicyclo[2.2.1]heptan-1-yl)acetic acid

[1012] To a solution of 2-(3-chloro-2,6-difluorophenyl)-2-(4-fluorobicyclo[2.2.1]heptan-1-yl)ethan-1-ol (4.80 g, 15.8 mmol) in acetonitrile (76.0 mL) was added a solution of $NaClO_2$ (11.4 g, 126 mmol) in H_2O (14.0 mL) at 0 °C. Then TEMPO (297 mg, 1.89 mmol), a solution of Na_2HPO_4 (0.67 M, 23.5 mL) and NaH_2PO_4 (0.67 M, 23.5 mL) in water, and a solution of NaClO (2.35 g, 1.89 mmol, 1.94 mL) in H_2O (14.0 mL) was added at 0 °C. The mixture was warmed to 15 °C and stirred at 15 °C for 12 hours. The reaction mixture was cooled to 0 °C. Water (200 mL) was added, followed by Na_2SO_3 (28.4 g) at 0 °C. The mixture was stirred at 15 °C for 30 minutes. The pH was adjusted to 1 - 2 with H_3PO_4, and the solution was extracted with ethyl acetate (200 mL * 2). The combined organic layers were washed with brine (200 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure. The residue was purified by column chromatography (silica gel, petroleum ether : ethyl acetate 1: 0 to 0: 1) to give 2-(3-chloro-2,6-difluorophenyl)-2-(4-fluorobicyclo[2.2.1]heptan-1-yl)acetic acid as a white solid. It was further purified by chiral SFC (column: DAICEL CHIRALPAK AS 250 mm * 30 mm, 10 μm); mobile phase: [CO_2-^{i}PrOH]; gradient: 15% ^{i}PrOH isocratic) to give (R)-2-(3-chloro-2,6-difluorophenyl)-2-(4-fluorobicyclo[2.2.1]heptan-1-yl)acetic acid and (S)-2-(3-chloro-2,6-difluorophenyl)-2-(4-fluorobicyclo[2.2.1]heptan-1-yl)acetic acid.

[1013] Isomer 1: 2.00 g, 6.28 mmol was obtained as a white solid. ^{1}H NMR: (400 MHz, $CDCl_3$) δ 7.37 (dt, J = 5.6, 8.6 Hz, 1H), 6.93 (dt, J = 1.6, 9.0 Hz, 1H), 4.21 (s, 1H), 2.07 - 1.91 (m, 3H), 1.91 - 1.80 (m, 3H), 1.80 - 1.68 (m, 2H), 1.67 - 1.56 (m, 2H).

[1014] Isomer 2: 2.01 g, 6.28 mmol was obtained as a white solid. ^{1}H NMR: (400 MHz, $CDCl_3$) δ 7.37 (dt, J = 5.6, 8.6 Hz, 1H), 6.93 (dt, J = 1.6, 9.0 Hz, 1H), 4.20 (s, 1H), 2.07 - 1.93 (m, 3H), 1.92 - 1.81 (m, 3H), 1.81 - 1.70 (m, 2H), 1.68 - 1.57 (m, 2H).

Step 5. Synthesis of tert-butyl ((1S,3S)-3-acetamidocyclopentyl) carbamate

[1015] To a mixture of tert-butyl ((1S,3S)-3-aminocyclopentyl) carbamate (500 mg, 2.50 m mol) and TEA (1.04 mL, 7.49 mmol) in DCM (8 mL) was added Ac_2O (283 μL, 3.00 mmol) dropwise at 0 °C under a nitrogen atmosphere. The mixture was stirred for 2 hours at room temperature. The mixture was concentrated. The resulting crude material was purified by re verse phase flash chromatography (column: C18 silica gel; mobile phase A: water, mobile p hase B: acetonitrile; gradient: 0% to 100% B in 20 min; detector: UV 200 nm) to give tert-b utyl ((1S,3S)-3-acetamidocyclopentyl) carbamate (300 mg, 1.24 mmol) as an off-white solid . LCMS RT 0.738 min, $[M+H]^+$ 243.15, LCMS method B.

Step 6. Synthesis of N-((1S,3S)-3-aminocyclopentyl) acetamide

[1016] A mixture of tert-butyl ((1S,3S)-3-acetamidocyclopentyl) carbamate (120 mg, 495 μ mol) in DCM : TFA (2:1, 1 mL) was stirred for 2 hours at room temperature. The mixture w as concentrated in vacuo to give N-((1S,3S)-3-aminocyclopentyl)acetamide (60 mg, 0.42 m molas a colorless oil. LCMS RT 0.158 min, $[M+H]^-$ 142.00, LCMS method B.

Step 7. Synthesis of (S)-N-((1S,3S)-3-acetamidocyclopentyl)-2-(3-chloro-2,6-difluorophenyl)-2-(4-fluorobicyclo [2.2.1] heptan-1-yl) acetamide

[1017] To a mixture of (S)-2-(3-chloro-2,6-difluorophenyl)-2-(4-fluorobicyclo [2.2.1] heptan-1-yl) acetic acid (25 mg, 78 μmol), N-((1S,3S)-3-aminocyclopentyl) acetamide (13 mg, 94 μmol) and $NaHCO_3$ (33 mg, 0.39 mmol) in DMF (1 mL) was added HATU (60 mg, 0.16 mmol). The mixture was stirred for 6 hours at 25 °C. The reaction mixture was diluted with water (10 mL), and the aqueous phase was extracted with ethyl acetate (20 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by preparative HPLC (column: XBridge Prep OBD C18 Column, 30*150 mm, 5 μm; mobile phase A: water

(10 mM NH_4HCO_3) + 0.05% NH_4OH, mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 31% B to 58% B in 7 min; wavelength: 254/220 nm; RT (min): 7.62) to give (S)-N-((1S,3S)-3-acetamidocyclopentyl)-2-(3-chloro-2,6-difluorophenyl)-2-(4-fluorobicyclo[2.2.1]heptan-1-yl)acetamide (3.6 mg, 8.1 μmol) as an off-white amorphous solid. ^{1}HNMR (400 MHz, DMSO-d6) δ 7.83 (s, 1H), 7.69 (d, J = 7.3 Hz, 1H), 7.58 (td, J = 8.7, 5.5 Hz, 1H), 7.15 (td, J = 9.3, 1.6 Hz, 1H), 4.13 (p, J = 7.1 Hz, 1H), 3.97 (p, J = 7.0 Hz, 1H), 3.86 (s, 1H), 1.94 - 1.76 (m, 5H), 1.70 (d, J = 28.3 Hz, 9H), 1.62 - 1.38 (m, 3H), 1.38 - 1.14 (m, 2H). LCMS RT 1.008 min, $[M+H]^+$ 443.25, LCMS method D.

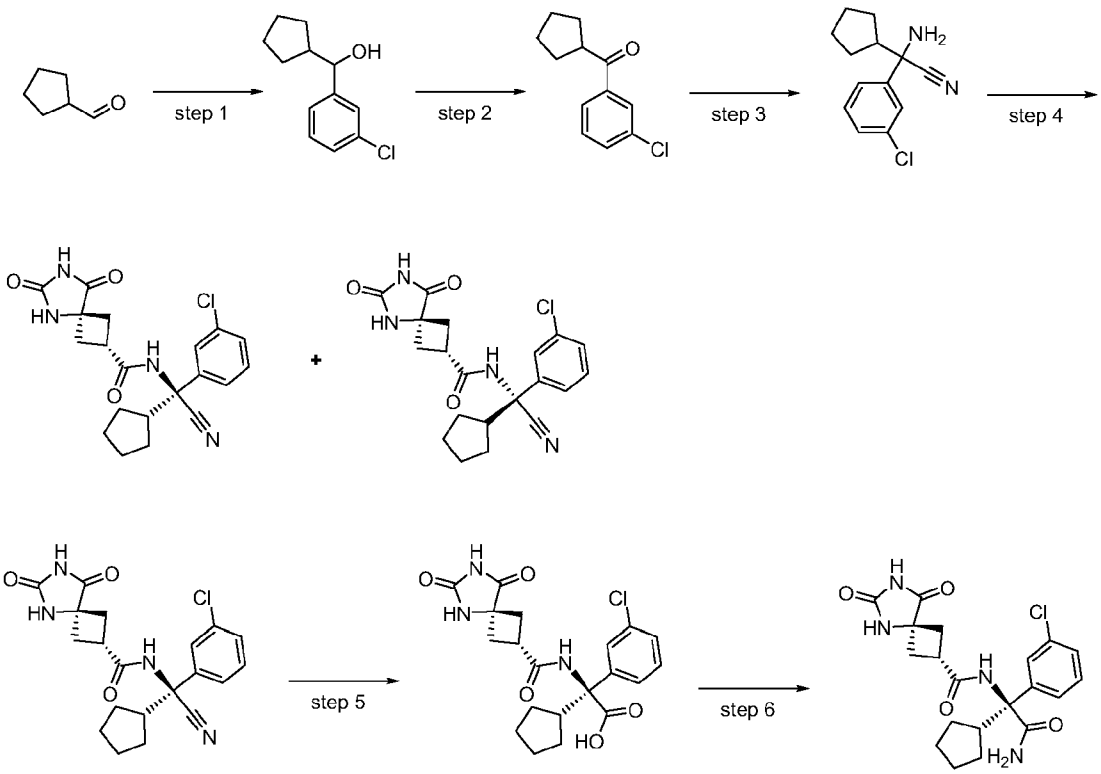
[1018] Additional compounds prepared according to the methods of Example 48 are listed in Table 11 below. Corresponding ^{1}H NMR and mass spectrometry characterization for these compounds are described in Table 1. Certain compounds in Table 11 below were prepared with other compounds whose preparation is described further below in the Examples.

Table 11. Additional exemplary compounds

I-272	I-273	I-297	I-298	I-3720
I-3722				

Example 49

(2r,4S)-N-((S)-2-amino-1-(3-chlorophenyl)-1-cyclopentyl-2-oxoethyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide



Step 1. Synthesis of (3-chlorophenyl)(cyclopentyl)methanol

[1021] To a mixture of cyclopentanecarbaldehyde (3.92 g, 0.040 mol) in THF (30 mL) was added (3-chlorophenyl)magnesium bromide (1M in THF, 40 ml, 0.040 mol) dropwise at -78 °C under a nitrogen atmosphere. The mixture was stirred for 2 hours at -78 °C. The reaction was quenched with saturated NH_4Cl (aq.) and the aqueous phase was extracted with ethyl acetate (100 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by C18 flash chromatography (CH_3CN/water) to afford (3-chlorophenyl)(cyclopentyl)methanol (2.74 g, 0.013 mol, 30 %) as a yellow oil. LCMS RT 1.003 min, $[M+H]^+$ not observed, LCMS method C.

Step 2. Synthesis of (3-chlorophenyl)(cyclopentyl)methanone

[1022] To a mixture of (3-chlorophenyl)(cyclopentyl)methanol (1.05 g, 5.0 mmol) and molecular sieve 4 Å (5.0 g) in DCM (10 mL) was added PCC (1.29 g, 6.0 mmol) in portions at 0 °C under a nitrogen atmosphere. The mixture was stirred for 2 hours at 25 °C. The reaction mixture was filtered through Celite, the pad was washed with DCM, and the filtrate

was concentrated in vacuo to give (3-chlorophenyl)(cyclopentyl)methanone (1.22 g, 5.85 mmol) as a yellow oil. ^{1}H NMR 17 (400 MHz, DMSO-d_6) δ 7.93 (dt, J = 6.0, 1.6 Hz, 2H), 7.76-7.65 (m, 1H), 7.56 (t, J = 8.1 Hz, 1H), 3.83 (tt, J = 8.8, 6.8 Hz, 1H), 1.88 (ddt, J = 12.7, 8.8, 6.4 Hz, 2H), 1.78-1.66 (m, 2H), 1.70-1.54 (m, 4H).

Step 3. Synthesis of 2-amino-2-(3-chlorophenyl)-2-cyclopentylacetonitrile

[1023] A mixture of (3-chlorophenyl)(cyclopentyl)methanone (1.04 g, 5.0 mmol), TMSCN (1.98 g, 0.02 mol) and NH_3 (10 mL, 7 N in MeOH) was stirred for 16 hours at 90 °C. The reaction mixture was concentrated in vacuo. The residue was purified by C18 flash chromatography (CH_3CN/H_2O) to afford 2-amino-2-(3-chlorophenyl)-2-cyclopentylacetonitrile (600 mg, 2.56 mmol) as a yellow oil. LCMS RT 0.870 min, $[M+H]^+$ 235, LCMS method C.

Step 4. Synthesis of (2r,4S)-N-((S)-(3-chlorophenyl)(cyano)(cyclopentyl)methyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide and (2r,4R)-N-((R)-(3-chlorophenyl)(cyano)(cyclopentyl)methyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide

[1024] A mixture of 2-amino-2-(3-chlorophenyl)-2-cyclopentylacetonitrile (500 mg, 2.13 m mol), (2r,4r)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxylic acid (392 mg, 2.13 mmol), T EA (891 µL, 6.39 mmol) and T_3P (1.02 g, 3.20 mmol) in DMF (5 mL) was stirred for 1 hour at room temperature. The reaction mixture was diluted with water (30 mL), and the aqueous phase was extracted with ethyl acetate (50 mL) three times. The combined organic layers w ere washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The res ulting crude material was purified by C18 flash chromatography to afford (2r,4r)-N-((3-chlo rophenyl)(cyano)(cyclopentyl)methyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide as a white solid. LCMS RT 0.855 min, $[M+H]^+$ 401, LCMS method D.

[1025] The product was further purified by chiral preparative HPLC (column: DZ-CHIRALPAK IH-3, 4.6*50 mm, 3.0 µm; mobile phase A: hexane; mobile phase B: EtOH; flow rate: 1 mL/min; gradient: 20% B isocratic; injection volume: 5 mL) to give (2r,4S)-N-((S)-(3-chlorophenyl)(cyano)(cyclopentyl)methyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide and (2r,4R)-N-((R)-(3-chlorophenyl)(cyano)(cyclopentyl)methyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide, both as an off-white amorphous solid.

[1026] Isomer 1: 10 mg. ^{1}H NMR (400 MHz, DMSO-d_6) δ 10.59 (s, 1H), 8.99 (s, 1H), 8.64 (s, 1H), 7.50 - 7.38 (m, 2H), 7.35 (dt, J = 4.6, 1.9 Hz, 2H), 3.34 (s, 1H), 2.68 (t, J = 10.9 Hz,

1H), 2.44 (t, J = 8.6 Hz, 1H), 2.22 (dd, J = 12.8, 9.0 Hz, 2H), 2.05 (dd, J = 13.4, 8.0 Hz, 1H), 1.62 - 1.48 (m, 4H), 1.43 - 1.13 (m, 4H). LCMS RT 0.838 min, $[M+H]^+$ 401.10, LCMS method C.

[1027] Isomer 2: 5 mg. LCMS 1.318 min, $[M+H]^+$ 401.10, LCMS method B. ^{1}H NMR (400 MHz, DMSO-d_6) δ 10.60 (s, 1H), 8098 (s, 1H), 8.64 (s, 1H), 7.34-7.47 (m, 4H), 3.24 (t, J = 8.8 Hz, 1H), 2.66-2.69 (m, 1H), 2.40-2.58 (m, 2H), 2.19-2.30 (m, 2H), 2.01-2.08 (m, 1H), 1. 40-1.72 (m, 5H), 1.10-1.29 (m, 2H).

Step 5. Synthesis of (S)-2-(3-chlorophenyl)-2-cyclopentyl-2-((2r,4S)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamido)acetic acid

[1028] A mixture of (2r,4S)-N-((S)-(3-chlorophenyl)(cyano)(cyclopentyl)methyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide (85 mg, 0.21 mmol) and HCl (5 mL,12 N) was stirred for 1 h at 40 °C. After cooling to room temperature, the reaction mixture was extracted with dichloromethane (20 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo to afford (S)-2-(3-chlorophenyl)-2-cyclopentyl-2-((2r,4S)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamido)acetic acid (70 mg, 0.17 mmol) as a colorless oil. LCMS RT 0.820 min, $[M+H]^+$ 420.0, LCMS method D.

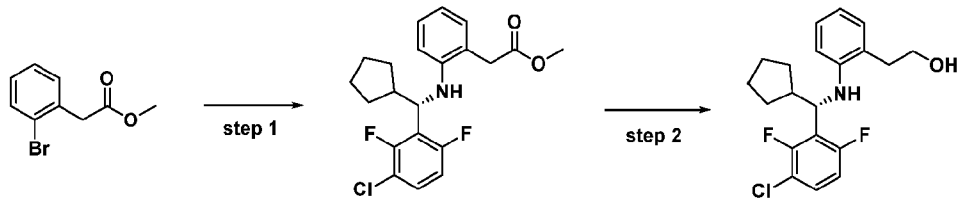
Step 6. Synthesis of (2r,4S)-N-((S)-2-amino-1-(3-chlorophenyl)-1-cyclopentyl-2-oxoethyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide

[1029] A mixture of (S)-2-(3-chlorophenyl)-2-cyclopentyl-2-((2r,4S)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamido)acetic acid (75 mg, 0.18 mmol), DIEA (93 µL, 0.54 mmol), HATU (0.10 g, 0.27 mmol) and NH_4Cl (10 mg, 0.20 mmol) in DMF (2 mL) was stirred for 1 hour at room temperature. The reaction mixture was diluted with water (10 mL), and the aqueous phase was extracted with ethyl acetate (10 mL) three times. The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The resulting crude material was purified by C18 flash chromatography (CH_3CN/H_2O) to give (2r,4S)-N-((S)-2-amino-1-(3-chlorophenyl)-1-cyclopentyl-2-oxoethyl)-6,8-dioxo-5,7-diazaspiro[3.4]octane-2-carboxamide (50 mg, 0.12 mmol) as colorless oil. ^{1}H NMR (400 MHz, DMSO-d_6) 10.59 (s, 1H), 8.58 (s, 1H), 7.95 (s, 1H), 7.54 (s, 1H), 7.37 (s, 1H), 7.28 (d, J = 13.4 Hz, 2H), 7.18 (s, 1H), 7.10 (s, 1H), 2.72 (s,

2H), 2.62 (s, 1H), 2.28 (d, J = 12.5 Hz, 2H), 1.58 (s, 1H), 1.42 (s, 8H). LCMS RT 0.715 min, $[M+H]^+$ 419, LCMS method C.

Example 50

(S)-2-(2-(((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)amino)phenyl)ethan-1-ol



Step 1. Synthesis of methyl (S)-2-(2-(((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)amino)phenyl)acetate

[1033] To a mixture of methyl 2-(2-bromophenyl)acetate (400 mg, 1.75 mmol), (S)-(3-chloro-2,6-difluorophenyl)(cyclopentyl)methanamine (429 mg, 1.75 mmol) and Cs_2cO_3 (1.70 g, 5.24 mmol) in toluene (1 mL) was added Pd-PEPPSI-IHept-Cl (CAS: 1814936-54-3) (170 mg, 175 μmol) under a N_2 atmosphere. The mixture was stirred for 16 h at 100 °C. After cooling to room temperature, the reaction mixture was diluted with water (50 mL), and the aqueous phase was extracted with ethyl acetate (50 mL*3). The combined organic layers were washed with brine, dried over sodium sulfate, filtered and concentrated in vacuo. The residue was purified by reverse phase flash chromatography (column, C18 silica gel; mobile phase A: water, mobile phase B: acetonitrile; gradient: 0% to 100% in 20 min; detector: UV 220 nm) to give methyl (S)-2-(2-(((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)amino)phenyl)acetate (380 mg, 965 μmol) as a yellow oil. LCMS RT 1.530 min, $[M+H]^+$ 394.05, LCMS method B.

Step 2. Synthesis of (S)-2-(2-(((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)amino)phenyl)ethan-1-ol

[1034] To a mixture of methyl (S)-2-(2-(((3-chloro-2,6-difluorophenyl) (cyclopentyl) methyl) amino) phenyl) acetate (100 mg, 254 μmol) in THF (1 mL) was added $LiAlH_4$ (19 mg, 508 μmol) in portions at 0 °C. The mixture was stirred for 1 h at 25 °C. The reaction was quenched with H_2O (19 μl), NaOH (4N,38 μl), H_2O (19 μl). The mixture was filtered through

a pad of Celite, the pad was washed with ethyl acetate, and the combined filtrate was concentrated in vacuo. The resulting crude material was purified by preparative HPLC (column: XBridge Prep Phenyl OBD Column, 19*250 mm, 5 μm; mobile phase A: water (10 mM NH_4HCO_3), mobile phase B: acetonitrile; flow rate: 25 mL/min; gradient: 55% B to 75% B in 10 min; wavelength: 220 nm; RT1 (min): 9.77) to give (S)-2-(2-(((3-chloro-2,6-difluorophenyl)(cyclopentyl)methyl)amino)phenyl)ethan-1-ol (5 mg, 0.01 mmol) as a colorless oil. ^{1}H NMR (400 MHz, DMSO-d6) δ 7.52 (td, J = 8.8, 5.6 Hz, 1H), 7.14 (td, J = 9.5, 1.6 Hz, 1H), 6.97 - 6.91 (m, 2H), 6.50 (td, J = 7.4, 1.1 Hz, 1H), 6.41 (d, J = 7.9 Hz, 1H), 5.34 (d, J = 8.7 Hz, 1H), 4.85 (t, J = 5.0 Hz, 1H), 4.49 (t, J = 9.5 Hz, 1H), 3.59 (dt, J = 7.1, 5.6 Hz, 2H), 2.70 - 2.55 (m, 3H), 2.13 - 2.03 (m, 1H), 1.71 - 1.34 (m, 6H), 1.11 (dq, J = 16.2, 8.2, 6.8 Hz, 1H). LCMS RT 1.383 min, $[M+H]^+$ 366.10, LCMS method B.

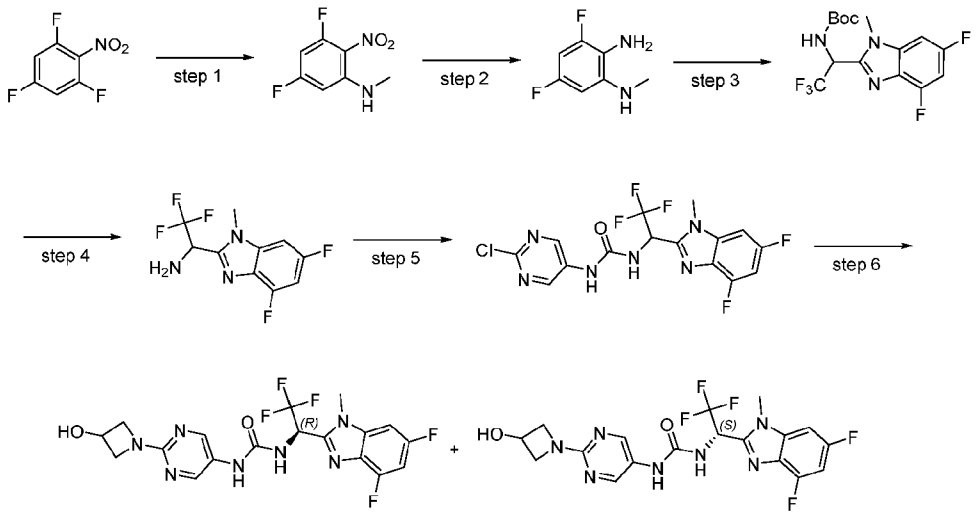
[1035] Additional compounds prepared according to the methods of Example 50 are listed in Table 12 below. Corresponding ^{1}H NMR and mass spectrometry characterization for these compounds are described in Table 1. Certain compounds in Table 12 below were prepared with other compounds whose preparation is described further below in the Examples.

Table 12: other exemplary compounds

I-1790	I-1817	I-1839	I-1844	I-1853
I-1969				

Example 51

(R)-1-(1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethyl)-3-(2-(3-hydroxyazetidin-1-yl)pyrimidin-5-yl)urea and (S)-1-(1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethyl)-3-(2-(3-hydroxyazetidin-1-yl)pyrimidin-5-yl)urea



Step 1. Synthesis of 3,5-difluoro-N-methyl-2-nitroaniline

[1036] To a stirred mixture of 1,3,5-trifluoro-2-nitrobenzene (50 mg, 0.28 mmol) and methanamine (13 mg, 0.42 mmol) in THF (1 mL) was added TEA (86 mg, 0.85 mmol) at 25 °C under a nitrogen atmosphere. The resulting mixture was stirred at 25 °C for 16 hours under nitrogen. The mixture was filtered, and the filter cake was washed with EtOAc (3x50 mL). The filtrate was concentrated under reduced pressure. The residue was purified by silica gel column chromatography, eluting with petroleum ether/EtOAc (10:1) to give 3,5-difluoro-N-methyl-2-nitroaniline (30 mg, 0.16 mmol) as a yellow oil. ^{1}H NMR (300 MHz, DMSO-d6) δ 7.73 (s, 1H), 6.70 – 6.49 (m, 2H), 2.86 (d, J = 4.9 Hz, 3H).

Step 2. Synthesis of 3,5-difluoro-N1-methylbenzene-1,2-diamine

[1037] To a stirred mixture of 3,5-difluoro-N-methyl-2-nitroaniline (200 mg, 1.06 mmol) and Zn powder (695 mg, 10.6 mmol) in MeOH (1 mL) was added saturated NH_4Cl solution (1 mL) at room temperature under a nitrogen atmosphere. The resulting mixture was stirred for 3 hours at 50°C under nitrogen. After cooling to room temperature, the mixture was filtered, and the filter cake was washed with EtOH (3x50 mL). The filtrate was concentrated under reduced pressure. The residue was diluted with water (100 mL) and extracted with DCM (2 x 100 mL). The combined organic layers were washed with water (1x100 mL) and brine (1x100 mL), and dried over anhydrous Na_2SO_4. After filtration, the filtrate was concentrated under reduced pressure to afford 3,5-difluoro-N1-methylbenzene-1,2-diamine (120 mg, 759 μmol) as a black solid. LCMS RT 1.087 min, $[M-H]^-$157.00, LCMS method E. ^{1}H NMR (400 MHz, DMSO-d6) δ 6.27 (ddd, J = 10.9, 9.1, 2.8 Hz, 1H), 6.08 (ddd, J = 11.6, 2.8, 1.6 Hz, 1H), 5.32 (s, 1H), 4.19 (s, 2H), 2.72 (d, J = 4.9 Hz, 3H).

Step 3. Synthesis of tert-butyl (1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethyl)carbamate

[1038] To a stirred mixture of 3,5-difluoro-N1-methylbenzene-1,2-diamine (200 mg, 1.26 mmol) and 2-((tert-butoxycarbonyl)amino)-3,3,3-trifluoropropanoic acid (308 mg, 1.26 mmol) in DMF (1 mL) were added HATU (736 mg, 1.39 mmol) and TEA (647 mg, 2.53 mmol) at room temperature under a nitrogen atmosphere. The resulting mixture was stirred at 60°C overnight under nitrogen. After cooling to room temperature, water was added and the mixture was extracted with EtOAc (3 x 100 mL). The combined organic layers were washed with brine (1x100 mL) and dried over anhydrous Na_2SO_4. After filtration, the filtrate was concentrated under reduced pressure. The residue was purified by silica gel column chromatography, eluting with petroleum ether/EtOAc (10:1) to afford tert-butyl (3-((2,4-difluoro-6-(methylamino)phenyl)amino)-1,1,1-trifluoro-3-oxopropan-2-yl)carbamate (150 mg) as a yellow solid.

[1039] A solution of tert-butyl (3-((2,4-difluoro-6-(methylamino)phenyl)amino)-1,1,1-trifluoro-3-oxopropan-2-yl)carbamate(140 mg) in HOAc (2 mL) was stirred for 80 °C at 3 hours under a nitrogen atmosphere. The resulting mixture was concentrated under reduced pressure to afford tert-butyl (1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethyl)carbamate (150 mg, 0.25 mmol) as a yellow solid, which was used in the next step without purification.

Step 4. Synthesis of 1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethan-1-amine

[1040] To a stirred mixture of tert-butyl (1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethyl)carbamate (126 mg, 345 μmol) in DCM (1 mL) was added HCl in 1,4-dioxane (2 mL, 1 M, 2 mmol) at 25 °C under a nitrogen atmosphere. The resulting mixture was stirred for 2 hours at 25 °C under nitrogen. The mixture was concentrated under reduced pressure to afford 1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethan-1-amine (140 mg, 528 μmol) as a yellow solid. LCMS RT 1.027 min, $[M+H]^+$ 265.95, LCMS method E.

Step 5. 1-(2-chloropyrimidin-5-yl)-3-(1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethyl)urea

[1041] . To a stirred mixture of 1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethan-1-amine (155 mg, 584 μmol) in pyridine (2 mL) was added phenyl (2-

chloropyrimidin-5-yl)carbamate (146 mg, 584 μmol) at 25 °C under a nitrogen atmosphere. The resulting mixture was stirred for 16 hours at 80 °C under nitrogen. The resulting mixture was extracted with DCM (2 x 100 mL). The combined organic layers were washed with brine (3 x 50 mL) and dried over anhydrous Na_2SO_4. After filtration, the filtrate was concentrated under reduced pressure. The residue was purified by silica gel column chromatography, eluted with petroleum ether/EtOAc (10:1) to afford 1-(2-chloropyrimidin-5-yl)-3-(1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethyl)urea (80 mg, 0.19 mmol) as a yellow solid. LCMS RT 1.142 min, $[M+H]^-$ 421.05, LCMS method E. ^1H NMR (300 MHz, DMSO-d6) δ 9.35 (s, 1H), 8.82 (d, J = 6.4 Hz, 2H), 8.10 (d, J = 9.0 Hz, 1H), 7.65 – 7.45 (m, 1H), 7.27 – 7.11 (m, 1H), 6.28 (p, J = 7.1 Hz, 1H), 3.91 (s, 3H).

Step 6. Synthesis of (R)-1-(1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethyl)-3-(2-(3-hydroxyazetidin-1-yl)pyrimidin-5-yl)urea and (S)-1-(1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethyl)-3-(2-(3-hydroxyazetidin-1-yl)pyrimidin-5-yl)urea

[1042] To a stirred mixture of 1-(2-chloropyrimidin-5-yl)-3-(1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethyl)urea (85 mg, 0.20 mmol) and DIEA (0.11 mL, 0.61 mmol) in NMP (3 mL) was added azetidin-3-ol (74 mg, 1.0 mmol) at 25 °C under a nitrogen atmosphere. The resulting mixture was stirred for 16 hours at 80 °C under nitrogen. The product was purified by preparative HPLC (Column: XBridge Prep OBD C18 Column, 30*150 mm, 10 μm; mobile phase A: water (10 mM NH_4HCO_3 + 0.05% NH_4OH), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 24% B to 34% B in 8 min; wavelength: 254/220 nm; RT (min): 9.63) to afford 1-(1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethyl)-3-(2-(3-hydroxyazetidin-1-yl)pyrimidin-5-yl)urea (50 mg, 0.11 mmol) as a white solid. LCMS RT 1.132 min, $[M+H]^+$ 458.10, LCMS method F.

[1043] 1-(1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethyl)-3-(2-(3-hydroxyazetidin-1-yl)pyrimidin-5-yl)urea (50 mg) was further purified by preparative chiral HPLC (column: CHIRAL ART Cellulose-SZ, 2.0*25 cm, 5 μm; mobile phase A: hexane (0.5% 2M NH_3 in MeOH), mobile phase B: EtOH; flow rate: 20 mL/min; gradient: 50% B isocratic; wavelength: 196/200 nm; RT1 (min): 4.5; RT2 (min): 6.6; sample solvent: MeOH : DCM 1 : 2; injection volume: 0.5 mL) to give (R)-1-(1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethyl)-3-(2-(3-hydroxyazetidin-1-yl)pyrimidin-5-

yl)urea and (S)-1-(1-(4,6-difluoro-1-methyl-1H-benzo[d]imidazol-2-yl)-2,2,2-trifluoroethyl)-3-(2-(3-hydroxyazetidin-1-yl)pyrimidin-5-yl)urea, both as a white solid.

[1044] Isomer 1: 7 mg, LCMS RT 1.167 min, $[M+H]^+$ 458.15, LCMS method F. ^{1}H NMR (300 MHz, DMSO-d6) δ 8.58 (s, 1H), 8.37 (s, 2H), 7.74 (d, J = 9.1 Hz, 1H), 7.50 (dd, J = 8.9, 2.3 Hz, 1H), 7.19 (td, J = 10.6, 2.2 Hz, 1H), 6.28 – 6.18 (m, 1H), 5.65 (d, J = 6.5 Hz, 1H), 4.59 – 4.49 (m, 1H), 4.18 (dd, J = 9.1, 6.6 Hz, 2H), 3.90 (s, 3H), 3.80 – 3.71 (m, 2H).

[1045] Isomer 2: 5 mg, LCMS RT 1.180 min, $[M+H]^+$ 458.10, LCMS method F. ^{1}H NMR (300 MHz, DMSO-d6) δ 8.58 (s, 1H), 8.37 (s, 2H), 7.74 (d, J = 9.1 Hz, 1H), 7.50 (dd, J = 8.7, 2.2 Hz, 1H), 7.19 (td, J = 10.6, 2.2 Hz, 1H), 6.27 – 6.15 (m, 1H), 5.65 (d, J = 6.5 Hz, 1H), 4.60 – 4.45 (m, 1H), 4.18 (dd, J = 9.1, 6.6 Hz, 2H), 3.90 (s, 3H), 3.73 (dd, J = 9.1, 4.6 Hz, 2H).

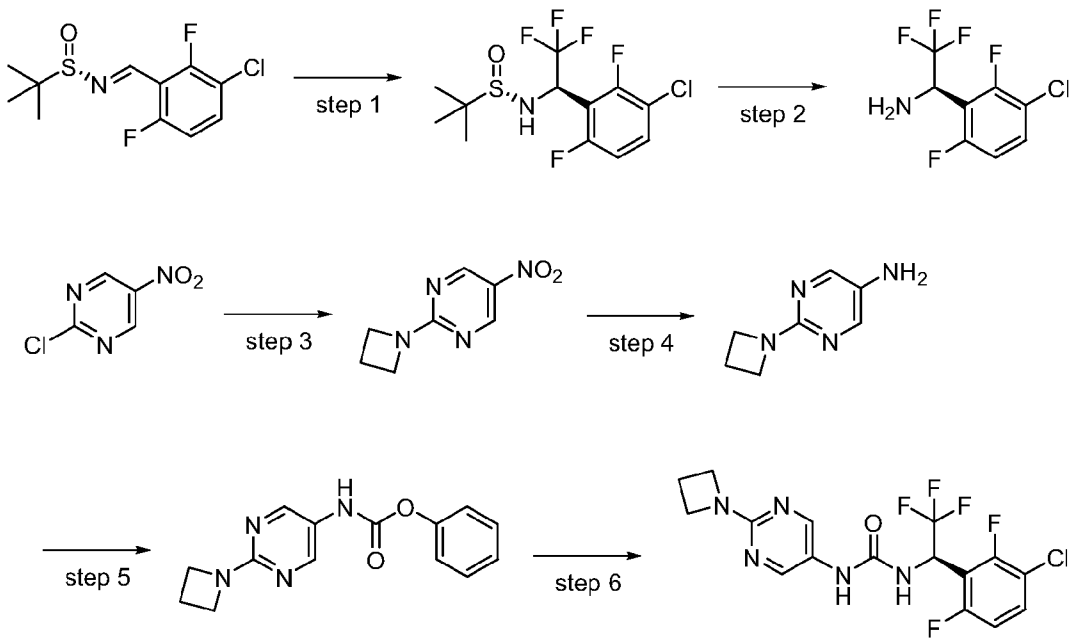
[1046] Additional compounds prepared according to the methods of Example 51 are listed in Table 13 below. Corresponding ^{1}H NMR and mass spectrometry characterization for these compounds are described in Table 1. Certain compounds in Table 13 below were prepared with other compounds whose preparation is described further below in the Examples.

Table 13. Additional exemplary compounds

I-3676

Example 52

(R)-1-(2-(azetidin-1-yl)pyrimidin-5-yl)-3-(1-(3-chloro-2,6-difluorophenyl)-2,2,2-trifluoroethyl)urea



Step 1. Synthesis of (S)-N-((R)-1-(3-chloro-2,6-difluorophenyl)-2,2,2-trifluoroethyl)-2-methylpropane-2-sulfinamide

[1047] A solution of (S,E)-N-(3-chloro-2,6-difluorobenzylidene)-2-methylpropane-2-sulfinamide (1.96 g, 7 mmol) and tetrabutylammoniumdifluorotriphenylsilicate (4.86 g, 9 mmol) in THF (15 mL) was stirred for 1 hour at -60 °C under a nitrogen atmosphere. Trifluoromethyltrimethylsilane (1.14 g, 8 mmol) was added at -60 °C. The resulting mixture was stirred at -60 °C for 1 hour. After warming to room temperature water was added, and the solution was extracted with EtOAc (3 x 100 mL). The combined organic layers were washed with brine (3 x 50 mL) and dried over anhydrous Na_2SO_4. After filtration, the filtrate was concentrated under reduced pressure. The residue was purified by reverse phase flash chromatography (column, C18 gel; mobile phase, acetonitrile in water (0.1% NH_4OH), gradient: 10% to 90% acetonitrile in 40 min; detector: UV 254 nm) to give (S)-N-((R)-1-(3-chloro-2,6-difluorophenyl)-2,2,2-trifluoroethyl)-2-methylpropane-2-sulfinamide (600 mg, 1.6 mmol) as a white solid. LCMS RT 1.390 min, $[M+H]^+$ 350, LCMS method E.

Step 2. Synthesis of (R)-1-(3-chloro-2,6-difluorophenyl)-2,2,2-trifluoroethan-1-amine

[1048] To a stirred solution of (S)-N-((R)-1-(3-chloro-2,6-difluorophenyl)-2,2,2-trifluoroethyl)-2-methylpropane-2-sulfinamide (600 mg, 1.72 mmol) in 1,4-dioxane (10 mL) was added HCl (8.58 mL, 2 M in MeOH, 17.2 mmol) dropwise at room temperature under a nitrogen atmosphere. The resulting mixture was stirred for 2 hours at 30 °C under

nitrogen. The solution was concentrated under reduced pressure. The residue was purified by trituration with Et_2O (3 x 5 mL). The crude product (R)-1-(3-chloro-2,6-difluorophenyl)-2,2,2-trifluoroethan-1-amine (400 mg, 1.5 mmol) was used in the next step directly without further purification. LCMS RT 1.390 min, $[M+H]^+$ 246, LCMS method E.

Step 3. Synthesis of 2-(azetidin-1-yl)-5-nitropyrimidine

[1049] To a stirred solution of 2-chloro-5-nitropyrimidine (0.96 g, 6 mmol) and azetidine (0.46 g, 8 mmol) in DMF (5 mL) was added K_2CO_3 (2.76 g, 0.02 mol) at room temperature under a nitrogen atmosphere. The resulting mixture was stirred for 1 hour at 90 °C under nitrogen. The mixture was allowed to cool down to room temperature and diluted with water. The solution was extracted with EtOAc (3 x 60 mL). The combined organic layers were washed with brine (5x10 mL) and dried over anhydrous Na_2SO_4. After filtration, the filtrate was concentrated under reduced pressure. The residue was purified by silica gel column chromatography, eluting with petroleum ether/EtOAc (1:1) to afford 2-(azetidin-1-yl)-5-nitropyrimidine (430 mg, 2.39 mmol) as a white solid. LCMS RT 0.360 min, $[M+H]^+$ 181, LCMS method E.

Step 4. Synthesis of 2-(azetidin-1-yl)pyrimidin-5-amine

[1050] To a stirred solution of 2-(azetidin-1-yl)-5-nitropyrimidine (430 mg, 2.39 mmol) in THF (8 mL) at room temperature was Pd/C (203 mg) added. The flask was purged with hydrogen and stirred for 12 hours under a hydrogen atmosphere. After filtration, the filtrate was concentrated under reduced pressure to afford 2-(azetidin-1-yl)pyrimidin-5-amine (220 mg, 1.46 mmol) as a white solid. LCMS RT 1.076 min, $[M+H]^+$ 150.19. LCMS method E.

Step 5. Synthesis of phenyl (2-(azetidin-1-yl)pyrimidin-5-yl)carbamate

[1051] To a stirred solution of 2-(azetidin-1-yl)pyrimidin-5-amine (60 mg, 0.40 mmol) and phenyl carbonochloridate (63 mg, 0.40 mmol) in DMF (2 mL) was added DIEA (0.21 mL, 1.2 mmol) dropwise at room temperature under a nitrogen atmosphere. The resulting mixture was stirred for 1 hour at 0 °C under nitrogen. The crude product was used in the next step directly without purification. LCMS RT 0.755 min, $[M+H]^+$ 271, LCMS method E.

Step 6. Synthesis of (R)-1-(2-(azetidin-1-yl)pyrimidin-5-yl)-3-(1-(3-chloro-2,6-difluorophenyl)-2,2,2-trifluoroethyl)urea

[1052] To a stirred solution of phenyl (2-(azetidin-1-yl)pyrimidin-5-yl)carbamate (50 mg,

0.18 mmol) and (R)-1-(3-chloro-2,6-difluorophenyl)-2,2,2-trifluoroethan-1-amine (45 mg, 0.18 mmol) in DMF (1 mL) was added DIEA (72 mg, 0.55 mmol) dropwise at room temperature under a nitrogen atmosphere. The resulting mixture was stirred for 3 hours at 30 °C under nitrogen. The mixture was allowed to cool down to room temperature. The resulting mixture was purified by reverse phase flash chromatography (Column: XBridge Prep OBD C18 Column, 30*150 mm, 10 μm; mobile phase A: water (10 mM NH_4HCO_3 + 0.05% NH_4OH), mobile phase B: acetonitrile; flow rate: 60 mL/min; gradient: 34% B to 49% B in 8 min; wavelength: 254/220 nm; RT(min): 9.32) to give (R)-1-(2-(azetidin-1-yl)pyrimidin-5-yl)-3-(1-(3-chloro-2,6-difluorophenyl)-2,2,2-trifluoroethyl)urea (4.5 mg, 11 μmol) as a white solid. LCMS RT 1.435 min, $[M+H]^+$ 422.05, LCMS method F. ^1H NMR (300 MHz, DMSO-d6) δ 8.67 (s, 1H), 8.36 (s, 2H), 7.84 (td, J = 8.8, 5.6 Hz, 1H), 7.60 (d, J = 9.9 Hz, 1H), 7.39 (t, J = 9.2 Hz, 1H), 6.09 (p, J = 9.0 Hz, 1H), 3.99 (t, J = 7.4 Hz, 4H), 2.28 (p, J = 7.5 Hz, 2H).

Example 43

[1053] Selected compounds of the present disclosure were tested in an ADP-Glo Biochemical PIK3CA Kinase Assay. Compounds to be assayed were plated in 16 doses of 1:2 serial dilutions (20 nL volume each well) on a 1536-well plate, and the plate warmed to room temperature. PIK3CA enzyme (*e.g.*, H1047R, E542K, E545K, or wild-type) (1 μL of 2 nM solution in Enzyme Assay Buffer (comprising 50 mM HEPES pH 7.4, 50mM NaCl, 6mM $MgCl_2$, 5mM DTT and 0.03% CHAPS)) was added and shaken for 10 seconds and preincubated for 30 minutes. To the well was added 1 μL of 200 μM ATP and 20 μM of diC8-PIP2 in Substrate Assay Buffer (50 mM HEPES pH7.4, 50mM NaCl, 5mM DTT and 0.03% CHAPS) to start the reaction, and the plate was shaken for 10 seconds, then spun briefly at 1500 rpm, and then incubated for 60 minutes at room temperature. The reaction was stopped by adding 2 μL of ADP-Glo reagent (Promega), and spinning briefly at 1500 rpm, and then incubating for 40 minutes. ADP-Glo Detection reagent (Promega) was added and the plate spun briefly at 1500 rpm, then incubated for 30 minutes. The plate was read on an Envision 2105 (Perkin Elmer), and the IC_{50} values were calculated using Genedata software.

[1054] Results of the ADP-Glo Biochemical PIK3CA Kinase Assay using H1047R PIK3CA enzyme are presented in Table 1. Compounds having an IC_{50} less than or equal to 100 nM

are represented as "A"; compounds having an IC_{50} greater than 100 nM but less than or equal to 500 nM are represented as "B"; compounds having an IC_{50} greater than 500 nM but less than or equal to1 μM are represented as "C"; compounds having an IC_{50} greater than 1 μM but less than or equal to10 μM are represented as "D"; and compounds having an IC_{50} greater than 10 μM but less than or equal to 100 μM are represented as "E".

Example 44

[1055] Selected compounds of the present disclosure were tested in a MCF10A Cell-Based PIK3CA Kinase Assay, namely the CisBio Phospho-AKT (Ser473) HTRF assay, to measure the degree of PIK3CA-mediated AKT phosphorylation. MCF10A cells (immortalized non-transformed breast cell line) overexpressing hotspot PIK3CA mutations (including H1047R, E542K, and E545K mutations) were used. Cells were seeded at 5,000 cells per well in DMEM/F12 (Thermo Fisher Scientific) supplemented with 0.5 mg/mL hydrocortisone, 100ng/mL Cholera Toxin, 10μg/mL insulin, and 0.5% horse serum. Once plated, cells were placed in a 5% CO_2, 37 °C incubator to adhere overnight.

[1056] The following day, compounds were added to the cell plates in 12 doses of 1:3 serial dilutions. The dose response curves were run in duplicate. Compound addition was carried out utilizing an Echo 55 Liquid Handler acoustic dispenser (Labcyte). The cell plates were incubated for 2 hours in a 5% CO_2, 37 °C incubator. Following compound incubation, the cells were lysed for 60 min at room temperature. Finally, a 4-hour incubation with the HTRF antibodies was performed at room temperature. All reagents, both lysis buffer and antibodies, were used from the CisBio pAKT S473 HTRF assay kit, as per the manufacturers protocol. Plates were read on an Envision 2105 (Perkin Elmer), and the IC_{50} values were calculated using Genedata software.

[1057] Results of the MCF10A Cell-Based PIK3CA Kinase Assay are presented in Table 1. Compounds having an IC_{50} less than or equal to 1 μM are represented as "A"; compounds having an IC_{50} greater than 1 μM but less than or equal to 5 μM are represented as "B"; compounds having an IC_{50} greater than 5 μM but less than or equal to10 μM are represented as "C"; compounds having an IC_{50} greater than 10 μM but less than or equal to36 μM are represented as "D"; and compounds having an IC_{50} greater than 36 μM but less than or equal to 100 μM are represented as "E".

INCORPORATION BY REFERENCE

[1058] All publications and patents mentioned herein are hereby incorporated by reference in their entirety for all purposes as if each individual publication or patent was specifically and individually incorporated by reference. In case of conflict, the present application, including any definitions herein, will control.

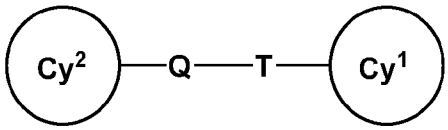
EQUIVALENTS

[1059] While specific embodiments of the subject disclosure have been discussed, the above specification is illustrative and not restrictive. Many variations of the present disclosure will become apparent to those skilled in the art upon review of this specification. The full scope of the disclosure should be determined by reference to the claims, along with their full scope of equivalents, and the specification, along with such variations.

[1060] Unless otherwise indicated, all numbers expressing quantities of ingredients, reaction conditions, and so forth used in the specification and claims are to be understood as being modified in all instances by the term "about." Accordingly, unless indicated to the contrary, the numerical parameters set forth in this specification and attached claims are approximations that may vary depending upon the desired properties sought to be obtained by the present disclosure.

What is claimed is:

1. A compound of formula I:



I

or a pharmaceutically acceptable salt thereof, wherein:

Cy^1 is phenyl; naphthyl; cubanyl; adamantyl; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein Cy^1 is substituted with n instances of R^1;

Cy^2 is phenyl; naphthyl; cubanyl; adamantyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein Cy^2 is substituted with m instances of R^2;

Q is L^Q;

T is a bivalent C_{1-3} aliphatic chain substituted with q instances of R^T;

each R^1 is independently $-L^1-R^{1A}$;

each R^2 is independently $-L^2-R^{2A}$;

each R^T is independently $-L^T-R^{TA}$; or

two instances of R^T are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^1 instances of R^{TTC};

two instances of R^1 are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^2 instances of R^{11C};

two instances of R^2 are taken together with their intervening atoms to form a 3-7 membered saturated, partially unsaturated, or aromatic carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^3 instances of R^{22C};

one instance of R^T and one instance of R^1 are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^4 instances of R^{T1C}; or

one instance of R^T and one instance of R^L are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^5 instances of R^{TLC};

each of L^1, L^2, L^Q, and L^T is independently a covalent bond, or a C_{1-4} bivalent saturated or unsaturated, straight or branched hydrocarbon chain wherein one or two methylene units of the chain are optionally and independently replaced by $-CH(R^L)-$, $-C(R^L)_2-$, C_{3-6} cycloalkylene, C_{3-6} heterocycloalkylene, -N(R)-, -N(R)C(O)-, -N(R)C(NR)-, -N(R)C(NOR)-, -N(R)C(NCN)-, -C(O)N(R)-, $-N(R)S(O)_2-$, $-S(O)_2N(R)-$, -O-, -C(O)-, -OC(O)-, -C(O)O-, -S-, -S(O)- , or $-S(O)_2-$;

each R^{1A} is independently R^A or R^B substituted by r^1 instances of R^{1C};

each R^{2A} is independently R^A or R^B substituted by r^2 instances of R^{2C};

each R^{TA} is independently R^A or R^B substituted by r^3 instances of R^{TC};

each R^L is independently R^A or R^B substituted by r^4 instances of R^{LC};

each instance of R^A is independently oxo, deuterium, halogen, -CN, $-NO_2$, -OR, $-SF_5$, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -S(O)(NCN)R, -S(NCN)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, or $-B(OR)_2$;

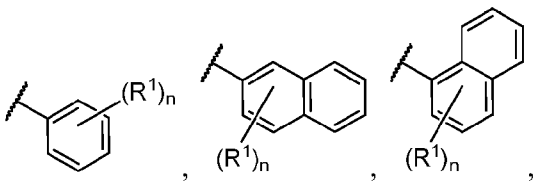
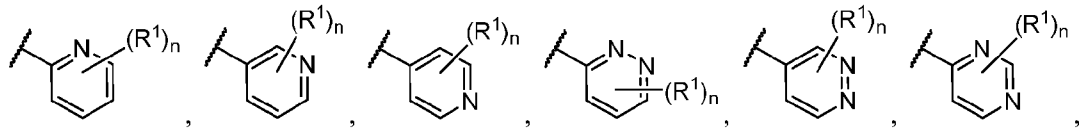
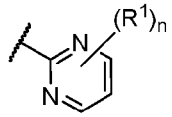
each instance of R^B is independently a C_{1-6} aliphatic chain; phenyl; naphthyl; cubanyl; adamantyl; a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring; a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur;

each instance of R^{1C}, R^{2C}, R^{TC}, R^{TTC}, R^{11C}, R^{22C}, R^{T1C}, R^{TLC}, and R^{LC} is independently oxo, deuterium, halogen, -CN, $-NO_2$, -OR, $-SF_5$, -SR, $-NR_2$, $-S(O)_2R$, $-S(O)_2NR_2$, $-S(O)_2F$, -S(O)R, $-S(O)NR_2$, -S(O)(NR)R, -C(O)R, -C(O)OR, $-C(O)NR_2$, -C(O)N(R)OR, -OC(O)R, $-OC(O)NR_2$, -N(R)C(O)OR, -N(R)C(O)R, $-N(R)C(O)NR_2$, $-N(R)C(NR)NR_2$, $-N(R)S(O)_2NR_2$, $-N(R)S(O)_2R$, $-P(O)R_2$, -P(O)(R)OR, $-B(OR)_2$, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur;

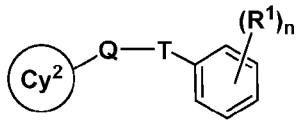
each instance of R is independently hydrogen, or an optionally substituted group selected from C_{1-6} aliphatic, phenyl, a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur, and a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or

two R groups on the same nitrogen are taken together with their intervening atoms to form a 4-7 membered saturated, partially unsaturated, or heteroaryl ring having 0-3 heteroatoms, in addition to the nitrogen, independently selected from nitrogen, oxygen, and sulfur; and

each of n, m, q, p^1, p^2, p^3, p^4, p^5, r^1, r^2, r^3, and r^4 is independently 0, 1, 2, 3, 4, or 5.

2. The compound of claim 1, wherein Cy^1 is  ,  , or  .

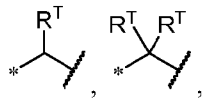
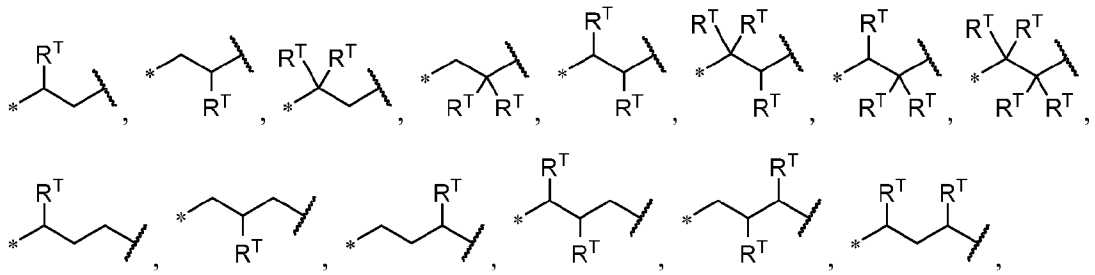
3. The compound of claim 1 or 2, wherein the compound is a compound of formula II:

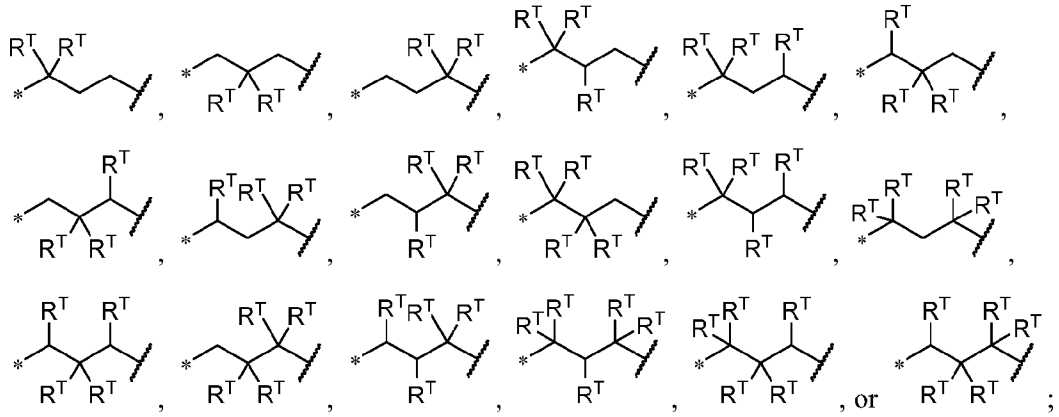


II

or a pharmaceutically acceptable salt thereof.

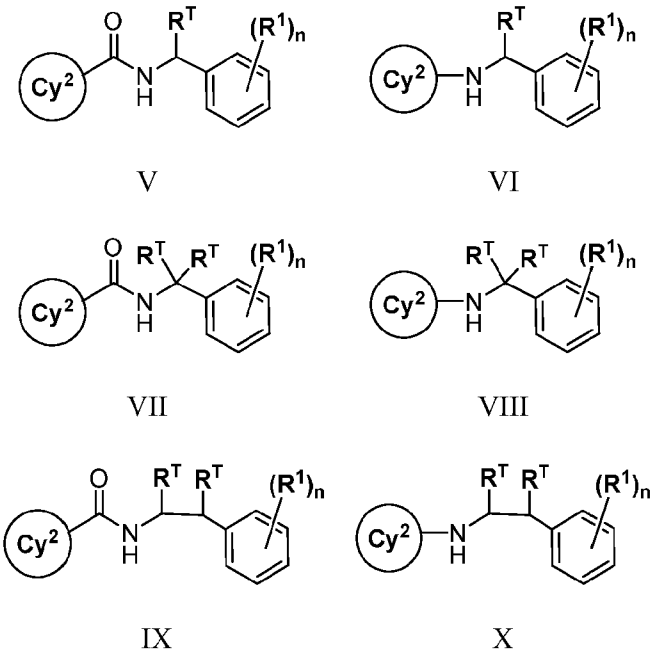
4. The compound of any one of the preceding claims, wherein Q is -C(O)N(R)-, -C(O)N(R)CH_2-, -N(R)-, -CH_2C(O)N(R)-, -N(R)C(O)N(R)-, or a covalent bond.

5. The compound of any one of the preceding claims, wherein T is  ,  .



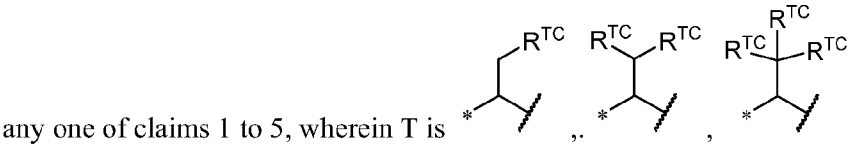
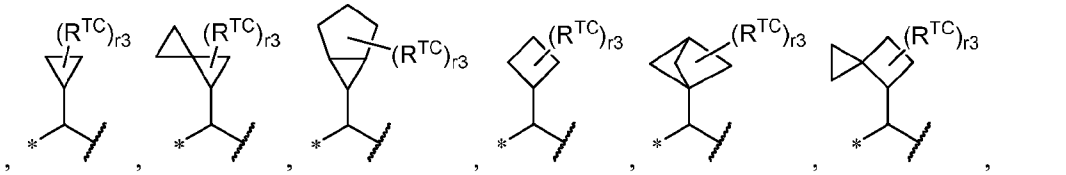
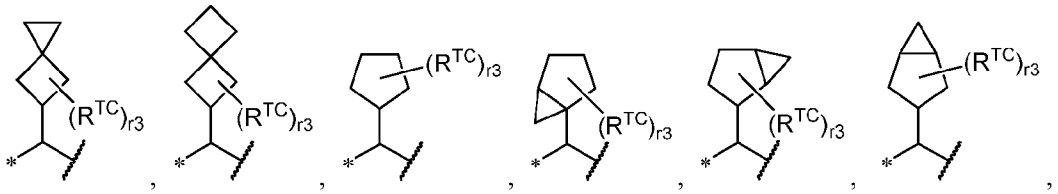
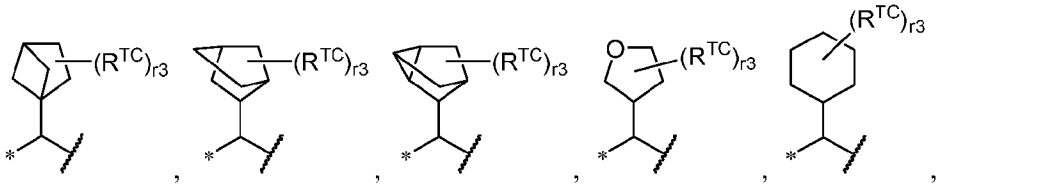
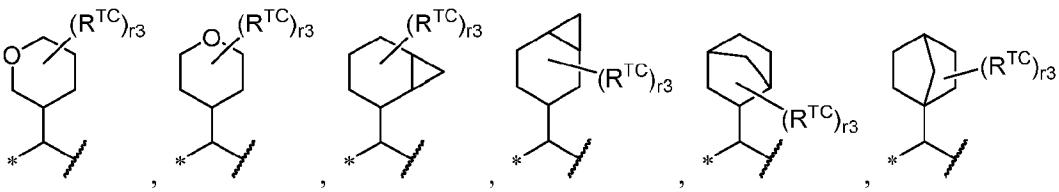
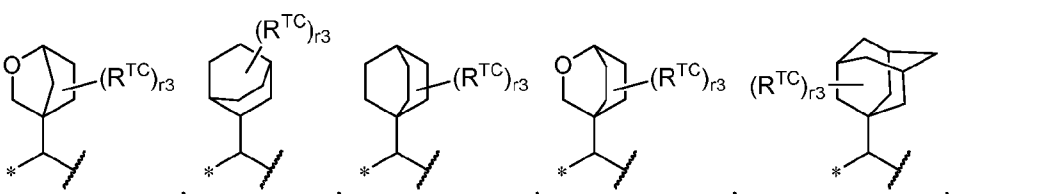
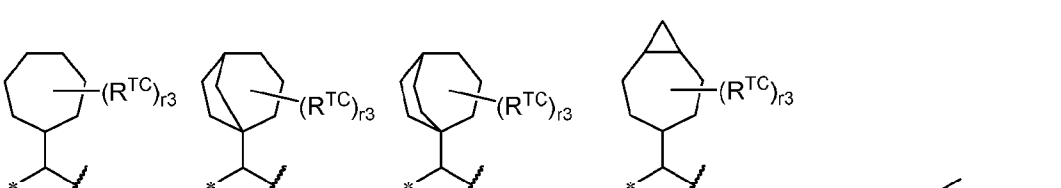
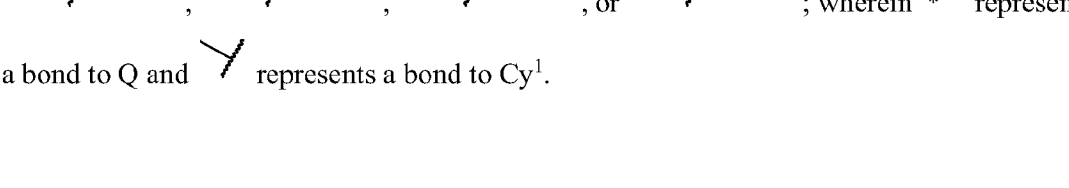
wherein * represents a bond to Q and Y represents a bond to Cy^1.

6. The compound of any one of the preceding claims, wherein the compound is a compound of formula V, VI, VII, VIII, IX, or X:

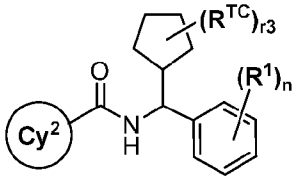


or a pharmaceutically acceptable salt thereof.

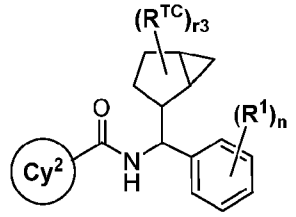
7. The compound of any one of the preceding claims, wherein two instances of R^T are taken together with their intervening atoms to form a 3-7 membered saturated or partially unsaturated carbocyclic ring or a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein the ring is substituted with p^1 instances of R^{TTC}.

8. The compound of any one of claims 1 to 5, wherein T is  ,  ,  ,  ,  ,  ,  ,  , ,  , or ; wherein * represents a bond to Q and represents a bond to Cy^1.

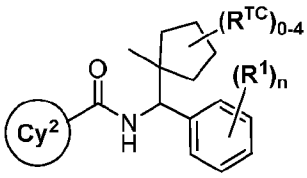
9. The compound of any one of claims 1 to 6 and claim 8, wherein the compound is a compound of formula XI, XII, XIII, XIV, XV, XVI, XVII, XVIII, or XIX:



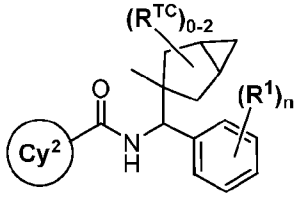
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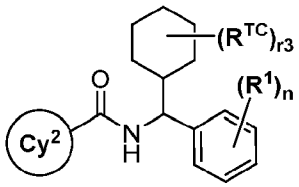
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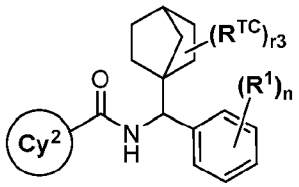
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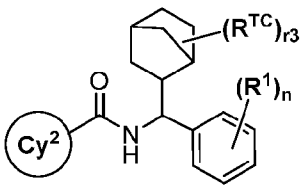
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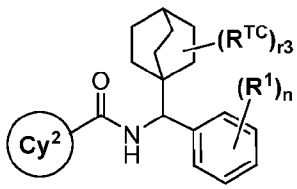
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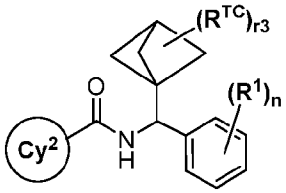
XVI



XVII



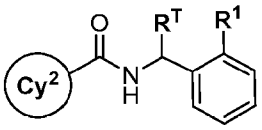
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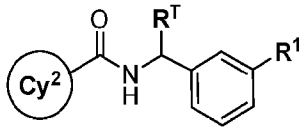
XIX

or a pharmaceutically acceptable salt thereof.

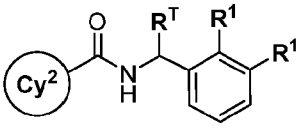
10. The compound of any one of claims 1-3, wherein the compound is a compound of formula XXVI, XXVII, XXVIII, XXIX, XXX, XXXI, XXXII, XXXIII, XXXIV, XXXV, or XXXVI:



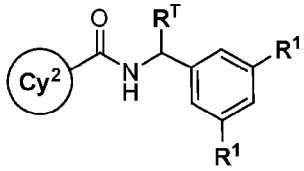
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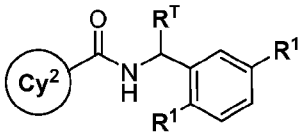
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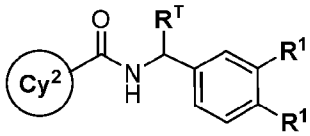
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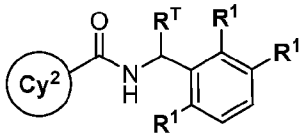
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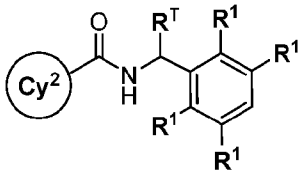
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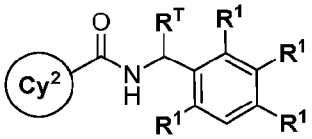
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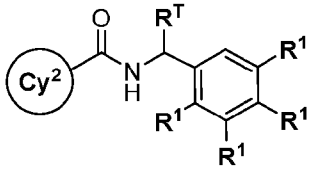
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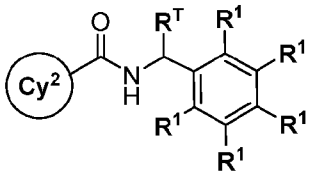
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XXXIV

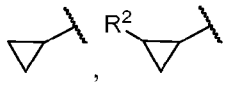
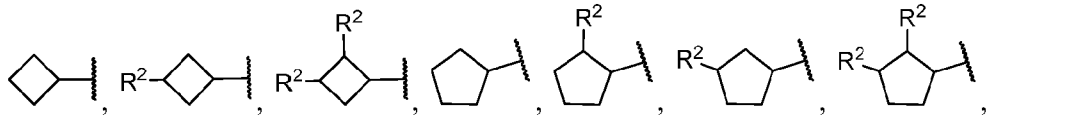
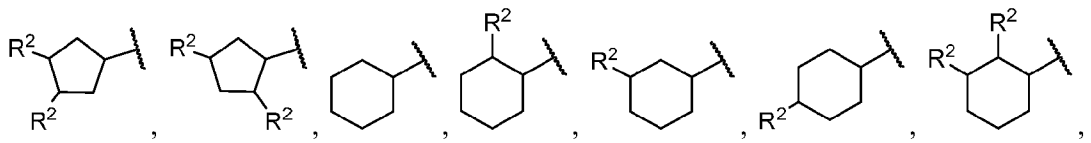
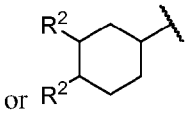
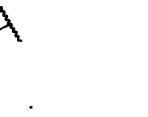
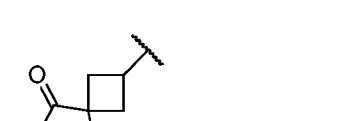


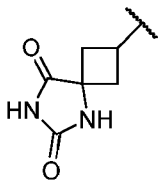
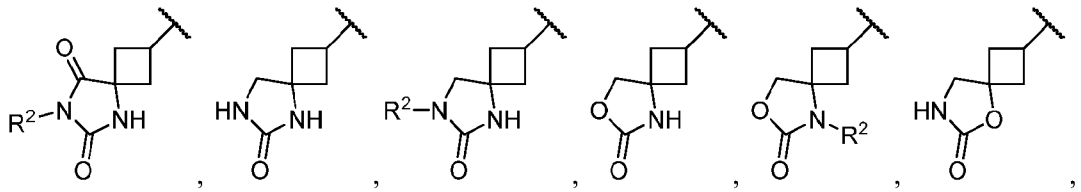
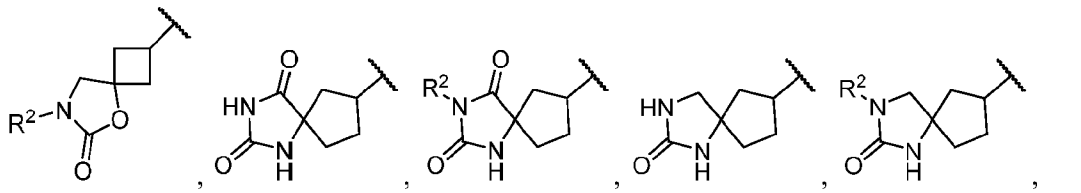
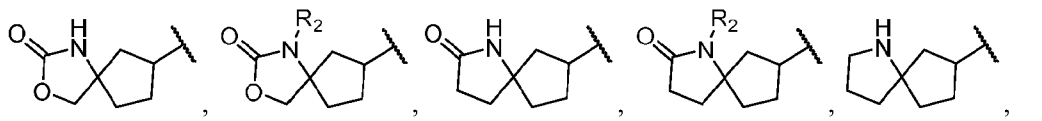
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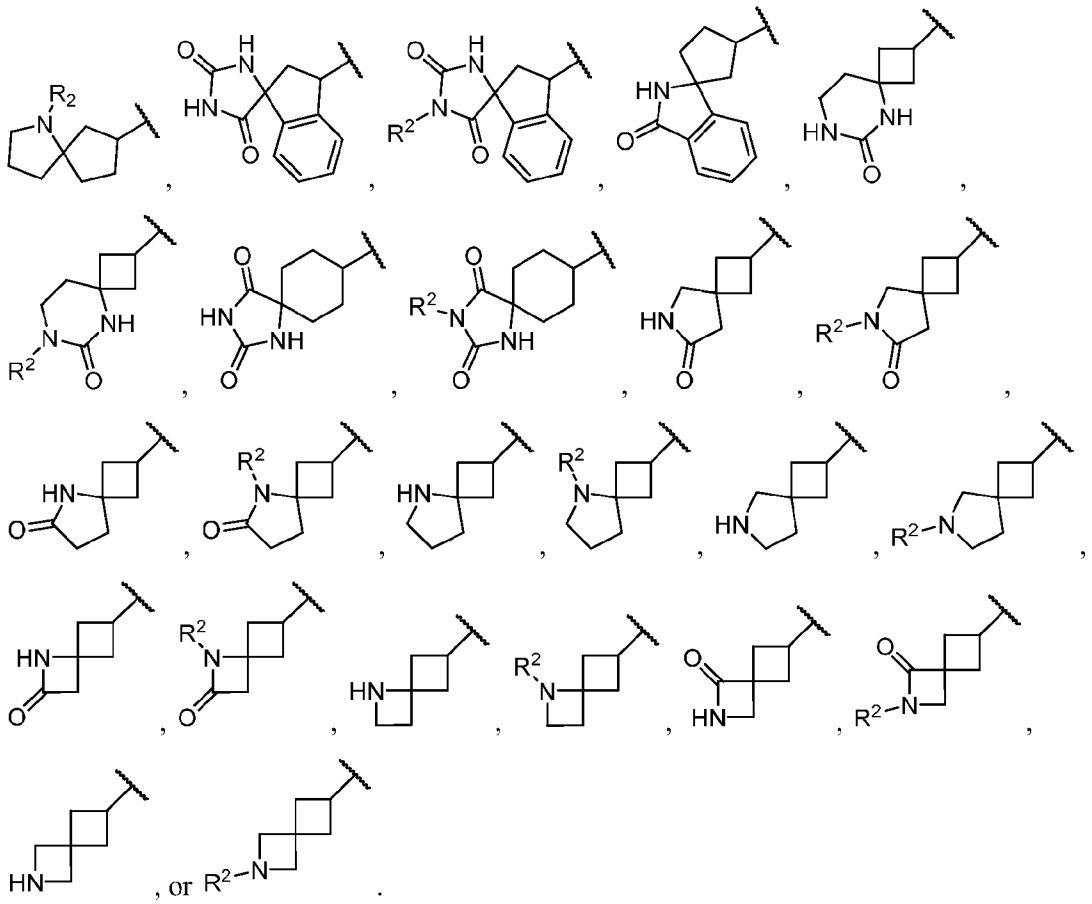


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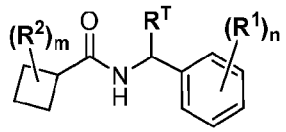
or a pharmaceutically acceptable salt thereof.

11. The compound of any one of the preceding claims, wherein Cy^2 is  ,  ,  ,  ,  , , , , , ,  , or .

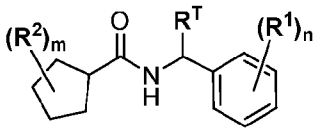
12. The compound of any one of claims 1 to 10, wherein Cy^2 is  ,  ,  ,  .



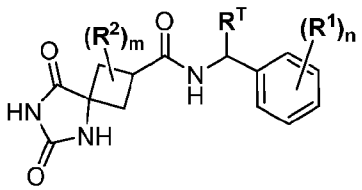
13. The compound of any one of claims 1-6, wherein the compound is a compound of formula XX, XXI, XXII, XXIII, XXIV, or XXV:



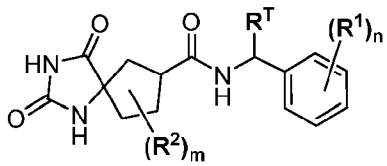
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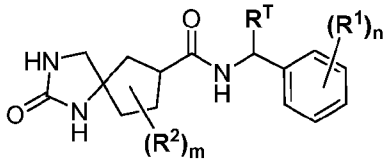
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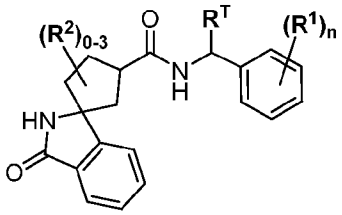
XXII



XXIII



XXIV



XXV

or a pharmaceutically acceptable salt thereof.

14. The compound of any one of the claims 1-6 and 10-13, wherein R^T is a 3-7 membered saturated or partially unsaturated monocyclic carbocyclic ring, or a 5-12 membered saturated or partially unsaturated bicyclic carbocyclic ring; each of which is substituted by r^3 instances of R^{TC}.

15. The compound of any one of the preceding claims, wherein L^1 is a covalent bond.

16. The compound of any one of the preceding claims, wherein each R^1 is independently halogen, -CN, -O-(C_{1-6} aliphatic chain substituted with 0-5 halogens), or a C_{1-6} aliphatic chain substituted with 0-5 halogens.

17. The compound of any one of the preceding claims, wherein at least one R^1 is halogen.

18. The compound of any one of the preceding claims, wherein at least two R^1 are halogen.

19. The compound of any one of the preceding claims, wherein at least three R^1 are halogen.

20. The compound of any one of the preceding claims, wherein at least one R^1 is C_{1-3} aliphatic optionally substituted with 1-3 halogen.

21. The compound of any one of the preceding claims, wherein at least one R^1 is -O-C_{1-3} aliphatic optionally substituted with 1-3 halogen.

22. The compound of any one of the preceding claims, wherein n is 1, 2, 3, 4, or 5.

23. The compound of any one of the preceding claims, wherein R^2 is -N(R)-R^{2A}, -N(R)C(O)-R^{2A}, -CH(R^L)N(R)-R^{2A}, -N(R)C(O)CH(R^L)-R^{2A}, -CH(R^L)O-R^{2A}, -CH(R^L)-R^{2A}, or -R^{2A}.

24. The compound of any one of the preceding claims, wherein R^2 is -N(H)-R^{2A}, -N(H)C(O)-R^{2A}, or -CH_2-R^{2A}.

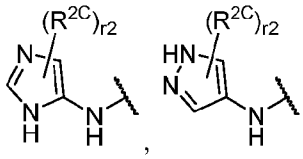
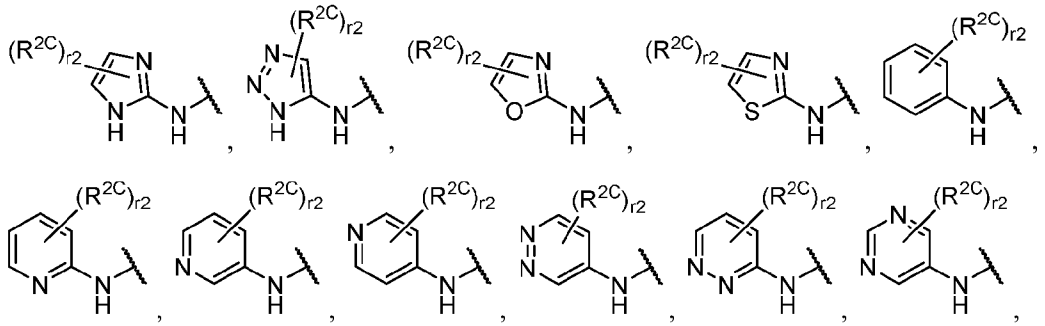
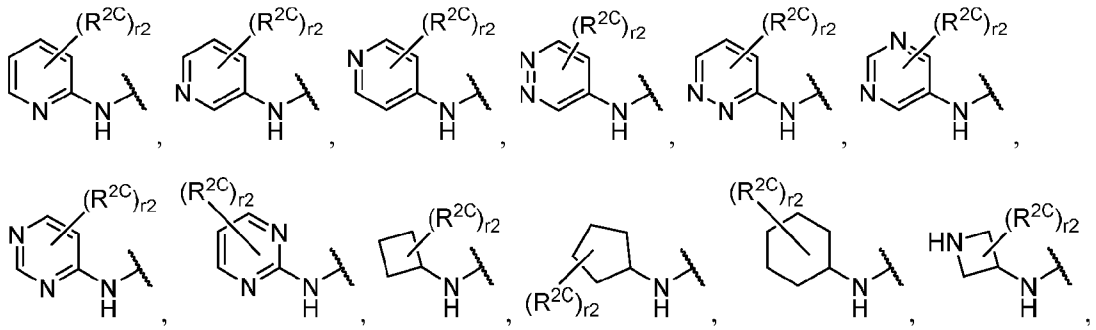
25. The compound of any one of the preceding claims, wherein R^{2A} is R^B substituted by r^2 instances of R^{2C}.

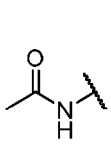
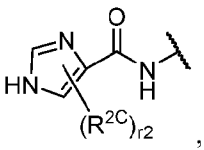
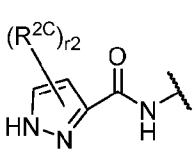
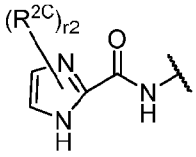
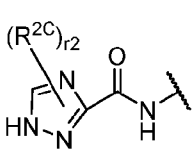
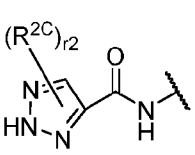
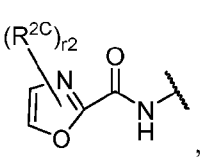
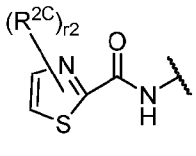
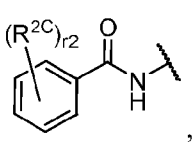
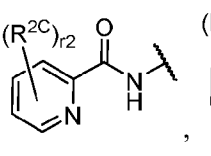
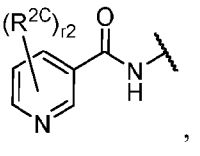
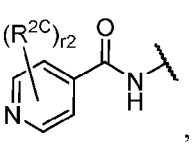
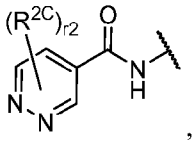
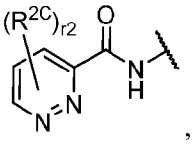
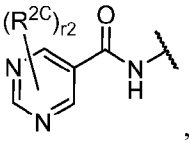
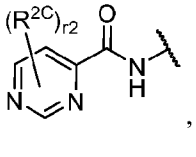
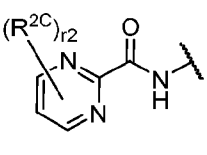
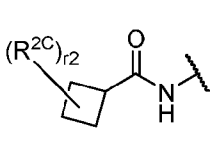
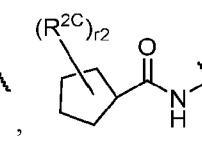
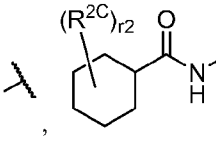
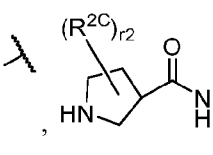
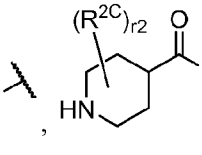
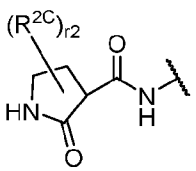
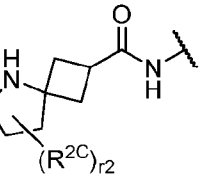
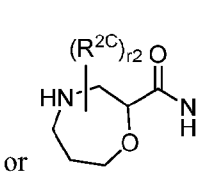
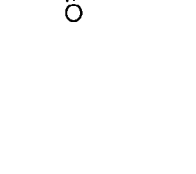
26. The compound of any one of the preceding claims, wherein R^{2A} is phenyl; naphthyl; an 8-10 membered bicyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; or a 7-12 membered saturated or partially unsaturated bicyclic heterocyclic ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein R^{2A} is substituted by r^2 instances of R^{2C}.

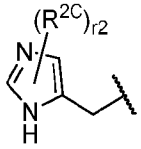
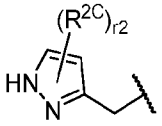
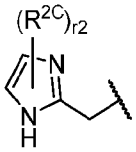
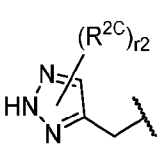
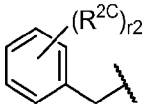
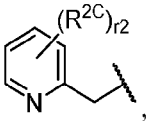
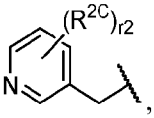
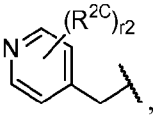
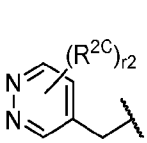
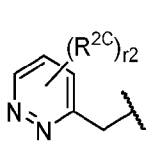
27. The compound of any one of the preceding claims, wherein R^{2A} is phenyl substituted with r^2 instances of R^{2C}.

28. The compound of any one of claims 1-25, wherein R^{2A} is a 5-6 membered monocyclic heteroaryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^2 instances of R^{2C}.

29. The compound of any one of claims 1-25, wherein R^{2A} is a 3-7 membered saturated or partially unsaturated monocyclic heterocyclic ring having 1-2 heteroatoms independently selected from nitrogen, oxygen, and sulfur; wherein said ring is substituted by r^2 instances of R^{2C}.

30. The compound of any one of claims 1-25, wherein R^2 is  ,  ,  , , , or .

31. The compound of any one of claims 1-25, wherein R^2 is  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  ,  , ,  , , , or .

32. The compound of any one of claims 1-25, wherein R^2 is  ,  ,  ,  ,  ,  ,  ,  ,  ,  , , , , .

33. The compound of any one of the preceding claims, wherein m is 1.

34. The compound of any one of claims 1-33, wherein each instance of R^{2C} is independently a C_{1-6} aliphatic optionally substituted with (i) 1 or 2 groups independently selected from -O-(C_{1-6} aliphatic), -OH, -N(C_{1-6} aliphatic)$_2$, and -CN, and (ii) 1, 2, or 3 atoms independently selected from halogen and deuterium.

35. The compound of any one of claims 1-33, wherein each instance of R^{2C} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms.

36. The compound of any one of claims 1-35, wherein each instance of R^{TC} is independently oxo, deuterium, halogen, -CN, -OH, -O-(C_{1-3} aliphatic), or C_{1-3} aliphatic, wherein each C_{1-3} aliphatic is optionally substituted with one or more halogen atoms.

37. A compound selected from those set forth in Table 1, or a pharmaceutically acceptable salt thereof.

38. A pharmaceutical composition, comprising a compound of any one of the preceding claims, and a pharmaceutically acceptable carrier.

39. A method of inhibiting PI3Kα signaling activity in a subject, comprising administering a therapeutically effective amount of a compound of any of claims 1-37, or the pharmaceutical composition of claim 38, to a subject in need thereof.

40. A method of treating a PI3Kα-mediated disorder in a subject, comprising administering a therapeutically effective amount of a compound of any of claims 1-37, or the pharmaceutical composition of claim 38, to a subject in need thereof.

41. A method of treating a cellular proliferative disease in a subject, comprising administering a therapeutically effective amount of a compound of any of claims 1-37, or the pharmaceutical composition of claim 38, to a subject in need thereof.

42. The method of claim 41, wherein the cellular proliferative disease is cancer.

43. The method of claim 42, wherein the cancer is breast cancer.

44. The method of claim 42, wherein the cancer is ovarian cancer.

45. The method of claim 44, wherein the ovarian cancer is clear cell ovarian cancer.

46. The method of any one of claims 39-45, wherein the subject has PI3Kα containing at least one of the following mutations: H1047R, E542K, and E545K.