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(54) Benævnelse: **3-((HETERO-)ARYL)-8-AMINO-2-OXO-1,3-DIAZA-SPIRO-[4,5]-DECAN-DERIVATER**

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Description

[0001] The invention relates to 3-((hetero-)aryl)-8-amino-2-oxo-1,3-diaza-spiro-[4.5]-decane derivatives for use as medicament. The medicament may be used in various neurological disorders, including but not limited to pain, neurodegenerative disorders, neuroinflammatory disorders, neuropsychiatric disorders, substance abuse/dependence.

[0002] Opioid receptors are a group of Gi/o protein-coupled receptors which are widely distributed in the human body. The opioid receptors are currently subdivided into four major classes, i.e. the three classical opioid receptors mu-opioid (MOP) receptor, kappa-opioid (KOP) receptor, and delta-opioid (DOP) receptor as well as the opioid receptor-like (ORL-1) receptor, which was more recently discovered based on its high homology with said classical opioid receptors. After identification of the endogenous ligand of the ORL-1 receptor, known as nociceptin/orphanin FQ, a highly basic 17 amino acid peptide isolated from tissue extracts in 1995, the ORL-1 receptor was renamed "nociceptin opioid peptide receptor" and abbreviated as "NOP-receptor".

[0003] The classical opioid receptors (MOP, KOP and DOP) as well as the NOP receptor are widely distributed/expressed in the human body, including in the brain, the spinal cord, on peripheral sensory neurons and the intestinal tract, wherein the distribution pattern differs between the different receptor classes.

[0004] Nociceptin acts at the molecular and cellular level in very much the same way as opioids. However, its pharmacological effects sometimes differ from, and even oppose those of opioids. NOP-receptor activation translates into a complex pharmacology of pain modulation, which, depending on route of administration, pain model and species involved, leads to either pronociceptive or antinociceptive activity. Furthermore, the NOP receptor system is upregulated under conditions of chronic pain. Systemic administration of selective NOP receptor agonists was found to exert a potent and efficacious analgesia in non-human primate models of acute and inflammatory pain in the absence of side effects. The activation of NOP receptors has been demonstrated to be devoid of reinforcing effects but to inhibit opioid-mediated reward in rodents and non-human primates (Review: Schroeder et al, Br J Pharmacol 2014; 171 (16): 3777-3800, and references therein).

[0005] Besides the involvement of the NOP receptor in nociception, results from preclinical experiments suggest that NOP receptor agonists might be useful inter alia in the treatment of neuropsychiatric disorders (Witkin et al, Pharmacology & Therapeutics, 141 (2014) 283-299; Jenck et al., Proc. Natl. Acad. Sci. USA 94, 1997, 14854-14858). Remarkably, the DOP receptor is also implicated to modulate not only pain but also neuropsychiatric disorders (Mabrouk et al, 2014; Pradhan et al., 2011).

[0006] Strong opioids acting at the MOP receptor site are widely used to treat moderate to severe acute and chronic pain. However, the therapeutic window of strong opioids is limited by severe side effects such as nausea and vomiting, constipation, dizziness, somnolence, respiratory depression, physical dependence and abuse. Furthermore, it is known that MOP receptor agonists show only reduced effectiveness under conditions of chronic and neuropathic pain.

[0007] It is known that some of the above mentioned side-effects of strong opioids are mediated by activation of classic opioid-receptors within the central nervous system. Furthermore, peripheral opioid receptors, when activated, can inhibit transmission of nociceptive signals shown in both, clinical and animal studies (Gupta et al., 2001; Kalso et al., 2002; Stein et al., 2003;Zollner et al., 2008).

[0008] Thus, to avoid CNS-mediated adverse effects after systemic administration, one approach has been to provide peripherally restricted opioid receptor ligands that do not easily cross the blood-brain barrier and therefore distribute poorly to the central nervous system (see for instance WO 2015/192039). Such peripherally acting compounds might combine effective analgesia with limited side-effects.

[0009] Another approach has been to provide compounds which interact with both the NOP receptor and the MOP receptor. Such compounds have for instance been described in WO 2004/043967, WO 2012/013343 and WO 2009/118168.

[0010] A further approach has been to provide multi-opioid receptor analgesics that modulate more than one of the opioid receptor subtypes to provide additive or synergistic analgesia and/or reduced side effects like abuse liability or tolerance.

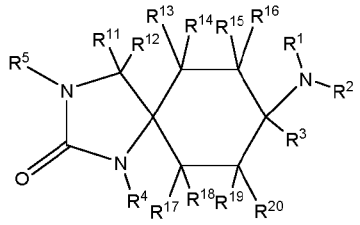
[0011] On the one hand, it would be desirable to provide analgesics that selectively act on the NOP receptor system but less pronounced on the classic opioid receptor system, especially MOP receptor system, whereas it would be desirable to distinguish between central nervous activity and peripheral nervous activity. On the other hand, it would be desirable to provide analgesics that act on the NOP receptor system and also to a balanced degree on the MOP receptor system, whereas it would be desirable to distinguish between central nervous activity and peripheral nervous activity.

[0012] There is a need for medicaments which are effective in the treatment of pain and which have advantages compared to the compounds of the prior art. Where possible, such medicaments should contain such a small dose of active ingredient that satisfactory pain therapy can be ensured without the occurrence of intolerable treatment-emergent adverse events.

[0013] It is an object of the invention to provide pharmacologically active compounds, preferably analgesics that have advantages compared to the prior art.

[0014] This object has been achieved by the subject-matter of the patent claims.

[0015] A first aspect of the invention relates to 3-((hetero-)aryl)-8-amino-2-oxo-1,3-diaza-spiro-[4.5]-decane derivatives according to general formula (I)



(I)

wherein

R^1 and R^2 independently of one another mean

-H;

$-C_1$ $-C_6$-alkyl, linear or branched, saturated or unsaturated, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -OH, $-OCH_3$, -CN and $-CO_2CH_3$;

a 3-12-membered cycloalkyl moiety, saturated or unsaturated, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -OH, $-OCH_3$, -CN and $-CO_2CH_3$; wherein said 3-12-membered cycloalkyl moiety is optionally connected through $-C_1$-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted; or

a 3-12-membered heterocycloalkyl moiety, saturated or unsaturated, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -OH, $-OCH_3$, -CN and $-CO_2CH_3$; wherein said 3-12-membered heterocycloalkyl moiety is optionally connected through $-C_1$-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted;
or

R^1 and R^2 together with the nitrogen atom to which they are attached form a ring and mean $-(CH_2)_{3-6}$-; $-(CH_2)_2$-O-$(CH_2)_2$-; or $-(CH_2)_2$-NR^A-$(CH_2)_2$-, wherein R^A means -H or $-C_1$-C_6-alkyl, linear or branched, saturated or unsaturated, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br and -I;

preferably with the proviso that R^1 and R^2 do not simultaneously mean -H;

R^3 means

$-C_1$-C_6-alkyl, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

a 3-12-membered cycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered cycloalkyl moiety is optionally connected through $-C_1$-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

a 3-12-membered heterocycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered heterocycloalkyl moiety is optionally connected through $-C_1$-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

a 6-14-membered aryl moiety, unsubstituted, mono- or polysubstituted; wherein said 6-14-membered aryl moiety is optionally connected through $-C_1$-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or

a 5-14-membered heteroaryl moiety, unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl moiety is optionally connected through -C_1-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

R^4 means

-H;

-C_1-C_6-alkyl, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said -C_1-C_6-alkyl is optionally connected through -C(=O)-, -C(=O)O-, or -$S(=O)_2$-;

a 3-12-membered cycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered cycloalkyl moiety is optionally connected through -C_1-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or wherein said 3-12-membered cycloalkyl moiety is optionally connected through -C(=O)-, -C(=O)O-, -C(=O)O-CH_2-, or -$S(=O)_2$-;

a 3-12-membered heterocycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered heterocycloalkyl moiety is optionally connected through -C_1-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or wherein said 3-12-membered heterocycloalkyl moiety is optionally connected through -C(=O)-, -C(=O)O-, -C(=O)O-CH_2-, or -$S(=O)_2$-;

a 6-14-membered aryl moiety, unsubstituted, mono- or polysubstituted; wherein said 6-14-membered aryl moiety is optionally connected through -C_1-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or wherein said 6-14-membered aryl moiety is optionally connected through -C(=O)-, - C(=O)O-, -C(=O)O-CH_2-, or -$S(=O)_2$-; or

a 5-14-membered heteroaryl moiety, unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl moiety is optionally connected through -C_1-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or wherein said 5-14-membered heteroaryl moiety is optionally connected through -C(=O)-, -C(=O)O-, -C(=O)O-CH_2-, or -$S(=O)_2$-;

R^5 means

a 6-14-membered aryl moiety, unsubstituted, mono- or polysubstituted; or

a 5-14-membered heteroaryl moiety, unsubstituted, mono- or polysubstituted;

R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, and R^{20} independently of one another mean -H, -F, -Cl, -Br, -I, -OH, or -C_1-C_6-alkyl, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

wherein "mono- or polysubstituted" means that one or more hydrogen atoms are replaced by a substituent independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -R^{21}, -C(=O)R^{21}, - C(=O)OR^{21}, -C(=O)$NR^{21}R^{22}$, -C(=O)NH-$(CH_2CH_2-O)_{1-30}$-CH_3, -O-$(CH_2CH_2-O)_{1-30}$-H, -O-$(CH_2CH_2-O)_{1-30}$-CH_3, =O, -OR^{21}, -OC(=O)R^{21}, -OC(=O)OR^{21}, -OC(=O)$NR^{21}R^{22}$, -NO_2, -$NR^{21}R^{22}$, -NR^{21}-$(CH_2)_{1-6}$-C(=O)R^{22}, -NR^{21}-$(CH_2)_{1-6}$-C(=O)OR^{22}, -NR^{23}-$(CH_2)_{1-6}$-C(=O)$NR^{21}R^{22}$, -NR^{21}C(=O)R^{22}, -NR^{21}C(=O)-OR^{22}, -NR^{23}C(=O)$NR^{21}R^{22}$, - $NR^{21}S(=O)_2R^{22}$, -SR^{21}, -S(=O)R^{21}, -$S(=O)_2R^{21}$, -$S(=O)_2OR^{21}$, and -$S(=O)_2NR^{21}R^{22}$;

wherein

R^{21}, R^{22} and R^{23} independently of one another mean

-H;

-C_1-C_6-alkyl, linear or branched, saturated or unsaturated, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, -NH_2, -CO_2H, -C(=O)O-C_1-C_6-alkyl, -C(=O)NH_2, -C(=O)NHC_1-C_6-alkyl, -C(=O)N(C_1-C_6-alkyl)$_2$, -O-C_1-C_6-alkyl and -$S(=O)_2$-C_1-C_6-alkyl;

a 3-12-membered cycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered cycloalkyl moiety is optionally connected through -C_1-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, -NH_2, -C_1-C_6-alkyl and -O-C_1-C_6-alkyl;

a 3-12-membered heterocycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered heterocycloalkyl moiety is optionally connected through -C_1-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, -NH_2, -C_1-C_6-alkyl and -O-C_1-C_6-alkyl;

a 6-14-membered aryl moiety, unsubstituted, mono- or polysubstituted; wherein said 6-14-membered aryl moiety is optionally connected through -C_1-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, -NH_2, -C_1-C_6-alkyl and -O-C_1-C_6-alkyl;

a 5-14-membered heteroaryl moiety, unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl moiety is optionally connected through -C_1-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, -NH_2, -C_1-C_6-alkyl and -O-C_1-C_6-alkyl;

or R^{21} and R^{22} within -C(=O)$NR^{21}R^{22}$, -OC(=O)$NR^{21}R^{22}$, -$NR^{21}R^{22}$, -NR^{23}-$(CH_2)_{1-6}$-C(=O)$NR^{21}R^{22}$, - NR^{23}C(=O) $NR^{21}R^{22}$, or -S(=O)$_2$$NR^{21}R^{22}$ together with the nitrogen atom to which they are attached form a ring and mean -$(CH_2)_{3-6}$-; -$(CH_2)_2$-O-$(CH_2)_2$-; -$(CH_2)_2$-S(=O)$_2$-$(CH_2)_2$- or -$(CH_2)_2$-NR^B-$(CH_2)_2$-, wherein R^B means -H, -C_1-C_6-alkyl, -C(=O)-C_1-C_6-alkyl, or -S(=O)$_2$-C_1-C_6-alkyl, wherein said -C_1-C_6-alkyl is linear or branched, saturated or unsaturated, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br -I, -OH, -CO_2H, -C(=O)O-C_1-C_6-alkyl and -C(=O)NH_2; and wherein said ring is unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, -NH_2, -C_1-C_6-alkyl and -O-C_1-C_6-alkyl;

or a physiologically acceptable salt thereof;

for use as medicament.

[0016] "(Hetero-)aryl" means "heteroaryl or aryl". Preferably, aryl includes but is not limited to phenyl and naphthyl. Preferably, heteroaryl includes but is not limited to -1,2-benzodioxole, -pyrazinyl, -pyridazinyl, - pyridinyl, -pyrimidinyl, -thienyl, -imidazolyl, -benzimidazolyl, -thiazolyl, -1,3,4-thiadiazolyl, -benzothiazolyl, - oxazolyl, -benzoxazolyl, -pyrazolyl, -quinolinyl, -isoquinolinyl, -quinazolinyl, -indolyl, -indolinyl, - benzo[c][1,2,5]oxadiazolyl, -imidazo[1,2-a]pyrazinyl, or -1H-pyrrolo[2,3-b]pyridinyl. Preferably, cycloalkyl includes but is not limited to -cyclopropyl, -cyclobutyl, -cyclopentyl and -cyclohexyl. Preferably, heterocycloalkyl includes but is not limited to -aziridinyl, -azetidinyl, -pyrrolidinyl, -piperidinyl, -piperazinyl, -morpholinyl, - sulfamorpholinyl, -oxiridinyl, -oxetanyl, -tetrahydropyranyl, and -pyranyl.

[0017] When a moiety is connected through an asymmetric group such as -C(=O)O- or -C(=O)O-CH_2-, said asymmetric group may be arranged in either direction. For example, when R^4 is connected to the core structure through -C(=O)O-, the arrangement may be either R^4-C(=O)O-core or core-C(=O)O-R^4.

[0018] In the following, "compound according to the invention" can be understood as "compound for use according to the invention".

[0019] In preferred embodiments of the compound according to the invention, R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, and R^{20} independently of one another mean -H, -F, -OH, or -C_1-C_6-alkyl; preferably -H.

[0020] In a preferred embodiment of the compound according to the invention, R^1 means -H; and R^2 means -C_1-C_6-alkyl, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted. Preferably, R^1 means -H and R^2 means -CH_3.

[0021] In another preferred embodiment of the compound according to the invention, R^1 means -CH_3; and R^2 means -C_1-C_6-alkyl, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted. Preferably, R^1 means -CH_3 and R^2 means -CH_3.

[0022] In still another preferred embodiment of the compound according to the invention, R^1 and R^2 together with the nitrogen atom to which they are attached form a ring and mean -$(CH_2)_{3-6}$-. Preferably, R^1 and R^2 together with the nitrogen atom to which they are attached form a ring and mean -$(CH_2)_3$-.

[0023] In yet another preferred embodiment,

- R^1 means -H or -CH_3; and
- R^2 means a 3-12-membered cycloalkyl moiety, saturated or unsaturated, unsubstituted; wherein said 3-12-membered cycloalkyl moiety is connected through -CH_2-, unsubstituted; preferably -CH_2-cycloalkyl, -CH_2-cyclobutyl or -CH_2-cyclopentyl; or R^2 means a 3-12-membered heterocycloalkyl moiety, saturated or unsaturated, unsubstituted; wherein said 3-12-membered heterocycloalkyl moiety is connected through -CH_2-, unsubstituted; preferably -CH_2-oxetanyl or -CH_2-tetrahydrofuranyl.

[0024] In a preferred embodiment of the compound according to the invention, R^3 means -C_1-C_6-alkyl, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted. Preferably, R^3 means -C_1-C_6-alkyl, linear or branched, saturated or unsaturated, unsubstituted or monosubstituted with -OCH_3.

[0025] In another preferred embodiment of the compound according to the invention, R^3 means a 6-14-membered aryl moiety, unsubstituted, mono- or polysubstituted, optionally connected through -C_1-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted. In a preferred embodiment, R^3 means -phenyl unsubstituted, mono- or polysubstituted. More preferably, R^3 means -phenyl unsubstituted, mono- or disubstituted with -F, -Cl, -CH_3, -CF_3, -OH, -OCH_3, -OCF_3 or -OCH_2OCH_3, preferably -F. In another preferred embodiment, R^3 means - benzyl unsubstituted, mono- or polysubstituted. More preferably, R^3 means -benzyl unsubstituted, mono- or disubstituted with -F, -Cl, -CH_3, -CF_3, -OH, -OCH_3, -OCF_3 or -OCH_2OCH_3, preferably -F.

[0026] In still another preferred embodiment of the compound according to the invention, R^3 means a 5-14-membered heteroaryl moiety, unsubstituted, mono- or polysubstituted. Preferably, R^3 means -thienyl or -pyridinyl, in each case unsubstituted, mono- or polysubstituted. More preferably, R^3 means -thienyl, -pyridinyl, -imidazolyl or benzimidazolyl, in each case unsubstituted or monosubstituted with -F, -Cl or -CH_3.

[0027] In a preferred embodiment of the compound according to the invention, R^4 means -H.

[0028] In another preferred embodiment of the compound according to the invention, R^4 means -C_1-C_6-alkyl, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted. Preferably, R^4 means -C_1-C_6-alkyl, linear or branched, saturated or unsaturated, unsubstituted or monosubstituted with a substituent selected from the group consisting of -F, -Cl, -Br, -I, -CN, -CF_3, -OH, -O-C_1-C_4-alkyl, -OCF_3, -O-$(CH_2CH_2$-$O)_{1\text{-}30}$-H, -O-$(CH_2CH_2$-$O)_{1\text{-}30}$-CH_3, -OC(=O)C_1-C_4-alkyl, -C(=O)C_1-C_4-alkyl, -C(=O)OH, -C(=O)OC_1-C_4-alkyl, -C(=O)NH_2, - C(=O)NHC_1-C_4-alkyl, -C(=O)NHC_1-C_4-alkylene-CN, -C(=O)NHC_1-C_4-alkylene-O-C_1-C_4-alkyl, -C(=O)N(C_1-C_4-alkyl)$_2$; -S(=O)C_1-C_4-alkyl, and -S(=O)$_2C_1$-C_4-alkyl; or with -C(=O)N$R^{21}R^{22}$ wherein R^{21} and R^{22} together with the nitrogen atom to which they are attached form a ring and mean -$(CH_2)_{3\text{-}6}$-, -$(CH_2)_2$-O-$(CH_2)_2$-, or -$(CH_2)_2$-NR^B-$(CH_2)_2$-, wherein R^B means -H or -C_1-C_6-alkyl; or with -C(=O)NH-3-12-membered cycloalkyl, saturated or unsaturated, unsubstituted or monosubstituted with -F, -Cl, -Br, -I, -CN, or -OH; or with -C(=O)NH-3-12-membered heterocycloalkyl, saturated or unsaturated, unsubstituted or monosubstituted with -F, -Cl, -Br, -I, -CN, or -OH. More preferably, R^4 means -C_1-C_6-alkyl, linear or branched, saturated or unsaturated, unsubstituted or monosubstituted with -O-C_1-C_4-alkyl or -C(=O)N(C_1-C_4-alkyl)$_2$.

[0029] In still another preferred embodiment of the compound according to the invention, R^4 means a 3-12-membered cycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein the 3-12-membered cycloalkyl moiety is connected through -C_1-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted. Preferably, R^4 means a 3-12-membered cycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered cycloalkyl moiety is connected through -CH_2- or -CH_2CH_2-. More preferably, R^4 means a 3-12-membered cycloalkyl moiety, saturated or unsaturated, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, -C_1-C_4-alkyl, -O-C_1-C_4-alkyl, -C(=O)OH, - C(=O)OC_1-C_4-alkyl, -C(=O)NH_2, -C(=O)NHC_1-C_4-alkyl, -C(=O)N(C_1-C_4-alkyl)$_2$, -S(=O)C_1-C_4-alkyl and - S(=O)$_2C_1$-C_4-alkyl; wherein said 3-12-membered cycloalkyl moiety is connected through -CH_2- or -CH_2CH_2-.

[0030] In a preferred embodiment of the compound according to the invention, R^4 means a 3-12-membered heterocycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered heterocycloalkyl moiety is connected through -C_1-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted. Preferably, R^4 means a 3-12-membered heterocycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered heterocycloalkyl moiety is connected through -CH_2- or -CH_2CH_2-. More preferably, R^4 means -oxetanyl, - tetrahydrofuranyl or -tetrahydropyranyl, in each case unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, -C_1-C_4-alkyl, -O-C_1-C_4-alkyl, -C(=O)OH, -C(=O)OC_1-C_4-alkyl, -C(=O)NH_2, -C(=O)NHC_1-C_4-alkyl, -C(=O)N(C_1-C_4-alkyl)$_2$, -S(=O)C_1-C_4-alkyl and -S(=O)$_2C_1$-C_4-alkyl; wherein said -oxetanyl, -tetrahydrofuranyl or - tetrahydropyranyl is connected through -CH_2- or -CH_2CH_2-.

[0031] In yet another preferred embodiment of the compound according to the invention, R^4 means a 6-14-membered aryl moiety, unsubstituted, mono- or polysubstituted; wherein said 6-14-membered aryl moiety is connected through -C_1-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted. Preferably, R^4 means -phenyl, unsubstituted, mono- or polysubstituted; wherein said -phenyl is connected through -CH_2- or -CH_2CH_2-.

More preferably, R^4 means -phenyl, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, -C_1-C_4-alkyl, -O-C_1-C_4-alkyl, -C(=O)OH, -C(=O)OC_1-C_4-alkyl, -C(=O)NH_2, -C(=O)NHC_1-C_4-alkyl, - C(=O)$N(C_1$-C_4-alkyl$)_2$, -S(=O)C_1-C_4-alkyl and -S(=O)$_2C_1$-C_4-alkyl; wherein said -phenyl is connected through - CH_2- or -CH_2CH_2-.

[0032] In a further preferred embodiment of the compound according to the invention, R^4 means a 5-14-membered heteroaryl moiety, unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl moiety is connected through -C_1-C_6-alkylene-, linear or branched, saturated or unsaturated, unsubstituted, mono- or polysubstituted. Preferably, R^4 means a 5-14-membered heteroaryl moiety, unsubstituted, mono- or polysubstituted; wherein said -phenyl is connected through -CH_2- or -CH_2CH_2-. More preferably, R^4 means - pyridinyl, -pyrimidinyl, -pyrazinyl, or -pyrazolinyl, in each case unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, -C_1-C_4-alkyl, -O-C_1-C_4-alkyl, -C(=O)OH, -C(=O)OC_1-C_4-alkyl, -C(=O)NH_2, -C(=O)NHC_1-C_4-alkyl, - C(=O)$N(C_1$-C_4-alkyl$)_2$, -S(=O)C_1-C_4-alkyl and -S(=O)$_2C_1$-C_4-alkyl; wherein said -pyridinyl, -pyrimidinyl, - pyrazinyl, or -pyrazolinyl is connected through -CH_2- or -CH_2CH_2-.

[0033] In a preferred embodiment of the compound according to the invention, R^5 means -phenyl, unsubstituted, mono- or polysubstituted. Preferably, R^5 means -phenyl unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F; -Cl; -Br; -I; -CN; -OH; -C_1-C_4-alkyl; -CF_3; -3-12-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; preferably -cyclopropyl, saturated, unsubstituted; -3-12-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; preferably -pyrrolidinyl, -piperidinyl, -morpholinyl, -piperazinyl, - thiomorpholinyl, or -thiomorpholinyl dioxide, in each case saturated, unsubstituted or monosubstituted with -C_1-C_4-alkyl; -6-14-membered aryl, unsubstituted, mono- or polysubstituted; preferably -phenyl, unsubstituted; -O-C_1-C_4-alkyl; -S-C_1-C_4-alkyl; -C(=O)OH; -C(=O)O-C_1-C_4-alkyl; -C(=O)NH_2; -C(=O)NHC_1-C_4-alkyl; -C(=O)$N(C_1$-C_4-alkyl$)_2$; -C(=O)$N(C_1$-C_4-alkyl$)(C_1$-C_4-alkyl-OH); -C(=O)NH-$(CH_2)_{1-3}$-3-12-membered cycloalkyl, saturated or unsaturated, unsubstituted or monosubstituted with -OH; preferably -C(=O)NH-$(CH_2)_{1-3}$-cyclobutyl, saturated or unsaturated, unsubstituted or monosubstituted with -OH; -C(=O)-3-12-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; preferably -C(=O)-morpholinyl, saturated, unsubstituted; - S(=O)C_1-C_4-alkyl; -S(=O)$_2C_1$-C_4-alkyl; and -S(=O)$_2N(C_1$-C_4-alkyl$)_2$.

[0034] In another preferred embodiment of the compound according to the invention, R^5 means -1,2-benzodioxole, -pyrazinyl, -pyridazinyl, -pyridinyl, -pyrimidinyl, -thienyl, -imidazolyl, -benzimidazolyl, -thiazolyl, -1,3,4-thiadiazolyl, -benzothiazolyl, -oxazolyl, -benzoxazolyl, -pyrazolyl, -quinolinyl, -isoquinolinyl, - quinazolinyl, -indolyl, -indolinyl, -benzo[c][1,2,5]oxadiazolyl, -imidazo[1,2-a]pyrazinyl, or -1H-pyrrolo[2,3-b]pyridinyl, in each case unsubstituted, mono- or polysubstituted; preferably -pyrazinyl, -pyridazinyl, -pyridinyl, -pyrimidinyl, or -thienyl, in each case unsubstituted, mono- or polysubstituted. Preferably, R^5 means -pyrazinyl, - pyridazinyl, -pyridinyl, -pyrimidinyl, or -thienyl, in each case unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F; -Cl; -Br; -I; -CN; -OH; - C_1-C_4-alkyl; -CF_3; -3-12-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; preferably -cyclopropyl, saturated, unsubstituted; -3-12-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; preferably -pyrrolidinyl, -piperidinyl, -morpholinyl, -piperazinyl, - thiomorpholinyl, or -thiomorpholinyl dioxide, in each case saturated, unsubstituted or monosubstituted with -C_1-C_4-alkyl; -6-14-membered aryl, unsubstituted, mono- or polysubstituted; preferably -phenyl, unsubstituted; -O-C_1-C_4-alkyl; -S-C_1-C_4-alkyl; -C(=O)OH; -C(=O)O-C_1-C_4-alkyl; -C(=O)NH_2; -C(=O)NHC_1-C_4-alkyl; -C(=O)$N(C_1$-C_4-alkyl$)_2$; -C(=O)$N(C_1$-C_4-alkyl$)(C_1$-C_4-alkyl-OH); -C(=O)NH-$(CH_2)_{1-3}$-3-12-membered cycloalkyl, saturated or unsaturated, unsubstituted or monosubstituted with -OH; preferably -C(=O)NH-$(CH_2)_{1-3}$-cyclobutyl, saturated or unsaturated, unsubstituted or monosubstituted with -OH; -C(=O)-3-12-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; preferably -C(=O)-morpholinyl, saturated, unsubstituted; - S(=O)C_1-C_4-alkyl; -S(=O)$_2C_1$-C_4-alkyl; and -S(=O)$_2N(C_1$-C_4-alkyl$)_2$.

[0035] In still another preferred embodiment of the compound according to the invention, R^5 means a bicyclic 9-10-membered heteroaryl moiety, unsubstituted, mono- or polysubstituted. Preferably, R^5 means imidazo[1,2-a]pyrazine, unsubstituted or monosubstituted with -C_1-C_4-alkyl.

[0036] Preferably, R^5 means -phenyl, -1,2-benzodioxole, -pyrazinyl, -pyridazinyl, -pyridinyl, -pyrimidinyl, - thienyl, -imidazolyl, -benzimidazolyl, -thiazolyl, -1,3,4-thiadiazolyl, -benzothiazolyl, -oxazolyl, -benzoxazolyl, - pyrazolyl, -quinolinyl, -isoquinolinyl, -quinazolinyl, -indolyl, -indolinyl, -benzo[c][1,2,5]oxadiazolyl, - imidazo[1,2-a]pyrazinyl, or -1H-pyrrolo[2,3-b]pyridinyl, in each case unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of

- F; -Cl; -Br; -1;
- CN; -C_1-C_4-alkyl; -CF_3; -C_1-C_4-alkyl-C(=O)NH_2; -C_1-C_4-alkyl-S(=O)$_2$-C_1-C_4-alkyl;
- C(=O)-C_1-C_4-alkyl; -C(=O)OH; -C(=O)O-C_1-C_4-alkyl; -C(=O)NH_2; -C(=O)NHC_1-C_4-alkyl; -C(=O)$N(C_1$-C_4-alkyl$)_2$;

-C(=O)NH(C_1-C_4-alkyl-OH); -C(=O)N(C_1-C_4-alkyl)(C_1-C_4-alkyl-OH); -C(=O)NH-$(CH_2CH_2O)_{1-30}$-CH_3;

- NH_2; -NHC_1-C_4-alkyl; -N(C_1-C_4-alkyl)$_2$; -NHC_1-C_4-alkyl-OH; -N$CH_3$$C_1$-$C_4$-alkyl-OH; -NH-$C_1$-$C_4$-alkyl-C(=O)$NH_2$; -N$CH_3$-$C_1$-$C_4$-alkyl-C(=O)$NH_2$; -NHC(=O)-$C_1$-$C_4$-alkyl; -N$CH_3$C(=O)-$C_1$-$C_4$-alkyl;

- OH; -O-C_1-C_4-alkyl; -OCF_3; -O-C_1-C_4-alkyl-CO_2H; -O-C_1-C_4-alkyl-C(=O)O-C_1-C_4-alkyl; -O-C_1-C_4-alkyl-$CONH_2$;

- S-C_1-C_4-alkyl; -S(=O)C_1-C_4-alkyl; -S(=O)$_2$$C_1$-$C_4$-alkyl; and -S(=O)$_2$N($C_1$-$C_4$-alkyl)$_2$;

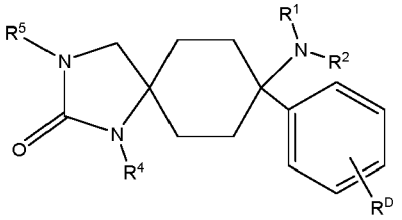
- 3-12-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered cycloalkyl is optionally connected through -CH_2-, -NH-, -NCH_3-, -NH-$(CH_2)_{1-3}$-, -$NCH_3(CH_2)_{1-3}$-, -(C=O)-, -NHC(=O)-, -NCH_3C(=O)-, -C(=O)NH-$(CH_2)_{1-3}$-, -C(=O)NCH_3-$(CH_2)_{1-3}$-;

- 3-12-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered heterocycloalkyl is optionally connected through -CH_2-, -NH-, -NCH_3-, -NH-$(CH_2)_{1-3}$-, - NCH_3 $(CH_2)_{1-3}$-, -(C=O)-, -NHC(=O)-, -NCH_3C(=O)-, -C(=O)NH-$(CH_2)_{1-3}$-, -C(=O)NCH_3-$(CH_2)_{1-3}$-;

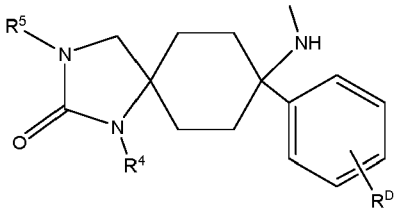
- 6-14-membered aryl, unsubstituted, mono- or polysubstituted; wherein said 6-14-membered aryl is optionally connected through -CH_2-, -NH-, -NCH_3-, -NH-$(CH_2)_{1-3}$-, -$NCH_3(CH_2)_{1-3}$-, -(C=O)-, -NHC(=O)-, -NCH_3C(=O)-, -C(=O)NH-$(CH_2)_{1-3}$-, -C(=O)NCH_3-$(CH_2)_{1-3}$-; or

- 5-14-membered heteroaryl, unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl is optionally connected through -CH_2-, -NH-, -NCH_3-, -NH-$(CH_2)_{1-3}$-, -$NCH_3(CH_2)_{1-3}$-, -(C=O)-, -NHC(=O)-, -NCH_3C(=O)-, -C(=O)NH-$(CH_2)_{1-3}$-, -C(=O)NCH_3-$(CH_2)_{1-3}$-.

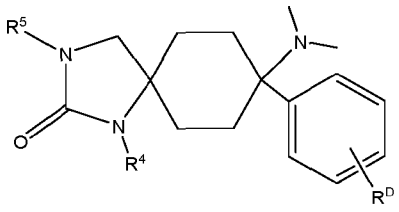
[0037] In preferred embodiments, the compound according to the invention has a structure according to any of general formulas (II-A) to (VIII-C):



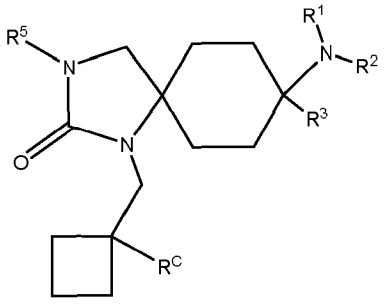
(II-A)



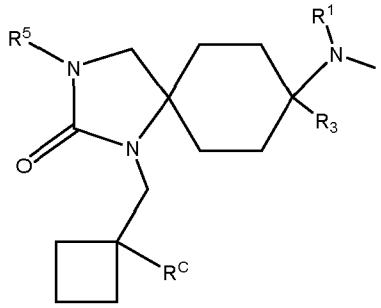
(II-B)



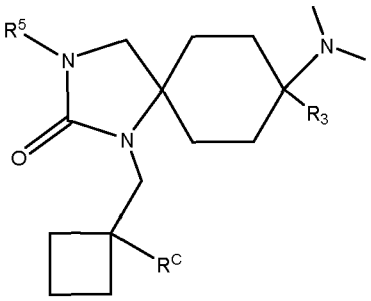
(II-C)



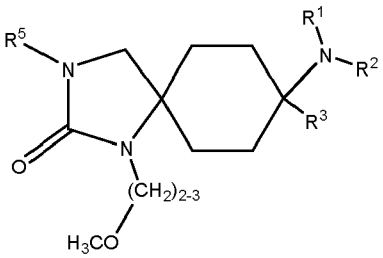
(III-A)



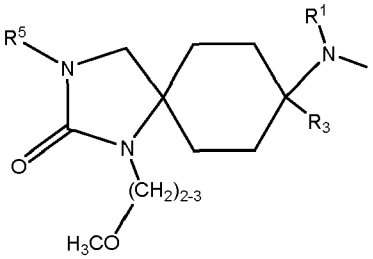
(III-B)



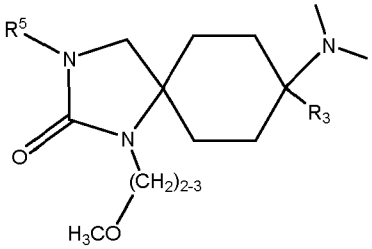
(III-C)



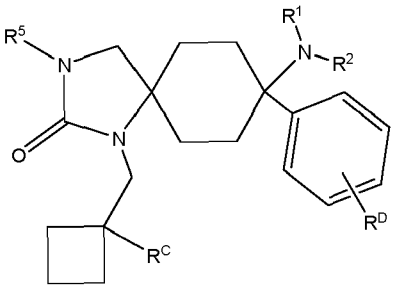
(IV-A)



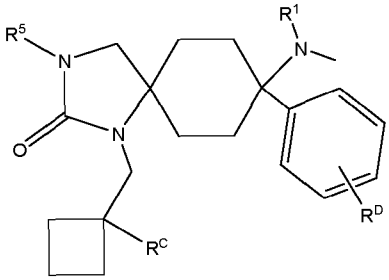
(IV-B)



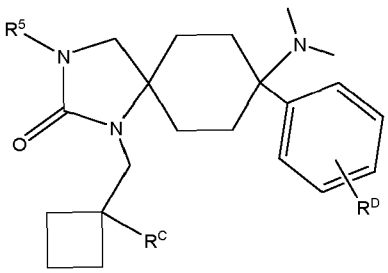
(IV-C)



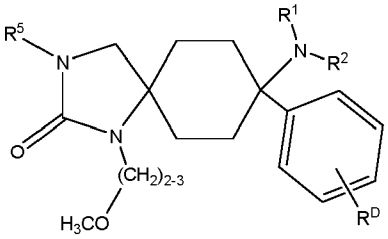
(V-A)



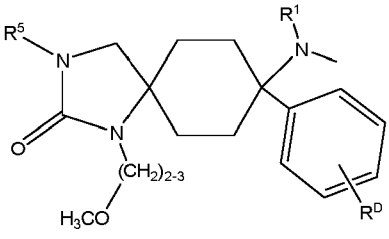
(V-B)



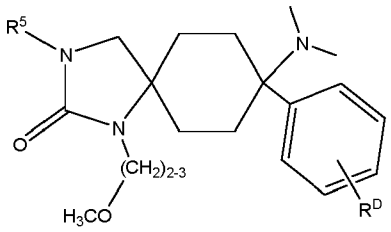
(V-C)



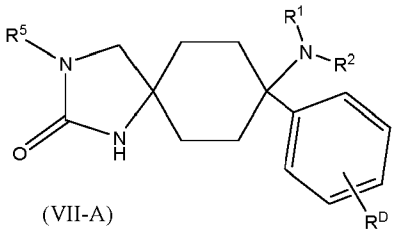
(VI-A)



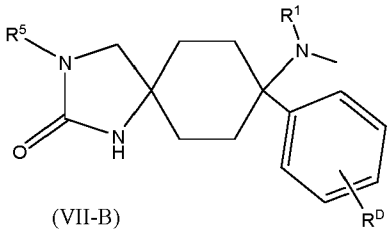
(VI-B)



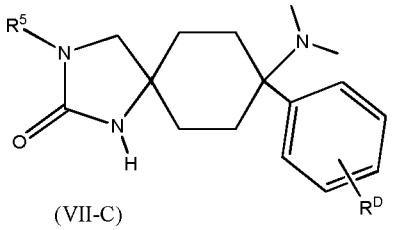
(VI-C)



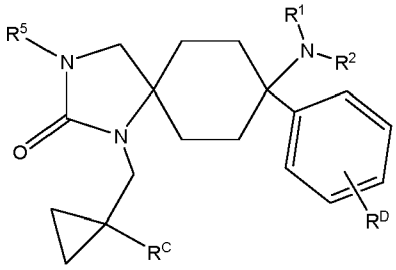
(VII-A)



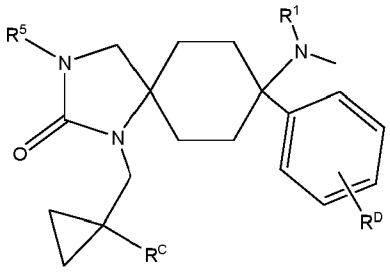
(VII-B)



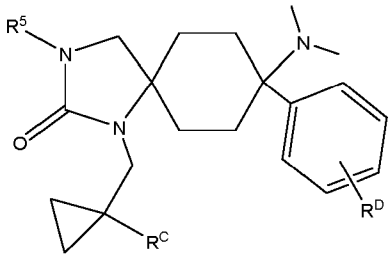
(VII-C)



(VIII-A)



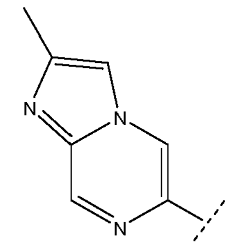
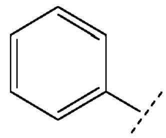
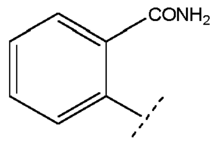
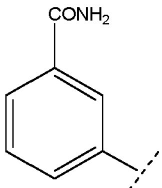
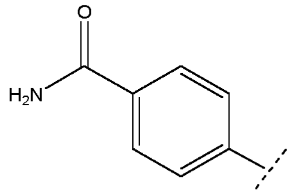
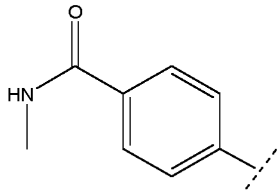
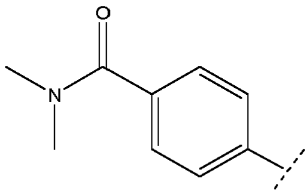
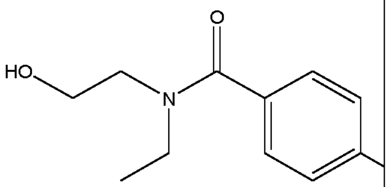
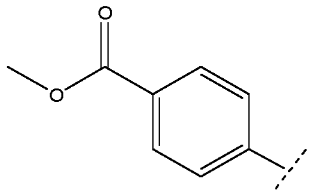
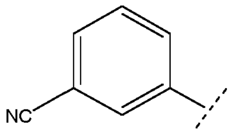
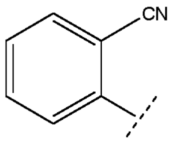
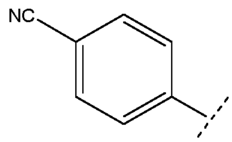
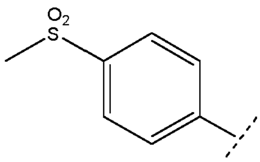
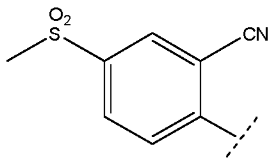
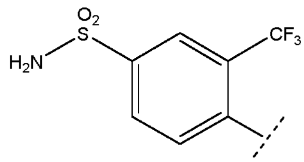
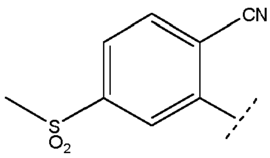
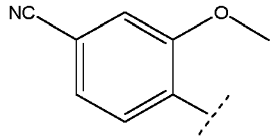
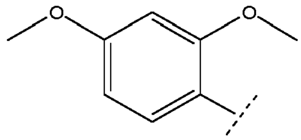
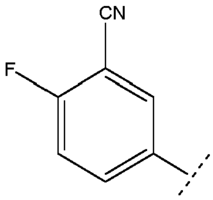
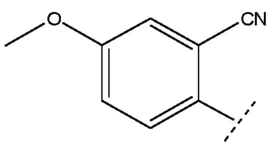
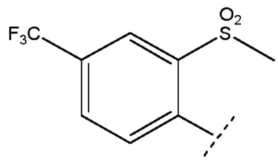
(VIII-B)

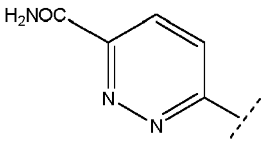
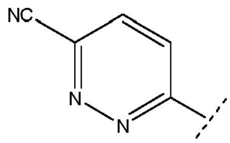
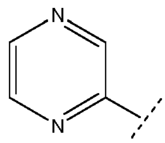
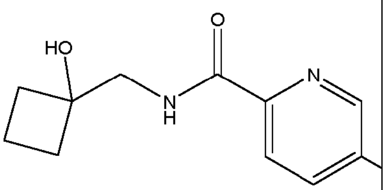
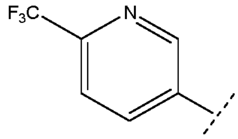
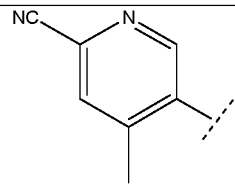
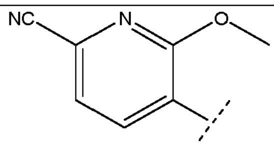
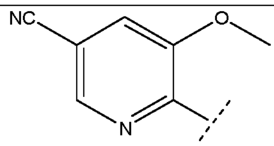
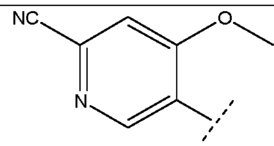
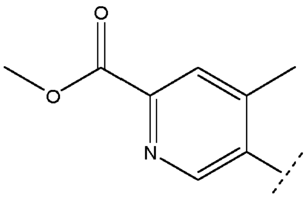
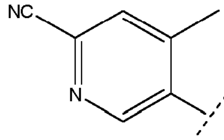
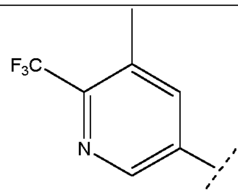
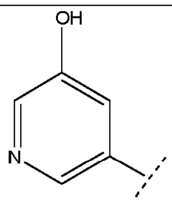
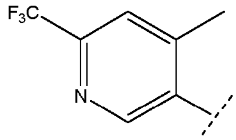
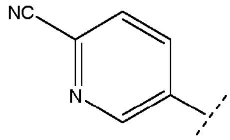
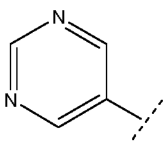
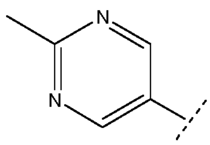
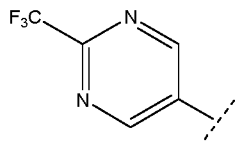
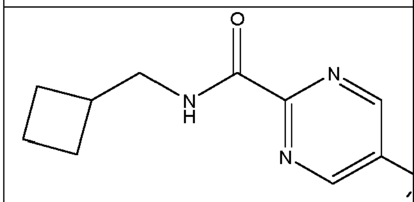
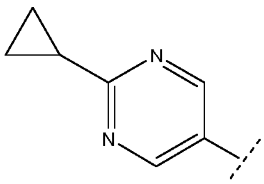
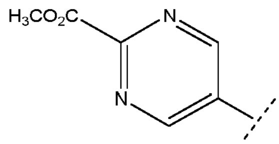
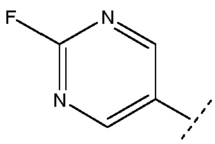
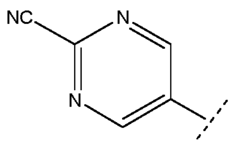
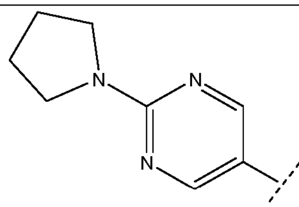


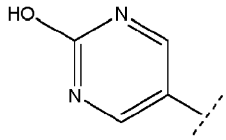
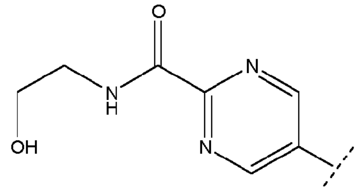
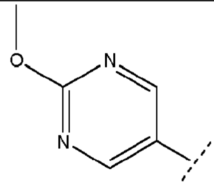
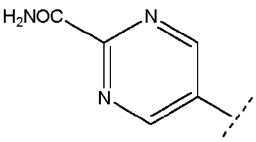
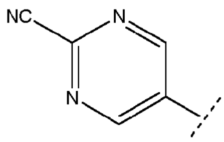
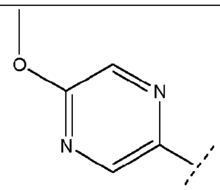
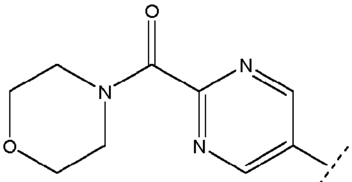
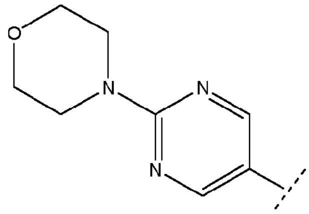
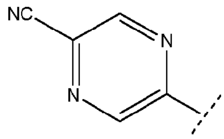
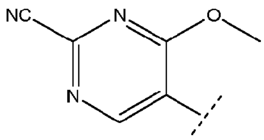
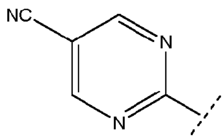
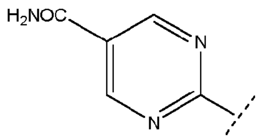
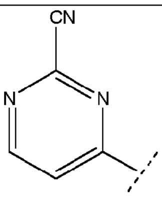
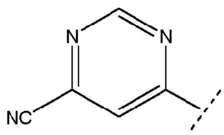
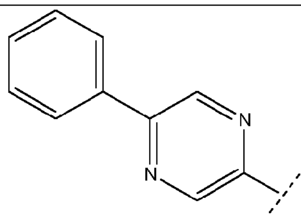
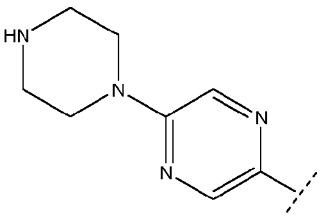
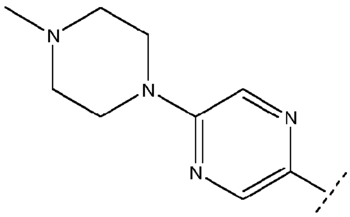
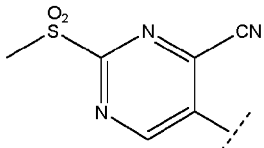
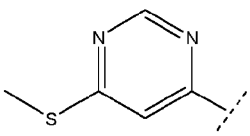
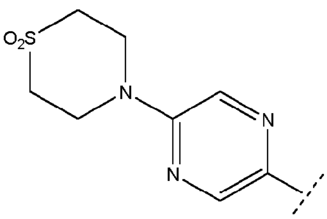
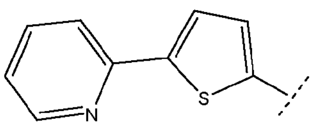
(VIII-C)

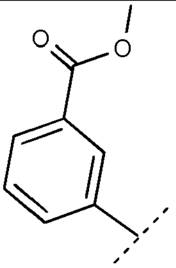
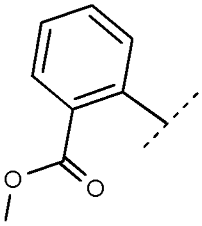
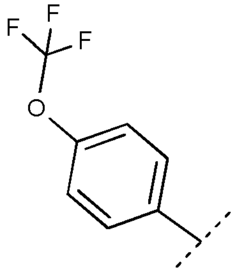
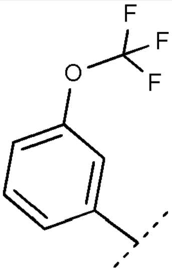
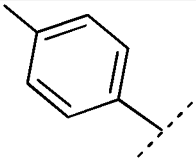
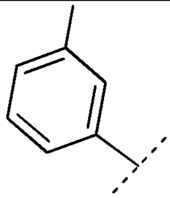
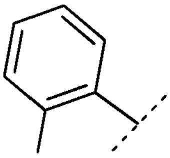
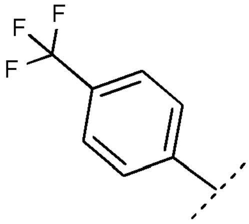
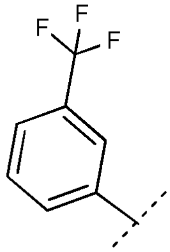
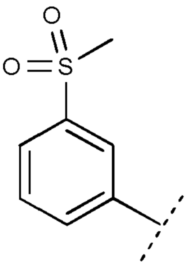
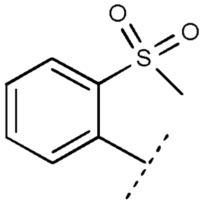
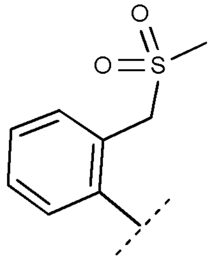
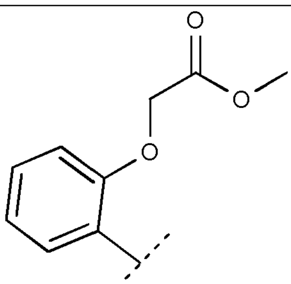
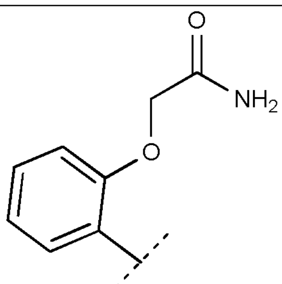
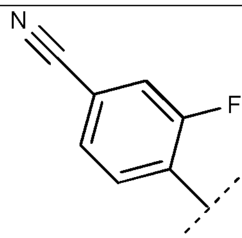
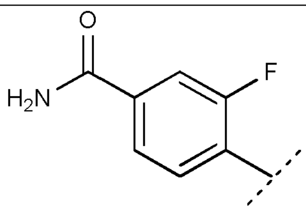
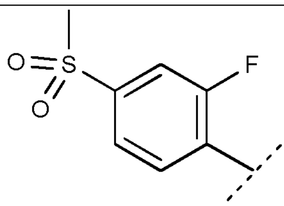
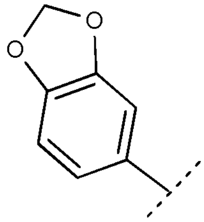
wherein in each case
R^1, R^2, R^3, R^4, and R^5 are defined as above,
R^C means -H, -OH, -F, -CN or -C_1-C_4-alkyl; preferably -H or -OH;
R^D means -H or -F;
or a physiologically acceptable salt thereof.

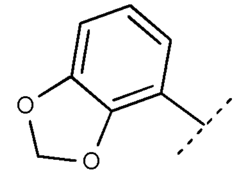
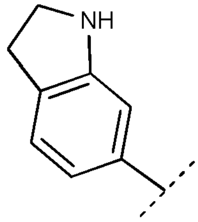
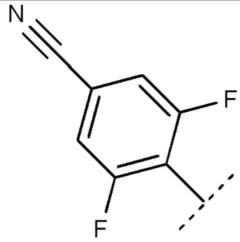
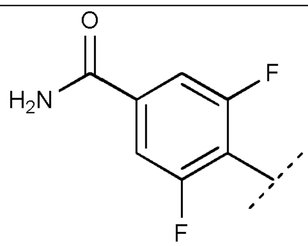
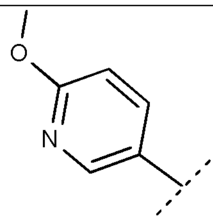
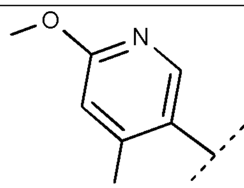
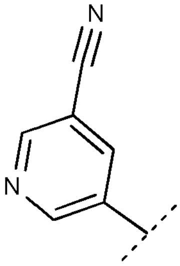
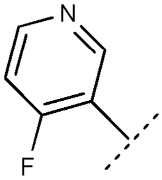
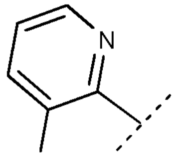
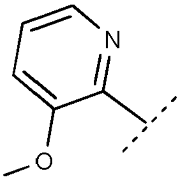
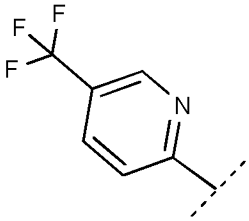
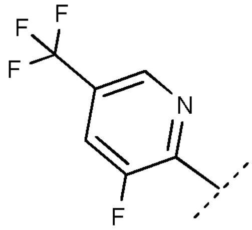
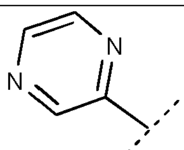
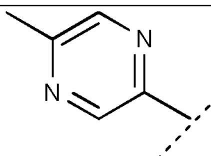
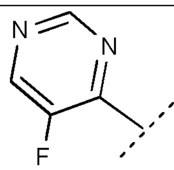
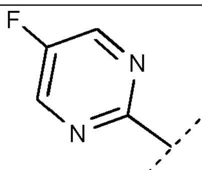
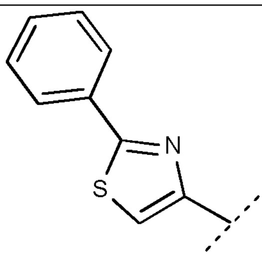
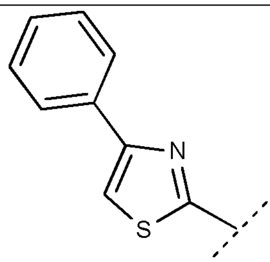
[0038] Preferably, in the compounds according to general formula (I) or any of the compounds according to general formulas (II-A) to (VIII-C), R^5 is selected from the group consisting of:

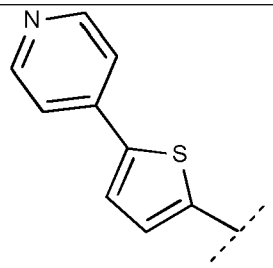
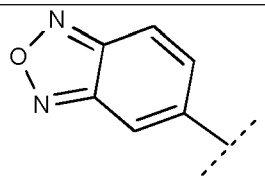
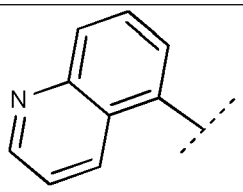
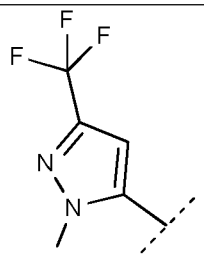
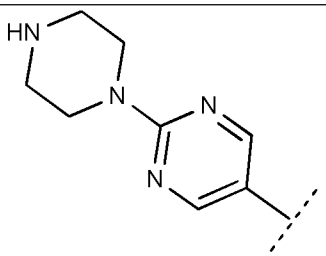
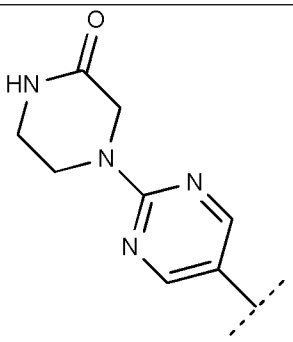
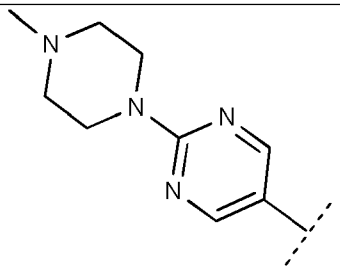
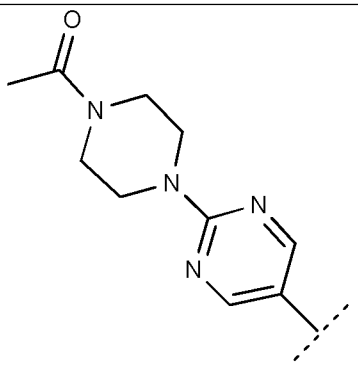
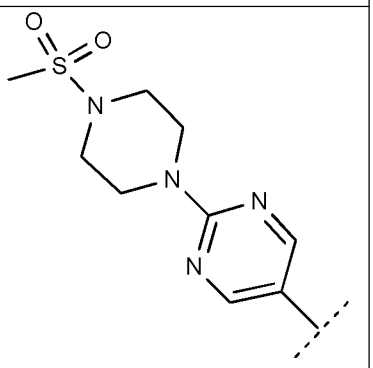
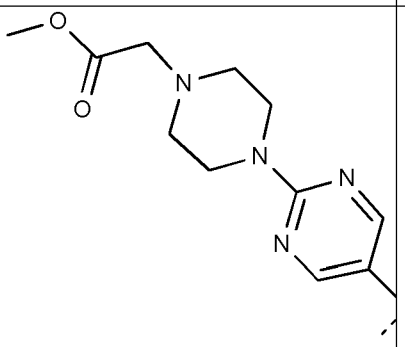
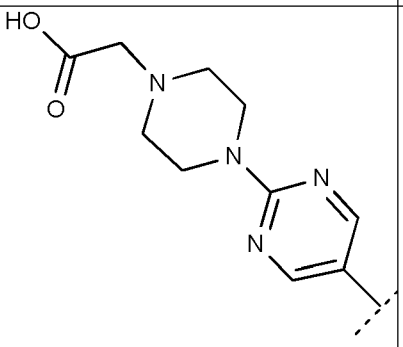
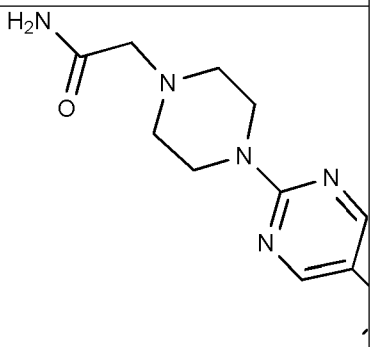
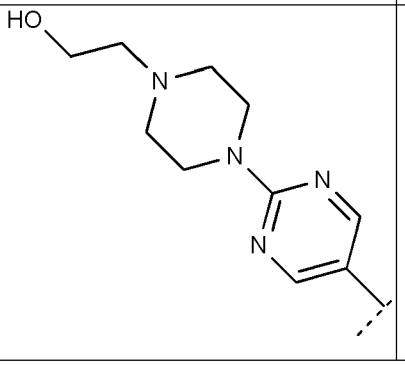
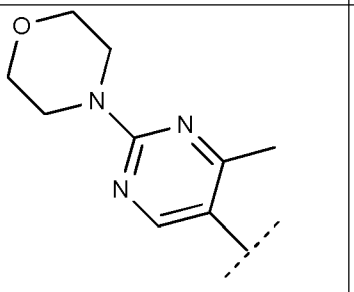
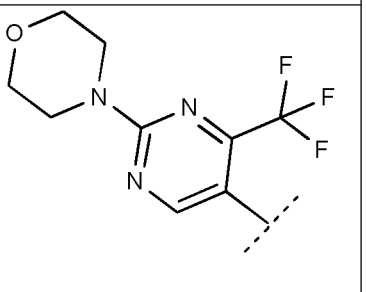
		
		
		
		
		
		
		

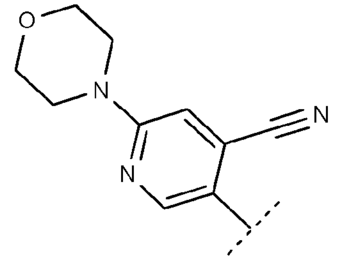
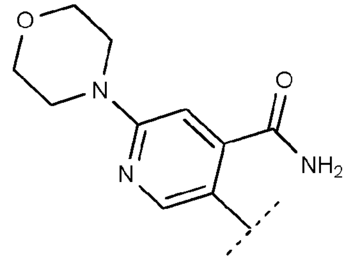
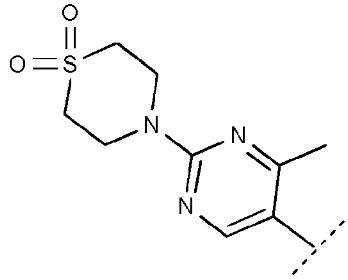
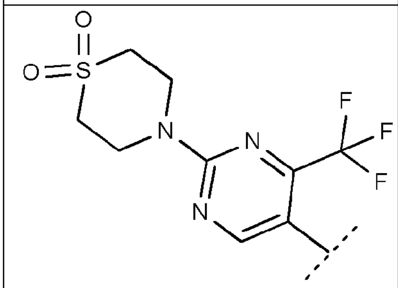
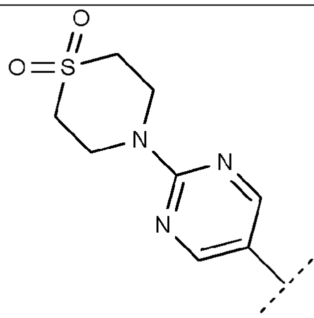
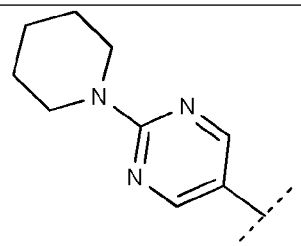
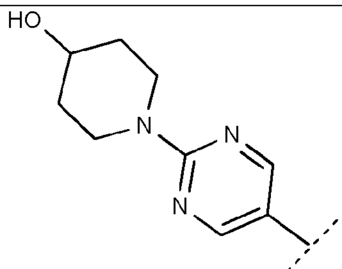
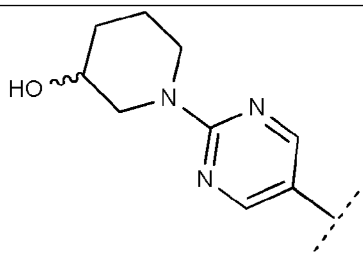
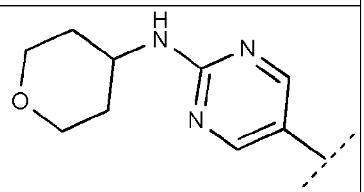
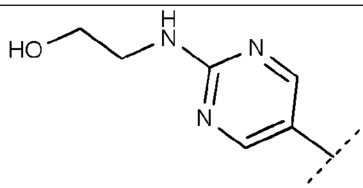
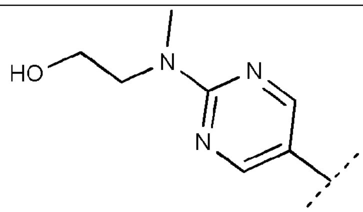
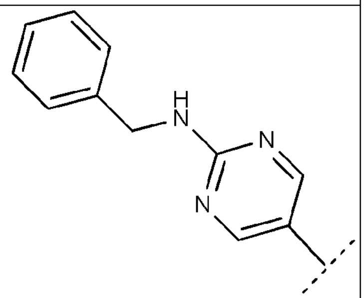
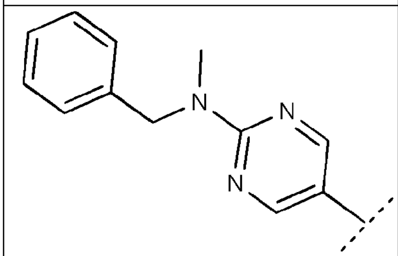
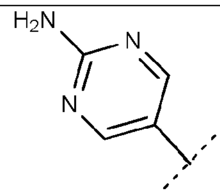
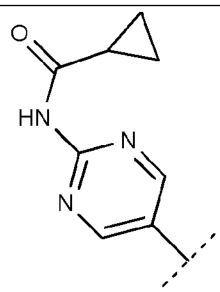
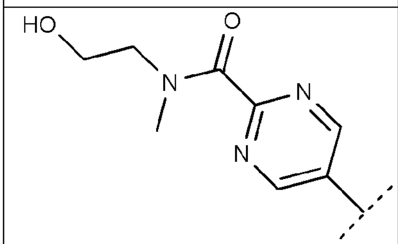
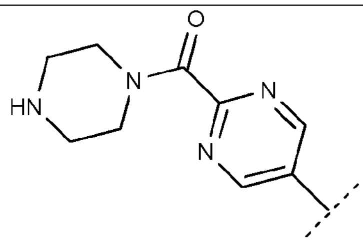
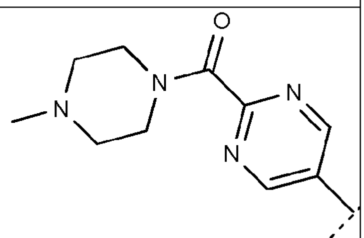
		
		
		
		
		
		
		
		

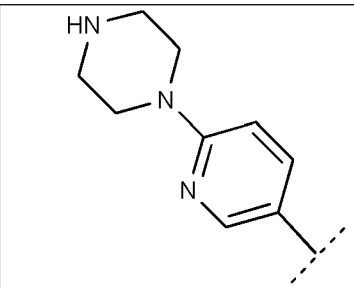
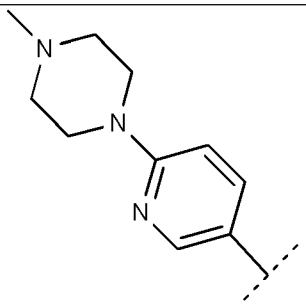
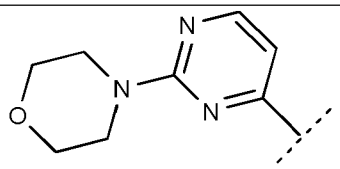
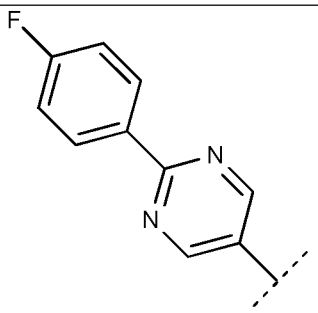
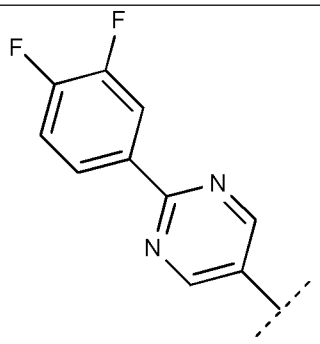
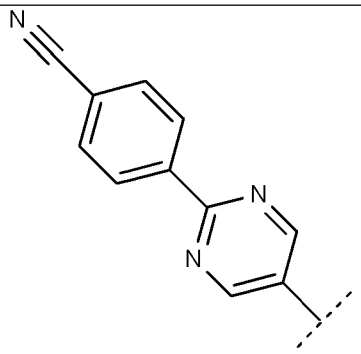
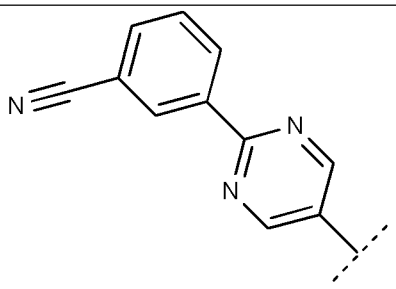
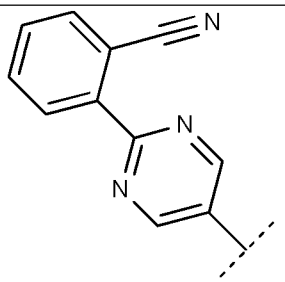
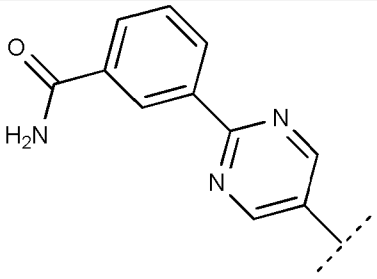
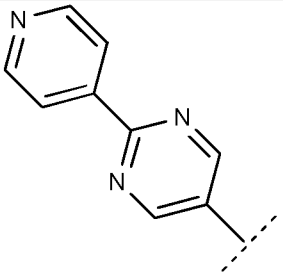
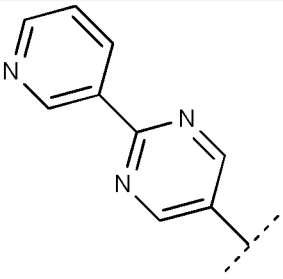
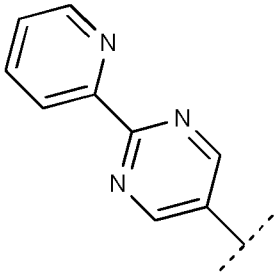
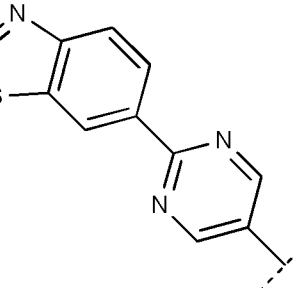
		
		
		
		
		
		
		

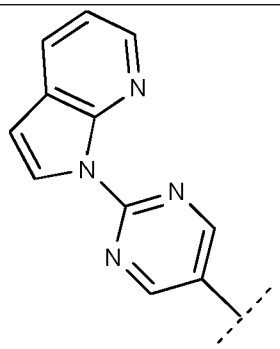
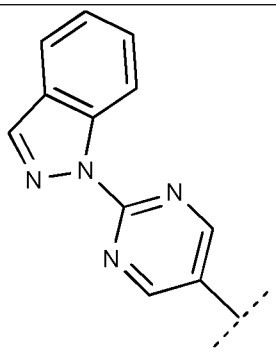
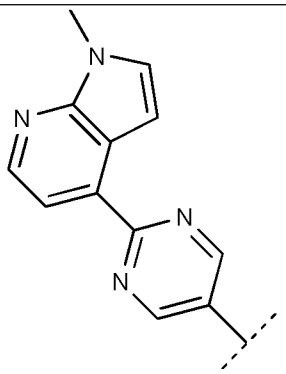
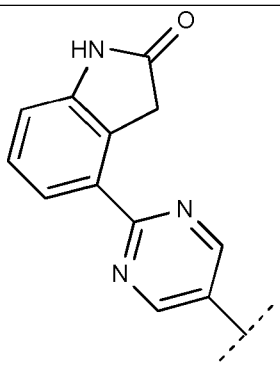
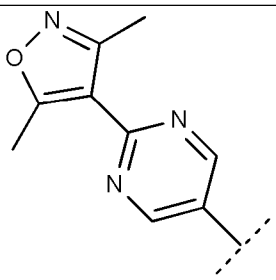
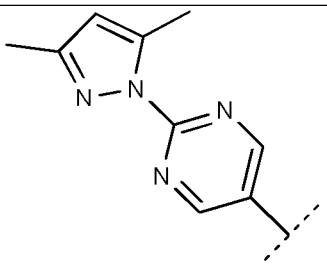
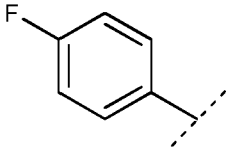
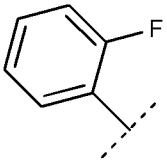
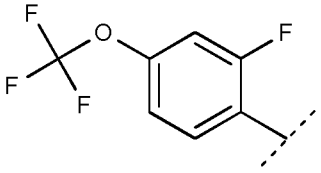
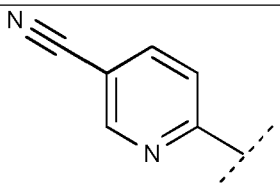
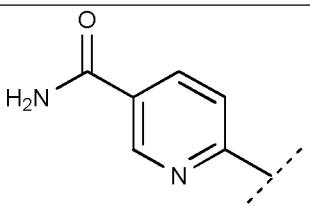
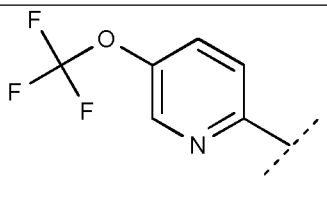
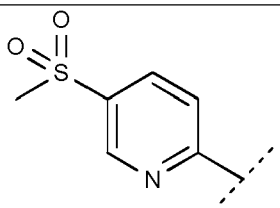
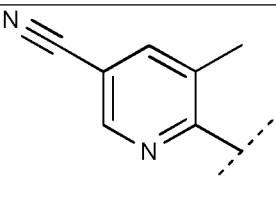
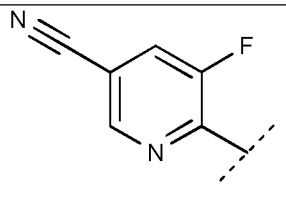
		
		
		
		
		
		

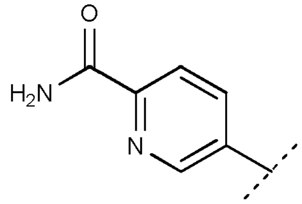
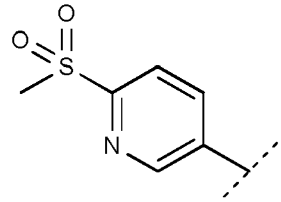
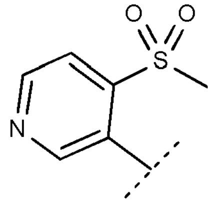
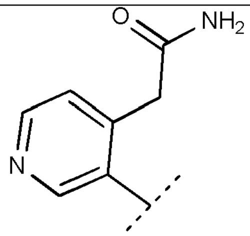
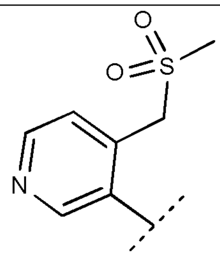
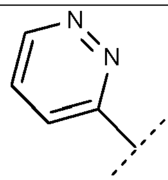
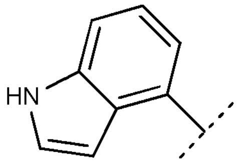
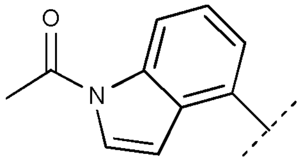
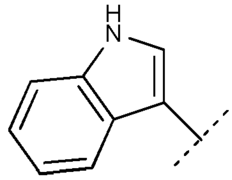
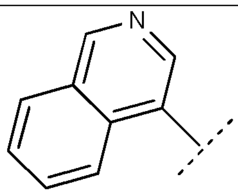
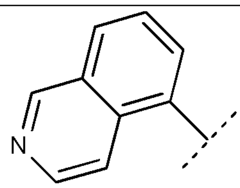
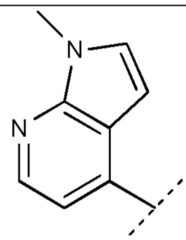
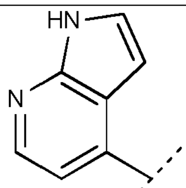
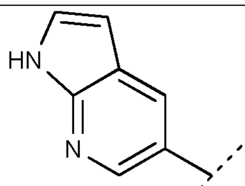
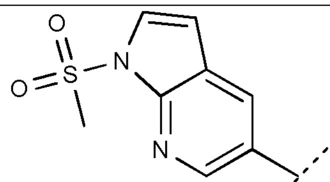
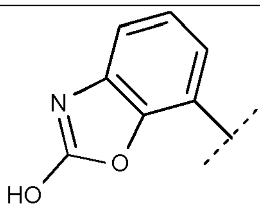
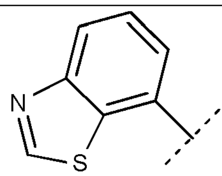
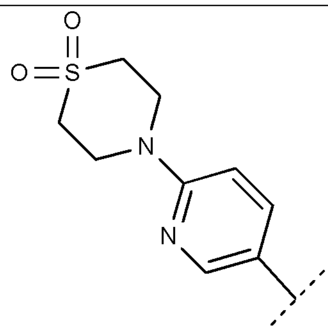
 O O	 NH	 N F F
 O H_2N F F	 O N	 O N
 N N	 N F	 N
 N O	 F F F N	 F F F N F
 N N	 N N	 N N F
 F N N	 N S	 N S

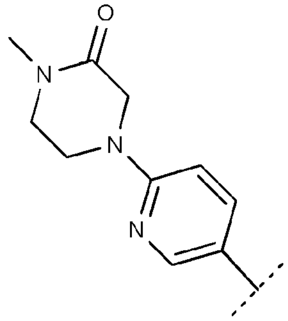
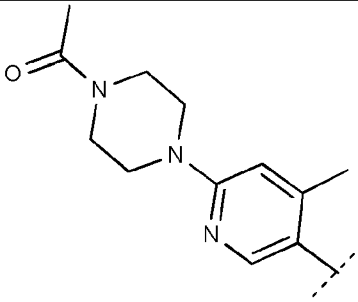
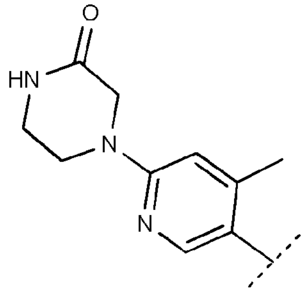
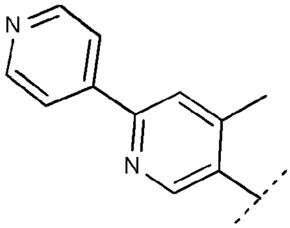
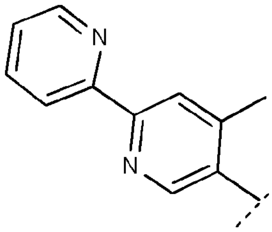
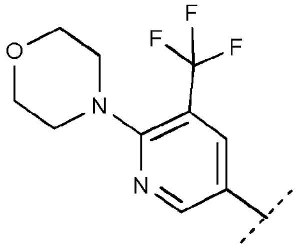
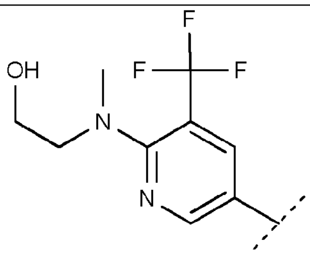
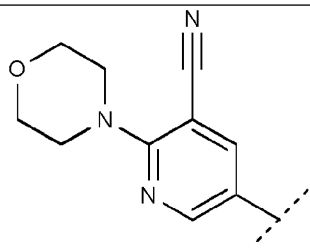
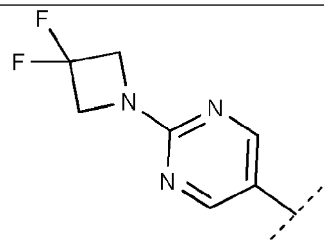
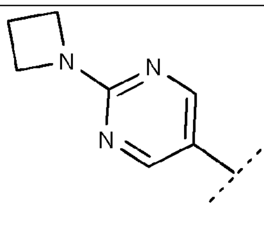
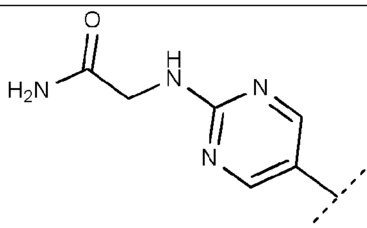
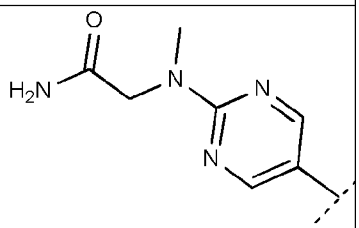
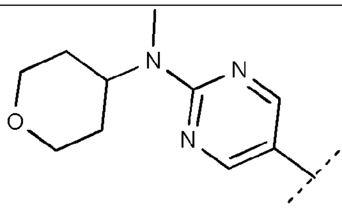
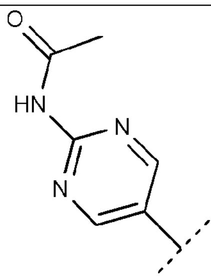
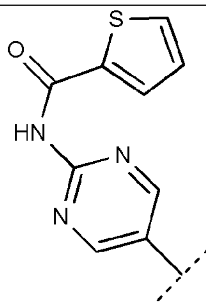
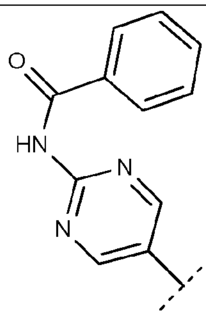
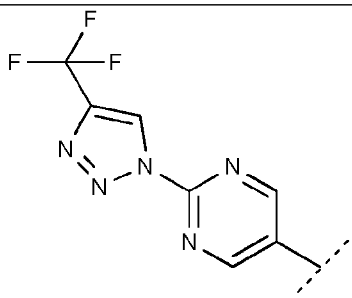
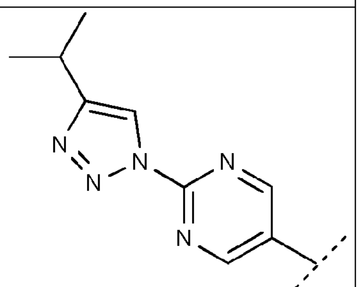
		
		
		
		
		

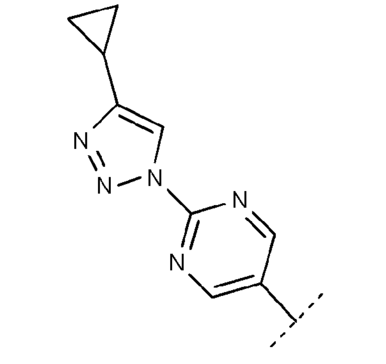
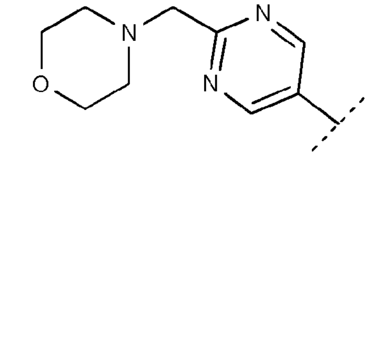
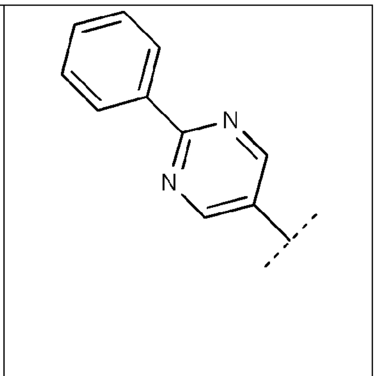
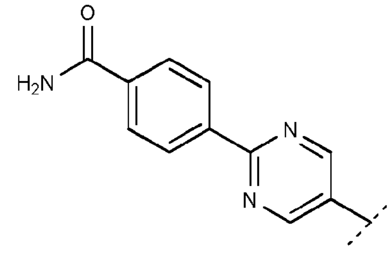
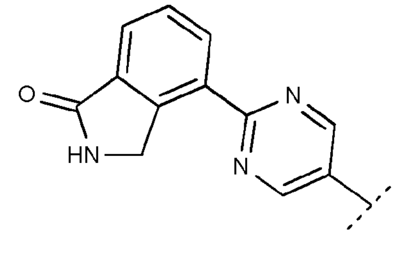
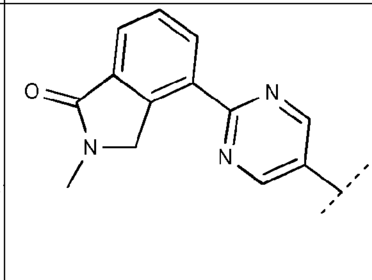
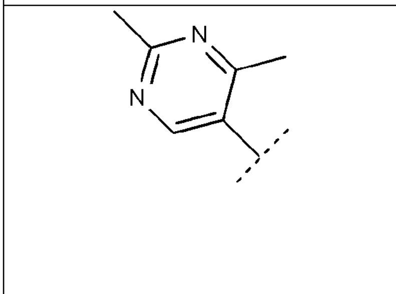
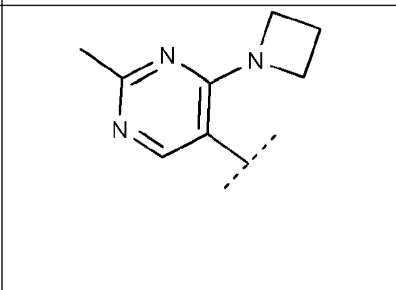
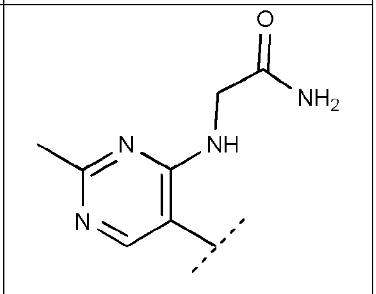
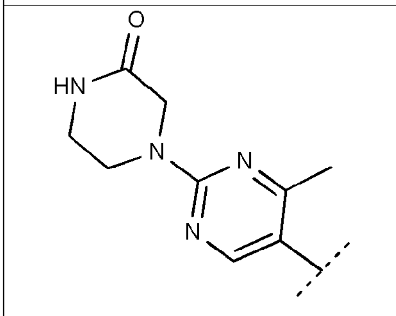
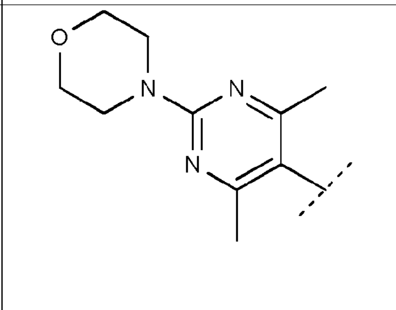
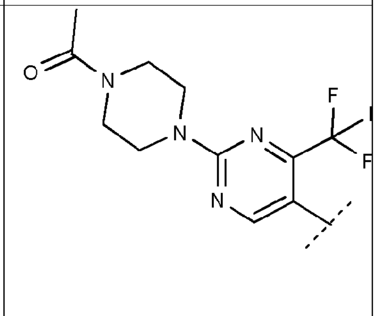
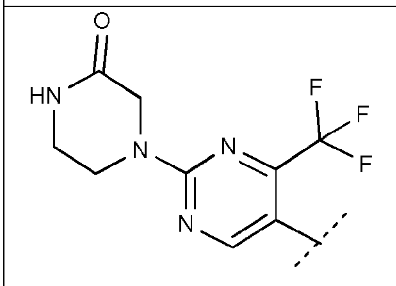
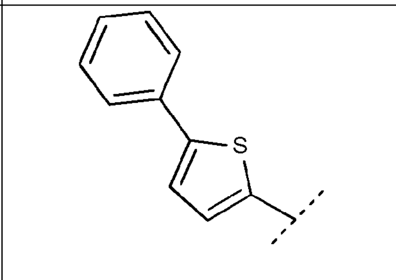
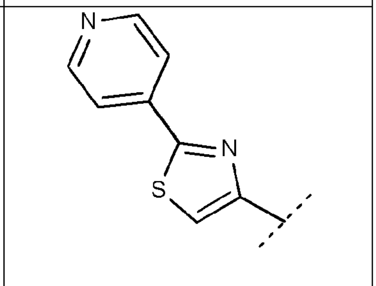
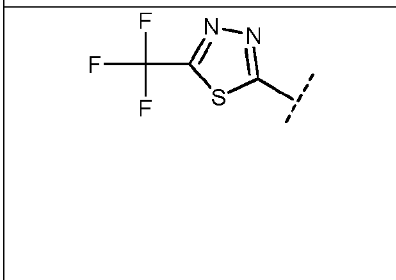
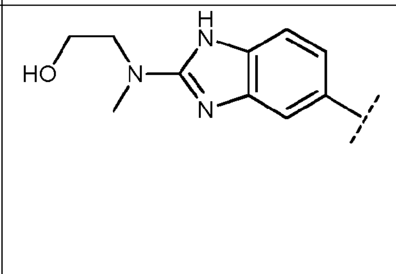
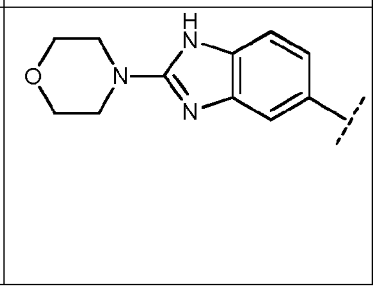
		
		
		
		
		
		

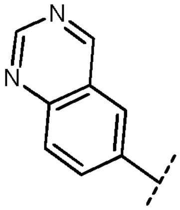
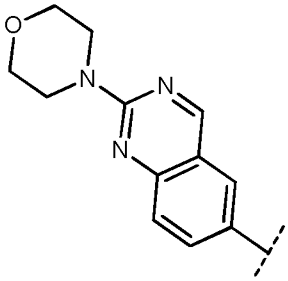
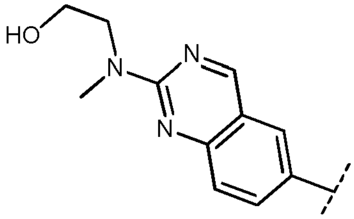
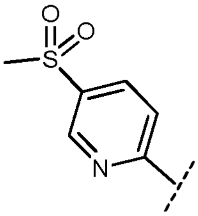
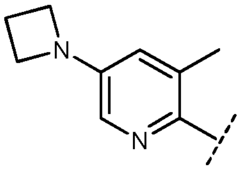
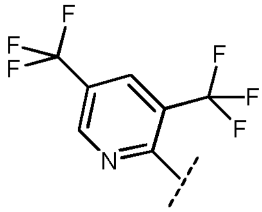
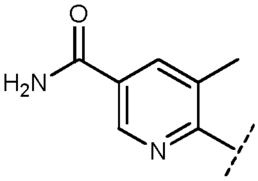
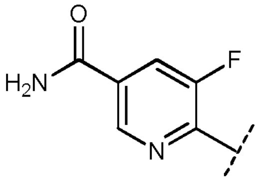
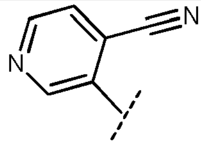
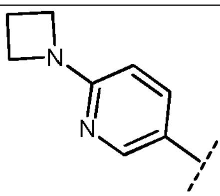
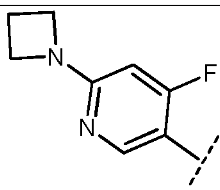
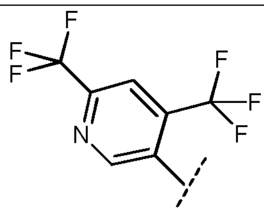
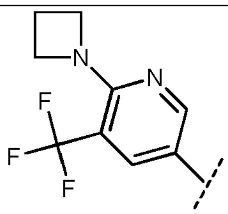
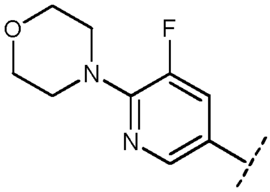
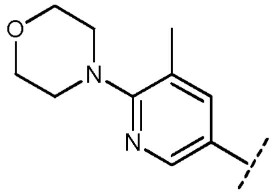
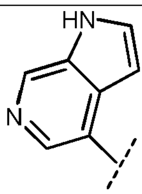
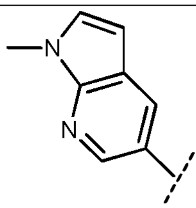
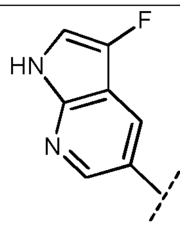
		
		
		
		
		

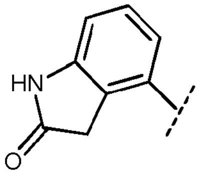
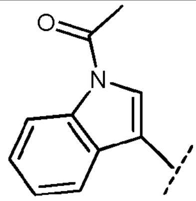
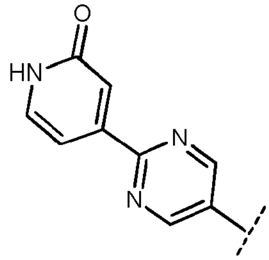
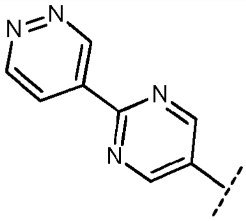
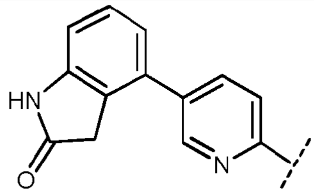
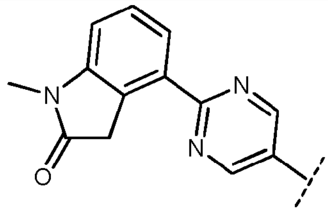
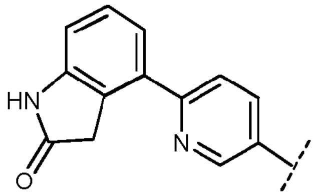
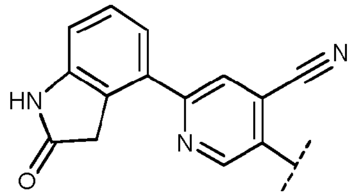
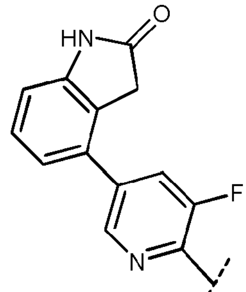
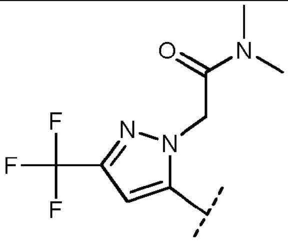
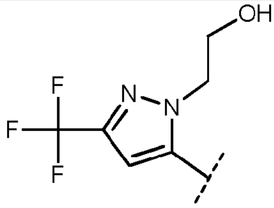
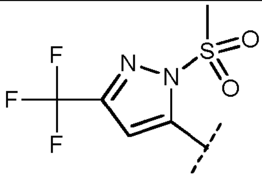
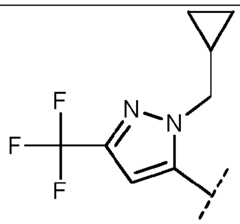
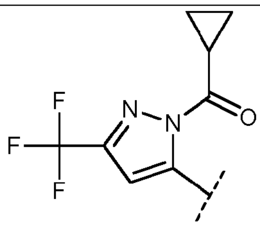
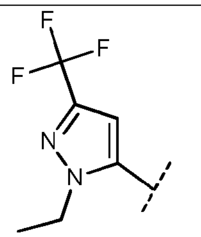
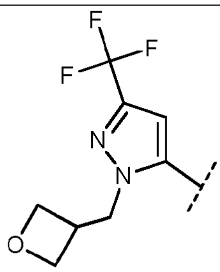
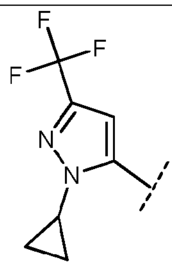
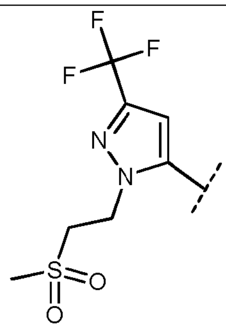
		
		
		
		
		

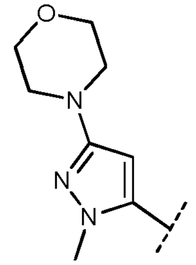
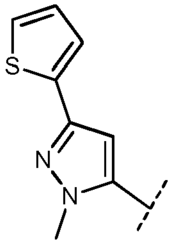
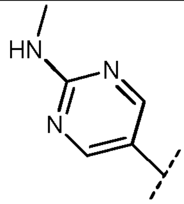
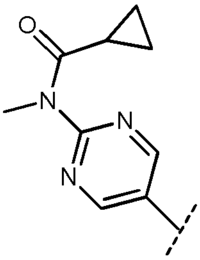
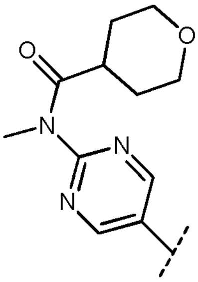
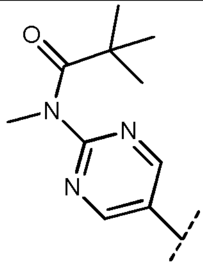
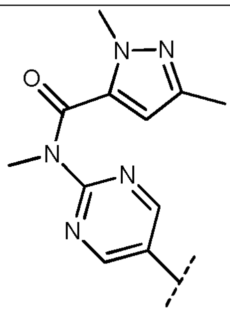
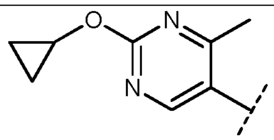
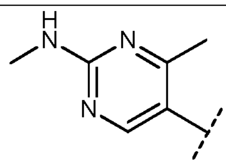
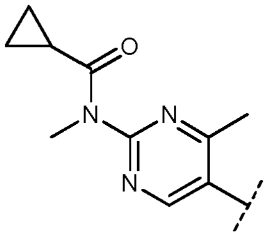
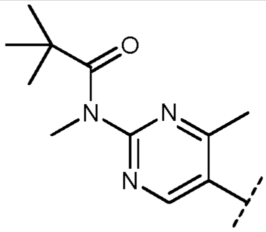
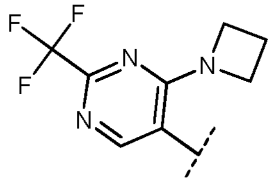
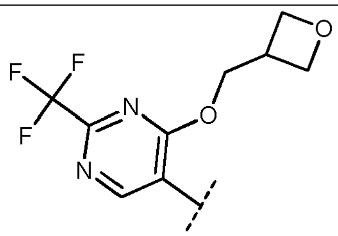
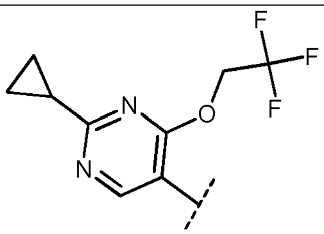
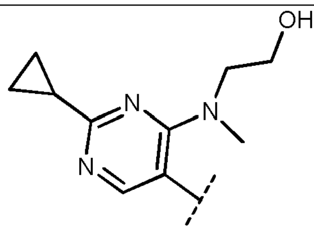
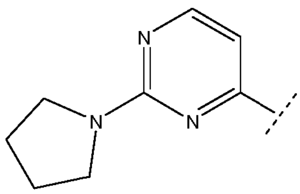
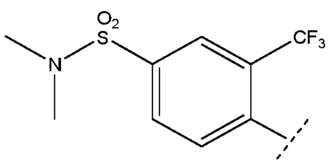
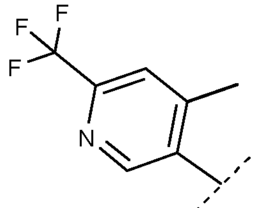
		
		
		
		
		
		

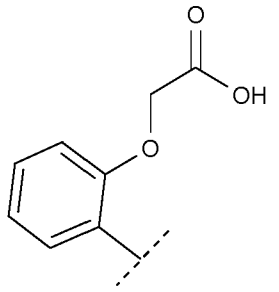
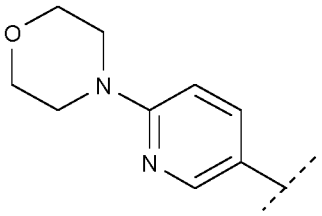
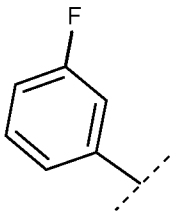
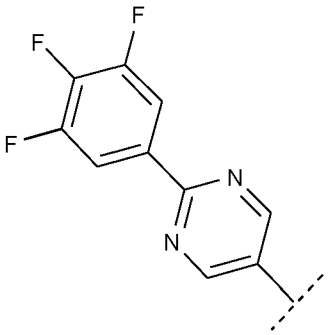
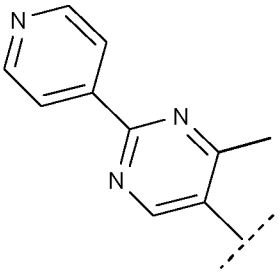
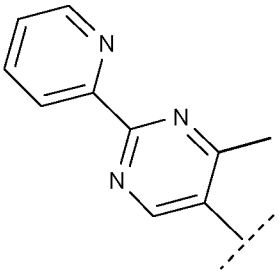
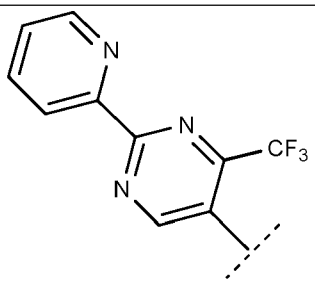
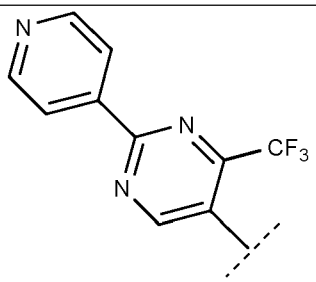
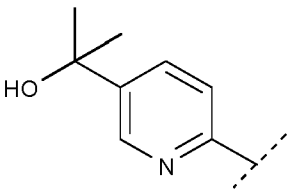
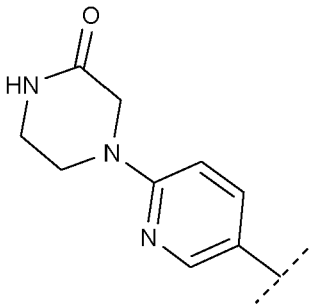
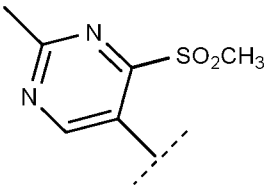
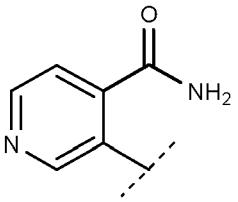
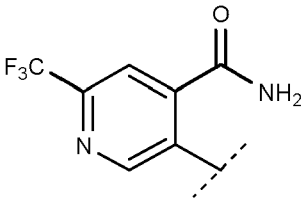
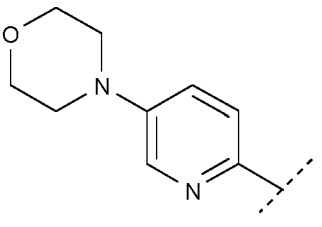
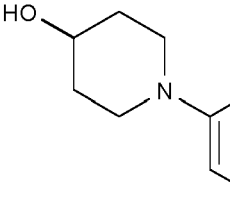
		
		
		
		
		
		

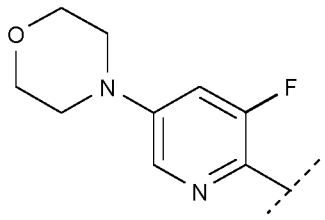
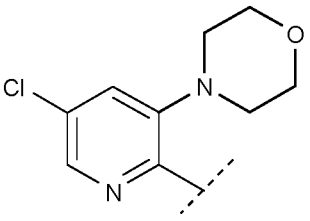
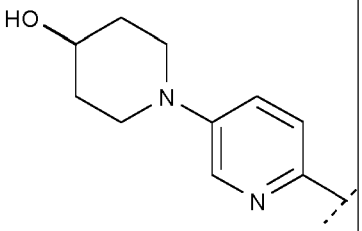
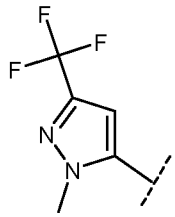
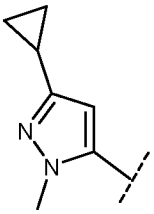
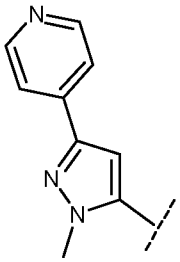
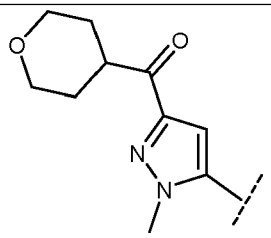
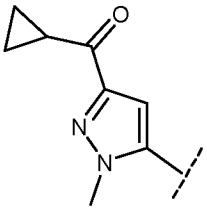
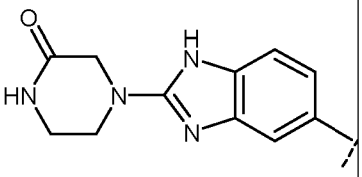
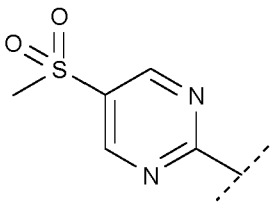
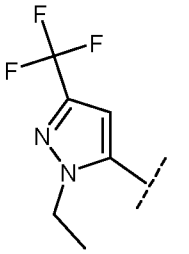
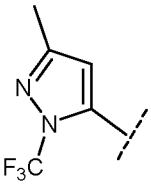
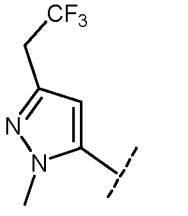
		
		
		
		
		
		

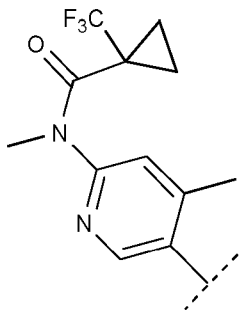
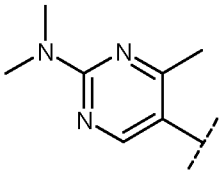
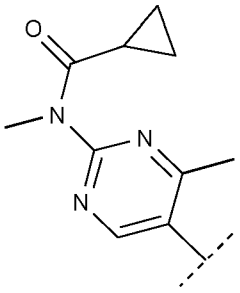
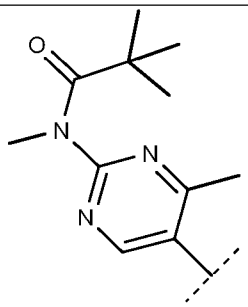
		
		
		
		
		
		

[0039] In a particularly preferred embodiment of the compound according to the invention

R^1 means -H or $-CH_3$;

R^2 means $-C_1$-C_6-alkyl, linear or branched, saturated, unsubstituted; cyclopropyl connected through $-CH_2-$; or tetrahydropyranyl connected through $-CH_2-$;

R^3 means -phenyl, benzyl, -thienyl or -pyridinyl, in each case unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -CN, $-CH_3$, $-CH_2CH_3$, $-CH_2F$, $-CHF_2$, $-CF_3$, -OCF3, -OH, $-OCH_3$, $-C(=O)NH_2$, $C(=O)NHCH_3$, $-C(=O)N(CH_3)_2$, $-NH_2$, $-NHCH_3$, $-N(CH_3)_2$, $-NHC(=O)CH_3$, $-CH_2OH$, $SOCH_3$ and SO_2CH_3; or

R^4 means

-H;

$-C_1$-C_6-alkyl, linear or branched, saturated, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, $-O-C_1$-C_4-alkyl, $-C(=O)NH-C_1$-C_6-alkyl, $-C(=O)N(C_1$-C_6-alkyl$)_2$ or -C(=O)NRR' wherein R and R' together with the nitrogen atom to which they are attached form a ring and mean $-(CH_2)_{3-5}-$;

3-6-membered cycloalkyl, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, and $-O-C_1$-C_4-alkyl, wherein said 3-6-membered cycloalkyl is connected through $-C_1$-C_6-alkylene;

3-6-membered heterocycloalkyl, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, and $-O-C_1$-C_4-alkyl, wherein said 3-6-membered heterocycloalkyl is connected through $-C_1$-C_6-alkylene;

-phenyl, unsubstituted or monosubstituted with $-OCH_3$; wherein said -phenyl isconnected through $-C_1$-C_6-alkylene-; or

-pyridyl, unsubstituted, mono- or polysubstituted; wherein said -pyridyl is connected through $-C_1$-C_6-alkylene-; R^5

means

-phenyl, -1,2-benzodioxole, -pyrazinyl, -pyridazinyl, -pyridinyl, -pyrimidinyl, -thienyl, -imidazolyl, - benzimidazolyl, -thiazolyl, -1,3,4-thiadiazolyl, -benzothiazolyl, -oxazolyl, -benzoxazolyl, -pyrazolyl, -quinolinyl, -isoquinolinyl, -quinazolinyl, -indolyl, -indolinyl, -benzo[c][1,2,5]oxadiazolyl, -imidazo[1,2-a]pyrazinyl, or -1H-pyrrolo[2,3-b]pyridinyl, in each case unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of

- F; -Cl; -Br; -I;

- CN; $-C_1$-C_4-alkyl; $-C_1$-C_4-alkyl-OH; $-CF_3$; $-C_1$-C_4-alkyl-CF_3; $-C_1$-C_4-alkyl-$C(=O)NH_2$; $-C_1$-C_4-alkyl-$C(=O)NHC_1$-C_6-alkyl; $-C_1$-C_4-alkyl-$C(=O)N(C_1$-C_6-alkyl$)_2$; $-C_1$-C_4-alkyl-$S(=O)_2$-C_1-C_4-alkyl;

- $C(=O)$-C_1-C_4-alkyl; $-C(=O)OH$; $-C(=O)O$-C_1-C_4-alkyl; $-C(=O)NH_2$; $-C(=O)NHC_1$-C_4-alkyl; $-C(=O)N(C_1$-C_4-alkyl$)_2$; $-C(=O)NH(C_1$-C_4-alkyl-OH); $-C(=O)N(C_1$-C_4-alkyl$)(C_1$-C_4-alkyl-OH); $-C(=O)NH$-$(CH_2CH_2O)_{1-30}$-CH_3;

- NH_2; $-NHC_1$-C_4-alkyl; $-N(C_1$-C_4-alkyl$)_2$; $-NHC_1$-C_4-alkyl-OH; $-NCH_3C_1$-C_4-alkyl-OH; $-NH$-C_1-C_4-alkyl-$C(=O)NH_2$; $-NCH_3$-C_1-C_4-alkyl-$C(=O)NH_2$; $-NHC(=O)$-C_1-C_4-alkyl; $-NCH_3C(=O)$-C_1-C_4-alkyl;

- OH; $-O$-C_1-C_4-alkyl; $-OCF_3$; $-O$-C_1-C_4-alkyl-CO_2H; $-O$-C_1-C_4-alkyl-$C(=O)O$-C_1-C_4-alkyl; $-O$-C_1-C_4-alkyl-$CONH_2$;

- S-C_1-C_4-alkyl; $-S(=O)C_1$-C_4-alkyl; $-S(=O)_2C_1$-C_4-alkyl; and $-S(=O)_2N(C_1$-C_4-alkyl$)_2$;

- 3-12-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered cycloalkyl is optionally connected through $-CH_2$-, -O-, -NH-, $-NCH_3$-, $-NH$-$(CH_2)_{1-3}$-, - NCH_3 $(CH_2)_{1-3}$-, -(C=O)-, -NHC(=O)-, $-NCH_3C(=O)$-, $-C(=O)NH$-$(CH_2)_{1-3}$-, $-C(=O)NCH_3$-$(CH_2)_{1-3}$-.,

- 3-12-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered heterocycloalkyl is optionally connected through $-CH_2$-, -O-, -NH-, $-NCH_3$-, $-NH$-$(CH_2)_{1-3}$-, $-NCH_3(CH_2)_{1-3}$-, -(C=O)-, -NHC(=O)-, $-NCH_3C(=O)$-, $-C(=O)NH$-$(CH_2)_{1-3}$-, $-C(=O)NCH_3$-$(CH_2)_{1-3}$-;

- 6-14-membered aryl, unsubstituted, mono- or polysubstituted; wherein said 6-14-membered aryl is optionally connected through $-CH_2$-, -O-, -NH-, $-NCH_3$-, $-NH$-$(CH_2)_{1-3}$-, $-NCH_3(CH_2)_{1-3}$-, -(C=O)-, -NHC(=O)-, - $NCH_3C(=O)$-, $-C(=O)NH$-$(CH_2)_{1-3}$-, $-C(=O)NCH_3$-$(CH_2)_{1-3}$-; or

- 5-14-membered heteroaryl, unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl is optionally connected through $-CH_2$-, -O-, -NH-, $-NCH_3$-, $-NH$-$(CH_2)_{1-3}$-, $-NCH_3(CH_2)_{1-3}$-, -(C=O)-, - NHC(=O)-, $-NCH_3C(=O)$-, $-C(=O)NH$-$(CH_2)_{1-3}$-, $-C(=O)NCH_3$-$(CH_2)_{1-3}$-; and

R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, and R^{20} mean -H.

[0040] In a particularly preferred embodiment of the compound according to the invention

R^1 means -H or $-CH_3$; and/or

R^2 means $-C_1$-C_6-alkyl, linear or branched, saturated, unsubstituted; preferably, R^2 means $-CH_3$ or $-CH_2CH_3$; more preferably, R^1 and R^2 both mean $-CH_3$; and/or

R^3 means -phenyl, -thienyl or -pyridinyl, in each case unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -CN, $-CH_3$, $-CH_2CH_3$, - CH_2F, $-CHF_2$, $-CF_3$, -OCF3, -OH, $-OCH_3$, $-C(=O)NH_2$, $C(=O)NHCH_3$, $-C(=O)N(CH_3)_2$, $-NH_2$, $-NHCH_3$, - $N(CH_3)_2$, $-NHC(=O)CH_3$, $-CH_2OH$, $SOCH_3$ and SO_2CH_3; preferably, R^3 means -phenyl, -thienyl or -pyridinyl, in each case unsubstituted or substituted with -F; more preferably, R^3 means phenyl, unsubstituted; and/or

R^4 means

-H;

-C_1-C_6-alkyl, linear or branched, saturated, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, and -O-C_1-C_4-alkyl; or

3-6-membered cycloalkyl, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, and -O-C_1-C_4-alkyl, wherein said 3-6-membered cycloalkyl is connected through -C_1-C_6-alkylene; preferably, R^4 means 3-6-membered cycloalkyl, unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F, -Cl, -Br, -I, -CN, -OH, and -O-C_1-C_4-alkyl, wherein said 3-6-membered cycloalkyl is connected through -CH_2- or -CH_2CH_2-; more preferably, R^4 means -cyclobutyl, unsubstituted or monosubstituted with -OH, wherein said -cyclobutyl is connected through -CH_2-; and/or

R^5 means -phenyl, -pyrazinyl, -pyridazinyl, -pyridinyl, -pyrimidinyl, -thienyl, or imidazo[1,2-a]pyrazine, in each case unsubstituted or substituted with one, two, three or four substituents independently of one another selected from the group consisting of -F; -Cl; -Br; -1; -CN; -OH; -C_1-C_4-alkyl; -CF_3; -3-12-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; preferably cyclopropyl, saturated, unsubstituted; -3-12-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; preferably - pyrrolidinyl, -morpholinyl, -piperazinyl, -thiomorpholinyl, or -thiomorpholinyl dioxide, in each case saturated, unsubstituted or monosubstituted with -C_1-C_4-alkyl; -6-14-membered aryl, unsubstituted, mono- or polysubstituted; preferably -phenyl, unsubstituted; -O-C_1-C_4-alkyl; -S-C_1-C_4-alkyl; -C(=O)OH; -C(=O)O-C_1-C_4-alkyl; -C(=O)NH_2; -C(=O)NHC_1-C_4-alkyl; -C(=O)N(C_1-C_4-alkyl)$_2$; -C(=O)N(C_1-C_4-alkyl)(C_1-C_4-alkyl-OH); - C(=O)NH-$(CH_2)_{1-3}$-3-12-membered cycloalkyl, saturated or unsaturated, unsubstituted or monosubstituted with - OH; preferably -C(=O)NH-$(CH_2)_{1-3}$-cyclobutyl, saturated or unsaturated, unsubstituted or monosubstituted with - OH; -C(=O)-3-12-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

preferably -C(=O)-morpholinyl, saturated, unsubstituted; -S(=O)C_1-C_4-alkyl; -$S(=O)_2C_1$-C_4-alkyl; and -$S(=O)_2$N(C_1-C_4-alkyl)$_2$; and/or

R^{11}, R^{12}, R^{13}, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, R^{19}, and R^{20} mean -H.

[0041] Preferably, the compound according to the invention is selected from the group consisting of

SC_3001	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile
SC_3002	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrazine-2-carbonitrile
SC_3003	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidine-2-carbonitrile
SC_3004	cis-5-[8-Dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile
SC_3005	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carboxylic acid amide
SC_3006	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-2-methylsulfonyl-pyrimidine-4-carbonitrile
SC_3007	cis-5-[1-(2-Methoxy-ethyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile
SC_3008	cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-5-methylsulfonyl-benzonitrile
SC_3009	cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzamide
SC_3010	cis-3-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzamide
SC_3011	cis-5-[8-Dimethylamino-1 -[(1 -hydro xy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carboxylic acid amide

(continued)

SC_3012	cis-5-[1-(Cyclobutyl-methyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidine-2-carbonitrile
SC_3013	cis-5-[8-Dimethylamino-1 -[(1 -hydro xy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile
SC_3014	cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-5-carbonitrile
SC_3015	cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-methoxy-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3016	cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-5-carboxylic acid amide
SC_3017	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N-methyl-benzamide
SC_3018	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1-propyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidine-2-carbonitrile
SC_3019	cis-5-[8-Dimethylamino-1-(3-methoxy-propyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile
SC_3020	cis-5-[1-(Cyclopropyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl] -pyrimidine-2-carbonitrile
SC_3021	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzamide
SC_3022	cis-1-(Cyclobuiyl-methyl)-8-dimethylamino-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3023	cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-hydroxy-pyrimidin-5-yl)-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one
SC_3024	cis-5-[8-Dimethylamino-1-(2-methyl-propyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile
SC_3025	cis-5-[8-Dimethylamino-1-(2-hydroxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile
SC_3026	cis-5-[1-(Cyclobutyl-methyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methyl-pyridine-2-carbonitrile
SC_3027	cis-1-(Cyclobutyl-methyl)-3-(5-methoxy-pyrazin-2-yl)-8-methylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3028	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N,N-dimethyl-benzamide
SC_3029	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N-ethyl-N-(2-hydroxy-ethyl)-benzaniide
SC_3030	cis-2-[1-(Cyclobutyl-methyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-5-methyl-sulfonyl-benzonitrile
SC_3031	cis-1-(Cyclobutyl-methyl)-8-methylamino-3-[2-methylsulfonyl-4-(trifluoromethyl)-phenyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3032	cis-4-[1-(Cyclobutyl-methyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N,N-dimethyl-3-(trifluoromethyl)-benzenesulfonic acid amide
SC_3033	cis-4-[1-(Cyclobutyl-methyl)-8-(ethyl-methyl-amino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzonitrile
SC 3034	cis-1-(Cyclobutyl-methyl)-8-(ethyl-methyl-amino)-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one

(continued)

SC_3035	cis-5-[1-(Cyclobutyl-methyl)-8-(ethyl-methyl-amino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile
SC_3036	cis-5-[8-Dimethylamino-1-[(1-methyl-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile
SC_3037	cis-2-[3-(2-Cyano-pyrimidin-5-yl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-1-yl]-N,N-dimethyl-acetamide
SC_3038	cis-1-(Cyclobutyl-methyl)-8-methylamino-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro [4.5]decan-2-one
SC_3039	cis-5-[8-Dimethylamino-8-(3 -fluorophenyl)-1 -(4-methoxy-butyl)-2-oxo-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile
SC_3040	cis-5-[8-Dimethylamino-1-(3-methoxy-propyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidine-2-carbonitrile
SC_3041	cis-5-[1-[(1-Cyano-cyclobutyl)-methyl] -8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile
SC_3042	cis-N-(Cyclobutyl-methyl)-5-[1-(cyclobutyl-methyl)-8-dimethylamino-8-(3-fluorophenyl)-2-oxo-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carboxylic acid amide
SC_3043	cis-5-[1-(3-Methoxy-propyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile
SC_3044	cis-5-[8-Dimethylamino-8-(3-fluorophenyl)-1-methyl-2-oxo-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile
SC_3045	cis-4-Methoxy-5-[1-(3-methoxy-propyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile
SC_3046	cis-4-[8-Dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile
SC_3047	cis-5-[8-Dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidine-2-carbonitrile
SC_3048	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile
SC_3049	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3-(6-methylsulfanyl-pyrimidin-4-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3050	cis-2-[3-(2-Cyano-pyrimidin-4-yl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-1-yl]-N,N-dimethyl-acetamide
SC_3051	cis-6-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-4-carbonitrile
SC_3052	cis-2-(8-Dimethylamino-2-oxo-3,8-diphenyl-1,3-diazaspiro[4.5]decan-1-yl)-N,N-dimethylacetamide
SC_3053	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3, 8-diphenyl-1,3-diazaspiro[4.5]decan-2-one
SC 3054	cis-2-[8-Dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-5-carbonitrile
SC_3055	cis-8-Dimethylamino-1-(2-methoxy-ethyl)-3,8-diphenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3056	cis-5-[8-Dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methyl-pyridine-2-carbonitrile
SC_3057	cis-N,N-Dimethyl-2-(8-methylamino-2-oxo-3,8-diphenyl-1,3-diazaspiro[4.5]decan-1-yl)-acetamide
SC_3058	cis-5-[1-[(1-Cyano-cyclobutyl)-methyl]-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile
SC_3059	cis-5-[1-[(1-Cyano-cyclobutyl)-methyl]-8-(ethyl-methyl-amino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3 -yl]-pyrimidine-2-carbonitrile

(continued)

SC_3060	cis-4-[8-Dimethylamino-1 -[(1 -hydro xy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -benzonitrile
SC_3061	cis-3 -[8-Dimethylamino-1 -[(1 -hydro xy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -benzonitrile
SC_3063	cis-5-[1-[(1-Cyano-cyclobutyl)-methyl] -8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyridine-2-carbonitrile
SC_3064	cis-2-[3-(2-Cyano-pyrimidin-5-yl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-1-yl]-N-propyl-acetamide
SC_3065	cis-5-[1-(Cyclobutyl-methyl)-8-(ethyl-methyl-amino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3 -yl] -4-methoxy-pyrimidine-2-carbonitrile
SC_3066	cis-4-[1-(Cyclobutyl-methyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-3-methoxy-benzonitrile
SC_3067	cis-5-[8-Dimethylamino-1-(3-methoxy-propyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-6-methoxy-pyridine-2-carbonitrile
SC_3068	cis-4-[8-Dimethylamino-1 -[(1 -hydro xy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -benzamide
SC_3069	cis-5-[8-Dimethylamino-1 -[(1 -hydro xy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyridine-2-carbonitrile
SC_3070	cis-5-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N-[(1-hydroxy-cyclobutyl)-methyl]-pyridine-2-carboxylic acid amide
SC_3071	cis-2-[8-Dimethylamino-1 -[(1 -hydro xy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -benzonitrile
SC_3072	cis-3-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]- benzonitrile
SC_3073	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3074	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methyl-pyridine-2-carboxylic acid methyl ester
SC_3075	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3-(5-methoxy-pyrazin-2-yl)-8-phenyl-1,3-diazaspiro[4.5] decan-2-one
SC_3076	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3-(2-methoxy-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5] decan-2-one
SC_3077	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzonitrile
SC_3078	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methyl-pyridine-2-carbonitrile
SC_3079	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3-(5-fluoro-pyrimidin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3080	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-3 -methoxy-benzonitrile
SC_3081	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzoic acid methyl ester
SC_3082	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3-(2-pyrrolidin-1-yl-pyrimidin-4-yl)-1,3- diazaspiro [4.5]decan-2-one
SC_3083	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3 -(5-pyridin-2-yl-thiophen-2-yl)-1,3- diazaspiro [4.5]decan-2-one

(continued)

SC_3084	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3-[2-methylsulfonyl-4-(trifluoromethyl)-phenyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3085	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3-[6-(trifluoromethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3086	cis-1-(Cyclobutyl-methyl)-3-(2,4-dimethoxy-phenyl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3087	cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methylsulfonyl-benzonitrile
SC_3088	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-2-fluoro-benzonitrile
SC_3089	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N,N-dimethyl-3-(trifluoromethyl)-benzenesulfonic acid amide
SC_3090	cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzonitrile
SC_3091	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3-(2-methyl-imidazo[1,2-a]pyrazin-6-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3092	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3-(4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3093	cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-5-methoxy-benzonitrile
SC_3094	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3,8-diphenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3096	cis-1-(Cyclobutyl-methyl)-8-dimethylaiuino-8-phenyl-3-pyrazin-2-yl-1,3-diazaspiro[4.5]decan-2-one
SC_3097	cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3098	cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-[2-(4-methyl-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3099	cis-1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3100	cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-8-phenyl-3-(2-piperazin-1-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one hydrochloride
SC_3101	cis-1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-3-[2-(4-methyl-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3102	cis-1 -[(1 -Hydro xy-cyclobutyl)-methyl] -8-methylamino-8-phenyl-3 -(2-piperazin- 1-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one dihydrochloride
SC_3103	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3104	cis-1-(Cyclobutyl-methyl)-8-methylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one
SC_3105	cis-1-(Cyclopropyl-methyl)-8-dimethylamino-3-(4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3106	cis-1-(Cyclopropyl-methyl)-8-methylamino-3-(4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3107	cis-1-(Cyclopropyl-methyl)-8-dimethylamino-3-(2-fluoro-4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3108	cis-2-[8-Dimethylamino-1 -[(1 -hydro xy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzamide; formic acid

(continued)

SC_3109	cis-2-[8-Dimethylamino-1-[2-(1-methoxy-cyclobutyl)-ethyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzamide
SC_3110	cis-8-Dimethylamino-1-[2-(1-methoxy-cyclobutyl)-ethyl]-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one
SC_3111	cis-5-[1-[(1-Hydroxy-cyclobutyl)-methyl] -8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile
SC_3112	cis-2-[1-[(1-Hydroxy-cyclobutyl)-methyl] -8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -benzonitrile
SC_3113	cis-4-[1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-3-methoxy-benzonitrile
SC_3114	cis-4-[8-Ethylamino-1 -[(1 -hydro xy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -3 -methoxy-benzonitrile
SC_3115	cis-2-[8-Ethylamino-1 -[(1 -hydro xy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -benzonitrile
SC_3116	cis-5-[1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidine-2-carbonitrile
SC_3117	cis-2-[8-Dimethylamino-1-(oxetan-3-yl-methyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzamide
SC_3118	cis-4-Methoxy-5-(8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidine-2-carbonitrile
SC_3119	cis-2-(8-Methylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-benzamide
SC_3120	cis-8-Dimethylamino-3-[2-(3-oxo-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3121	cis-3-(2-Cyclopropyl-pyrimidin-5-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3122	cis-8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3123	cis-8-Dimethylamino-3-(2-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3124	cis-8-Dimethylamino-8-phenyl-3-(2-piperazin-1-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3125	trans-2-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzamide
SC_3126	cis--2-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-benzamide
SC_3127	cis-2-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-benzonitrile
SC_3128	cis-2-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-benzonitrile
SC_3129	cis-3-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-benzonitrile
SC_3130	cis-8-Dimethylamino-3-[2-(4-methylsulfonyl-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one
SC_3131	cis-3-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-benzamide
SC_3132	cis-8-[(Cyclopropyl-methyl)-methyl-amino]-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3133	cis-8-Dimethylamino-3-[2-(4-methyl-piperazine-1-carbonyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one
SC_3134	trans-4-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3-methoxy-benzonitrile
SC_3135	cis-4-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3-methoxy-benzonitrile
SC_3136	cis-3-[2-(4-Acetyl-piperazin-1-yl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3137	cis-8-Dimethylamino-8-phenyl-3-(2-pyridin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one

(continued)

SC_3138	cis-8-Dimethylamino-8-phenyl-3-(2-pyridin-3-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3139	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-N-(2-hydroxy-ethyl)-pyrimidine-2-carboxylic acid amide
SC_3140	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidine-2-carboxylic acid amide
SC_3141	cis-8-Dimethylamino-3-[2-morpholin-4-yl-4-(trifluoromethyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one
SC_3142	cis-4-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-benzonitrile
SC_3143	cis-5-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-4-methoxy-pyrimidine-2-carbonitrile
SC_3144	trans-5-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-4-methoxy-pyrimidine-2-carbonitrile
SC_3145	cis-8-Dimethylamino-3 -[2-(morpholine-4-carbonyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3146	cis-2-[4-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-piperazin-1-yl]-acetic acid methyl ester
SC_3147	cis-8-Dimethylamino-3-[2-(methylsulfonyl-methyl)-phenyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3148	cis-8-Dimethylamino-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3149	cis-8-Dimethylamino-3-[2-(1,1-dioxo-[1,4]thiazinan-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5] decan-2-one
SC_3150	cis-8-Dimethylamino-3-(4-fluoro-pyridin-3-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one
SC_3151	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-N-(2-hydroxy-ethyl)-N-methyl-pyrimidine-2-carboxylic acid amide
SC_3152	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-2-morpholin-4-yl-isonicotinonitrile
SC_3153	cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzamide
SC_3154	cis-8-Dimethylamino-3-(2-fluoro-4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one
SC_3155	cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3-fluoro-benzonitrile
SC_3156	cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3,5-difluoro-benzonitrile
SC_3157	cis-8-Dimethylamino-3-(2-methoxy-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3158	cis-3-[2-(Benzylamino)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3159	cis-8-Dimethylamino-3-[2-(4-fluorophenyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-one
SC_3160	trans-8-Benzyl-8-dimethylamino-3-(2-morpholin-4-yl-pyrimidin-5-yl)-1,3- diazaspiro[4.5]decan-2-one
SC_3161	cis-8-Benzyl-8-dimethylamino-3-(2-morpholin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3162	cis-8-Dimethylamino-8-phenyl-3-(2-pyridin-2-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3163	cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3,5-difluoro-benzamide
SC_3164	cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3-fluoro-benzamide
SC_3165	cis-8-Benzyl-8-dimethylamino-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3166	trans-8-Benzyl-8-dimethylamino-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3167	cis-8-Dimethylamino-8-thiophen-2-yl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3168	trans-8-Dimethylamino-8-thiophen-2-yl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one

(continued)

SC_3169	cis-2-[2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-phenoxy]-acetic acid
SC_3170	cis-8-Dimethylamino-8-phenyl-3-(2-piperidin-1-yl-pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-one
SC_3171	cis-8-Dimethylamino-8-phenyl-3-(2-pyrrolidin-1-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3172	cis-8-Dimethylamino-8-phenyl-3-(2-pyrimidin-5-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3173	cis-8-Dimethylamino-8-phenyl-3-[2-(piperazine-1-carbonyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3174	trans-8-Benzyl-8-dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3175	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-2-morpholin-4-yl-pyridine-4-carboxylic acid amide
SC_3176	cis-8-Dimethylamino-3-[2-(3,5-dimethyl-isoxazol-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3177	cis-3-[2-(Benzothiazol-6-yl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3178	cis-8-Dimethylamino-3-[2-fluoro-4-(trifluoromethyl)-phenyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3179	cis-8-Dimethylamino-3-(6-morpholin-4-yl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one
SC_3180	cis-8-Dimethylamino-8-phenyl-3-(2-phenyl-thiazol-4-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3181	cis-8-Dimethylamino-8-phenyl-3-[2-(tetrahydro-pyran-4-ylamino)-pyrimidin-5-yl]-1,3-diazaspiro[4.5] decan-2-one
SC_3182	cis-8-Dimethylamino-3 -[2-(4-hydroxy-piperidin-1-yl)-pyrimidin-5-yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3183	cis-8-Dimethylamino-8-phenyl-3-(4-phenyl-thiazol-2-yl)-l,3-diazaspiro[4.5]decan-2-one
SC_3184	cis-8-Dimethylamino-8-phenyl-3 -[2-(1H-pyrrolo [2,3 -b]pyridin-1-yl)-pyrimidin-5-yl] -1,3-diazaspiro[4.5] decan-2-one
SC_3185	cis-8-Dimethylamino-8-phenyl-3-[2-(3,4,5-trifluoro-phenyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3186	cis-8-Dimethylamino-3-o-tolyl-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3187	cis-8-Dimethylamino-3-m-tolyl-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3188	cis-8-Dimethylamino-8-phenyl-3-p-tolyl-1,3-diazaspiro[4.5]decan-2-one
SC_3189	cis-8-Dimethylamino-8-phenyl-3 - [4-(trifluoromethyl)-phenyl] - 1,3 -diazaspiro [4.5] decan-2-one
SC_3190	cis-8-Dimethylamino-8-phenyl-3-[3-(trifluoromethyloxy)-phenyl]-1,3-diazaspiro[4.5]decan-2-one
SC_3191	cis-8-Dimethylamino-8-phenyl-3-[4-(trifluoromethyloxy)-phenyl]-1,3-diazaspiro[4.5]decan-2-one
SC_3192	cis-2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzoic acid methyl ester
SC_3193	cis-3-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzoic acid methyl ester
SC_3194	cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzoic acid methyl ester
SC_3195	cis-3-(1,3-Benzodioxol-5-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3196	cis-8-Dimethylamino-8-phenyl-3-quinolin-5-yl-1,3-diazaspiro [4.5]decan-2-one
SC_3197	cis-3-(2,3-Dihydro-1H-indol-6-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3198	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-4-methyl-pyridine-2-carboxylic acid methyl ester
SC_3199	cis-8-Dimethylamino-3-(6-methoxy-4-methyl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3200	cis-8-Dimethylamino-3-[2-methyl-5-(trifluoromethyl)-2H-pyrazol-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3201	cis-8-Dimethylamino-3-(3-methoxy-pyridin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

(continued)

SC_3202	cis-8-Dimethylamino-8-pheny1-3-[5-(trifluoromethyl)-pyridin-2-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3203	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-nicotinonitrile
SC_3204	cis-8-Dimethylamino-3-(3-methyl-pyridin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3205	cis-8-Dimethylamino-3-(6-methoxy-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3206	cis-8-Dimethylamino-8-phenyl-3-[3-(trifluoromethyl)phenyl]-1,3-diazaspiro[4.5]decan-2-one
SC_3207	cis-3-(1,3-Benzodioxol-4-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3208	cis-8-Dimethylamino-3-[2-(2-oxo-1,3-dihydro-indol-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5] decan-2-one
SC_3209	cis-8-Dimethylamino-3-[2-(3,5-dimethyl-1H-pyrazol-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5] decan-2-one
SC_3210	cis-8-Dimethylamino-3 -[2-(3 -hydro xy-piperidin-1-yl)-pyrimidin-5-yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3211	cis-8-Dimethylamino-3 -[2-(3 -hydro xy-piperidin-1-yl)-pyrimidin-5-yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3212	cis-8-Dimethylamino-3 -[2-[4-(2-hydroxy-ethyl)-piperazin-1-yl]-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one
SC_3213	cis-2-[4-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-piperazin-1-yl]-acetic acid
SC_3214	cis-8-Dimethylamino-3-[2-(1-methyl-1H-pyrrolo[2,3-b]pyridin-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3215	cis-8-Benzyl-8-dimethylamino-3 -[4-methyl-6-(trifluoromethyl)-pyridin-3 -yl] -1,3-diazaspiro[4.5]decan-2-one
SC_3216	trans-8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-thiophen-2-yl-1,3-diazaspiro[4.5] decan-2-one
SC_3217	cis-8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-thiophen-2-yl-1,3-diazaspiro[4.5] decan-2-one
SC_3218	cis-8-Dimethylamino-3-[2-(1,1-dioxo-[1,4]thiazinan-4-yl)-4-(trifluoromethyl)-pyrimidin-5-yl] - 8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3219	cis-8-Dimethylamino-8-(1-methyl-1H-benzoimidazol-2-yl)-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3220	cis-8-Dimethylamino-8-(1-methyl-1H-benzoimidazol-2-yl)-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl] -1,3-diazaspiro[4.5]decan-2-one
SC_3221	cis-8-Dimethylamino-3 -[2-(2-hydroxy-ethylamino)-pyrimidin-5-yl] -8-phenyl-1,3-diazaspiro [4.5]decan-2-one
SC_3222	cis-3-[2-(Benzyl-methyl-amino)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3223	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-N-[2-[2-[2-(2-methoxy-ethoxy)-ethoxy] -ethoxy] -ethyl] -pyrimidine-2-carboxylic acid amide
SC_3224	cis-8-Dimethylamino-3-[2-(1H-indazol-1-yl)-pyrimidin-5-yl] -8-phenyl-1,3-diazaspiro [4.5]decan-2-one
SC_3225	cis-8-Dimethylamino-3 -[2-[(2-hydro xy-ethyl)-methyl-amino] -pyrimidin-5-yl] -8-phenyl-1,3-diazaspiro [4.5]decan-2-one
SC_3226	cis-3-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzamide
SC_3227	cis-8-Dimethylamino-3-[3-fluoro-5-(trifluoromethyl)-pyridin-2-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3228	cis-8-Dimethylamino-3-(5-methyl-pyrazin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3229	cis-8-Dimethylamino-3-(5-fluoro-pyrimidin-4-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

(continued)

SC_3230	cis-8-Dimethylamino-3-(5-fluoro-pyrimidin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3231	cis-8-Dimethylamino-8-phenyl-3-pyrazin-2-yl-1,3-diazaspiro[4.5]decan-2-one
SC_3232	cis-3-([2,1,3]Benzoxadiazol-5-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3233	cis-2-[2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-phenoxy]-acetamide
SC_3234	cis-8-Dimethylamino-8-phenyl-3-(5-pyridin-4-yl-thiophen-2-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3235	cis-2-[2-(8-Dimethylaiuino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-phenoxy]-acetic acid methyl ester
SC_3236	cis-8-Dimethylamino-3-(2-morpholin-4-yl-pyrimidin-4-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one
SC_3237	cis-3-[2-(3,4-Difluoro-phenyl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3238	cis-2-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-benzonitrile
SC_3239	cis-3-(2-Amino-pyrimidin-5-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3240	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-cyclopropanecarboxylic acid amide
SC_3241	cis-2-[4-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-piperazin-1-yl]-acetamide
SC_3242	cis-8-Dimethylamino-8-phenyl-3-(6-piperazin-1-yl-pyridin-3-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3243	cis-8-Dimethylamino-3 -[6-(4-methyl-piperazin-1-yl)-pyridin-3 -yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3244	cis-8-Dimethylamino-3-[2-(1,1-dioxo-[1,4]thiazinan-4-yl)-4-methyl-pyrimidin-5-yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3245	cis-8-Dimethylamino-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3246	cis-2-[8-Dimethylammo-1-(3-methoxy-propyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-5-carbonitrile
SC_3247	cis-8-Dimethylamino-3-[2-(4-methyl-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3248	cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl] -1,3 -diazaspiro[4.5]decan-2-one
SC_3249	cis-2-[1-(3-Methoxy-propyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-5-carbonitrile
SC_3250	cis-8-Dimethylamino-8-phenyl-3-[6-(trifluoromethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3251	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyridine-2-carbonitrile
SC_3252	cis-8-Dimethylamino-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one
SC_3253	cis-8-Dimethylamino-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one
SC_3254	cis-8-Dimethylamino-1-[(2-methoxyphenyl)-methyl]-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3255	cis-1-[(1-Hydroxy-cyclobutyl)-methyl] -8-methylamino-8-phenyl-3 -[2-(trifluoromethyl)-pyrimidin-5-yl] -1,3 -diazaspiro[4.5]decan-2-one
SC_3256	cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one
SC_3257	cis-1 - [(1 -Hy dro xy-cy clobuty l)-methyl] -8-methylamino-8 -phenyl-3 -pyrimidin-5 -yl-1,3 - diazaspiro [4.5]decan-2-one
SC_3258	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-4-methyl-pyridine-2-carbonitrile

(continued)

SC_3259	cis-8-Dimethylamino-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1-(pyridin-2-yl-methyl)-1,3-diazaspiro[4.5] decan-2-one
SC_3260	cis-8-Dimethylamino-8-phenyl-3-pyrimidin-5-yl-1,3-diazaspiro[4.5]decan-2-one
SC_3261	cis-8-Dimethylamino-1 - [(1 -hydro xy-cy clobuty l)-methyl] -8-phenyl-3 -pyrimidin-5 -yl-1,3 - diazaspiro [4.5]decan-2-one
SC_3262	cis-8-Amino-1 -[(1 -hydro xy-cyclobutyl)-methyl] -8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3263	cis-8-Dimethylamino-3 -(3 -fluorophenyl)-8-phenyl- 1, 3 -diazaspiro [4.5] decan-2-one
SC_3264	cis-8-Dimethylamino-3-(3-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3265	cis-8-Dimethylamino-3-(4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3266	cis-8-Dimethylamino-8-phenyl-3 -pyridazin-3 -yl-1,3 -diazaspiro[4.5]decan-2-one
SC_3267	cis-3-Methoxy-4-(8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzonitrile
SC_3268	cis-8-Dimethylamino-3-(2-fluorophenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3269	cis-8-Dimethylamino-8-phenyl-3-(2-phenyl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3270	cis-8-Methylamino-1-(oxetan-3-yl-methyl)-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3271	cis-1-(Cyclopropyl-methyl)-8-methylamino-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3272	cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzonitrile
SC_3273	cis-8-Dimethylamino-3-(4-fluorophenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3274	cis-2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzonitrile
SC_3275	cis-8-Ethylamino-1 -[(1 -hydro xy-cyclobutyl)-methyl] -8-phenyl-3 -[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3276	cis-1-[(1-Hydroxy-cyclobutyl)-methyl] -8-methylamino-3 -(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3277	cis-8-Dimethylamino-3 -[2-(morpholin-4-yl-methyl)-pyrimidin-5-yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3278	cis-8-Dimethylamino-3-[2-(methyl-tetrahydro-pyran-4-yl-amino)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one
SC_3279	cis-5-[8-Dimethylamino-1 -[(1 -hydro xy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N-[2-[2-[2-(2-methoxy-ethoxy)-ethoxy]-ethoxy]-ethyl]-pyrimidine-2-carboxylic acid amide
SC_3280	cis-1 -(Cyclopropyl-methyl)-3 -(2-fluoro-4-methylsulfonyl-phenyl)-8-methylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3281	cis-2-[[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-methyl-amino] -acetamide
SC_3282	cis-2-[[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]amino]-acetamide
SC_3283	cis-1-(Cyclopropyl-methyl)-8-methylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3284	cis-1-(Cyclopropyl-methyl)-8-dimethylamino-3 -[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3285	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-thiophene-2-carboxylic acid amide
SC_3286	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-benzamide
SC_3287	cis-8-Dimethylamino-8-phenyl-3-(5-phenyl-thiophen-2-yl)-1,3-diazaspiro[4.5]decan-2-one

(continued)

SC_3288	cis-1-(Cyclopropyl-methyl)-8-dimethylamino-3 -[2-(methylsulfonyl-methyl)-phenyl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3289	cis-1-(Cyclopropyl-methyl)-8-methylamino-3 -[2-(methylsulfonyl-methyl)-phenyl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3290	cis-8-Dimethylamino-8-(3-fluorophenyl)-3-[2-(methylsulfonyl-methyl)-phenyl]-1,3-diazaspiro [4.5]decan-2-one
SC_3291	cis-8-Dimethylamino-8-(4-fluorophenyl)-3-[2-(methylsulfonyl-methyl)-phenyl]-1,3-diazaspiro [4.5]decan-2-one
SC_3292	cis-8-[Methyl-(tetrahydro-furan-3-yl-methyl)-amino]-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one (enantiomer 1)
SC_3293	cis-8-[Methyl-(tetrahydro-furan-3-yl-methyl)-amino]-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one (enantiomer 2)
SC_3294	cis-8-Dimethylamino-8-(3-fluorophenyl)-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro [4.5]decan-2-one
SC_3295	cis-3 -[6-(4-Acetyl-piperazin-1-yl)-4-methyl-pyridin-3 -yl] -8-dimethylamino-8-phenyl-1,3-diazaspiro [4.5]decan-2-one
SC_3296	cis-3-[2-(4-Acetyl-piperazin-1-yl)-4-methyl-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro [4.5]decan-2-one
SC_3297	cis-8-Dimethylamino-3-(4-methyl-6-pyridin-4-yl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3298	cis-3-[2-(4-Acetyl-piperazin-1-yl)-4-(trifluoromethyl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one
SC_3299	cis-8-Dimethylamino-3-[2-(3-oxo-piperazin-1-yl)-4-(trifluoromethyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3300	cis-8-Dimethylamino-3-isoquinolin-4-yl-8-phenyl-1,3-diazaspiro [4.5] decan-2-one
SC_3301	cis-8-Dimethylamino-3-isoquinolin-5-yl-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3302	cis-8-Dimethylamino-8-phenyl-3-(1H-pyrrolo [2,3 -b]pyridin-4-yl)-1,3 -diazaspiro[4.5]decan-2-one
SC_3303	cis-8-Dimethylamino-8-phenyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3304	cis-8-[Methyl-(tetrahydro-furan-3-yl-methyl)-amino]-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (enantiomer 1)
SC_3305	cis-8-[Methyl-(tetrahydro-furan-3-yl-methyl)-amino]-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (enantiomer 2)
SC_3306	cis-3-[2-(Azetidin-1-yl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3307	cis-3 -[2-(3,3 -Difluoro-azetidin-1-yl)-pyrimidin-5-yl] -8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3308	cis-8-Dimethylamino-3-[6-morpholin-4-yl-5-(trifluoromethyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5] decan-2-one
SC_3309	cis-8-Methylamino-3-[6-morpholin-4-yl-5-(trifluoromethyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3310	cis-8-Dimethylamino-8-phenyl-3-[5-(trifluoromethyloxy)-pyridin-2-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3311	cis-8-Dimethylamino-3-(5-methylsulfonyl-pyridin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3312	cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-nicotinonitrile
SC_3313	cis-3-[2-(4-Cyclopropyl-1H-[1,2,3]triazol-1-yl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro [4.5]decan-2-one
SC_3314	cis-8-Dimethylamino-3-[4-methyl-2-(3-oxo-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5] decan-2-one

(continued)

SC_3315	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyridine-2-caboxylic acid amide
SC_3316	cis-3-[4-(Azetidin-1-yl)-2-methyl-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3317	cis-2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzamide
SC_3318	cis-8-Dimethylamino-3-[2-(methylsulfonyl-methyl)-phenyl]-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-one
SC_3319	cis-8-Dimethylamino-8-(3-fluorophenyl)-3-[2-methyl-5-(trifluoromethyl)-2H-pyrazol-3-yl]-1,3-diazaspiro [4.5]decan-2-one
SC_3320	cis-8-Dimethylamino-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-8-thiophen-2-yl-1,3-diazaspiro[4.5] decan-2-one
SC_3321	cis-8-Dimethylamino-3-(6-methylsulfonyl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3322	cis-8-Dimethylamino-8-pheny1-3-(1H-pyrrolo[2,3-b]pyridin-5-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3323	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-acetamide
SC_3324	cis-3-[2-(4-Methyl-piperazin-1-yl)-pyrimidin-5-yl]-8-[methyl-(tetrahydro-furan-3-yl-methyl)-amino]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (enantiomer 1)
SC_3325	cis-3-[2-(4-Methyl-piperazin-1-yl)-pyrimidin-5-yl]-8-[methyl-(tetrahydro-furan-3-yl-methyl)-amino]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (enantiomer 2)
SC_3326	cis-8-Dimethylamino-3-(4,6-dimethyl-2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3327	cis-8-Dimethylamino-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-one
SC_3328	cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyridine-3-carboxylic acid amide
SC_3329	cis-8-Dimethylamino-3-[2-methyl-5-(trifluoromethyl)-2H-pyrazol-3-yl]-8-thiophen-2-yl-1,3-diazaspiro [4.5]decan-2-one
SC_3330	cis-8-Dimethylamino-3-[2-[(2-hydro xy-ethyl)-methyl-amino]-pyrimidin-5-yl]-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-one
SC_3331	cis-8-Dimethylamino-3-[2-(2-oxo-1,3-dihydro-indol-4-yl)-pyrimidin-5-yl]-8-thiophen-2-yl-1,3-diazaspiro [4.5]decan-2-one
SC_3332	cis-8-Dimethylamino-3 -[4-methyl-6-(3 -oxo-piperazin-1-yl)-pyridin-3 -yl] -8-phenyl-1,3-diazaspiro[4.5] decan-2-one
SC_3333	cis-8-Dimethylamino-3-(4-methyl-6-pyridin-2-yl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3334	cis-8-Dimethylamino-3-(4-methylsulfonyl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one
SC_3335	cis-3-(Benzothiazol-7-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3336	cis-8-Dimethylamino-8-(4-fluorophenyl)-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro [4.5]decan-2-one
SC_3337	cis-2-[8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-2-oxo-8-phenyl-1,3-diazaspiro [4.5]decan-1-yl]-N,N-dimethyl-acetamide
SC_3338	cis-8-Dimethylamino-3-[2-(2-methyl-1-oxo-2,3-dihydro-isoindol-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one
SC_3339	cis-2-[[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-2-methyl-pyrimidin-4-yl] amino]-acetamide
SC_3340	cis-2-[3-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyridin-4-yl]-acetamide
SC_3341	cis-8-Dimethylamino-3 -[4-(methylsulfonyl-methyl)-pyridin-3 -yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one

(continued)

SC_3342	cis-8-Dimethylamino-3 -[6-(4-methyl-3 -oxo-piperazin-1-yl)-pyridin-3 -yl] -8-phenyl-1,3-diazaspiro[4.5] decan-2-one
SC_3343	cis-8-Dimethylamino-3-(2,4-dimethyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3344	cis-8-Dimethylamino-3-[2-(1-oxo-2,3-dihydro-isoindol-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one; 2,2,2-trifluoro-acetic acid
SC_3345	cis-8-Dimethylamino-3-[6-[(2-hydroxy-ethyl)-methyl-amino]-5-(trifluoromethyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3346	cis-8-Dimethylamino-8-phenyl-3-[2-[4-(trifluoromethyl)-1H-[1,2,3]triazol-1-yl]-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3347	cis-8-Dimethylamino-3-[2-(4-isopropyl-1H-[1,2,3]triazol-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one
SC_3348	cis-8-Dimethylamino-3 -[6-(1,1-dioxo-[1,4]thiazinan-4-yl)-pyridin-3 -yl] -8-phenyl-1,3-diazaspiro[4.5] decan-2-one
SC_3349	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-2-morpholin-4-yl-nicotinonitrile
SC_3350	cis-8-Dimethylamino-3 -(1-methylsulfonyl- 1H-pyrrolo [2,3 -b]pyridin-5-yl)-8-phenyl-1,3-diazaspiro[4.5] decan-2-one
SC_3351	cis-8-Dimethylamino-3-(1H-indol-4-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3352	cis-8-Dimethylamino-3-(2-hydroxy-benzooxazol-7-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3353	cis-8-Dimethylamino-3 -[2-fluoro-4-(trifluoromethyloxy)-phenyl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3354	cis-4-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-benzamide; 2,2,2-trifluoro-acetic acid
SC_3355	cis-8-Dimethylamino-3 -(1-methyl- 1H-pyrrolo [2,3 -b]pyridin-4-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3356	cis-3-(1-Acetyl- 1H-indol-4-yl)-8-dimethylamino-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one
SC_3357	cis-8-Dimethylamino-3-(1H-indol-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3358	cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-5-methyl-nicotinonitrile
SC_3359	cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-5-fluoro-nicotinonitrile
SC_3360	cis-8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-1-(2-oxo-2-pyrrolidin-1-yl-ethyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3361	cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-5-methyl-pyridine-3-carboxylic acid amide
SC_3362	cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-5-fluoro-pyridine-3-carboxylic acid amide
SC_3363	cis-8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-m-tolyl-1,3-diazaspiro[4.5]decan-2-one
SC_3364	cis-3-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-isonicotinonitrile
SC_3365	cis-8-Dimethylamino-3 -[3 -fluoro-5-(2-oxo-1,3 -dihydro-indol-4-yl)-pyridin-2-yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3366	cis-8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-[3-(trifluoromethyloxy)-phenyl]-1,3-diazaspiro[4.5]decan-2-one
SC_3367	cis-8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-[3-(trifluoromethyl)phenyl] -1,3-diazaspiro[4.5]decan-2-one
SC_3368	cis-8-Dimethylamino-8-(3-methoxyphenyl)-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-1,3-diazaspiro [4.5]decan-2-one

(continued)

SC_3369	cis-8-(5-Chloro-thiophen-2-yl)-8-dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3370	cis-8-Dimethylamino-8-(3 -fluorophenyl)-3 -[4-methyl-6-(trifluoromethyl)-pyridin-3 -yl] -1,3-diazaspiro [4.5]decan-2-one
SC_3371	cis-8-Dimethylamino-3-(2-methylamino-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one
SC_3372	cis-8-(5-Chloro-thiophen-2-yl)-8-dimethylamino-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3373	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-N-methyl-cyclopropanecarboxylic acid amide
SC_3374	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-N,2,5-trimethyl-2H-pyrazole-3-carboxylic acid amide
SC_3375	cis-3-[4,6-Bis(trifluoromethyl)-pyridin-3-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3376	cis-8-Dimethylamino-3-[2-[(2-hydroxy-ethyl)-methyl-amino]-quinazolin-6-yl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one
SC_3377	cis-8-Dimethylamino-3-(2-morpholin-4-yl-quinazolin-6-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one
SC_3378	cis-8-[Methyl-(oxetan-3-yl-methyl)-amino]-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3379	cis-3 -(1-Acetyl- 1H-indol-3 -yl)-8-dimethylamino-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one
SC_3380	cis-8-Dimethylamino-8-phenyl-3-quinazolin-6-yl-1,3-diazaspiro[4.5]decan-2-one
SC_3381	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-2-(2-oxo-1,3-dihydro-indol-4-yl)-isonicotinonitrile
SC_3382	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-N-methyl-tetrahydro-pyran-4-carboxylic acid amide
SC_3383	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-N,2,2-trimethyl-propionamide
SC_3384	cis-8-Dimethylamino-3-[2-(1-methyl-2-oxo-1,3-dihydro-indol-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3385	cis-8-Dimethylamino-3 -(2-morpholin-4-yl-1H-benzoimidazol-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3386	cis-8-Dimethylamino-8-(3-fluoro-5-methyl-phenyl)-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3387	cis-8-Dimethylamino-3 -[6-(2-oxo-1,3 -dihydro-indol-4-yl)-pyridin-3 -yl] -8-phenyl-1,3-diazaspiro[4.5] decan-2-one
SC_3388	cis-8-Dimethylamino-8-(3-hydroxyphenyl)-3-[4-methyl-6-(trifluoromethyl)-pyridin-3 -yl] -1,3-diazaspiro [4.5]decan-2-one
SC_3389	cis-3 -[6-(Azetidin-1-yl)-5-(trifluoromethyl)-pyridin-3 -yl] -8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5] decan-2-one
SC_3390	cis-3-[1-(Cyclopropyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl] -isonicotinonitrile
SC_3391	cis-3-[3,5-Bis(trifluoromethyl)-pyridin-2-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3392	cis-8-Dimethylamino-3-(5-fluoro-6-morpholin-4-yl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3393	cis-8-(3 -Chlorophenyl)-8-dimethylamino-3 -[4-methyl-6-(trifluoromethyl)-pyridin-3 -yl] -1,3-diazaspiro [4.5]decan-2-one
SC_3394	cis-8-Dimethylamino-3-[5-(2-oxo-1,3-dihydro-indol-4-yl)-pyridin-2-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

(continued)

SC_3395	cis-8-Dimethylamino-8-phenyl-3-[5-(trifluoromethyl)-[1,3,4]thiadiazol-2-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3396	cis-8-Dimethylamino-3-(2-oxo-1,3-dihydro-indol-4-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3397	cis-8-Dimethylamino-3-[2-[(2-hydroxy-ethyl)-methyl-amino]-1H-benzoimidazol-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3398	cis-8-Dimethylamino-3-(5-methyl-6-morpholin-4-yl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3399	cis-1-(Cyclopropyl-methyl)-8-dimethylamino-8-(3-fluorophenyl)-3-(5-methylsulfonyl-pyridin-2-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3400	cis-1-(Cyclopropyl-methyl)-8-(3-fluorophenyl)-8-methylamino-3-(5-methylsulfonyl-pyridin-2-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3401	cis-1-(Cyclobutyl-methyl)-8-(3-fluorophenyl)-8-methylamino-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3402	cis-1-(Cyclopropyl-methyl)-8-dimethylamino-8-(3-fluorophenyl)-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3403	cis-1-(Cyclopropyl-methyl)-8-(3-fluorophenyl)-8-methylamino-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3404	cis-8-Dimethylamino-8-(3-fluorophenyl)-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3405	cis-l-(Cyclopropyl-methyl)-8-dimethylamino-8-(3-fluorophenyl)-3-[2-methyl-5-(trifluoromethyl)-2H-pyrazol-3 -yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3406	cis-1 -(Cyclopropyl-methyl)-8-(3 -fluorophenyl)-8-methylamino-3 -[2-methyl-5-(trifluoromethyl)-2H-pyrazol-3 -yl]-1,3-diazaspiro[4.5]decan-2-one
SC_3407	cis-8-Methylamino-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3408	cis-3-[5-(Azetidin-1-yl)-3-methyl-pyridin-2-yl]-8-dimethylamino-8-(3-fluorophenyl)-1,3-diazaspiro[4.5]decan-2-one
SC_3409	cis-8-Dimethylamino-8-(3-fluorophenyl)-3-(5-methylsulfonyl-pyridin-2-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3410	cis- 3-(6-(azetidin-1-yl)-4-fluoropyridin-3-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3411	cis-3 -(6-(azetidin-1-yl)pyridin-3 -yl)-8-(dimethylamino)-8-(3-fluorophenyl)-1,3 - diazaspiro[4.5]decan-2-one
SC_3412	cis-3-(1-(cyclopropanecarbonyl)-3 -(trifluoromethyl)- 1H-pyrazol-5-yl)-8-(dimethylamino)-8-(3 - fluorophenyl)-1,3 -diazaspiro[4.5]decan-2-one
SC_3413	cis-8-(dimethylamino)-8-(3 -fluorophenyl)-3 -(1-(2-hydroxyethyl)-3 -(trifluoromethyl)- 1H-pyrazol-5-yl)-1,3 -diazaspiro[4.5]decan-2-one
SC_3414	cis-3-(1-(cyclopropylmethyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl)-8-(dimethylamino)-8-(3 - fluorophenyl)-1,3-diazaspiro[4.5]decan-2-one
SC_3415	cis-8-(dimethylamino)-8-(3 -fluorophenyl)-3-(1-(methylsulfonyl)-3 -(trifluoromethyl)- 1H-pyrazol-5-yl)-1,3 -diazaspiro[4.5]decan-2-one
SC_3416	cis-1-(cyclopropylmethyl)-8-(dimethylamino)-8-(3-fluorophenyl)-3-(1-(methylsulfonyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3417	cis-2-(5-(8-(dimethylamino)-8-(3 -fluorophenyl)-2-oxo-1,3 -diazaspiro [4.5]decan-3 -yl)-3 - (trifluoromethyl)-1H-pyrazol-1-yl)-N,N-dimethylacetamide
SC_3418	cis-2-(5-(1-(cyclopropylmethyl)-8-(dimethylamino)-8-(3-fluorophenyl)-2-oxo-1,3-diazaspiro[4.5]decan-3-yl)-3-(trifluoromethyl)-1H-pyrazol-1-yl)-N,N-dimethylacetamide

(continued)

SC_3419	cis-8-(dimethylamino)-3 -(1-methyl- 1H-pyrrolo [2,3 -b]pyridin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3420	cis-8-(dimethylamino)-3 -(3 -fluoro- 1H-pyrrolo [2,3 -b]pyridin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3421	cis-8-(dimethylamino)-8-phenyl-3 -(1H-pyrrolo [2,3 -c]pyridin-4-yl)-1,3 -diazaspiro [4.5]decan-2-one
SC_3422	cis-8-(dimethylamino)-8-phenyl-3-(2-(pyridazin-4-yl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3423	cis-8-(dimethylamino)-3-(2-(2-oxo-1,2-dihydropyridin-4-yl)pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3424	cis-8-(dimethylamino)-8-(3 -fluorophenyl)-3 -(1-methyl-3 -(thiophen-2-yl)-1H-pyrazol-5-yl)-1,3 - diazaspiro[4.5]decan-2-one
SC_3425	cis-8-(dimethylamino)-8-(3 -fluorophenyl)-3 -(1-methyl-3 -morpholino- 1H-pyrazol-5-yl)-1,3 - diazaspiro[4.5]decan-2-one
SC_3426	cis-8-(dimethylamino)-8-phenyl-1-(2,2,2-trifluoroethyl)-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3427	cis-8-(dimethylamino)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1-(3,3,3-trifluoropropyl)-1,3-diazaspiro[4.5]decan-2-one
SC_3428	cis-3-(4-methyl-6-(trifluoromethyl)pyridin-3-yl)-8-(methylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3429	cis-3 -(1-methyl-3 -(trifluoromethyl)- 1H-pyrazol-5-yl)-8-(methylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one
SC_3430	cis-8-(dimethylamino)-8-(3 -fluorophenyl)-3 -(4-(methylsulfonyl)pyridin-3 -yl)-1,3 - diazaspiro[4.5]decan-2-one
SC_3431	cis-8-(dimethylamino)-3 -(1-ethyl-3 -(trifluoromethyl)- 1H-pyrazol-5-yl)-8-(3 -fluorophenyl)-1,3 - diazaspiro[4.5]decan-2-one
SC_3432	cis-3-(1-cyclopropyl-3-(trifluoromethyl)-1H-pyrazol-5-yl)-8-(dimethylamino)-8-(3 - fluorophenyl)-1,3 -diazaspiro[4.5]decan-2-one
SC_3433	cis-8-(dimethylamino)-8-(3 -fluorophenyl)-3-(1-(oxetan-3 -ylmethyl)-3 -(trifluoromethyl)- 1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]decan-2-one
SC_3434	cis-8-(dimethylamino)-8-(3 -fluorophenyl)-3-(1-(2-(methylsulfonyl)ethyl)-3 -(trifluoromethyl)-1H-pyrazol-5-yl)-1,3 -diazaspiro[4.5]decan-2-one
SC_3435	cis-8-(dimethylamino)-8-(3 -fluorophenyl)-3 -(4-methyl-2-(methylamino)pyrimidin-5-yl)-1,3 - diazaspiro [4.5]decan-2-one
SC 3436	cis-3-(2-cyclopropoxy-4-methylpyrimidin-5-yl)-8-(dimethylamino)-8-(3-fluorophenyl)-1,3 - diazaspiro [4.5]decan-2-one
SC_3437	cis-N-(5-(8-(dimethylamino)-8-(3-fluorophenyl)-2-oxo-1,3-diazaspiro[4.5]decan-3-yl)-4-methylpyrimidin-2-yl)-N-methylcyclopropanecarboxamide
SC_3438	cis-N-(5-(8-(dimethylamino)-8-(3-fluorophenyl)-2-oxo-1,3-diazaspiro[4.5]decan-3-yl)-4-methylpyrimidin-2-yl)-N-methylpivalamide
SC_3439	cis-3-(4-(azetidin-1-yl)-2-(trifluoromethyl)pyrimidin-5-yl)-8-(dimethylamino)-8-(3 - fluorophenyl)-1,3 -diazaspiro[4.5]decan-2-one
SC_3440	cis-8-(dimethylamino)-8-(3 -fluorophenyl)-3 -(4-(oxetan-3 -ylmethoxy)-2-(trifluoromethyl)pyrimidin-5-yl)-1,3 -diazaspiro [4.5] decan-2-one
SC_3441	cis-3-(2-cyclopropyl-4-(2,2,2-trifluoroethoxy)pyrimidin-5-yl)-8-(dimethylamino)-8-(3-fluorophenyl)-1,3-diazaspiro[4.5]decan-2-one
SC_3442	cis-3-(2-cyclopropyl-4-((2-hydroxyethyl)(methyl)amino)pyrimidin-5-yl)-8-(dimethylamino)-8-(3 -fluorophenyl)-1,3 -diazaspiro[4.5]decan-2-one

and the physiologically acceptable salts thereof.

[0042] According to the invention, unless expressly stated otherwise, "-C_1-C_4-alkyl", "-C_1-C_6-alkyl" and any other alkyl residues can be linear or branched, saturated or unsaturated. Linear saturated alkyl includes methyl, ethyl, n-propyl, n-butyl, n-pentyl and n-hexyl. Examples of branched saturated alkyl include but are not limited to iso-propyl, sec-butyl, and tert-butyl. Examples of linear unsaturated alkyl include but are not limited to vinyl, propenyl, allyl, and propargyl.

[0043] According to the invention, unless expressly stated otherwise, "-C_1-C_4-alkyl", "-C_1-C_6-alkyl" and any other alkyl residues can be unsubstituted, mono- or polysubstituted. Examples of substituted alkyl include but are not limited to -CH_2CH_2OH, -$CH_2CH_2OCH_3$, -$CH_2CH_2CH_2OCH_3$, -$CH_2CH_2S(=O)_2CH_3$, -$CH_2C(=O)NH_2$, - $C(CH_3)_2C(=O)NH_2$, -$CH_2C(CH_3)_2C(=O)NH_2$, and -$CH_2CH_2C(=O)N(CH_3)_2$.

[0044] According to the invention, unless expressly stated otherwise, "-C_1-C_6-alkylene-", "-C_1-C_4-alkylene" and any other alkylene residue can be unsubstituted, mono- or polysubstituted. Examples of saturated alkylene include but are not limited to -CH_2-, -$CH(CH_3)$-, -$C(CH_3)_2$-, -CH_2CH_2-, -$CH(CH_3)CH_2$-, -$CH_2CH(CH_3)$-, -$CH(CH_3)$-$CH(CH_3)$-, -$C(CH_3)_2CH_2$-, -$CH_2C(CH_3)_2$-, -$CH(CH_3)C(CH_3)_2$-, -$C(CH_3)_2CH(CH_3)$-, $C(CH_3)_2C(CH_3)_2$-, - $CH_2CH_2CH_2$-, and -$C(CH_3)_2CH_2CH_2$-. Examples of unsaturated alkylene include but are not limited to -CH=CH-, -C≡C-, -$C(CH_3)$=CH-, -CH=$C(CH_3)$-, -$C(CH_3)$=$C(CH_3)$-, - CH_2CH=CH-, -CH=$CHCH_2$-, -CH=CH-CH=CH-, and -CH=CH-C≡C-.

[0045] According to the invention, unless expressly stated otherwise, "-C_1-C_6-alkylene-", "-C_1-C_4-alkylene" and any other alkylene residue can be unsubstituted, mono- or polysubstituted. Examples of substituted -C_1-C_6-alkylene- include but are not limited to -CHF-, -CF_2-, -CHOH- and -C(=O)-.

[0046] According to the invention, moieties may be connected through -C_1-C_6-alkylene-, i.e. the moieties may not be directly bound to the core structure of compound according to general formula (I), but may be connected to the core structure of compound according to general formula (I) or its periphery through a -C_1-C_6-alkylene- linker.

[0047] According to the invention, "3-12-membered cycloalkyl moiety" means a non-aromatic, monocyclic, bicyclic or tricyclic moiety comprising 3 to 12 ring carbon atoms but no heteroatoms in the ring. Examples of preferred saturated 3-12-membered cycloalkyl moieties according to the invention include but are not limited to cyclopropane, cyclobutane, cyclopentane, cyclohexane, cycloheptane, cyclooctane, hydrindane, and decaline. Examples of preferred unsaturated 3-12-membered cycloalkyl moiety moieties according to the invention include but are not limited to cyclopropene, cyclobutene, cyclopentene, cyclopentadiene, cyclohexene, 1,3-cyclohexadiene, and 1,4-cyclohexadiene. The 3-12-membered cycloalkyl moiety, which is bonded to the compound according to the invention, in its periphery may optionally be condensed with a 3-12-membered heterocycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; and/or with a 6-14-membered aryl moiety, unsubstituted, mono- or polysubstituted; and/or with a 5-14-membered heteroaryl moiety, unsubstituted, mono- or polysubstituted. Under these circumstances, the ring atoms of the condensed moieties are not included in the 3 to 12 ring atoms of the 3-12-membered cycloalkyl moiety. Examples of 3-12-membered cycloalkyl moieties condensed with 3-12-membered heterocycloalkyl moieties include but are not limited to octahydro-1*H*-indol, decahydroquinoline, decahydroisoquinoline, octahydro-2H-benzo[b][1,4]oxazin, and decahydroquinoxalin, which in each case are connected through the 3-12-membered cycloalkyl moiety. Examples of 3-12-membered cycloalkyl moieties condensed with 6-14-membered aryl moieties include but are not limited to 2,3-dihydro-1*H*-indene and tetraline, which in each case are connected through the 3-12-membered cycloalkyl moiety. Examples of 3-12-membered cycloalkyl moieties condensed with 5-14-membered heteroaryl moieties include but are not limited to 5,6,7,8-tetrahydroquinoline and 5,6,7,8-tetrahydroquinazoline, which in each case are connected through the 3-12-membered cycloalkyl moiety.

[0048] According to the invention, the 3-12-membered cycloalkyl moiety may optionally be connected through -C_1-C_6-alkylene-, i.e. the 3-12-membered cycloalkyl moiety may not be directly bound to the compound according to general formula (I) but may be connected thereto through a -C_1-C_6-alkylene- linker. Examples include but are not limited to -CH_2-cyclopropyl, -CH_2-cyclobutyl, -CH_2-cyclopentyl, -CH_2-cyclohexyl, -CH_2CH_2-cyclopropyl, - CH_2CH_2-cyclobutyl, -CH_2CH_2-cyclopentyl, and -CH_2CH_2-cyclohexyl.

[0049] According to the invention, unless expressly stated otherwise, the 3-12-membered cycloalkyl moiety can be unsubstituted, mono- or polysubstituted. Examples of substituted 3-12-membered cycloalkyl moieties include but are not limited to -CH_2-1-hydroxy-cyclobutyl.

[0050] According to the invention, "3-12-membered heterocycloalkyl moiety" means a non-aromatic, monocyclic, bicyclic or tricyclic moiety comprising 3 to 12 ring atoms, wherein each cycle comprises independently of one another 1, 2, 3, 4 or more heteroatoms independently of one another selected from the group consisting of nitrogen, oxygen and sulfur, whereas sulfur may be oxidized (S(=O) or $(S(=O)_2)$, whereas the remaining ring atoms are carbon atoms, and whereas bicyclic or tricyclic systems may share common heteroatom(s). Examples of preferred saturated 3-12-membered heterocycloalkyl moieties according to the invention include but are not limited to aziridin, azetidine, pyrrolidine, imidazolidine, pyrazolidine, piperidine, piperazine, triazolidine, tetrazolidine, oxiran, oxetane, tetrahydrofurane, tetrahydropyrane, thiirane, thietane, tetrahydrothiophene, diazepane, oxazolidine, isoxazolidine, thiazolidine, isothiazolidine, thiadiazolidine, morpholine, thiomorpholine. Examples of preferred unsaturated 3-12-membered heterocycloalkyl moiety moieties according to the invention include but are not limited to oxazoline, pyrazoline, imidazoline, isoxazoline, thiazoline,

isothiazoline, and dihydropyran. The 3-12-membered heterocycloalkyl moiety, which is bonded to the compound according to the invention, in its periphery may optionally be condensed with a 3-12-membered cycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; and/or with a 6-14-membered aryl moiety, unsubstituted, mono- or polysubstituted; and/or with a 5-14-membered heteroaryl moiety, unsubstituted, mono- or polysubstituted. Under these circumstances, the ring atoms of the condensed moieties are not included in the 3 to 12 ring atoms of the 3-12-membered heterocycloalkyl moieties. Examples of 3-12-membered heterocycloalkyl moieties condensed with 3-12-membered cycloalkyl moieties include but are not limited to octahydro-1*H*-indol, decahydroquinoline, decahydroisoquinoline, octahydro-2H-benzo[b][1,4]oxazin, and decahydroquinoxalin, which in each case are connected through the 3-12-membered heterocycloalkyl moiety. An examples of a 3-12-membered heterocycloalkyl moiety condensed with a 6-14-membered aryl moiety includes but is not limited to 1,2,3,4-tetrahydroquinoline, which is connected through the 3-12-membered heterocycloalkyl moiety. An example of a 3-12-membered heterocycloalkyl moiety condensed with a 5-14-membered heteroaryl moieties includes but is not limited to 5,6,7,8-tetrahydro-[1,2,4]triazolo[1,5-a]pyrazine, which is connected through the 3-12-membered heterocycloalkyl moiety.

[0051] According to the invention, the 3-12-membered heterocycloalkyl moiety may optionally be connected through -C_1-C_6-alkylene-, i.e. the 3-12-membered heterocycloalkyl moiety may not be directly bound to the compound according to general formula (I) but may be connected thereto through a -C_1-C_6-alkylene- linker. Said linker may be connected to a carbon ring atom or to a hetero ring atom of the 3-12-membered heterocycloalkyl moiety. Examples include but are not limited to -CH_2-oxetane, -CH_2-pyrrolidine, -CH_2-piperidine, -CH_2-morpholine, -CH_2CH_2-oxetane, -CH_2CH_2-pyrrolidine, -CH_2CH_2-piperidine, and -CH_2CH_2-morpholine.

[0052] According to the invention, unless expressly stated otherwise, the 3-12-membered heterocycloalkyl moiety can be unsubstituted, mono- or polysubstituted. Examples of substituted 3-12-membered heterocycloalkyl moieties include but are not limited to 2-carboxamido-N-pyrrolidinyl-, 3,4-dihydroxy-N-pyrrolidinyl, 3-hydroxy-N-pyrimidinyl, 3,4-dihydroxy-N-pyrimidinyl, 3-oxo-N-piperazinyl, -tetrahydro-2H-thiopyranyl dioxide and thiomorpholinyl dioxide.

[0053] According to the invention, "6-14-membered aryl moiety" means an aromatic, monocyclic, bicyclic or tricyclic moiety comprising 6 to 14 ring carbon atoms but no heteroatoms in the ring. Examples of preferred 6-14-membered aryl moieties according to the invention include but are not limited to benzene, naphthalene, anthracen, and phenanthren. The 6-14-membered aryl moiety, which is bonded to the compound according to the invention, in its periphery may optionally be condensed with a 3-12-membered cycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; and/or with a 3-12-membered heterocycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; and/or with a 5-14-membered heteroaryl moiety, unsubstituted, mono- or polysubstituted. Under these circumstances, the ring atoms of the condensed moieties are not included in the 6 to 14 ring carbon atoms of the 6-14-membered heterocycloalkyl moieties. Examples of 6-14-membered aryl moieties condensed with 3-12-membered cycloalkyl moieties include but are not limited to 2,3-dihydro-1H-indene and tetraline, which in each case are connected through the 6-14-membered aryl moiety. An example of a 6-14-membered aryl moiety condensed with a 3-12-membered heterocycloalkyl moiety includes but is not limited to 1,2,3,4-tetrahydroquinoline, which is connected through the 6-14-membered aryl moiety. Examples of 6-14-membered aryl moieties condensed with 5-14-membered heteroaryl moieties include but are not limited to quinoline, isoquinoline, phenazine and phenoxacine, which in each case are connected through the 6-14-membered aryl moiety.

[0054] According to the invention, the 6-14-membered aryl moiety may optionally be connected through -C_1-C_6-alkylene-, i.e. the 6-14-membered aryl moiety may not be directly bound to the compound according to general formula (I) but may be connected thereto through a -C_1-C_6-alkylene- linker. Said linker may be connected to a carbon ring atom or to a hetero ring atom of the 6-14-membered aryl moiety. Examples include but are not limited to -CH_2-C_6H_5, -CH_2CH_2-C_6H_5 and -CH=CH-C_6H_5.

[0055] According to the invention, unless expressly stated otherwise, the 6-14-membered aryl moiety can be unsubstituted, mono- or polysubstituted. Examples of substituted 6-14-membered aryl moieties include but are not limited to 2-fluorophenyl, 3-fluorophenyl, 2-methoxyphenyl and 3-methoxyphenyl.

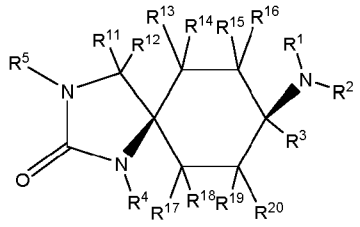
[0056] According to the invention, "5-14-membered heteroaryl moiety" means an aromatic, monocyclic, bicyclic or tricyclic moiety comprising 6 to 14 ring atoms, wherein each cycle comprises independently of one another 1, 2, 3, 4 or more heteroatoms independently of one another selected from the group consisting of nitrogen, oxygen and sulfur, whereas the remaining ring atoms are carbon atoms, and whereas bicyclic or tricyclic systems may share common heteroatom(s). Examples of preferred 5-14-membered heteroaryl moieties according to the invention include but are not limited to pyrrole, pyrazole, imidazole, triazole, tetrazole, furane, thiophene, oxazole, isoxazole, thiazole, isothiazole, pyridine, pyridazine, pyrimidine, pyrazine, indolicine, 9H-chinolicine, 1,8-naphthyridine, purine, imidazo[1,2-a]pyrazine, and pteridine. The 5-14-membered heteroaryl moiety, which is bonded to the compound according to the invention, in its periphery may optionally be condensed with a 3-12-membered cycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; and/or with a 3-12-membered heterocycloalkyl moiety, saturated or unsaturated, unsubstituted, mono- or polysubstituted; and/or with a 6-14-membered aryl moiety, unsubstituted, mono- or polysubstituted. Under these circumstances, the ring atoms of the condensed moieties are not included in the 6 to 14 ring carbon atoms of the 6-14-

membered heterocycloalkyl moieties. Examples of 5-14-membered heteroaryl moieties condensed with 3-12-membered cycloalkyl moieties include but are not limited to 5,6,7,8-tetrahydroquinoline and 5,6,7,8-tetrahydroquinazoline, which in each case are connected through the 5-14-membered heteroaryl moiety. An examples of a 5-14-membered heteroaryl moiety condensed with a 3-12-membered heterocycloalkyl moiety includes but is not limited to 5,6,7,8-tetrahydro-[1,2,4] triazolo[1,5-a]pyrazine, which is connected through the 5-14-membered heteroaryl moiety. Examples of 5-14-membered heteroaryl moieties condensed with 6-14-membered aryl moieties include but are not limited to quinoline, isoquinoline, phenazine and phenoxacine, which in each case are connected through the 5-14-membered heteroaryl moiety.

[0057] According to the invention, the 5-14-membered heteroaryl moiety may optionally be connected through -C_1-C_6-alkylene-, i.e. the 5-14-membered heteroaryl moiety may not be directly bound to the compound according to general formula (I) but may be connected thereto through a -C_1-C_6-alkylene- linker. Said linker may be connected to a carbon ring atom or to a hetero ring atom of the 5-14-membered heteroaryl moiety. Examples include but are not limited to -CH_2-oxazole, -CH_2-isoxazole, -CH_2-imidazole, -CH_2-pyridine, -CH_2-pyrimidine, - CH_2-pyridazine, -CH_2CH_2-oxazole, -CH_2CH_2-isoxazole, -CH_2CH_2-imidazole, -CH_2CH_2-pyridine, -CH_2CH_2-pyrimidine, and -CH_2CH_2-pyridazine.

[0058] According to the invention, unless expressly stated otherwise, the 5-14-membered heteroaryl moiety can be unsubstituted, mono- or polysubstituted. Examples of 5-14-membered heteroaryl moieties include but are not limited to 2-methoxy-4-pyridinyl, 2-methoxy-5-pyridinyl, 3-methoxy-4-pyridinyl, 3-methoxy-6-pyridinyl, 4-methoxy-2-pyridinyl, 2-methylsulfonyl-5-pyridinyl, 3-methylsulfonyl-6-pyridinyl, 3-methoxy-6-pyridazinyl, 2-nitrilo-5-pyrimidinyl, 4-hydroxy-2-pyrimidinyl, 4-methoxy-pyrimidinyl, and 2-methoxy-6-pyrazinyl.

[0059] Preferably, the compound according to the invention has a structure according to general formula (I')

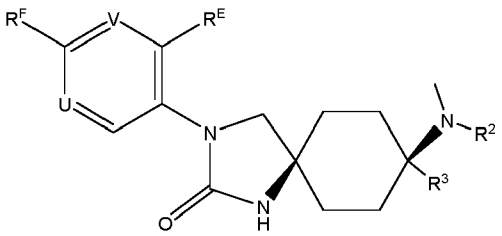


(I')

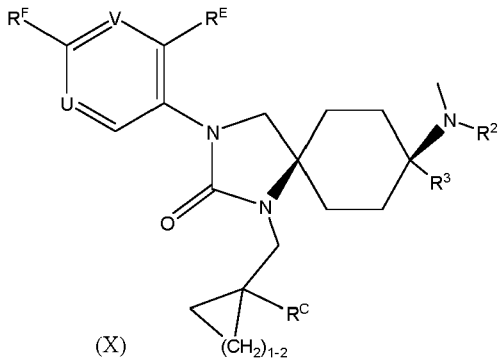
wherein **R^1** to **R^5, R^{11}** to **R^{20}** are defined as above,
or a physiologically acceptable salt thereof.

[0060] In one preferred embodiment, the excess of the cis-isomer so designated is at least 50% de, more preferably at least 75% de, yet more preferably at least 90% de, most preferably at least 95% de and in particular at least 99% de.

[0061] In a preferred embodiment, the compound according to the invention has a structure according to general formula (IX) or (X)



(IX)



(X)

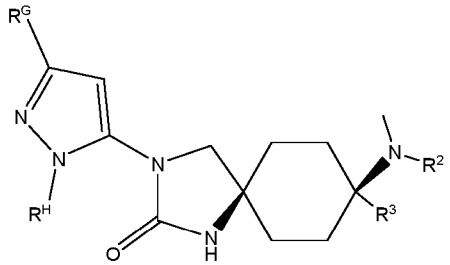
wherein

R^2 means -H or -CH_3;
R^3 means -phenyl or -3-fluorophenyl;
R^C means -H or -OH;
R^E means -H, -CH_3, -F, -CF_3, -cyclopropyl, -aziridinyl, -OH; -O-C_1-C_4-alkyl; -OCF_3; -O-C_1-C_4-alkyl-CO_2H; -O-C_1-C_4-alkyl-C(=O)O-C_1-C_4-alkyl; or -O-C_1-Ca-alkyl-$CONH_2$;
R^F means

- CF_3, -cyclopropyl, $-S(=O)_2CH_3$,
- NH_2; $-NHC_1$-C_4-alkyl; $-N(C_1$-C_4-alkyl$)_2$; $-NHC_1$-C_4-alkyl-OH; $-NCH_3C_1$-C_4-alkyl-OH; $-NH$-C_1-C_4-alkyl-C(=O)NH_2; $-NCH_3$-C_1-C_4-alkyl-C(=O)NH_2; $-NHC(=O)$-C_1-Ca-alkyl; $-NCH_3C(=O)$-C_1-C_4-alkyl;
- 6-14-membered aryl, unsubstituted, mono- or polysubstituted; or
- 5-14-membered heteroaryl, unsubstituted, mono- or polysubstituted;

U means =CH- or =N-; and
V means =CH- or =N-;
or a physiologically acceptable salt thereof

[0062] In a preferred embodiment, the compound according to the invention has a structure according to general formula (XI)



(XI)

wherein

R^2 means -H or $-CH_3$;
R^3 means -phenyl or -3-fluorophenyl;
R^H means

- CN; $-C_1$-C_4-alkyl; $-CF_3$; $-C_1$-C_4-alkyl-C(=O)NH_2; $-C_1$-C_4-alkyl-$S(=O)_2$-C_1-C_4-alkyl; -C(=O)-C_1-C_4-alkyl; -C(=O)OH; -C(=O)O-C_1-C_4-alkyl; -C(=O)NH_2; -C(=O)NHC_1-C_4-alkyl; -C(=O)$N(C_1$-C_4-alkyl$)_2$; -C(=O)$NH(C_1$-C_4-alkyl-OH); -C(=O)$N(C_1$-C_4-alkyl$)(C_1$-C_4-alkyl-OH); -C(=O)NH-$(CH_2CH_2O)_{1\text{-}30}$-$CH_3$;
- 3-12-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered cycloalkyl is optionally connected through $-CH_2$-, -NH-, $-NCH_3$-, -NH-$(CH_2)_{1\text{-}3}$-, $-NCH_3(CH_2)_{1\text{-}3}$-, -(C=O)-, -NHC(=O)-, $-NCH_3C(=O)$-, -C(=O)NH-$(CH_2)_{1\text{-}3}$-, -C(=O)NCH_3-$(CH_2)_{1\text{-}3}$-; or
- 3-12-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; 6-14-membered aryl, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered heterocycloalkyl is optionally connected through $-CH_2$-, -NH-, $-NCH_3$-, -NH-$(CH_2)_{1\text{-}3}$-, $-NCH_3(CH_2)_{1\text{-}3}$-, -(C=O)-, -NHC(=O)-, $-NCH_3C(=O)$-, -C(=O)NH-$(CH_2)_{1\text{-}3}$-, -C(=O)NCH_3-$(CH_2)_{1\text{-}3}$-;

R^G means

- CF_3, $-S(=O)_2CH_3$;
- NH_2; $-NHC_1$-C_4-alkyl; $-N(C_1$-C_4-alkyl$)_2$; $-NHC_1$-C_4-alkyl-OH; $-NCH_3C_1$-C_4-alkyl-OH; $-NH$-C_1-C_4-alkyl-C(=O)NH_2; $-NCH_3$-C_1-C_4-alkyl-C(=O)NH_2; $-NHC(=O)$-C_1-C_4-alkyl; $-NCH_3C(=O)$-C_1-C_4-alkyl;
- 3-12-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered cycloalkyl is optionally connected through $-CH_2$-, -NH-, $-NCH_3$-, -NH-$(CH_2)_{1\text{-}3}$-, $-NCH_3(CH_2)_{1\text{-}3}$-, -(C=O)-, -NHC(=O)-, $-NCH_3C(=O)$-, -C(=O)NH-$(CH_2)_{1\text{-}3}$-, -C(=O)NCH_3-$(CH_2)_{1\text{-}3}$-; or
- 3-12-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; 6-14-membered aryl, unsubstituted, mono- or polysubstituted; wherein said 3-12-membered heterocycloalkyl is optionally connected through $-CH_2$-, -NH-, $-NCH_3$-, -NH-$(CH_2)_{1\text{-}3}$-, $-NCH_3(CH_2)_{1\text{-}3}$-, -(C=O)-, -NHC(=O)-, $-NCH_3C(=O)$-, -C(=O)NH-$(CH_2)_{1\text{-}3}$-, -C(=O)NCH_3-$(CH_2)_{1\text{-}3}$-;

or a physiologically acceptable salt thereof.

[0063] In a preferred embodiment, the compounds according to the invention are in the form of the free bases.

[0064] In another preferred embodiment, the compounds according to the invention are in the form of the physiologically acceptable salts.

[0065] For the purposes of the description, a "salt" is to be understood as being any form of the compound in which it assumes an ionic form or is charged and is coupled with a counter-ion (a cation or anion) or is in solution. The term is also to be understood as meaning complexes of the compound with other molecules and ions, in particular complexes which are associated via ionic interactions. Preferred salts are physiologically acceptable, in particular physiologically acceptable salts with anions or acids or also a salt formed with a physiologically acceptable acid.

[0066] Physiologically acceptable salts with anions or acids are salts of the particular compound in question with inorganic or organic acids which are physiologically acceptable, in particular when used in humans and/or mammals. Examples of physiologically acceptable salts of particular acids include but are not limited to salts of hydrochloric acid, sulfuric acid, and acetic acid.

[0067] The invention also includes isotopic isomers of a compound according to the invention, wherein at least one atom of the compound is replaced by an isotope of the respective atom which is different from the naturally predominantly occurring isotope, as well as any mixtures of isotopic isomers of such a compound. Preferred isotopes are ^{2}H (deuterium), ^{3}H (tritium), ^{13}C and ^{14}C.

[0068] Certain compounds according to the invention are useful for modulating a pharmacodynamic response from one or more opioid receptors (mu, delta, kappa, NOP/ORL-1) either centrally or peripherally, or both. The pharmacodynamic response may be attributed to the compound either stimulating (agonizing) or inhibiting (antagonizing) the one or more receptors. Certain compounds according to the invention may antagonize one opioid receptor, while also agonizing one or more other receptors. Compounds according to the invention having agonist activity may be either full agonists or partial agonists.

[0069] As used herein, compounds that bind to receptors and mimic the regulatory effects of endogenous ligands are defined as "agonists". Compounds that bind to a receptor but produce no regulatory effect, but rather block the binding of ligands to the receptor, are defined as "antagonists".

[0070] In certain embodiments, the compounds according to the invention are agonists at the mu opioid (MOP) and/or kappa opioid (KOP) and/or delta opioid (DOP) and/or nociceptin opioid (NOP/ORL-1) receptors.

[0071] The compounds according to the invention potently bind to the MOP and/or KOP and/or DOP and/or NOP receptors.

[0072] The compounds according to the invention can be modulators at the MOP and/or KOP and/or DOP and/or NOP receptors, and therefore the compounds according to the invention can be used/administered to treat, ameliorate, or prevent pain.

[0073] In some embodiments, the compounds according to the invention are agonists of one or more opioid receptors. In some embodiments, the compounds according to the invention are agonists of the MOP and/or KOP and/or DOP and/or NOP receptors.

[0074] In some embodiments, the compounds according to the invention are antagonists of one or more opioid receptors. In some embodiments, the compounds according to the invention are antagonists of the MOP and/or KOP and/or DOP and/or NOP receptors.

[0075] In some embodiments, the compounds according to the invention have both, (i) agonist activity at the NOP receptor; and (ii) agonist activity at one or more of the MOP, KOP, and DOP receptors.

[0076] In some embodiments, the compounds according to the invention have both, (i) agonist activity at the NOP receptor; and (ii) antagonist activity at one or more of the MOP, KOP, and DOP receptors.

[0077] In some embodiments, the compounds according to the invention have both, (i) antagonist activity at the NOP receptor; and (ii) agonist activity at one or more of the MOP, KOP, and DOP receptors.

[0078] In some embodiments, the compounds according to the invention have both, (i) antagonist activity at the NOP receptor; and (ii) antagonist activity at one or more of the MOP, KOP, and DOP receptors.

[0079] In some embodiments, preferably with respect to receptors of the peripheral nervous system, the compounds according to the invention have selective agonist activity at the NOP receptor. In some embodiments, preferably with respect to receptors of the peripheral nervous system, the compounds according to the invention

- have agonist activity at the NOP receptor, but no significant activity at the MOP receptor;
- have agonist activity at the NOP receptor, but no significant activity at the KOP receptor;
- have agonist activity at the NOP receptor, but no significant activity at the DOP receptor;
- have agonist activity at the NOP receptor, but no significant activity at the MOP receptor as well as no significant activity at the KOP receptor;

- have agonist activity at the NOP receptor, but no significant activity at the MOP receptor as well as no significant activity at the DOP receptor; or

- have agonist activity at the NOP receptor, but no significant activity at the MOP receptor as well as no significant activity at the KOP receptor as well as no significant activity at the DOP receptor.

[0080] In some embodiments, preferably with respect to receptors of the peripheral nervous system, the compounds according to the invention have balanced agonist activity at the NOP receptor as well as at the MOP receptor. In some embodiments, preferably with respect to receptors of the peripheral nervous system, the compounds according to the invention

- have agonist activity at the NOP receptor as well as agonist activity at the MOP receptor;

- have agonist activity at the NOP receptor as well as agonist activity at the MOP receptor as well as agonist activity at the KOP receptor;

- have agonist activity at the NOP receptor as well as agonist activity at the MOP receptor as well as agonist activity at the DOP receptor;

- can be regarded as opioid pan agonists, i.e. have agonist activity at the NOP receptor as well as agonist activity at the MOP receptor as well as agonist activity at the KOP receptor as well as agonist activity at the DOP receptor;

- have agonist activity at the NOP receptor as well as agonist activity at the MOP receptor, but no significant activity at the KOP receptor;

- have agonist activity at the NOP receptor as well as agonist activity at the MOP receptor, but no significant activity at the DOP receptor; or

- have agonist activity at the NOP receptor as well as agonist activity at the MOP receptor, but no significant activity at the KOP receptor as well as no significant activity at the DOP receptor.

[0081] In some embodiments, preferably with respect to receptors of the peripheral nervous system, the compounds according to the invention have balanced agonist activity at the NOP receptor as well as at the KOP receptor. In some embodiments, preferably with respect to receptors of the peripheral nervous system, the compounds according to the invention

- have agonist activity at the NOP receptor as well as agonist activity at the KOP receptor;

- have agonist activity at the NOP receptor as well as agonist activity at the KOP receptor as well as agonist activity at the MOP receptor;

- have agonist activity at the NOP receptor as well as agonist activity at the KOP receptor as well as agonist activity at the DOP receptor;

- have agonist activity at the NOP receptor as well as agonist activity at the KOP receptor, but no significant activity at the MOP receptor;

- have agonist activity at the NOP receptor as well as agonist activity at the KOP receptor, but no significant activity at the DOP receptor; or

- have agonist activity at the NOP receptor as well as agonist activity at the KOP receptor, but no significant activity at the MOP receptor as well as no significant activity at the DOP receptor.

[0082] In some embodiments, preferably with respect to receptors of the peripheral nervous system, the compounds according to the invention have balanced agonist activity at the NOP receptor as well as at the DOP receptor. In some embodiments, preferably with respect to receptors of the peripheral nervous system, the compounds according to the invention

- have agonist activity at the NOP receptor as well as agonist activity at the DOP receptor;
- have agonist activity at the NOP receptor as well as agonist activity at the DOP receptor, but no significant activity at the MOP receptor;
- have agonist activity at the NOP receptor as well as agonist activity at the DOP receptor, but no significant activity at the KOP receptor; or
- have agonist activity at the NOP receptor as well as agonist activity at the DOP receptor, but no significant activity at the MOP receptor as well as no significant activity at the KOP receptor.

[0083] In some embodiments, preferably with respect to receptors of the peripheral nervous system, the compounds according to the invention have selective agonist activity at the KOP receptor. In some embodiments, preferably with respect to receptors of the peripheral nervous system, the compounds according to the invention

- have agonist activity at the KOP receptor, but no significant activity at the MOP receptor;
- have agonist activity at the KOP receptor, but no significant activity at the NOP receptor;
- have agonist activity at the KOP receptor, but no significant activity at the DOP receptor;
- have agonist activity at the KOP receptor, but no significant activity at the MOP receptor as well as no significant activity at the NOP receptor;
- have agonist activity at the KOP receptor, but no significant activity at the MOP receptor as well as no significant activity at the DOP receptor; or
- have agonist activity at the KOP receptor, but no significant activity at the MOP receptor as well as no significant activity at the NOP receptor as well as no significant activity at the DOP receptor.

[0084] In some embodiments, preferably with respect to receptors of the peripheral nervous system, the compounds according to the invention have agonist activity at the MOP receptor, agonist activity at the KOP receptor, and antagonist activity at the DOP receptor. In some embodiments, preferably with respect to receptors of the peripheral nervous system, the compounds according to the invention

- have agonist activity at the MOP receptor as well as agonist activity at the KOP receptor as well as antagonist activity at the DOP receptor;
- have agonist activity at the MOP receptor as well as agonist activity at the KOP receptor as well as antagonist activity at the DOP receptor as well as agonist activity at the NOP receptor;
- have agonist activity at the MOP receptor as well as agonist activity at the KOP receptor as well as antagonist activity at the DOP receptor as well as antagonist activity at the NOP receptor; or
- have agonist activity at the MOP receptor as well as agonist activity at the KOP receptor as well as antagonist activity at the DOP receptor, no significant activity at the NOP receptor.

[0085] In some embodiments, preferably with respect to receptors of the central nervous system, the compounds according to the invention have selective agonist activity at the NOP receptor. In some embodiments, preferably with respect to receptors of the central nervous system, the compounds according to the invention

- have agonist activity at the NOP receptor, but no significant activity at the MOP receptor;
- have agonist activity at the NOP receptor, but no significant activity at the KOP receptor;
- have agonist activity at the NOP receptor, but no significant activity at the DOP receptor;
- have agonist activity at the NOP receptor, but no significant activity at the MOP receptor as well as no significant

activity at the KOP receptor;

- have agonist activity at the NOP receptor, but no significant activity at the MOP receptor as well as no significant activity at the DOP receptor; or

- have agonist activity at the NOP receptor, but no significant activity at the MOP receptor as well as no significant activity at the KOP receptor as well as no significant activity at the DOP receptor.

[0086] In some embodiments, preferably with respect to receptors of the central nervous system, the compounds according to the invention have selective antagonist activity at the NOP receptor. In some embodiments, preferably with respect to receptors of the central nervous system, the compounds according to the invention

- have antagonist activity at the NOP receptor, but no significant activity at the MOP receptor;

- have antagonist activity at the NOP receptor, but no significant activity at the KOP receptor;

- have antagonist activity at the NOP receptor, but no significant activity at the DOP receptor;

- have antagonist activity at the NOP receptor, but no significant activity at the MOP receptor as well as no significant activity at the KOP receptor;

- have antagonist activity at the NOP receptor, but no significant activity at the MOP receptor as well as no significant activity at the DOP receptor; or

- have antagonist activity at the NOP receptor, but no significant activity at the MOP receptor as well as no significant activity at the KOP receptor as well as no significant activity at the DOP receptor.

[0087] In some embodiments, preferably with respect to receptors of the central nervous system, the compounds according to the invention have antagonist activity at the NOP receptor as well as agonist activity at the DOP receptor. In some embodiments, preferably with respect to receptors of the central nervous system, the compounds according to the invention

- have antagonist activity at the NOP receptor as well as agonist activity at the DOP receptor;

- have antagonist activity at the NOP receptor as well as agonist activity at the DOP receptor, but no significant activity at the MOP receptor;

- have antagonist activity at the NOP receptor as well as agonist activity at the DOP receptor, but no significant activity at the KOP receptor; or

- have antagonist activity at the NOP receptor as well as agonist activity at the DOP receptor, but no significant activity at the MOP receptor as well as no significant activity at the KOP receptor.

[0088] For the purpose of the specification, "no significant activity" means that the activity (agonist/antagonist) of the given compound at this receptor is lower by a factor of 1000 or more compared to its activity (agonist/antagonist) at one or more of the other opioid receptors.

[0089] The invention relates to the compounds disclosed herein for use as medicaments.

[0090] A further aspect of the invention relates to the compounds according to the invention for use in the treatment of pain. The pain is preferably acute or chronic. The pain is preferably nociceptive or neuropathic.

[0091] A further aspect of the invention relates to the compounds according to the invention for use in the treatment of neurodegenerative disorders, neuroinflammatory disorders, neuropsychiatric disorders, and substance abuse/dependence.

[0092] Another aspect of the description relates to a pharmaceutical composition which contains a physiologically acceptable carrier and at least one compound according to the invention. The pharmaceutical compositions are not claimed as such. References to the pharmaceutical compositions essentially serve information purposes.

[0093] Preferably, the composition is solid, liquid or pasty; and/or contains the compound according to the invention in an amount of from 0.001 to 99 wt. %, preferably from 1.0 to 70 wt. %, based on the total weight of the composition.

[0094] The pharmaceutical composition can optionally contain suitable additives and/or auxiliary substances and/or

optionally further active ingredients.

[0095] Examples of suitable physiologically acceptable carriers, additives and/or auxiliary substances are fillers, solvents, diluents, colorings and/or binders. These substances are known to the person skilled in the art (see H. P. Fiedler, Lexikon der Hilfsstoffe fur Pharmazie, Kosmetik and angrenzende Gebiete, Editio Cantor Aulendoff).

[0096] The pharmaceutical composition contains the compound according to the invention in an amount of preferably from 0.001 to 99 wt. %, more preferably from 0.1 to 90 wt. %, yet more preferably from 0.5 to 80 wt. %, most preferably from 1.0 to 70 wt. % and in particular from 2.5 to 60 wt. %, based on the total weight of the pharmaceutical composition.

[0097] The pharmaceutical composition is preferably for systemic, topical or local administration, preferably for oral administration.

[0098] Another aspect of the description relates to a pharmaceutical dosage form which contains the pharmaceutical composition disclosed herein. The pharmaceutical dosage forms are not claimed as such.
References to the pharmaceutical dosage forms essentially serve information purposes.

[0099] In one preferred embodiment, the pharmaceutical dosage form is produced for administration twice daily, for administration once daily or for administration less frequently than once daily. Administration is preferably systemic, in particular oral.

[0100] The pharmaceutical dosage form can be administered, for example, as a liquid dosage form in the form of injection solutions, drops or juices, or as a semi-solid dosage form in the form of granules, tablets, pellets, patches, capsules, plasters/spray-on plasters or aerosols. The choice of auxiliary substances etc. and the amounts thereof to be used depend on whether the form of administration is to be administered orally, perorally, parenterally, intravenously, intraperitoneally, intradermally, intramuscularly, intranasally, buccally, rectally or locally, for example to the skin, the mucosa or into the eyes.

[0101] Pharmaceutical dosage forms in the form of tablets, dragees, capsules, granules, drops, juices and syrups are suitable for oral administration, and solutions, suspensions, readily reconstitutable dry preparations and also sprays are suitable for parenteral, topical and inhalatory administration. Compounds according to the invention in a depot, in dissolved form or in a plaster, optionally with the addition of agents promoting penetration through the skin, are suitable percutaneous administration preparations.

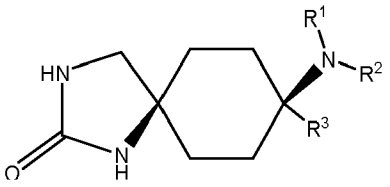
[0102] The amount of the compounds for use according to the invention to be administered to the patient varies in dependence on the weight of the patient, on the type of administration, on the indication and on the severity of the disease. Usually, from 0.00005 mg/kg to 50 mg/kg, preferably from 0.001 mg/kg to 10 mg/kg, of at least one compound according to the invention is administered.

[0103] Another aspect of the description relates to a process for the preparation of the compounds disclosed herein. Suitable processes for the synthesis of the compounds are known in principle to the person skilled in the art. The process for the preparation of the compounds is not claimed as such. References to the process for the preparation of the compounds essentially serve information purposes.

[0104] Preferred synthesis routes are described below:

[0105] The compounds according to the invention can be obtained via different synthesis routes. Depending on the synthesis route, different intermediates are prepared and subsequently further reacted.

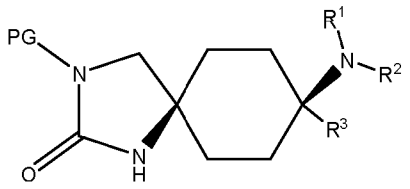
[0106] In a preferred embodiment, the synthesis of the compounds according to the invention proceeds via a synthesis route which comprises the preparation of an intermediate according to general formula (IIIa):



(IIIa)

wherein R', R^2 and R^3 are defined as above.

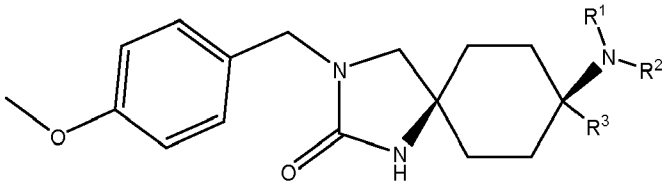
[0107] In another preferred embodiment, the synthesis of the compounds proceeds via a synthesis route which comprises the preparation of an intermediate according to general formula (IIIb):



(IIIb)

wherein R', R^2 and R^3 are defined as above and PG is a protecting group.

[0108] Preferably the protecting group is -p-methoxybenzyl. Therefore, in another preferred embodiment, the synthesis of the compounds proceeds via a synthesis route which comprises the preparation of an intermediate according to general formula (IIIc):



(IIIc)

wherein R', R^2 and R^3 are defined as above.

[0109] As already indicated, in general formula (IIIc), the -p-methoxybenzyl moiety represents a protecting group which can be cleaved in the course of the synthesis route.

[0110] In yet another preferred embodiment, the synthesis of the compounds proceeds via a synthesis route which comprises the preparation of

- an intermediate according to general formula (IIIa) and according to general formula (IIIb); or
- an intermediate according to general formula (IIIa) and according to general formula (IIIc); or
- an intermediate according to general formula (IIIb) and according to general formula (IIIc); or
- an intermediate according to general formula (IIIa), according to general formula (IIIb) and according to general formula (IIIc).

[0111] The following examples further illustrate the invention but are not to be construed as limiting its scope.

Examples

[0112] "RT" means room temperature (23 ± 7 °C), "M" are indications of concentration in mol/l, "aq." means aqueous, "sat." means saturated, "sol." means solution, "conc." means concentrated.

[0113] Further abbreviations:

brine	saturated aqueous sodium chloride solution
CC	column chromatography
cHex	cyclohexane
dba	dibenzylideneacetone
DCM	dichloromethane
DIPEA	N,N-diisopropylethylamine
DMF	N,N-dimethylformamide
Et	ethyl
ether	diethyl ether
EE	ethyl acetate
EtOAc	ethyl acetate
EtOH	ethanol
h	hour(s)
H_2O	water
HATU	O-(7-aza-benzotriazol-1-yl)-N,N,N',N'-tetramethyluroniumhexafluorophosphate

LDA	lithium diisoproylamide
Me	methyl
m/z	mass-to-charge ratio
MeOH	methanol
MeCN	acetonitrile
min	minutes
MS	mass spectrometry
NBS	N-bromosuccinimide
NIS	N-iodosuccinimide
NEt_3	triethylamine
PE	petroleum ether (60-80°C)
RM	reaction mixture
RT	room temperature
TFA	trifluoroacetic acid
T3P	2,4,6-tripropyl-1,3,5,2,4,6-trioxatriphosphorinane-2,4,6-trioxide
tBME	tert-butyl methyl ether
THF	tetrahydrofurane
v/v	volume to volume
w/w	weight to weight
Xantphos	4,5-bis(diphenylphosphino)-9,9-dimethylxanthene

[0114] The yields of the compounds prepared were not optimised. All temperatures are uncorrected.

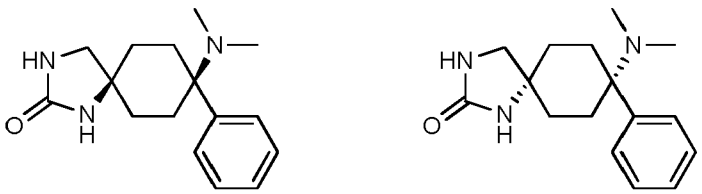
[0115] All starting materials, which are not explicitly described, were either commercially available (the details of suppliers such as for example Acros, Aldrich, Bachem, Butt park, Enamine, Fluka, Lancaster, Maybridge, Merck, Sigma, TCI, Oakwood, etc. can be found in the Symyx® Available Chemicals Database of MDL, San Ramon, US or the SciFinder® Database of the ACS, Washington DC, US, respectively, for example) or the synthesis thereof has already been described precisely in the specialist literature (experimental guidelines can be found in the Reaxys® Database of Elsevier, Amsterdam, NL or the SciFinder® Database of the ACS, Washington DC, US, repspectively, for example) or can be prepared using the conventional methods known to the person skilled in the art.

[0116] The mixing ratios of solvents or eluents for chromatography are specified in v/v.

[0117] All the intermediate products and exemplary compounds were analytically characterised by mass spectrometry (MS, m/z for $[M+H]^+$). In addition ^{1}H-NMR and ^{13}C spectroscopy was carried out for all the exemplary compounds and selected intermediate products.

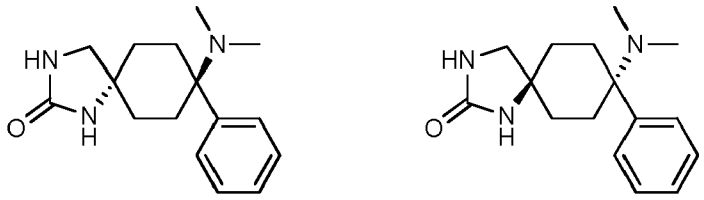
Remark regarding stereochemistry

[0118] **CIS** refers to the relative configuration of compounds described herein, in which both nitrogen atoms are drawn on the same face of the cyclohexane ring as described in the following exemplary structure. Two depictions are possible:



CIS configuration

[0119] **TRANS** refers to compounds, in which both nitrogen atoms are on opposite faces of the cyclohexane ring as described in the following exemplary structure. Two depictions are possible:

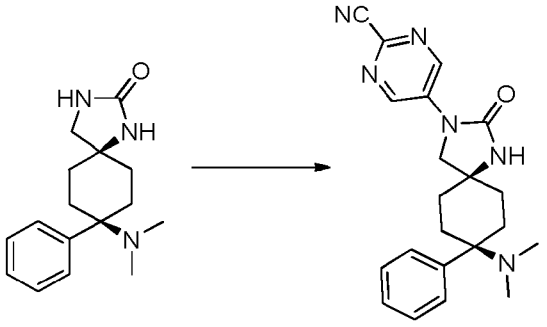


TRANS configuration

Synthesis of Intermediates

Synthesis of INT-600: 5-(cis-8-(Dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carbonitrile

[0120]

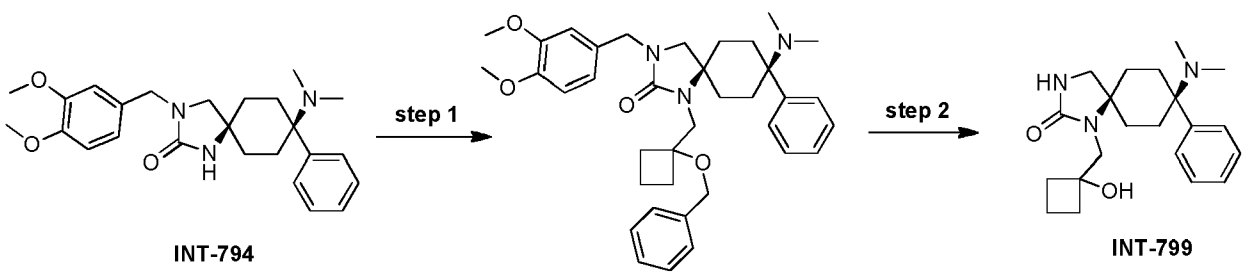


INT-976 **INT-600**

[0121] Cs_2CO_3 (1.1 g, 3.66 mmol) was added to the solution of CIS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5] decan-2-one **(INT-976)** (0.5 g, 1.83 mmol), Xanthphos (0.158 g, 0.274 mmol), $Pd_2(dba)_3$ (0.083 g, 0.091 mmol) and 5-bromopyrimidine-2-carbonitrile (0.52 g, 2.74 mmol) in 1,4-dioxane (20 mL) under argon atmosphere. The reaction mixture was stirred for 16 h at 90°C, then cooled to RT and concentrated under reduced pressure. The residue was suspended in EtOAc (20 mL) and filtered through a plug of celite. The filtrate was concentrated under reduced pressure and the resulting residue was purified by flash chromatography on silica gel to afford 5-(cis-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carbonitrile **(INT-600)** (0.4 g) as a white solid.

Synthesis of INT-799: CIS-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-one

[0122]



INT-794 **INT-799**

Step 1: CIS-1-((1-(benzyloxy)cyclobutyl)methyl)-3-(3,4-dimethoxybenzyl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro [4.5]decan-2-one

[0123] NaOH (1.42 g, 35.5 mmol) was added to a solution of CIS-3-(3,4-dimethoxybenzyl)-8-(dimethylamino)-8-

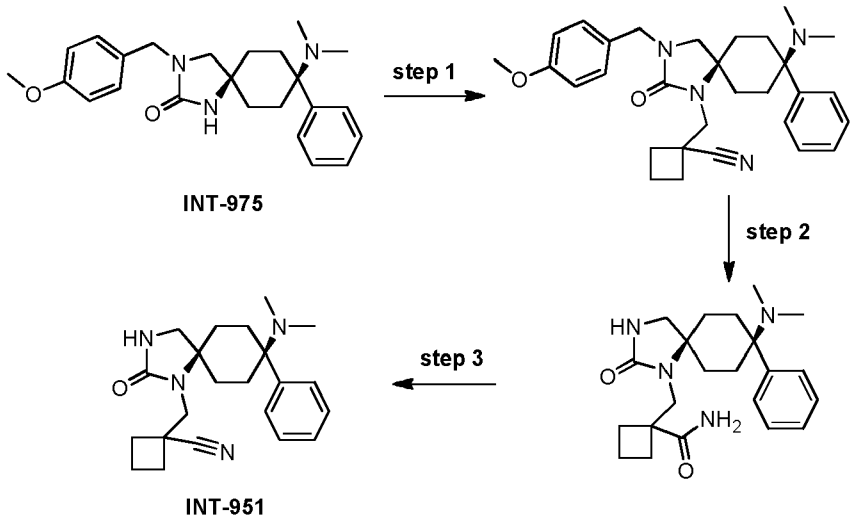
phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-794)** (3 g, 7.09 mmol) in DMSO (90 mL) under argon atmosphere and the reaction mixture was stirred at 80°C for 30 min. ((1-(Bromomethyl)cyclobutoxy)methyl)benzene (5.4 g, 21.3 mmol) was added and stirring was continued for 2 days at 80°C. The reaction completion was monitored by TLC. The reaction mixture was diluted with water (500 mL) and extracted with diethyl ether (4x300 mL). The combined organic extracts were dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. The residue was purified by column chromatography (230-400mesh silica gel; 65-70% EtOAc in petroleum ether as eluent) to afford 2.5g (59%) of -CIS-1-((1-(benzyloxy) cyclobutyl)methyl)-3-(3,4-dimethoxybenzyl)-8 (dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (TLC system: 10% MeOH in DCM; Rf: 0.8).

Step 2: CIS-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0124] TFA (12mL) was added to CIS-1-((1-(benzyloxy)cyclobutyl)methyl)-3-(3,4-dimethoxybenzyl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (2.5 g, 4.18 mmol) at 0°C and the resulting mixture was stirred at 70°C for 6 h. The reaction completion was monitored by LCMS. The reaction mixture was concentrated under reduced pressure. To the residue sat. aq. $NaHCO_3$ was added (until pH 10) and the organic product was extracted with DCM (3x150mL). The combined organic extracts were dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. The residue was purified by column chromatography (230-400mesh silica gel; 5% MeOH in DCM as eluent) to afford 500mg (33%) of CIS-8-dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-799)** (TLC system: 10% MeOH in DCM; Rf: 0.5). $[M+H]^+$ 358.2

Synthesis of INT-951: CIS-1-[(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl)-methyl]-cyclobutane-1-carbonitrile

[0125]



Step 1: 1-((CIS-8-(dimethylamino)-3-(4-methoxybenzyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl)methyl) cyclobutanecarbonitrile

[0126] NaH (50% in mineral oil) (2.44 g, 50.89 mmol) was added to a solution of CIS-8-dimethylamino-3-[(4-methoxyphenyl)-methyl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one **(INT-975)** (5 g, 12.72 mmol) in DMF (100 mL) at 0°C portionwise over 10 min. 1-(Bromomethyl)cyclobutanecarbonitrile (4.4 g, 25.44 mmol) was added dropwise over 10 minutes at 0°C. The reaction mixture was allowed to stir at RT for 3 h, then quenched with water and the organic product was extracted with ethyl acetate (3x200mL). The combined organic extracts were dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to afford 5g (crude) of 1-((CIS-8-(dimethylamino)-3-(4-methoxybenzyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl)methyl)cyclobutane-carbonitrile as gummy brown liquid. The material was used for the next step without further purification.

Step 2: 1-((CIS-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl)methyl) cyclobutanecarboxamide

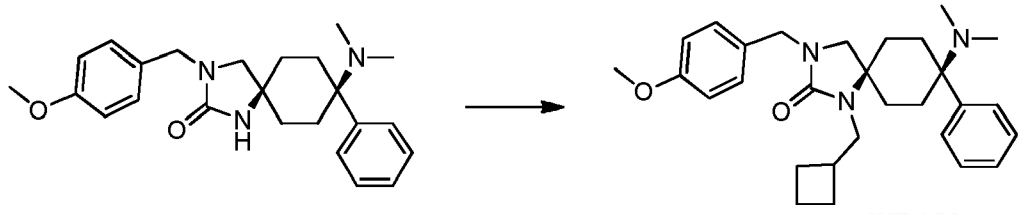
[0127] TFA (100mL) was added to 1-((CIS-8-(dimethylamino)-3-(4-methoaybenzyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5]decan-1-yl)methyl)cyclobutanecarbonitrile (5 g, 10.28 mmol) at 0°C and the reaction mixture at mixture was stirred at RT for 2 days. The reaction mixture was concentrated *in vacuo.* To the residue sat. aq. $NaHCO_3$ was added (until pH 10) and the organic product was extracted with dichloromethane (3x150mL). The combined organic extracts were dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to afford 3.5g (crude) of 1-((CIS-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl)methyl) cyclobutanecarboxamide. The material was used for the next step without further purification.

Step 3: 1-((cis-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl)methyl)cyclobutane carbonitrile

[0128] Thionyl chloride (35 mL) was added to 1-((cis-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl) methyl)cyclobutanecarboxamide (3.5 g, 9.11 mmol) at RT and the resulting mixture was stirred at reflux for 2h. The reaction mixture was concentrated *in vacuo.* To the residue sat. aq. $NaHCO_3$ was added (until pH 10) and the organic product was extracted with dichloromethane (3x150mL). The combined organic layer was dried over anhydrous Na_2SO_4 and concentrated *in vacuo.* The residue was purified by column chromatography to afford 1.3 g (34% after three steps) of CIS-1-[(8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl)-methyl]-cyclobutane-1-carbonitrile **(INT-951).** $[M+H]^+$ 367.2.

Synthesis of INT-952: CIS-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one

[0129]

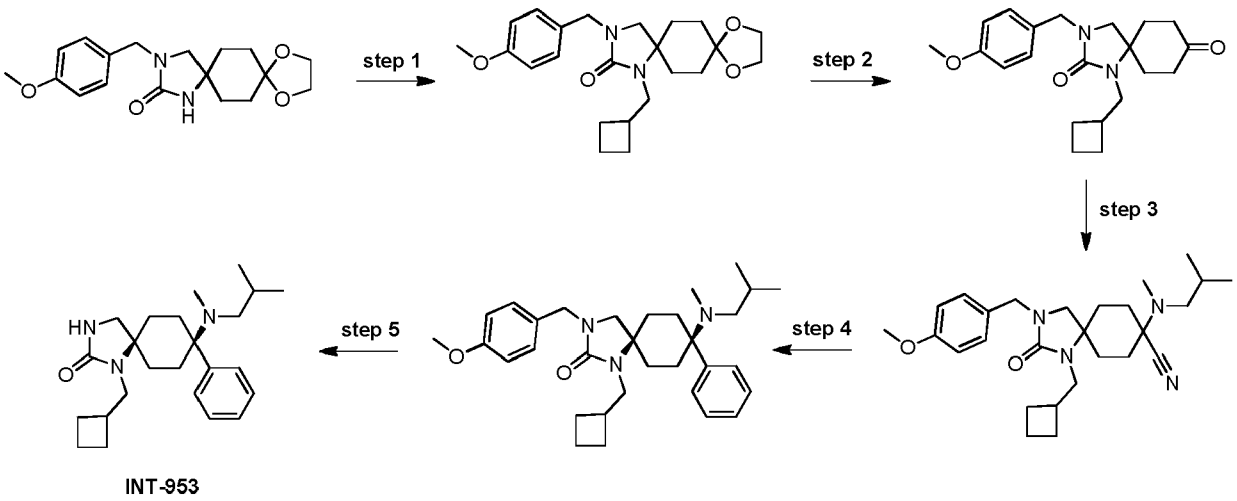


INT-975 **INT-952**

[0130] To a solution of CIS-8-dimethylamino-3-[(4-methoxyphenyl)-methyl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one **(INT-975)** (10 g, 25 mmol) in THF (500 mL) was added KOtBu (7.1 g, 63 mmol) at 50 °C. The reaction mixture was heated up to reflux, cyclobutylmethylbromide (11.3 g, 76 mmol) was added in one portion, and stirring was continued at reflux for 12 h. KOtBu (7.1 g) and cyclobutylmethylbromide (11.3 g) were added again. The reaction mixture was allowed to stir another 2 h at reflux, then cooled to RT, diluted with water (150 mL) and the layers partitioned. The aqueous layer was extracted with EtOAc (3x300 mL). The combined organic layers were dried over Na_2SO_4 and then concentrated *in vacuo.* The residue was filtered through a plug of silica gel using a DCM/MeOH (19/1 v/v) mixture. The filtrate was concentrated *in vacuo* and the resulting solid was recrystallized from hot ethanol to yield 7.8 g of CIS-1-(cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one **(INT-952).** $[M+H]^+$ 461.3.

Synthesis of INT-953: CIS-1-(Cyclobutyl-methyl)-8-(methyl-(2-methyl-propyl)-amino)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one

[0131]



Step 1: 1-Cyclobutylmethyl-3-(4-methoxy-benzyl)-9,12-dioxa-1,3-diaza-dispiro[4.2.4.2]tetradecan-2-one

[0132] To a stirred solution of 3-(4-methoxy-benzyl)-9,12-dioxa-1,3-diaza-dispiro[4.2.4.2]tetradecan-2-one (4 g, 12.04 mmol) in anhydrous DMF (60 ml) was added NaH (1.38 g, 60% dispersion in oil, 36.14 mmol) at RT. The reaction mixture was stirred for 10 min, bromomethylcyclobutane (3 ml, 26.5 mmol) was added dropwise and stirring was continued for 50 h. TLC analysis showed complete consumption of the starting material. The reaction mixture was quenched with sat. aq. NH_4Cl (50 ml) and extracted with EtOAc (3x200ml). The combined organic phase was dried over Na_2SO_4 and concentrated under reduced pressure. The resulting residue was purified column chromatography (neutral aluminum oxide, EtOAc - petroleum ether (2:8)) to give 1-cyclobutylmethyl-3-(4-methoxy-benzyl)-9,12-dioxa-1,3-diaza-dispiro [4.2.4.2]tetradecan-2-one (2.4 g, 50%, white solid). TLC system: EtOAc - pet ether (6:4); R_f= 0.48.

Step 2: 1-Cyclobutylmethyl-3-(4-methoxy-benzyl)-1,3-diaza-spiro[4.5]decane-2,8-dione

[0133] To a stirred solution of 1-cyclobutylmethyl-3-(4-methoxy-benzyl)-9,12-dioxa-1,3-diaza-dispiro[4.2.4.2]tetradecan-2-one (1 g, 2.5 mmol) in MeOH (7 ml) was added 10% aq. HCl (8 ml) at 0°C. The reaction mixture was warmed up to RT and stirred for 16 h. TLC analysis showed complete consumption of the starting material. The reaction mixture was quenched with sat. aq. $NaHCO_3$ (30 ml) and extracted with EtOAc (3x50ml). The combined organic phase was dried over Na_2SO_4 and concentrated under reduced pressure. The resulting residue was purified by column chromatography (silica gel, 230-400 mesh, EtOAc - pet ether (1:3)→(3:7)) to give 1-cyclobutylmethyl-3-(4-methoxy-benzyl)-1,3-diaza-spiro[4.5] decane-2,8-dione (650 mg, 73%, colorless viscous oil). TLC system: EtOAc - pet ether (6:4); R_f = 0.40.

Step 3: 1-(cyclobutylmethyl)-8-(isobutyl(methyl)amino)-3-(4-methoxybenzyl)-2-oxo-1,3-diazaspiro [4.5] decane-8-carbonitrile

[0134] To a stirred solution of N-isobutyl-N-methylamine (1.34 ml, 11.23 mmol) and MeOH/H_2O (8 ml, 1:1, v/v) was added 4N aq. HCl (1.5 ml) and the reaction mixture was stirred for 10 min at 0°C (ice bath). A solution of 1-cyclobutylmethyl-3-(4-methoxy-benzyl)-l,3-diaza-spiro[4.5]decane-2,8-dione (1 g, 2.80 mmol) in MeOH (7 ml) and KCN (548 mg, 8.42 mmol) were added and the reaction mixture was stirred at 45°C for 20 h. TLC analysis showed complete consumption of the starting material. The reaction mixture was diluted with water (30 ml), extracted with EtOAc (3x30ml), the combined organic phase was dried over Na_2SO_4 and concentrated under reduced pressure to give 1-(cyclobutylmethyl)-8-(isobutyl(methyl)amino)-3-(4-methoxybenzyl)-2-oxo-1,3-diazaspiro[4.5]decane-8-carbonitrile (1.3 g, viscous yellow oil). TLC system: EtOAc - pet ether (1:1); R_f = 0.45. The product was used for the next step without additional purification.

Step 4: CIS-1-(cyclobutylmethyl)-8-(isobutyl(methyl)amino)-3-(4-methoxybenzyl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one

[0135] A round bottom flask containing 1-(cyclobutylmethyl)-8-(isobutyl(methyl)amino)-3-(4-methoxybenzyl)-2-oxo-1,3-diazaspiro[4.5]decane-8-carbonitrile (1.3 g, 2.81 mmol) was cooled in an ice bath (~0°C) and a solution of phenylmagnesium bromide (26 ml, ~2M in THF) was added slowly at 0°C-5°C. The ice bath was removed and the reaction mixture was stirred for 30 min, then diluted with sat. aq. NH_4Cl (25 ml) and extracted with EtOAc (4x30 ml). The combined organic phase was dried over Na_2SO_4 and concentrated under reduced pressure to give pale yellow viscous oil. This

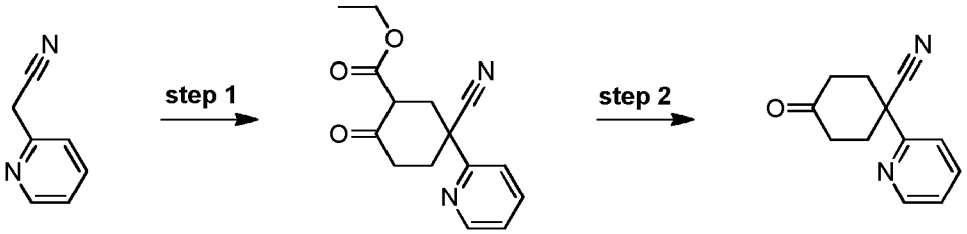
residue was purified by column chromatography (silica gel, 230-400 mesh, eluent: EtOAc - pet ether (15:85)→ (2:4)) to give CIS-1-(cyclobutylmethyl)-8-(isobutyl(methyl)amino)-3-(4-methoxybenzyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (135 mg, 10%, white solid). TLC system: EtOAc - pet ether (1:1); R_f = 0.6

Step 5: CIS-1-(Cyclobutyl-methyl)-8-(methyl-(2-methyl-propyl)-amino)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one

[0136] A round bottom flask containing CIS-1-(cyclobutylmethyl)-8-(isobutyl(methyl)amino)-3-(4-methoxybenzyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (130 mg, 0.25 mmol) was cooled in an ice bath and a mixture of TFA/CH_2Cl_2 (2.6 ml, 1:1, v/v) was added slowly at 0°C-5°C. The reaction mixture was warmed to RT and stirred for 20 h, then quenched with methanolic NH_3 (10ml, ~10% in MeOH) and concentrated under reduced pressure to give pale yellow viscous oil. This residue was purified twice by column chromatography (silica gel, 230-400 mesh, eluent: MeOH - $CHCl_3$ (1:99)→(2:98)) to give CIS-1-(cyclobutyl-methyl)-8-(methyl-(2-methylpropyl)-amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-953)** (65 mg, 66%, white solid). TLC system: MeOH - $CHCl_3$ (5:95); R_f = 0.25; $[M+H]^+$ 384.3

Synthesis of INT-958: 4-Oxo-1-pyridin-2-yl-cyclohexane-1-carbonitrile

[0137]



INT-958

Step 1: Ethyl 5-cyano-2-oxo-5-(pyridin-2-yl)cyclohexanecarboxylate

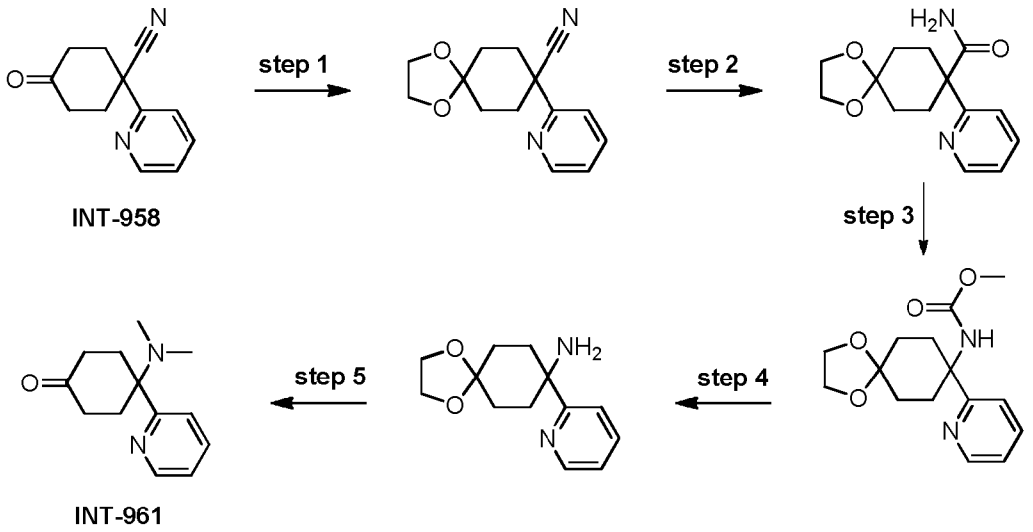
[0138] KOtBu (57.0 g, 508.4 mmol) was added to the solution of 2-(pyridin-2-yl)acetonitrile (50.0 g, 423.7 mmol) and ethyl acrylate (89.0 g, 889.8 mmol) in THF (500 mL) at 0°C and stirred for 16 h at RT. The reaction mixture was quenched with sat. aq. NH_4Cl and extracted with EtOAc (2x500 mL). The combined organic layer was washed with brine, dried over Na_2SO_4 and concentrated under reduced pressure to afford 68.0 g (60%; crude) of ethyl 5-cyano-2-oxo-5-(pyridin-2-yl) cyclohexanecarboxylate as a brown liquid (TLC system: 50% ethyl acetate in petroleum ether; Rf: 0.65).

Step 2: 4-Oxo-1-pyridin-2-yl-cyclohexane-1-carbonitrile

[0139] A solution of ethyl 5-cyano-2-oxo-5-(pyridin-2-yl)cyclohexanecarboxylate (68.0 g, 250.0 mmol) was added to a mixture of conc. aq. HCl and glacial acetic acid (170mL/510mL) at 0°C. The reaction mixture was heated to 100°C for 16 h. All volatiles were evaporated under reduced pressure. The residue was diluted with sat. aq. $NaHCO_3$ and extracted with ethyl acetate (3x300 mL). The combined organic layer was washed with brine, dried over Na_2SO_4 and concentrated under reduced pressure to afford 44.0g (88%) of 4-oxo-1-pyridin-2-yl-cyclohexane-1-carbonitrile **INT-958** as a brown solid (TLC system: 50% ethyl acetate in pet ether; Rf: 0.45). $[M+H]^+$ 201.1

Synthesis of INT-961: 4-Dimethylamino-4-pyridin-2-yl-cyclohexan-1-one

[0140]



Step 1: 8-(pyridin-2-yl)-1,4-dioxaspiro[4.5]decane-8-carbonitrile

[0141] A solution of 4-oxo-1-pyridin-2-yl-cyclohexane-1-carbonitrile (INT-958) (44.0 g, 220.0 mmol), ethylene glycol (27.0 g, 440.0 mmol) and PTSA (4.2 g, 22.0 mmol) in toluene (450 mL) was heated to 120°C for 16 h using Dean Stark apparatus. All volatiles were evaporated under reduced pressure. The residue was diluted with sat. aq. $NaHCO_3$ and extracted with ethyl acetate (3x300 mL). The combined organic layer was washed with brine, dried over Na_2SO_4 and concentrated under reduced pressure to afford 45.0 g (85%) of 8-(pyridin-2-yl)-1,4-dioxaspiro[4.5]decane-8-carbonitrile as a light brown solid (TLC system: 50% ethyl acetate in petroleum ether; Rf: 0.55).

Step 2: 8-(pyridin-2-yl)-1,4-dioxaspiro[4.5]decane-8-carboxamide

[0142] Potassium carbonate (50.0 g, 368.84 mmol) and 30% aq. H_2O_2 (210.0 mL, 1844.2 mmol) were added to the solution of 8-(pyridin-2-yl)-1,4-dioxaspiro[4.5]decane-8-carbonitrile (45.0 g, 184.42 mmol) in DMSO (450 mL) at 0°C and the resulting mixture was stirred at RT for 14 h. The reaction mixture was diluted with water (1.5 L) and stirred for 1 h. The precipitated solid was separated by filtration, washed with water, petroleum ether and dried under reduced pressure to get 32.0 g (66%) of 8-(pyridin-2-yl)-1,4-dioxaspiro[4.5]decane-8-carboxamide as a white solid. (TLC system: 10% MeOH in DCM R_f: 0.35).

Step 3: methyl 8-(pyridin-2-yl)-1,4-dioxaspiro[4.5]decan-8-ylcarbamate

[0143] A mixture of 8-(pyridin-2-yl)-1,4-dioxaspiro[4.5]decane-8-carboxamide (25.0 g, 95.41 mmol), sodium hypochlorite (5wt% aq. solution, 700 mL, 477.09 mmol) and KF-Al_2O_3 (125.0 g) in methanol (500 mL) was heated to 80°C for 16 h. The reaction mixture was filtered through celite and the solid residue was washed with methanol. The combined filtrate was concentrated under reduced pressure. The residue was diluted with water and extracted with ethyl acetate (3x500mL). The combined organic layer was washed with brine, dried over Na_2SO_4 and concentrated under reduced pressure to afford 18.0g (66%) of methyl 8-(pyridin-2-yl)-1,4-dioxaspiro[4.5]decan-8-ylcarbamate as a light brown solid. (TLC system: 5% MeOH in DCM R_f: 0.52.)

Step 4: 8-(pyridin-2-yl)-1,4-dioxaspiro[4.5]decan-8-amine

[0144] A suspension of methyl 8-(pyridin-2-yl)-1,4-dioxaspiro[4.5]decan-8-ylcarbamate (18.0 g, 61.64 mmol) in 10wt% aq. NaOH (200 mL) was heated to 100°C for 24 h. The reaction mixture was filtered through celite pad, the solid residue was washed with water and the combined filtrate was extracted with EtOAc (4x200 mL). The combined organic layer washed with brine, dried over Na_2SO_4 and concentrated under reduced pressure to afford 12.5g (88%) of 8-(pyridin-2-yl)-1,4-dioxaspiro[4.5]decan-8-amine as a light brown semi-solid. (TLC system: 5% MeOH in DCM R_f: 0.22.).

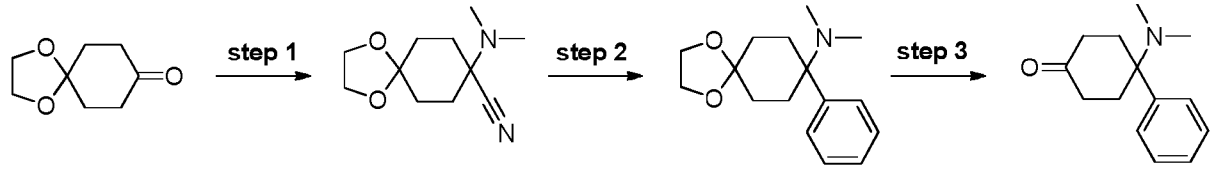
Step 5: 4-Dimethylamino-4-pyridin-2-yl-cyclohexan-1-one

[0145] Sodium cyanoborohydride (13.7 g, 0.213 mol) was added portionwise to a solution of 8-(pyridin-2-yl)-1,4-dioxaspiro[4.5]decan-8-amine (12.5 g, 53.418 mmol) and 35wt%aq. formaldehyde (45 mL, 0.534 mol) in acetonitrile (130

mL) at 0 °C. The reaction mixture was warmed up to room temperature and stirred for 16 h. The reaction mixture was quenched with sat. aq. NH_4Cl and concentrated under reduced pressure. The residue was dissolved in water and extracted with EtOAc (3x200 mL). The combined organic layer was washed with brine, dried over Na_2SO_4 and concentrated under reduced pressure to afford 10.5 g (72%) of 4-dimethylamino-4-pyridin-2-yl-cyclohexan-1-one (INT-961) as a light brown solid. (TLC system: 5% MeOH in DCM R_f: 0.32.). $[M+H]^+$ 219.1

Synthesis of INT-965: 4-Dimethylamino-4-phenyl-cyclohexan-1-one

[0146]



INT-965

Step 1: 8-(Dimethylamino)-1,4-dioxaspiro 4.5] decane-8-carbonitrile

[0147] Dimethylamine hydrochloride (52 g, 0.645 mol) was added to the solution of 1,4-dioxaspiro-[4.5]-decan-8-one (35g, 0.224 mmol) in MeOH (35 mL) at RT under argon atmosphere. The solution was stirred for 10 min and 40wt% aq. dimethylamine (280 mL, 2.5 mol) and KCN (32 g, 0.492 mol) were sequentially added. The reaction mixture was stirred for 48 h at RT, then diluted with water (100mL) and extracted with EtOAc (2x200 mL). The combined organic layer was dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to afford 44 g of 8-(dimethylamino)-1,4-dioxaspiro-[4.5]-decane-8-carbonitrile (93%) as a white solid.

Step 2: N,N-dimethyl-8-phenyl-1,4-dioxaspiro [4.5] decan-8-amine

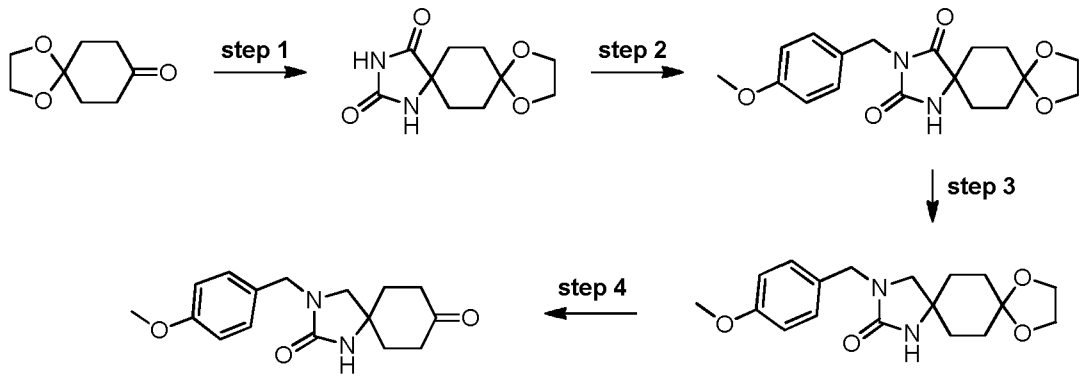
[0148] 8-(Dimethylamino)-1,4-dioxaspiro[4.5]decane-8-carbonitrile (35 g, 0.167 mol) in THF (350 mL) was added to the solution of 3M phenylmagnesium bromide in diethyl ether (556 mL, 1.67 mol) dropwise at -10°C under argon atmosphere. The reaction mixture was stirred for 4 h at -10°C to 0°C and then at RT for 18 h. The reaction completion was monitored by TLC. The reaction mixture was cooled to 0°C, diluted with sat. aq. NH_4Cl (1 L) and extracted with EtOAc (2x600 mL). The combined organic layer was dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to afford 60 g of, N N-dimethyl-8-phenyl-1, 4-dioxaspiro-[4.5]-decan-8-amine as a liquid.

Step 3: 4-(dimethylamino)-4-phenylcyclohexanone

[0149] A solution of N,N-dimethyl-8-phenyl-1,4-dioxaspiro[4.5]decan-8-amine (32 g, 0.123 mol) in 6N aq. HCl (320 mL) was stirred at 0°C for 2 h and then at RT for 18 h. The reaction completion was monitored by TLC. The reaction mixture was extracted with DCM (2x150 mL). The aqueous layer was basified to pH 10 with solid NaOH and extracted with ethyl acetate (2x200mL). The combined organic layer was dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. The solid residue was washed with hexane and dried *in vacuo* to afford 7g of 4-dimethylamino-4-phenyl-cyclohexan-1-one (INT-965) (25% over 2 steps) as a brown solid. $[M+H]^+$ 218.1

Synthesis of INT-966: 3-[(4-Methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decane-2,8-dione

[0150]



INT-966

Step 1: 9,12-Dioxa-2,4-diazadispiro[4.2.4-diazadispiro[4.2.4^{8}.2^{5}]tetradecane-1,3-dione

[0151] KCN (93.8 g, 1441.6 mmol) and $(NH_4)_2CO_3$ (271.8 g, 1729.9 mmol) were added to the solution of 1,4-dioxaspiro [4.5]decan-8-one (150 g, 961 mmol) in MeOH:H_2O (1:1 v/v) (1.92 L) at RT under argon atmosphere. The reaction mixture was stirred at 60°C for 16 h. The reaction completion was monitored by TLC. The reaction mixture was cooled to 0°C, the precipitated solid was filtered off and dried *in vacuo* to afford 120 g (55%) of 9,12-dioxa-2,4-diazadispiro[4.2.4^{8}.2^{5}] tetradecane-1,3-dione. The filtrate was extracted with DCM (2x1.5 L). The combined organic layer was dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to afford additional 30 g (14%) of 9,12-dioxa-2,4-diazadispiro[4.2.4^{8}.2^{5}]tetradecane-1,3-dione (TLC system: 10% Methanol in DCM; Rf: 0.4).

Step 2: 2-[(4-Methoxyphenyl)-methyl]-9,12-dioxa-2,4-diazadispiro[4.2.4^{8}.2^{5}] tetradecane-1,3-dione

[0152] Cs_2CO_3 (258.7 g, 796.1 mmol) was added to the solution of **73a** (150 g, 663.4 mmol) in MeCN (1.5 L) under argon atmosphere and the reaction mixture was stirred for 30 min. A solution of p-methoxybenzyl bromide (96 mL, 663.4 mmol) was added. The reaction mixture was stirred at RT for 48 h. The reaction completion was monitored by TLC. The reaction mixture was quenched with sat. aq. NH_4Cl (1.0L) and the organic product was extracted with EtOAc (2x1.5L). The combined organic layer was dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. The residue was washed with diethyl ether and pentane and dried under reduced pressure to afford 151 g (65%) of 2-[(4-Methoxyphenyl)-methyl]-9,12-dioxa-2,4-diazadispiro[4.2.4^{8}.2^{5}]tetradecane-1,3-dione as an off white solid (TLC system: 10% MeOH in DCM; Rf: 0.6).

Step 3: 2-[(4-Methoxyphenyl)-methyl]-9,12-dioxa-2,4-diazadispiro[4.2.4^{8}.2^{5}] tetradecan-3-one

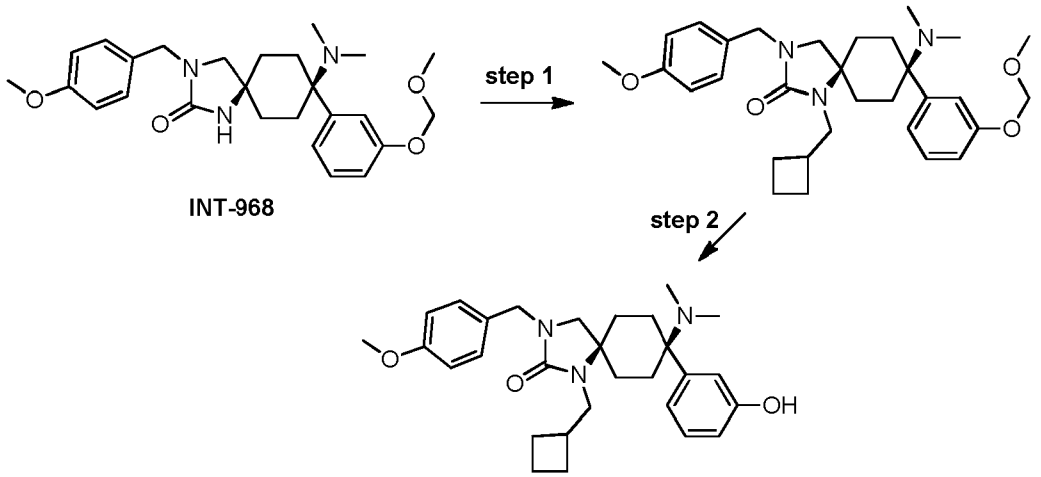
[0153] $AlCl_3$ (144.3 g, 1082.6 mmol) was added to a solution of $LiAlH_4$ (2M in THF) (433 mL, 866.10 mmol) in THF (4.5 L) at 0°C under argon atmosphere and the resulting mixture was stirred at RT for 1 h. 2-[(4-Methoxyphenyl)-methyl]-9,12-dioxa-2,4-diazadispiro[4.2.4^{8}.2^{5}]tetradecane-1,3-dione (150g, 433.05mmol) was added at 0°C. The reaction mixture was stirred at RT for 16 h. The reaction completion was monitored by TLC. The reaction mixture was cooled to 0°C, quenched with sat. aq. $NaHCO_3$ (500 mL) and filtered through celite pad. The filtrate was extracted with EtOAc (2x2.0 L). The combined organic layer was dried over anhydrous Na_2SO_4 and concentrated *in vacuo* to afford 120g (84%) of 2-[(4-methoxyphenyl)-methyl]-9,12-dioxa-2,4-diazadispiro[4.2.4^{8}.2^{5}]tetradecan-3-one as an off-white solid. (TLC system: 10% MeOH in DCM, Rf: 0.5).

Step 4: 3-[(4-Methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decane-2,8-dione

[0154] A solution of 2-[(4-methoxyphenyl)-methyl]-9,12-dioxa-2,4-diazadispiro[4.2.4^{8}.2^{5}] tetradecan-3-one (120 g, 361.03 mmol) in 6N aq. HCl (2.4 L) was stirred at 0°C for 2 h and then at RT for 18 h. The reaction completion was monitored by TLC. The reaction mixture was extracted with DCM (2x2.0L). The aqueous layer was basified to pH 10 with 50% aq. NaOH and then extracted with DCM (2 × 2.0L). Combined organic extracts were dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. The solid residue was washed with hexane and dried *in vacuo* to afford 90 g of 3-[(4-Methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decane-2,8-dione **(INT-966)** as an off-white solid (TLC system: 10% MeOH in DCM; Rf: 0.4) $[M+H]^+$ 289.11.

Synthesis of INT-971: CIS-1-(Cyclobutyl-methyl)-8-dimethylamino-8-(3-hydroxyphenyl)-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one

[0155]



INT-968

INT-971

Step 1: CIS-8-(dimethylamino)-1-isobutyl-3-(4-methoxybenzyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

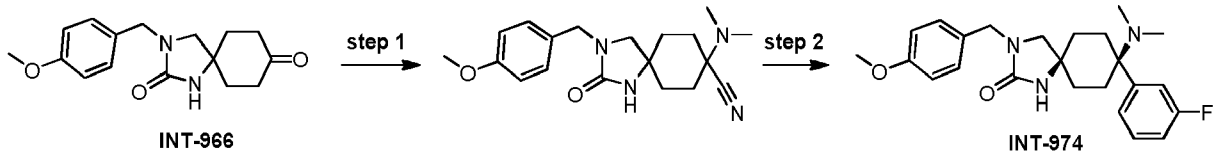
[0156] In analogy to the method described for **INT-951 step 1** CIS-8-Dimethylamino-8-[3-(methoxymethyloxy)-phenyl]-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one **(INT-968)** was converted into CIS-1-(cyclobutyl-methyl)-8-(dimethylamino)-3-(4-methoxybenzyl)-8-(3-(methoxymethoxy)phenyl)-1,3-diazaspiro[4.5]decan-2-one.

Step 2: CIS-1-(Cyclobutyl-methyl)-8-dimethylamino-8-(3-hydroxyphenyl)-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one

[0157] TFA (0.2mL) was added to the solution of CIS-1-(cyclobutylmethyl)-8-(dimethylamino)-3-(4-methoxybenzyl)-8-(3-methoxyphenyl)-1,3-diazaspiro[4.5]decan-2-one (300 mg, 0.57 mmol) inDCM (1.5 mL) at 0^0C. The reaction mixture was stirred at 0^0C for 3 h. The reaction completion was monitored by TLC. The reaction mixture was quenched with sat. aq. $NaHCO_3$ and the organic product was extracted with DCM (3x10mL). The combined organic extracts were dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. Purification of the residue by preparative TLC (3% MeOH in DCM as mobile phase) yielded 50 mg (18%) of CIS-1-(Cyclobutyl-methyl)-8-dimethylamino-8-(3-hydroxyphenyl)-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one **(INT-971)** as an off white solid. (TLC system: 10% MeOH in DCM; Rf: 0.20) $[M+H]^+$ 478.3

Synthesis of INT-974: CIS-8-Dimethylamino-8-(3-fluorophenyl)-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro [4.5]decan-2-one

[0158]



INT-966

INT-974

Step 1: 8-(dimethylamino)-3-(4-methoxybenzyl)-2-oxo-1,3-diazaspiro[4.5]decane-8-carbonitrile

[0159] Dimethylamine hydrochloride (76.4 g, 936.4 mmol) was added to a solution of 3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decane-2,8-dione **(INT-966)** (90 g, 312.13 mmol) in MeOH (180 mL) at RT under argon atmosphere. The solution was stirred for 15 min and 40wt% aq. dimethylamine (780 mL) and KCN (48.76 g, 749.11 mmol) were sequentially added. The reaction mixture was stirred for 48 h and the completion of the reaction was monitored by

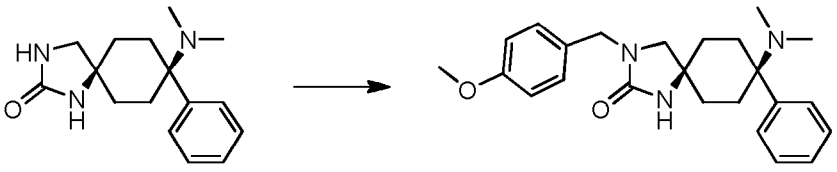
NMR. The reaction mixture was diluted with water (1.0 L) and the organic product was extracted with ethyl acetate (2x2.0L). The combined organic layer was dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to afford 90g (85%) of 8-(dimethylamino)-3-(4-methoxybenzyl)-2-oxo-1,3-diazaspiro[4.5]decane-8-carbonitrile as an off white solid (TLC system: TLC system: 10% MeOH in DCM; Rf: 0.35, 0.30).

Step 2: CIS-8-Dimethylamino-8-(3-fluorophenyl)-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one

[0160] 3-Fluorophenylmagnesium bromide (1M in THF) (220 mL, 219.17 mmol) was added dropwise to a solution of 8-(dimethylamino)-3-(4-methoxybenzyl)-2-oxo-1,3-diazaspiro[4.5]decane-8-carbonitrile (15 g, 43.83 mmol) in THF (300 mL) at 0°C under argon atmosphere. The reaction mixture was stirred for 16 h at RT. The reaction completion was monitored by TLC. The reaction mixture was cooled to 0°C, quenched with sat. aq. NH_4Cl (200 mL) and the organic product was extracted with EtOAc (2x200mL). The combined organic layer was dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. The reaction was carried out in 4 batches (15 g × 2 and 5 g × 2) and the batches were combined for purification. Purification of the crude product by flash column chromatography on silica gel (230-400 mesh) (2 times) (0-20% methanol in DCM) eluent and subsequently by washing with pentane yielded 5.6 g (11%) of CIS-8-dimethylamino-8-(3-fluorophenyl)-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one **(INT-974)** as an off-white solid. (TLC system: 5% MeOH in DCM in presence of ammonia; Rf: 0.1). $[M+H]^+$ 412.2

Synthesis of INT-975: CIS-8-Dimethylamino-3-[(4-methoxyphenyl)-methyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0161]

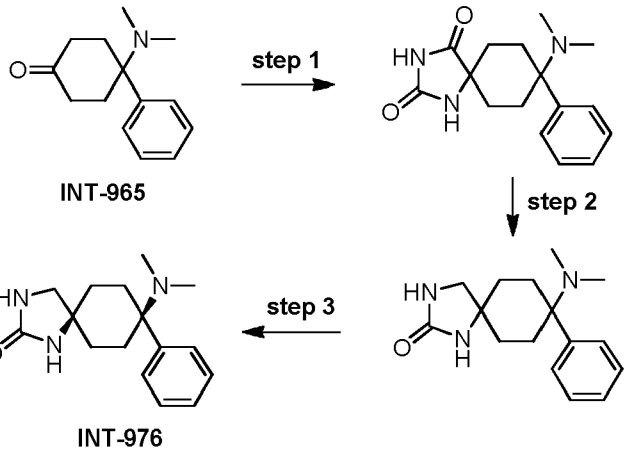


INT-976 INT-975

[0162] KOtBu (1M in THF) (29.30mL, 29.30mmol) was added to the solution of CIS-8-Dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **INT-976** (8.0 g, 29.30 mmol) in THF (160 mL) under argon atmosphere and the reaction mixture was stirred for 30 min. 4-Methoxybenzyl bromide (4.23 mL, 29.30 mmol) was added and stirring was continued at RT for 4 h. The reaction completion was monitored by TLC. The reaction mixture was diluted with sat. aq. NH_4Cl (150mL) and the organic product was extracted with EtOAc (2x150mL). The combined organic layer was dried over anhydrous Na_2SO_4 and concentrated *in vacuo.* The reaction was carried out in 2 batches (8 g × 2) and the batches were combined for purification. Purification of the crude product by flash column chromatography on silica gel (0-10% methanol in DCM) and subsequently by washing with pentane yielded 11 g (47%) of CIS-8-Dimethylamino-3-[(4-methoxyphenyl)-methyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-975)** as a white solid. $[M+H]^+$ 394.2

Synthesis of INT-976: CIS-8-Dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0163]



INT-965

INT-976

Step 1: 8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4,5]decane-2,4-dione

[0164] In a sealed tube 4-dimethylamino-4-phenyl-cyclohexan-1-one **(INT-965)** (2 g, 9.22 mmol) was suspended in 40mL EtOH/H_2O (1:1 v/v) at RT under argon atmosphere. $(NH_4)_2CO_3$ (3.62 g, 23.04 mmol) and KCN (0.6 g, 9.22 mmol) were added. The reaction mixture was stirred at 60°C for 18h. The reaction mixture was cooled to 0°C and diluted with ice-water and filtered through a glass filter. The solid residue was dried under reduced pressure to afford 8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4,5]decane-2,4-dione (1.8 g, 86%) as an off white crystalline solid (TLC: 80% EtOAc in hexane; Rf: 0.25).

Step 2: 8-(dimethylamino)-8-phenyl-1, 3-diazaspiro [4,5] decan-2-one

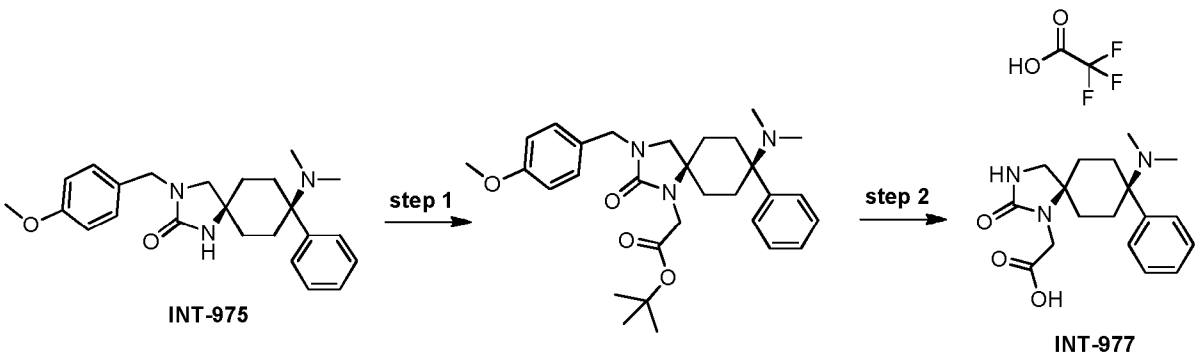
[0165] $LiAlH_4$ (2M in THF) (70 mL, 139.4 mmol) was added to the solution of 8-(dimethylamino)-8-phenyl-1,3-diazaspiro [4,5]decane-2,4-dione (10 g, 34.8 mmol) in THF/Et_2O (2:1 v/v) (400 mL) at 0°C under argon atmosphere. The reaction mixture was stirred for 4 h at 60°C. The reaction completion was monitored by TLC. The reaction mixture was cooled to 0°C, quenched with saturated Na_2SO_4 solution (100mL) and filtered through Celite pad. The filtrate was dried over anhydrous Na_2SO_4 and concentrated *in vacuo* to afford 5.7g (59%) of 8-(dimethylamino)-8-phenyl-1, 3-diazaspiro [4, 5] decan-2-one as an off white solid. (TLC system: 10% MeOH in DCM, Rf: 0.3).

Step 3: CIS-8-Dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0166] A mixture of CIS- and TRANS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4,5]decan-2-one (8g, 29.30mmol) was purified by preparative chiral SFC (column: Chiralcel AS-H, 60% CO_2, 40% (0,5% DEA in MeOH)) to get 5g of CIS-8-Dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-976)** as a white solid. $[M+H]^+$ 274.2.

Synthesis of INT-977: CIS-2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl)-acetic acid; 2,2,2-trifluoro-acetic acid salt

[0167]



INT-975

INT-977

Step 1: CIS-2-[8-Dimethylamino-3-[(4-methoxyphenyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5] decan-1-yl]-acetic acid tert-butyl ester

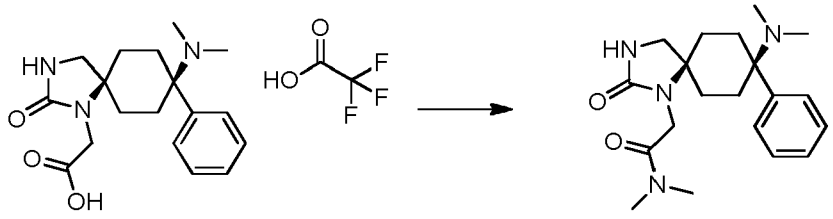
[0168] A solution of CIS-8-Dimethylamino-3-[(4-methoxyphenyl)-methyl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one **(INT-975)** (5.0 g, 12.7 mmol) in THF (18 mL) was cooled to 0°C and treated with LDA solution (2M in THF/heptane/ether, 25.4 mL, 50.8 mmol). The resulting mixture was was allowed to warm up to RT over 30 min. The solution was then cooled to 0°C again and tert-butyl-bromoacetate (5.63 mL, 38.1 mmol) was added. The reaction mixture was stirred at RT for 16 h, quenched with water and extracted with DCM (3x). The combinded organic layers were dried over Na_2SO_4, filtered and concentrated inder reduced pressure. Purification of the residue by column chromatography on silica gel provided CIS-2-[8-dimethylamino-3-[(4-methoxyphenyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5] decan-1-yl]-acetic acid tert-butyl ester (4.4 g).

Step 2: cis- 2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl)-acetic acid trifluoroacetic acid salt

[0169] CIS-2-[8-Dimethylamino-3-[(4-methoxyphenyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5] decan-1-yl]-acetic acid tert-butyl ester (200 mg, 0.4 mmol) was dissolved in TFA (5 mL) and heated to reflux overnight. After cooling to RT all volatiles are removed *in vacuo*. The residue was taken up in THF (1mL) and added dropwise to diethyl ether (20 mL). The resulting precipitate was filtered off and dried under reduced pressure to give CIS-2-(8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl)-acetic acid; 2,2,2-trifluoro-acetic acid salt **(INT-977)** (119 mg) as a white solid. $[M+H]^+$ 332.2

Synthesis of INT-978: CIS-2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl)-N,N-dimethyl-acetamide

[0170]

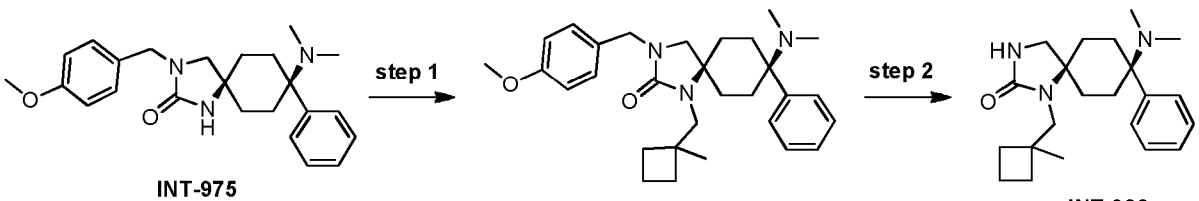


INT-977 **INT-978**

[0171] CIS-2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl)-acetic acid **(INT-977)** trifluoroacetic acid salt (119 mg, 0.35 mmol) was dissolved in DCM (5 mL). Triethylamine (0.21 mL, 1.6 mmol), dimethylamine (0.54 mL, 1.1 mmol) and T3P (0.63 mL, 1.1 mmol) were sequentially added. The reaction mixture was stirred at RT overnight, then diluted with 1 M aq. Na_2CO_3 (5 mL). The aqueous layer was extracted with DCM (3x5mL), the combined organic layers were dried over Na_2SO_4 and concentrated under reduced pressure. The residue was purified by flash chromatography on silica gel to yield CIS-2-(8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl)-N,N-dimethyl-acetamide **(INT-978)** (39 mg) as a white solid. $[M+H]^+$ 359.2

Synthesis of INT-982: CIS-8-Dimethylamino-1-[(1-methyl-cyclobutyl)-methyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0172]



INT-975 **INT-982**

Step 1: CIS-8-(dimethylamino)-3-(4-methoxybenzyl)-1-((1-methylcyclobutyl)methyl)-8-phenyl-1,3-diazaspiro [4.5]decan-2-one

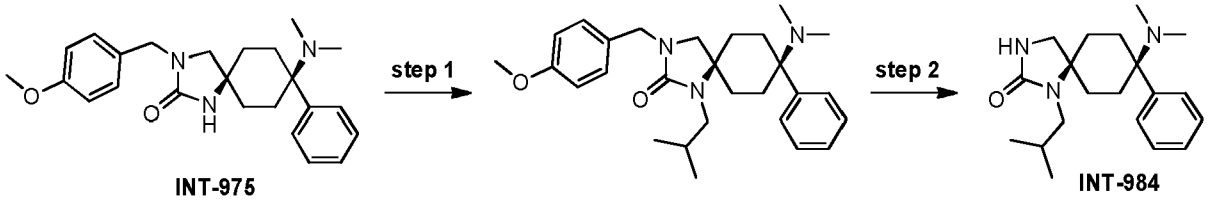
[0173] A solution of NaOH (2.85 g, 71.2 mmol) in DMSO (25 mL) was stirred at RT for 10 min. CIS-8-Dimethylamino-3-[(4-methoxyphenyl)-methyl]-8-phenyl-1,3-diazaspiro[4.5] decan-2-one **(INT-975)** (7.00 g, 17.8 mmol) was added and stirring was continued for 15 min. 1-(Bromo-methyl)-1-methyl-cyclobutane (8.7 g, 53.4 mmol) was added at 0°C. The reaction mixture was heated to 60°C for 16 h. After cooling down to RT, water (100 mL) was added and the mixture was extracted with DCM (3x150 mL). The combined organic layers were washed with water (70 mL), brine (100 mL), dried over Na_2SO_4 and concentrated under reduced pressure. Purification of the residueby column chromatography on silica gel provided CIS-8-(dimethylamino)-3-(4-methoxybenzyl)-1-((1-methylcyclobutyl)methyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (6.5g) as a light yellow solid.

Step 2: CIS-8-Dimethylamino-1-[(1-methyl-cyclobutyl)-methyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0174] To the solution of CIS-8-Dimethylamino-1-[(1-methyl-cyclobutyl)-methyl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one (6.66 g, 14.0 mmol) in DCM (65 mL) was added TFA (65 mL) and the resulting mixture was stirred at RT for 16 h. The reaction mixture was concentrated under reduced pressure. The residue was taken up in DCM (100 mL) and water (60 mL) and basified with 2M aq. NaOH to pH 10. The organic layer was separated and washed with brine (40 mL), dried over $MgSO_4$, filtered and concentrated under reduced pressure. Crystallization of the residue from EtOAc provided CIS-8-Dimethylamino-1-[(1-methyl-cyclobutyl)-methyl]-8-phenyl-1,3-diazaspiro[4.5] decan-2-one **(INT-982)** (3.41 g) as an off-white solid. $[M+H]^+$ 356.3

Synthesis of INT-984: CIS-1-(Cyclobutyl-methyl)-8-(ethyl-methyl-amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0175]



Step 1: CIS-8-(dimethylamino)-1-isobutyl-3-(4-methoxybenzyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

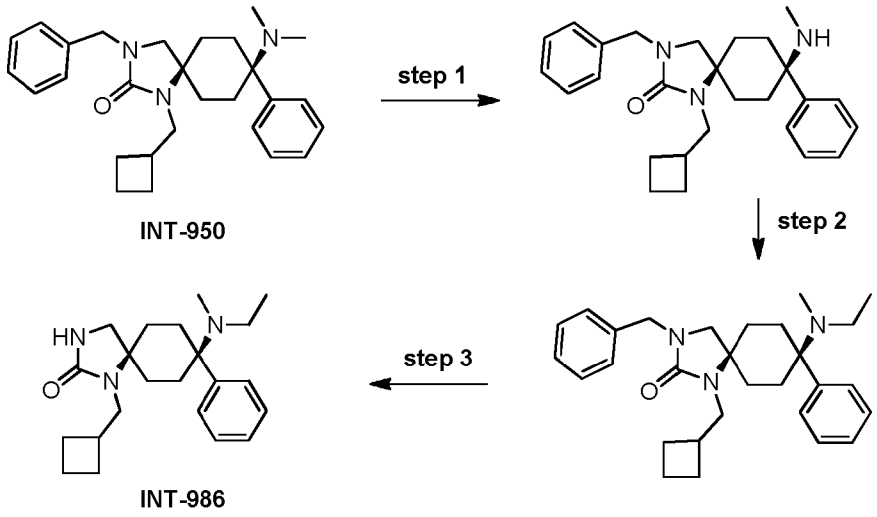
[0176] In analogy to the method described for **INT-951 step 1** CIS-8-Dimethylamino-3-[(4-methoxyphenyl)-methyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-975)** was converted into CIS-8-(dimethylamino)-1-isobutyl-3-(4-methoxybenzyl)-8-phenyl-1,3-diazaspiro [4.5]decan-2-one.

Step2: CIS-1-(Cyclobutyl-methyl)-8-(ethyl-methyl-amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0177] In analogy to the method described for **INT-982 step 2** CIS-8-(dimethylamino)-1-isobutyl-3-(4-methoxybenzyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one was converted into CIS-1-(Cyclobutyl-methyl)-8-(ethyl-methyl-amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-984).**

Synthesis of INT-986: CIS-1-(Cyclobutyl-methyl)-8-(ethyl-methyl-amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0178]



Step 1: CIS-3-benzyl-1-(cyclobutylmethyl)-8-(methylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0179] N-Iodosuccinimide (3.11g, 13.92mmol) was added to the solution of CIS-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3-[phenyl-methyl]-1,3-diazaspiro[4.5]decan-2-one **(INT-950)** (4 g, 9.28 mmol) in a mixture of acetonitrile and THF (1:1 v/v, 80 mL) and the resulting mixture was stirred at RT for 16 h. The reaction mixture was basified with 2N aq. NaOH to pH~10 and the organic product was extracted with DCM (3x10 mL). The combined organic extracts were dried over anhydrous Na_2SO_4 and concentrated *in vacuo.* The residue was stirred vigorously with a mixture of 10wt% aq. citric acid (5 mL) and DCM (10 mL) at RT for 10 min. The reaction mixture was basified with 5N aq. NaOH to pH~10 and extracted with DCM (3x10 mL). The combined organic layer was dried over anhydrous Na_2SO_4 and concentrated *in vacuo* to give 3.5g (crude) of CIS-3-benzyl-1-(cyclobutylmethyl)-8-(methylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one as semi solid (TLC system: 10% MeOH in DCM; R_f: 0.60.).

Step 2: CIS-3-benzyl-1-(cyclobutylmethyl)-8-(ethyl(methyl)amino)-8-phenyl-1,3-diazaspiro [4.5]decan-2-one

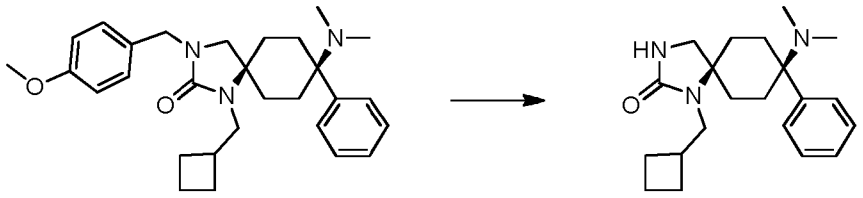
[0180] Sodium cyanoborohydride (1.56 g, 25.17 mmol, 3 equiv.) was added to the solution of CIS-3-benzyl-1-(cyclobutylmethyl)-8-(methylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (3.5 g, 8.39 mmol), acetaldehyde (738 mg, 16.78 mmol, 2 equiv.) and acetic acid (0.5 mL) in methanol (20 mL). The reaction mixture was stirred at RT for 3 h, then quenched with sat. aq. $NaHCO_3$ and the organic product was extracted with DCM (3x50 mL). The combined organic extracts were dried over anhydrous Na_2SO_4 and concentrated *in vacuo.* Purification of the residue by flash column chromatography on silica gel (230-400 mesh) (20-25% ethyl acetate in petroleum ether) yielded 2.3g (62%) of CIS-3-benzyl-1-(cyclobutylmethyl)-8-(ethyl(methyl)amino)-8-phenyl-1,3-diazaspiro [4.5]decan-2-one as a solid. (TLC system: 50% EtOAc in Pet. Ether; R_f: 0.65).

Step 3: CIS-1-(Cyclobutyl-methyl)-8-(ethyl-methyl-amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (INT-986)

[0181] Sodium metal (1.18 g, 51.68 mmol, 10 equiv.) was added to liquid ammonia (~25 mL) at -78°C. The resulting mixture was stirred for 10min at -78°C. A solution of CIS-3-benzyl-1-(cyclobutylmethyl)-8-(ethyl(methyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (2.3 g, 5.16 mmol) in THF (25 mL) was added at -78 °C. The reaction mixture was stirred for 15min, then quenched with sat. aq. NH_4Cl, warmed to RT and stirred for 1h. The organic product was extracted with DCM (3x50 mL). The combined organic layer was washed with water, brine and concentrated under reduced pressure to afford 1.30 g (72%) of CIS-1-(cyclobutylmethyl)-8-(ethyl(methyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-986)** as an off-white solid. (TLC system: 10% MeOH in DCM R_f: 0.15.). $[M+H]^+$ 356.3

Synthesis of INT-987: CIS-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0182]

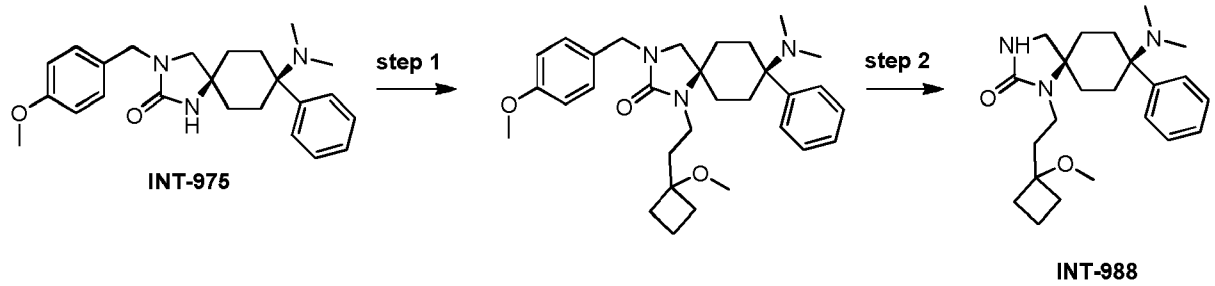


INT-952 INT-987

[0183] In analogy to the method as described for **INT-982 step 2** CIS-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one **(INT-952)** was converted into CIS-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-987).**

Synthesis of INT-988: CIS-8-(dimethylamino)-1-(2-(1-methoxycyclobutyl)ethyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0184]



INT-975 INT-988

Step 1: CIS-8-(dimethylamino)-1-[2-(1-methoxycyclobutyl)ethyl]-3-[(4-methoxyphenyl)methyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

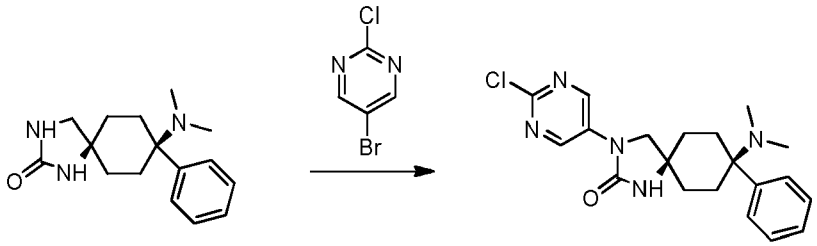
[0185] Sodium hydroxide (78.06 mg, 4.0 equiv.) was suspended in DMSO (3.5 mL), stirred for 10 minutes, 8-(dimethylamino)-3-[(4-methoxyphenyl)methyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-975)** (192.0 mg, 1.0 equiv.) was added, the reaction mixture was stirred for 5 min followed by addition of 2-(1-methoxycyclobutyl)ethyl 4-methylbenzenesulfonate (416.2 mg, 3.0 equiv.) in DMSO (1.5 mL). The resulting mixture was stirred overnight at 50°C. The reaction mixture was quenched with water and extracted with DCM (3x20 mL). The combined organic phases were washed with brine, dried over Na_2SO_4 and concentrated under reduced pressure. The residue (283 mg yellow oil) was purified by column chromatography on silica gel (eluent DCM/EtOH 98/2 to 96/4) to give 8-(dimethylamino)-1-[2-(1-methoxycyclobutyl)ethyl]-3-[(4-methoxyphenyl)methyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one 163 mg (66%).

Step 2: CIS-8-(dimethylamino)-1-(2-(1-methoxycyclobutyl)ethyl)-8-phenyl-1,3-diazaspiro[4.5] decan-2-one (INT-988)

[0186] In analogy to the method described for **INT-982 step 2** CIS-8-(dimethylamino)-1-[2-(1-methoxycyclobutyl) ethyl]-3-[(4-methoxyphenyl)methyl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one was converted into CIS-8-(dimethylamino)-1-(2-(1-methoxycyclobutyl)ethyl)-8-phenyl-1,3-diazaspiro[4.5] decan-2-one **(INT-988).** Mass: m/z 386.3 $(M+H)^+$.

Synthesis of INT-989: CIS-3-(2-chloropyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0187]

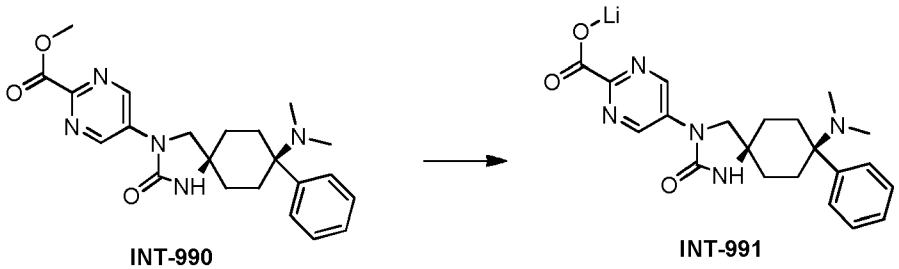


INT-976 INT-989

[0188] CIS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-976)** (1250 mg, 4.6 mmol), 5-bromo-2-chloro-pyrimidine (1.5 equiv., 6.7 mmol, 1327 mg), Cs_2CO_3 (2 equiv., 9.15 mmol, 2980 mg), XantPhos (0.15 equiv., 0.69 mmol, 397 mg) and $Pd_2(dba)_3$ (0.05 equiv., 0.23 mmol, 209 mg) were dissolved in dry 1,4-dioxane (120 equiv., 549 mmol, 47 mL) under nitrogen atmosphere and stirred at 90°C overnight. The reaction mixture was cooled down, diluted with water (50 mL), extracted with DCM (3x70 mL), the combined organic phases were dried over Na_2SO_4 and concentrated under reduced pressure. The residue (2.8 g) was suspended in 10 mL DCM and stirred for 10 min. The resulting precipitate was filtered off and washed with small amount of DCM to give 1213 mg of CIS-3-(2-chloropyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-989)** as a white solid. The mother liquor was concentrated under reduced pressure (1428 mg), suspended in 3 mL DCM, 3 mL pentane were slowly added and the mixture was stirred for 30 min. The precipitate was filtered off, washed with small amounts of pentane and DCM to give second portion of **INT-989** (215 mg) as a light yellow solid. ^{1}H NMR (600 MHz, DMSO) δ 8.94 (s, 2H), 7.88 (s, 1H), 7.41 - 7.33 (m, 4H), 7.27 (tt, 1H), 3.65 (s, 2H), 2.49 - 2.32 (m, 2H), 1.98 - 1.88 (m, 2H), 1.96 (s, 6H), 1.87 - 1.73 (m, 2H), 1.53 - 1.47 (m, 2H). Mass: m/z 386.2 $(M+H)^+$.

Synthesis of INT-991: lithium CIS-5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carboxylate

[0189]

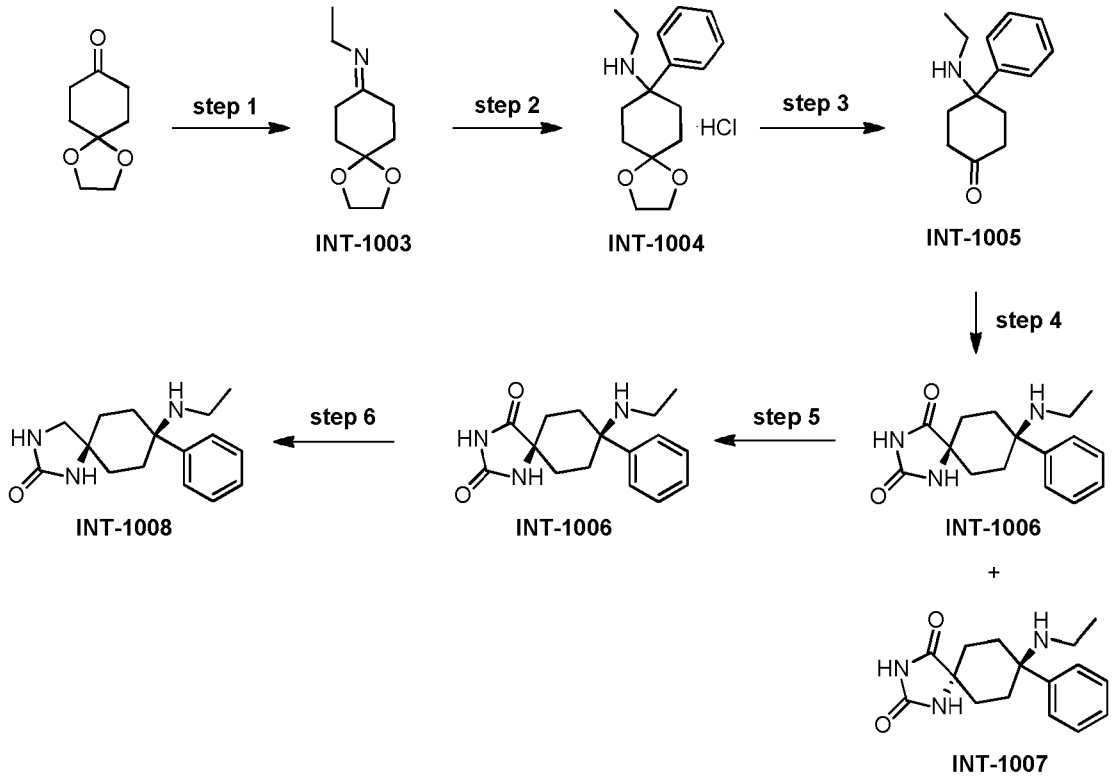


INT-990 INT-991

[0190] Methyl CIS-5-[8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]pyrimidine-2-carboxylate **(INT-990)** (950 mg, 2.32 mmol) was suspended in a mixture of MeOH (140 equiv., 325 mmol, 13 mL) and THF (70 equiv., 162 mmol, 13 mL). Lithium hydroxide 2M aq. sol. (1.3 mL) was added. The reaction mixture was stirred 5 days at RT. Additional 1.3 mL of lithium hydroxide 2M aq. sol. were added and the reaction mixture was stirred for 2 h at RT. The solvents were removed under reduced pressure. The residue was suspended in EtOAc (10 mL) and stirred overnight. The precipitate was filtered off (1.07 g) and washed with DCM (3 mL), pentane and dried under reduced pressure. The resulting solid (960 mg) containing INT-990 and residual lithium salts was used directly in the next steps. Mass: m/z 394.2 $(M-Li)^-$.

Synthesis of INT-1008: CIS-8-ethylamino-8-phenyl-1,3-diaza-spiro[4.5]decan-2-one

[0191]



Step 1 and step 2: **ethyl-(8-phenyl-1,4-dioxa-spiro[4.5]dec-8-yl)-amine hydrochloride (INT-1004)**

[0192] A mixture of 1,4-dioxa-spiro[4.5]decan-8-one (25.0 g, 160.25 mmol, 1.0 eq.) and 2M solution of $EtNH_2$ in THF (200 ml, 2.5 eq. 400.64 mmol) in EtOH (30 ml) was stirred at RT for 48h. The reaction mixture was concentrated under argon atmosphere and the residue was diluted with ether (60 ml), and a freshly prepared PhLi solution was added [prepared by addition of 2.5M n-BuLi in THF (70.5 ml, 1.1 eq. 176.27 mmol) to a solution of bromobenzene (27.675g, 1.1 eq. 176.275 mmol) in ether (100 ml) at -30 °C and stirred at RT for 1h). The reaction mixture was stirred at RT for 1.5h, quenched with saturated NH_4Cl solution (100 ml) at 0°C and extracted with ethyl acetate (2 × 750 ml). The combined organic layer was washed with water (3 × 350 ml), brine (300 ml), dried over Na_2SO_4 and concentrated under reduced pressure. The resulting residue was dissolved in ethyl methyl ketone (100 ml) and trimethylsilyl chloride (37.5 ml) was added at 0°C. The resulting mixture was stirred at RT for 16h. The precipitated solid was filtered off and washed with acetone followed by THF to get ethyl-(8-phenyl-1,4-dioxaspiro[4.5]dec-8-yl)-amine hydrochloride as an off white solid. This reaction was done in 2 batches of 25 g scale and the yield is given for 2 combined batches. Yield: 18 % (17.1 g, 57.575 mmol). LCMS: m/z 262.2 $(M+H)^+$.

Step 3: 4-ethylamino-4-phenyl-cyclohexanone (INT-1005)

[0193] To a solution of ethyl-(8-phenyl-1,4-dioxa-spiro[4.5]dec-8-yl)-amine hydrochloride (10.1 g, 34.0 mmol, 1 eq.) in water (37.5 ml) was added conc. aq. HCl (62.5 ml) at 0°C and the resulting mixture was stirred at RT for 16 h. The reaction mixture was basified with aq. NaOH (pH ~14) at 0°C and extracted with DCM (2x750 ml). Organic layer was washed with water (400 ml), brine (400 ml), dried over Na_2SO_4 and concentrated under reduced pressure to yield 4-ethylamino-4-phenyl-cyclohexanone which was used in the next step without further purification. This reaction was carried out in another batch of 15.1g scale and the yield is given for 2 combined batches. Yield: 92 % (17.0 g, 78.34 mmol).

Step 4: cis and trans mixture of 8-ethylamino-8-phenyl-1,3-diaza-spiro[4.5]decane-2,4-dione (INT-1006 and INT-1007)

[0194] To a solution of 4-ethylamino-4-phenyl-cyclohexanone (17 g, 78.341 mmol, 1.0 eq.) in EtOH (250 ml) and water (200 ml) was added $(NH_4)_2CO_3$ (18.8 g, 195.85 mmol, 2.5 eq.) and the reaction mixture was stirred at RT for 15 min. KCN (5.09 g, 78.341 mmol, 1.0 eq.) was added and stirring was continued at 60 °C for 18 h. The reaction mixture was cooled down to RT. The precipitated solid was filtered off, washed with water (250 ml), EtOH (300 ml), hexane (200 ml) and dried under reduced pressure to yield *cis* and *trans* mixture of 8-ethylamino-8-phenyl-1,3-diaza-spiro[4.5]decane-2,4-dione

(13.0 g, 45.29 mmol, 58%) as a white solid. Yield: 58 % (13 g, 45.296 mmol). LC-MS: m/z $[M+1]^+$ = 288.2.

Step 5: CIS-8-ethylamino-8-phenyl-1,3-diaza-spiro[4.5]decane-2,4-dione (INT-1006)

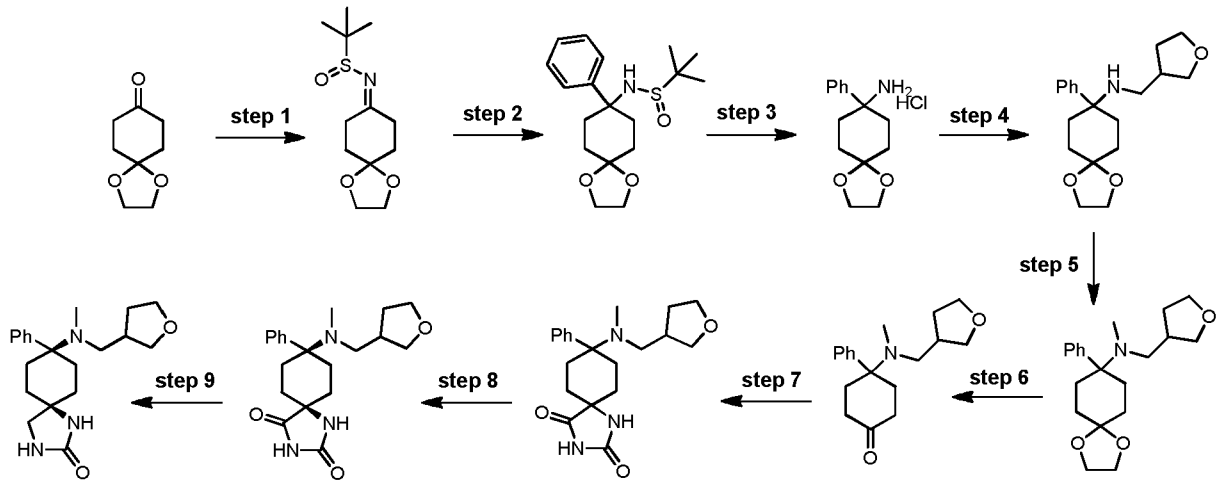
[0195] To a solution of *cis* and *trans* mixture of 8-ethylamino-8-phenyl-1,3-diaza-spiro[4.5]decane-2,4-dione (12g) in MeOH-DCM (1:1, 960 ml) was added a solution of L-tartaric acid in MeOH (25 ml) and the resulting mixture stirred at RT for 2 h and then kept in refrigerator for 16 h. The precipitated solid was filtered off and washed with MeOH-DCM (1:5, 50 ml) to get tartrate salt of 8-ethylamino-8-phenyl-1,3-diaza-spiro[4.5]decane-2,4-dione (7.5 g) as a white solid. To this solid sat. aq. $NaHCO_3$ was added (pH~8) and the resulting mixture was extracted with 25% MeOH-DCM (2 × 800 ml). Combined organic layer was washed with water (300 ml), brine (300 ml), dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. The residue was triturated with 20 % DCM-hexane and the resulting solid was dried under reduced pressure to afford CIS-8-ethylamino-8-phenyl-1,3-diaza-spiro[4.5]decane-2,4-dione as white solid. This step was done in 2 batches (12 g & 2.4 g) and the yield is given for 2 combined batches. Yield: 31.2 % (5.0 g, 17.421 mmol). LC-MS: m/z $[M+1]^+$ = 288.0.

Step 6: CIS-8-ethylamino-8-phenyl-1,3-diaza-spiro[4.5]decan-2-one (INT-1008)

[0196] To a slurry of $LiAlH_4$ (793 mg, 20.91 mmol, 3.0 eq.) in THF (15 ml) was added a suspension of CIS-8-ethylamino-8-phenyl-1,3-diaza-spiro[4.5]decane-2,4-dione (2.0 g, 6.97 mmol, 1.0 eq.) in THF (60 ml) at 0°C and the reaction mixture was heated to 65°C for 16 h. The reaction mixture was cooled to 0°C, quenched with sat. aq. Na_2SO_4 (20 ml), stirred at RT for 1h and filtered through celite pad. The residue was washed with 15% MeOH-DCM (500 ml). The combined filtrate was dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to give crude product which was triturated with 15% DCM-Hexane to afford CIS-8-ethylamino-8-phenyl-1,3-diaza-spiro[4.5]decan-2-one **(INT-1008)** (1.6 g, 5.86 mmol, 84%) as a white solid. Yield: 84 % (1.6 g, 5.86 mmol). LC-MS: m/z $[M+1]^+$ = 274.2.

Synthesis of INT-1026: CIS-8-(methyl((tetrahydrofuran-3-yl)methyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0197]



Step 1: 2-methyl-N-(1,4-dioxaspiro[4.5]decan-8-ylidene)propane-2-sulfinamide

[0198] Titanium ethoxide (58.45 g, 256.4mmol) was added to a solution of 1,4-dioxaspiro[4.5]decan-8-one (20 g, 128.20 mmol) and 2-methylpropane-2-sulfinamide (15.51g, 128.20 mmol) in THF (200 mL) at RT and the reaction mixture was stirred at RT for 18h. The reaction mixture was cooled to 0°C and quenched by dropwise addition of sat. aq. $NaHCO_3$ (500 mL) over a period of 30 min. The organic product was extracted with EtOAc (3x100 mL). The combined organic extracts were dried over anhydrous Na_2SO_4 and concentrated *in vacuo* to afford 10 g (crude) of 2-methyl-N-(1,4-dioxaspiro[4.5]decan-8-ylidene)propane-2-sulfinamide as a white solid (TLC system: 30% Ethyl acetate in hexane; Rf: 0.30).

Step 2: 2-methyl-N-(8-phenyl-1,4-dioxaspiro[4.5]decan-8-yl)propane-2-sulfinamide

[0199] Phenylmagnesium bromide (1M in THF, 116 mL, 116 mmol) was added dropwise to a solution of 2-methyl-N-(1,4-dioxaspiro[4.5]decan-8-ylidene)propane-2-sulfinamide (10 g, 38.61 mmol) in THF (500 mL) at - 10°C under argon atmosphere. The reaction mixture was stirred for 2h at -10°C to 0°C. The reaction completion was monitored by TLC. The reaction mixture was quenched with sat. aq. NH_4Cl (50mL) at 0°C and the organic product was extracted with EtOAc (3x100 mL). The combined organic extracts were dried over anhydrous Na_2SO_4 and concentrated *in vacuo.* The residue was purified by column chromatography (silica gel 230-400 mesh; 40-60% ethyl acetate in hexane) to yield 6.0 g (46%) of 2-methyl-N-(8-phenyl-1,4-dioxaspiro[4.5]decan-8-yl)propane-2-sulfinamide as a liquid (TLC system: 70% Ethyl acetate in hexane; Rf: 0.30).

Step 3: 8-phenyl-1,4-dioxaspiro[4.5]decan-8-amine hydrochloride

[0200] 2N solution of HCl in diethyl ether (17.80 mL, 35.60 mmol) was added to a solution of 2-methyl-N-(8-phenyl-1,4-dioxaspiro[4.5]decan-8-yl)propane-2-sulfinamide (6.0g, 17.80 mmol) in DCM (60 mL) at 0°C. The reaction mixture was stirred at RT for 2 h. The reaction mixture was concentrated *in vacuo.* The residue was washed with diethyl ether to yield 3g (crude) of 8-phenyl-1,4-dioxaspiro[4.5]decan-8-amine hydrochloride as a brown solid (TLC system: 5% MeOH in DCM; Rf: 0.10).

Step 4: 8-phenyl-N-((tetrahydrofuran-3-yl)methyl)-1,4-dioxaspiro[4.5]decan-8-amine

[0201] Sodium cyanoborohydride (2.17 g, 33.45 mmol) was added to a solution of 8-phenyl-1,4-dioxaspiro[4.5]decan-8-amine hydrochloride (3.0 g, 11.15 mmol) and tetrahydrofuran-3-carbaldehyde (4.46 mL, 22.30 mmol) and acetic acid (0.05 mL) in methanol (30 mL) at 0°C. The reaction mixture was stirred at RT for 16h. The reaction mixture was concentrated *in vacuo* at 30°C and to the residue sat. aq. $NaHCO_3$ was added. The organic product was extracted with DCM (3x30 mL). The combined organic extracts were dried over anhydrous Na_2SO_4 and solvent was concentrated under reduced pressure to get 3g (crude) of 8-phenyl-N-((tetrahydrofuran-3-yl)methyl)-1,4-dioxaspiro[4.5]decan-8-amine as a semi-solid (TLC system: 10% MeOH in DCM; Rf: 0.22).

Step 5: N-methyl-8-phenyl-N-((tetrahydrofuran-3-yl)methyl)-1,4-dioxaspiro[4.5]decan-8-amine)

[0202] Sodium cyanoborohydride (1.76 g, 28.39 mmol) was added to a solution of 8-phenyl-N-((tetrahydrofuran-3-yl)methyl)-1,4-dioxaspiro[4.5]decan-8-amine (3.0 g, 9.46 mmol), 37% formaldehyde in water (7.70 mL, 94.60 mmol) and acetic acid (0.05 mL) in methanol (30 mL) at 0°C. The reaction mixture was stirred at RT for 16 h. The reaction mixture was concentrated *in vacuo* and to the residue sat. aq. $NaHCO_3$ was added. The organic product was extracted with DCM (3x30 mL). The combined organic extracts were dried over anhydrous Na_2SO_4 and solvent was concentrated under reduced pressure. The resulting residue was purified by column chromatography (silica gel 230-400 mesh; 5-6% MeOH in DCM) to yield 2.50 g (83%) of N-methyl-8-phenyl-N-((tetrahydrofuran-3-yl)methyl)-1,4-dioxaspiro[4.5]decan-8-amine as a semi solid (TLC system: 10% MeOH in DCM; Rf: 0.25).

Step 6: 4-(methyl((tetrahydrofuran-3-yl)methyl)amino)-4-phenylcyclohexanone

[0203] 5% sulfuric acid in water (25 mL) was added to N-methyl-8-phenyl-N-((tetrahydrofuran-3-yl)methyl)-1,4-dioxaspiro[4.5]decan-8-amine (2.50 g, 7.55 mmol) at 0°C and the resulting mixture was stirred at RT for 24 h. The reaction mixture was quenched with sat. aq. $NaHCO_3$ and the organic product was extracted with DCM (2x50 mL). The combined organic layers were dried over anhydrous Na_2SO_4 and concentrated *in vacuo* to afford 2.0g (crude) of 4-(methyl((tetrahydrofuran-3-yl)methyl)amino)-4-phenylcyclohexanone as a thick liquid (TLC system: 10% MeOH in DCM, Rf: 0.20).

Step 7: 8-(methyl((tetrahydrofuran-3-yl)methyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decane-2,4-dione

[0204] 4-(methyl((tetrahydrofuran-3-yl)methyl)amino)-4-phenylcyclohexanone (1.50 g, 5.22 mmol) was suspended in 30 mL of EtOH:H_2O (1:1 v/v) at RT under argon atmosphere. $(NH_4)_2CO_3$ (1.9 g, 13.05 mmol) and KCN (0.34 g, 5.22 mmol) were added. The reaction mixture was heated to 70°C for 16 h. The reaction mixture was diluted with ice-water and the organic product was extracted with DCM (2x50 mL). The combined organic layer was dried over anhydrous Na_2SO_4 and concentrated *in vacuo* to give 1.0 g (crude) of 8-(methyl((tetrahydrofuran-3-yl)methyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decane-2,4-dione as a solid (TLC system: 70% Ethyl acetate in hexane; Rf: 0.18).

Step 8: CIS-8-(methyl((tetrahydrofuran-3-yl)methyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decane-2,4-dione

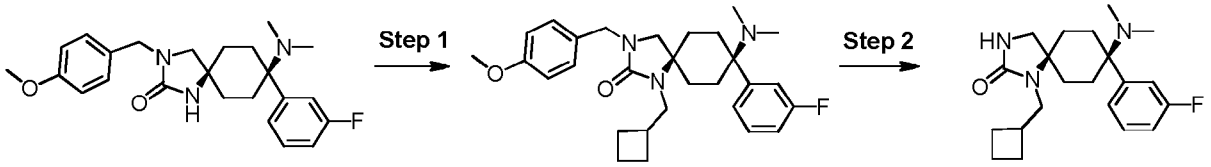
[0205] Diastereomeric mixture of 8-(methyl((tetrahydrofuran-3-yl)methyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decane-2,4-dione (1.0 g) was separated by reverse phase preparative HPLC to afford 400 mg of isomer 1 (CIS-8-(methyl((tetrahydrofuran-3-yl)methyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decane-2,4-dione) and 60 mg of isomer 2 (TRANS-8-(methyl((tetrahydrofuran-3-yl)methyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decane-2,4-dione) and 300 mg of mixture of both isomers. Reverse phase preparative HPLC conditions: mobile phase: 10mM ammonium bicarbonate in H_2O/acetonitrile, column: X-BRIDGE-C18 (150*30), 5μm, gradient (T/B%): 0/35, 8/55, 8.1/98, 10/98, 10.1/35, 13/35, flow rate: 25 ml/min, diluent: mobile phase+ THF.

Step 9: CIS-8-(methyl((tetrahydrofuran-3-yl)methyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (INT-1026)

[0206] $LiAlH_4$ (1M in THF) (4.48 mL, 4.48 mmol) was added to a solution of CIS-8-(methyl((tetrahydrofuran-3-yl)methyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decane-2,4-dione (isomer-1) (0.4 g, 1.12 mmol) in THF:Et_2O (2:1 v/v, 15 mL) at 0°C under argon atmosphere The reaction mixture was stirred at 65°C for 16 h. The mixture was cooled to 0°C, quenched with sat. aq. Na_2SO_4 (1000 mL) and filtered through celite pad. The filtrate was dried over anhydrous Na_2SO_4 and concentrated *in vacuo.* The residue was purified by column chromatography (silica gel 230-400 mesh; 5-6% MeOH in DCM) to yield 0.3g (78%) of CIS-8-(methyl((tetrahydrofuran-3-yl)methyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-1026)** as an off white solid. (TLC system: 10% MeOH in DCM, Rf: 0.2). LC-MS: m/z $[M+1]^+$ = 344.2.

Synthesis of INT-1031: CIS-1-(Cyclobutyl-methyl)-8-dimethylamino-8-(3-fluorophenyl)-1,3-diazaspiro[4.5]decan-2-one

[0207]



INT-974 **INT-1031**

Step 1: CIS-1-(Cyclobutyl-methyl)-8-dimethylamino-8-(3-fluorophenyl)-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one

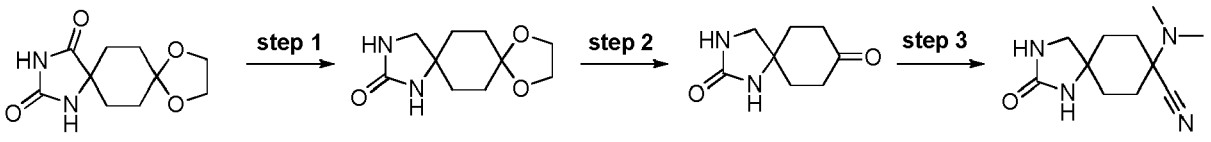
[0208] In analogy to the method described for **INT-952** CIS-8-dimethylamino-8-(3-fluorophenyl)-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one **(INT-974)** was converted into CIS-1-(cyclobutylmethyl)-8-dimethylamino-8-(3-fluorophenyl)-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro [4.5] decan-2-one.

Step 2: CIS-1-(Cyclobutyl-methyl)-8-dimethylamino-8-(3-fluorophenyl)-1,3-diazaspiro[4.5]decan-2-one

[0209] In analogy to the method described for **INT-982 step 2** 1-(cyclobutyl-methyl)-8-dimethylamino-8-(3-fluorophenyl)-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one was converted into 1-(cyclobutylmethyl)-8-dimethylamino-8-(3-fluorophenyl)-1,3-diazaspiro[4.5]decan-2-one (INT-1031).

Synthesis of INT-1037: 8-(dimethylamino)-2-oxo-1,3-diazaspiro[4.5]decane-8-carbonitrile

[0210]



INT-1037

Step 1: 9,12-dioxa-2,4-diazadispiro[4.2.4^{8}.2^{5}]tetradecan-3-one

[0211] Lithiumaluminiumhydride (2.2 equiv., 292 mmol) was suspended in THF (400 mL) and the suspension was cooled to 0°C. 8-(Dimethylamino)-8-(m-tolyl)-1,3-diazaspiro[4.5]decan-2-one (B, 75 mg, 0,261 mmol) (step 1 of **INT-965)** was added portionwise at 0°C. The reaction mixture was stirred 1.5 h at 0°C, then overnight at RT and then 2 h at 40°C. The reaction mixture was cooled down to 0°C, quenched carefully with sat. aq. Na_2SO_4, EtOAc (400 mL) was added and the resulting mixture was stirred for 2 h and then left without stirring for 2h at RT. The precipitate was filtered off and washed with EtOAc and MeOH. The resulting solid residue was suspended in methanol and stirred at RT overnight. The precipitate was filtered off and disposed. The filtrate was concentrated under reduced pressure, the residue was suspended thoroughly in water (50 mL) at 40 °C, the precipitate was filtered off and dried under reduced pressure to yield 9,12-dioxa-2,4-diazadispiro[4.2.4^{8}.2^{5}]tetradecan-3-one (11.4 g, 41%). Mass: m/z 213.2 $(M+H)^+$.

Step 2: 1,3-diazaspiro[4.5]decane-2,8-dione

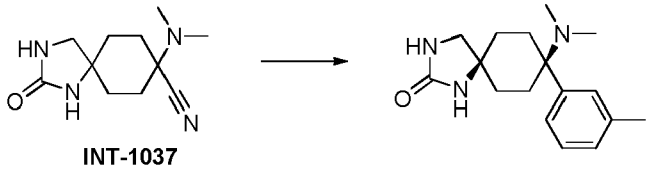
[0212] In analogy to the method described for **INT-1003 step 3** 9,12-dioxa-2,4-diazadispiro[4.2.4^{8}.2^{5}]tetradecan-3-one was treated with conc. aq. HCl to be converted into 1,3-diazaspiro[4.5]decane-2,8-dione. Mass: m/z 169.1 $(M+H)^+$.

Step 3: **8-(dimethylamino)-2-oxo-1,3-diazaspiro[4.5]decane-8-carbonitrile (INT-1037)**

[0213] In analogy to the method described for **INT-965 step 1** 1,3-diazaspiro[4.5]decane-2,8-dione was treated with dimethyl amine and potassium cyanide to be converted into 8-(dimethylamino)-2-oxo-1,3-diazaspiro[4.5]decane-8-carbonitrile **(INT-1037).** Mass: m/z 223.2 $(M+H)^+$.

Synthesis of INT-1038: CIS-8-(dimethylamino)-8-(m-tolyl)-1,3-diazaspiro[4.5]decan-2-one

[0214]

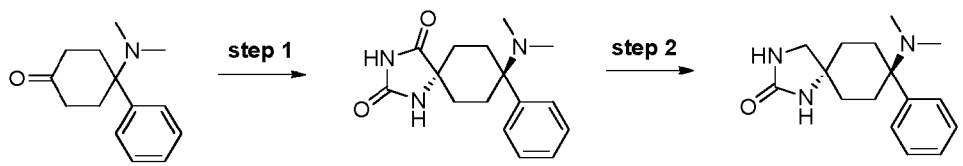


INT-1037 **INT-1038**

[0215] To the suspension of 8-(dimethylamino)-2-oxo-1,3-diazaspiro[4.5]decane-8-carbonitrile (200 mg, 0.90 mmol) in THF (4 mL) at RT was added dropwise 1M bromo(m-tolyl)magnesium in THF (4 equiv., 3.6 mmol, 3.6 mL) and the reaction mixture was stirred for 1 h at RT. Additional portion of 1M bromo(m-tolyl)magnesium in THF (1 equiv., 0.8 mL) was added. The reaction mixture was stirred at RT overnight, then quenched with methanol/water. Solid NH_4Cl and DCM were added to the resulting mixture and the precipitate was filtered off. The organic phase of the filtrate was separated and the aqueous phase was extracted with DCM (3x). The combined organic phases were dried over anhydr. Na_2SO_4 and concentrated under reduced pressure. The residue was purified by flash chromatography on silica gel (DCM/MeOH, 100/0 to 65/35) to yield CIS-8-(dimethylamino)-8-(m-tolyl)-1,3-diazaspiro[4.5]decan-2-one **(INT-1038)** (81 mg, 31%). Mass: m/z 288.2 $(M+H)^+$.

Synthesis of INT-1059: TRANS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0216]



INT-1059

Step 1: TRANS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decane-2,4-dione

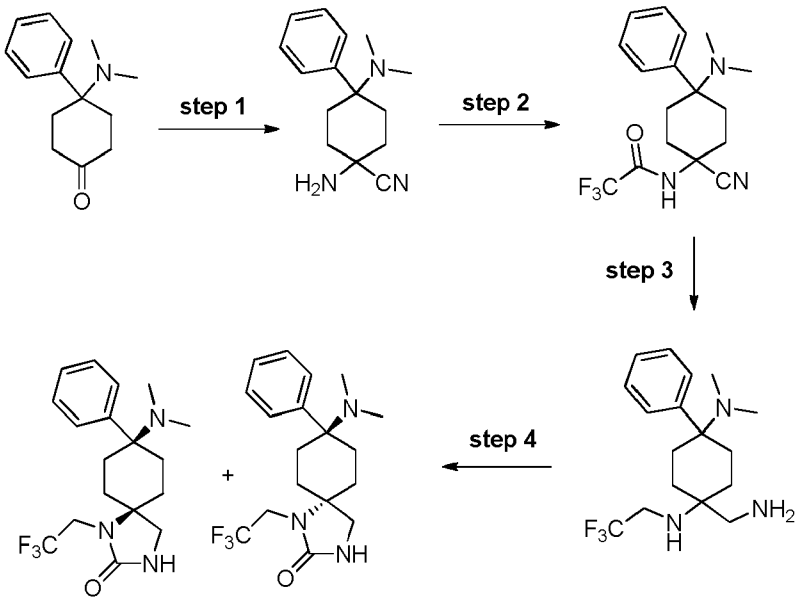
[0217] To a stirred solution of 4-dimethylamino-4-phenyl-cyclohexanone (250.0 g, 1.15 mol, 1.0 eq.) in EtOH (2.5 L) and water (2.1 L) was added $(NH_4)_2CO_3$ (276.2 g, 2.87 mol, 2.5 eq.) and the reaction mixture was stirred at RT for 15 min. KCN (74.92 g, 1.15 mol, 1.0 eq.) was added. The reaction mixture was stirred at 60°C for 18h and then filtered in hot condition to get white solid which was washed with water (2.5 L), ethanol (1 L) and hexane (2.5 L). The resulting solid was dried under reduced pressure to get CIS-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decane-2,4-dione (223 g, 0.776 mol, 65%) as a white solid. The filtrate was collected from multiple batches (~450 g) which contained a mixture of cis and trans isomers. The filtrate was concentrated under reduced pressure and solid obtained was filtered and washed with water (1 L) and hexane (1 L). Solid material was dried under reduced pressure to get ~100 g of a mixture of cis and trans (major) isomers. Crude material was partially dissolved in hot MeOH (600 mL) and cooled to RT, filtered through sintered funnel, washed with MeOH (200 mL) followed by ether (150 mL) and dried to get TRANS-8-dimethylamino-8-phenyl-1,3-diaza-spiro[4.5] decane-2,4-dione (50 g, 0.174 mmol, ~9-10%).

Step 2: TRANS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (INT-1059)

[0218] In analogy to the method described for INT-976 step 2 TRANS-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5] decane-2,4-dione was treated with $LiAlH_4$ to be converted into TRANS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5] decan-2-one (INT-1059). Mass: m/z 274.2 $(M+H)^+$.

Synthesis of INT-1068 and INT-1069: CIS- and TRANS-8-(dimethylamino)-8-phenyl-1-(2,2,2-trifluoroethyl)-1,3-diazaspiro[4.5]decan-2-one

[0219]



Step 1: 1-amino-4-dimethylamino-4-phenyl-cyclohexanecarbonitrile

[0220] To a stirred solution of 4-dimethylamino-4-phenyl-cyclohexanone (50 g, 230.096 mmol) in MeOH (400 mL) was added NH_4Cl (24.6 g, 460.8 mmol) followed by NH_4OH (400 mL) at RT and the reaction mixture was stirred for 15 min. NaCN (22.5 g, 460.83 mmol) was added and the resulting mixture was stirred for 16 h at RT. The reaction mixture was extracted with DCM (3x750 mL). Combined organic layer was washed with water (750 mL), brine (750 mL), dried over Na_2SO_4 and concentrated under reduced pressure. The residue was triturated with DCM/hexane to get crude 1-amino-4-dimethylamino-4-phenyl-cyclohexanecarbonitrile (50 g, 90%) as an off white solid which was used in next step without further purification. LC-MS: m/z $[M+H]^+$ = 244.2 (MW calc. 244.09).

Step 2: N-(1-cyano-4-dimethylamino-4-phenyl-cyclohexyl)-2,2,2-trifluoroacetamide

[0221] To a solution of 1-amino-4-dimethylamino-4-phenyl-cyclohexanecarbonitrile (5.0 g, 20.57 mmol, 1.0 eq.) in THF (100 ml) were added DIPEA (10.72 ml, 61.71 mmol, 3.0 eq), trifluoroacetic acid (1.89 ml, 24.69 mmol, 1.2 eq) and T3P (18.2 ml, 30.85 mmol, 1.5 eq) at 0°C. The reaction mixture was stirred at RT for 16h, then diluted with water (100 ml) and extracted with 10 % MeOH in DCM (2×250 mL). Combined organic layer was washed with brine (100 mL), dried over Na_2SO_4 and concentrated under reduced pressure to get crude N-(1-cyano-4-dimethylamino-4-phenyl-cyclohexyl)-2,2,2-trifluoroacetamide as a light yellow sticky material which was used in the next step without further purification. LC-MS: m/z $[M+1]^+$ = 339.9 (MW calc. 339.36).

Step 3: 1-aminomethyl-N',N'-dimethyl-4-phenyl-N-(2,2,2-trifluoroethyl)cyclohexane-1,4-diamine

[0222] To suspension of $LiAlH_4$ (4.03 g, 106.19 mmol, 6.0 eq.) in dry THF (40 mL) was added N-(1-cyano-4-dimethylamino-4-phenyl-cyclohexyl)-2,2,2-trifluoro-acetamide (6.0 g, 17.69 mmol, 1.0 eq.) in dry THF (100 mL) dropwise at 0°C. The reaction mixture was stirred at RT for 16 h, then quenched with sat. aq. Na_2SO_4 at 0°C, excess THF was added and the resulting mixture was stirred at RT for 2 h. The resulting suspension was filtered through celite and the filter cake was washed with 10% MeOH in DCM (150 mL). Combined filtrate was concentrated under reduced pressure to yield crude 1-aminomethyl-N',N'-dimethyl-4-phenyl-N-(2,2,2-trifluoro-ethyl)-cyclohexane-1,4-diamine (4.2 g, crude) as a light yellow sticky material which was directly used in the next step without further purification. LC-MS: m/z $[M+1]^+$ = 330.0 (MW calc. 329.40).

Step 4: CIS- and TRANS-8-dimethylamino-8-phenyl-1-(2,2,2-trifluoro-ethyl)-1,3-diazaspiro[4.5]decan-2-one (INT-1068 and INT-1069)

[0223] To a solution of 1-aminomethyl-N',N'-dimethyl-4-phenyl-N-(2,2,2-trifluoro-ethyl)-cyclohexane-1,4-diamine (4.2 g, 12.76 mmol, 1.0 eq.) in toluene (60 ml) was added KOH (4.29 g, 76.56 mmol, 6.0 eq.) in water (120 ml) at 0°C followed by addition of $COCl_2$ (15.6 ml, 44.66 mmol, 3.5 eq., 20% in toluene) at 0°C and stirred at RT for 16 h. Reaction mixture was basified with sat $NaHCO_3$ solution and extracted with DCM (2 × 200 ml). Combined organic layer was dried over Na_2SO_4 and concentrated under reduced pressure to get crude product which was purified by prep HPLC to get CIS-8-dimethylamino-8-phenyl-1-(2,2,2-trifluoro-ethyl)-1,3-diazaspiro[4.5]decan-2-one **(INT-1068)** (1.5g) (major isomer, polar spot on TLC) and TRANS-8-dimethylamino-8-phenyl-1-(2,2,2-trifluoro-ethyl)-1,3-diaza-spiro[4.5]decan-2-one **(INT-1069)** as minor isomer (non-polar spot on TLC) (120 mg, 92.93% by HPLC) as off-white solids. CIS-isomer: LC-MS: m/z $[M+1]^+$ =356.2 (MW calc.= 355.40). HPLC: 98.53%, Column: Xbridge C-18 (100 x4.6), 5μ, Diluent: MeOH, Mobile phase: A) 0.05% TFA in water; B) ACN flow rate: 1ml/min, R_t = 5.17 min. ^{1}HNMR (DMSO-d_6, 400 MHz), δ (ppm) = 7.43-7.27 (m, 5H), 6.84 (s, 1H), 3.30-3.25 (m, 4H), 2.66-2.63 (d, 2H, J = 12.72 Hz), 1.89 (s, 6H), 1.58-1.51 (m, 2H), 1.46-1.43 (m, 2H), 1.33-1.23 (m, 2H).

[0224] For **further intermediates** the synthesis in analogy to previously described methods is given in the following table. The syntheses of the building blocks and intermediates have either been described previously within this application or can be performed in analogy to the herein described methods or by methods known to the person, skilled in the art. Such a person will also know which building blocks and intermediates need to be chosen for synthesis of each exemplary compound.

Intermediate	Chemical Name	Chemical Structure	in analogy to method	m/z $[M+H]^+$
INT-601	CIS-5-(-8-(dimethylamino)-8-(3 -fluorophenyl)-2-oxo-1,3 -diazaspiro [4.5] decan-3 -yl)pyrimidine-2-carbonitrile		INT-600	395.1
INT-794	CIS-3-(3,4-dimethoxybenzyl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one		INT-975	424.3
INT-796	CIS-8-Dimethylamino-3 -[(4-methoxyphenyl)-methyl] -8-(3-methoxy-propyl)-1,3-diazaspiro [4.5] decan-2-one		INT-974	390.3
INT-797	CIS-8-(Ethyl-methyl-amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one		INT-976	288.2
INT-949	CIS-8-Dimethylamino-1-ethyl-8-phenyl-1,3-diazaspiro[4.5]decan-2-one		INT-984	302.2

(continued)

Intermediate	Chemical Name	Chemical Structure	in analogy to method	m/z $[M+H]^+$
INT-950	CIS-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3-[phenyl-methyl] -1,3 -diazaspiro [4.5] decan-2-one		INT-952	432.3
INT-954	4-Dimethylamino-4-(5-methyl-thiophen-2-yl)-cyclohexan-1 -one		INT-965	238.1
INT-955	4-Dimethylamino-4-thiophen-2-yl-cyclohexan-1 -one		INT-965	224.1
INT-956	1-(1-Methyl-1H-pyrazol-3-yl)-4-oxo-cyclohexane-1-carbonitrile		INT-958	204.1
INT-957	4-Oxo-1 -pyrazin-2-yl-cyclohexane-1 -carbonitrile		INT-958	202.1

(continued)

Intermediate	Chemical Name	Chemical Structure	in analogy to method	m/z $[M+H]^+$
INT-959	4-Dimethylamino-4-(1-methyl-1H-pyrazol-3-yl)-cyclohexan-1 -one		INT-961	222.2
INT-960	4-Dimethylamino-4-pyrazin-2-yl-cyclohexan-1-one		INT-961	220.1
INT-962	4-Dimethylamino-4-(3 -methoxyphenyl)-cyclohexan-1 - one		INT-965	248.2
INT-963	CIS-3 -Benzyl-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]de-can-2-one		INT-975	364.2
INT-964	4-(Ethyl-methyl-amino)-4-phenyl-cyclohexan-1-one		INT-965	232.2

(continued)

Intermediate	Chemical Name	Chemical Structure	in analogy to method	m/z $[M+H]^+$
INT-967	CIS-8-Dimethylamino-8-[4-(methoxymethyloxy)-phenyl]-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one		INT-974	454.3
INT-968	CIS-8-Dimethylamino-8-[3-(methoxymethyloxy)-phenyl]-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one		INT-974	454.3
INT-969	CIS-1-(Cyclobutyl-methyl)-8-dimethylamino-8-(4-hydroxyphenyl)-3-[(4-methoxyphenyl)-methyl]-1,3-diazaspiro[4.5]decan-2-one		INT-971	478.3
INT-970	CIS-8-Dimethylamino-8-(4-methoxyphenyl)-3-[(4-methoxyphenyl)-methyl] -1,3 -diazaspiro [4.5] decan-2-one		SC_2017	424.3
INT-972	CIS-8-Dimethylamino-8-(3-methoxyphenyl)-3-[(4-methoxyphenyl)-methyl] -1,3 -diazaspiro [4.5] decan-2-one		SC_2017	424.3

(continued)

Intermediate	Chemical Name	Chemical Structure	in analogy to method	m/z $[M+H]^+$
INT-973	CIS-8-Dimethylamino-8-(4-fluorophenyl)-3-[(4-methoxyphenyl)-methyl] -1,3 -diazaspiro [4.5] decan-2-one		INT-974	412.2
INT-979	CIS-8-Dimethylamino-1-(3-methoxy-propyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one		INT-984	346.2
INT-980	CIS-8-Dimethylamino-1 -(2-methoxy-ethyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one		INT-984	332.2
INT-981	CIS-8-Dimethylamino-8-phenyl-1-propyl-1,3-diazaspiro[4.5]decan-2-one		INT-984	316.2

(continued)

Intermediate	Chemical Name	Chemical Structure	in analogy to method	m/z $[M+H]^+$
INT-983	CIS-1-(Cyclopropyl-methyl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one		INT-984	328.2
INT-985	CIS-1 -(Cyclobutyl-methyl)-8-(methyl-propyl-amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one		INT-986	370.3
INT-990	methyl CIS-5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carboxylate		INT-989	410.2
INT-992	CIS-3-(2-chloro-4-methylpyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one		INT-989	400.2

(continued)

Intermediate	Chemical Name	Chemical Structure	in analogy to method	m/z $[M+H]^+$
INT-993	4-benzyl-4-(dimethylamino)cyclohexanone		INT-965	232.3
INT-994	CIS-8-benzyl-8-(dimethylamino)-1,3-diazaspiro[4.5]decan-2-one		INT-976	288.2
INT-995	TRANS-8-benzyl-8-(dimethylamino)-1,3 - diazaspiro[4.5]de-can-2-one		INT-976	288.2
INT-997	CIS-8-(dimethylamino)-8-(thiophen-2-yl)-1,3-diazaspiro[4.5]de-can-2-one		INT-976	280.1
INT-998	TRANS-8-(dimethylamino)-8-(thiophen-2-yl)-1,3-diazaspiro[4.5] decan-2-one		INT-976	280.1

(continued)

Intermediate	Chemical Name	Chemical Structure	in analogy to method	m/z $[M+H]^+$
INT-999	4-(dimethylamino)-4-(1-methyl-1H-benzo[d]imidazol-2-yl)cyclo-hexanone		INT-965	272.2
INT-1000	CIS-8-(dimethylamino)-8-(1-methyl-1H-benzo[d]imidazol-2-yl)-1,3-diazaspiro[4.5]decan-2-one		INT-976	328.2
INT-1001	TRANS-8-(dimethylamino)-8-(1-methyl-1H-benzo[d]imidazol-2-yl)-1,3-diazaspiro[4.5]decan-2-one		INT-976	328.2
INT-1002	CIS-3-(2-chloropyrimidin-4-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one		INT-989	386.9
INT-1009	TRANS-8-ethylamino-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one		INT-1008	274.2

(continued)

Intermediate	Chemical Name	Chemical Structure	in analogy to method	m/z $[M+H]^+$
INT-1024	CIS-8-(dimethylamino)-8-(3 -fluorophenyl)-1,3 - diazaspiro[4.5] decan-2-one		INT-977 (step 2)	292.2
INT-1025	CIS-8-(dimethylamino)-8-(4-fluorophenyl)-1,3-diazaspiro[4.5]de-can-2-one		INT-974, INT-977 (step 2)	292.2
INT-1027	CIS-3-(2-chloropyrimidin-5-yl)-8-(dimethylamino)-8-(thiophen-2-yl)-1,3-diazaspiro[4.5]decan-2-one		INT-989	392.1
INT-1039	CIS-8-(dimethylamino)-8-(3-(trifluoromethoxy)phenyl)-1,3-dia-zaspiro[4.5]decan-2-one		INT-1038	358.2
INT-1040	(CIS)-8-(dimethylamino)-8-(3-(trifluoromethyl)phenyl)-1,3-diazas-piro[4.5]decan-2-one		INT-1038	342.2

(continued)

Intermediate	Chemical Name	Chemical Structure	in analogy to method	m/z $[M+H]^+$
INT-1041	(CIS)-8-(dimethylamino)-8-(3-methoxyphenyl)-1,3-diazaspiro [4.5]decan-2-one		INT-1038	304.2
INT-1042	(CIS)-8-(5-chlorothiophen-2-yl)-8-(dimethylamino)-1,3-diazaspiro [4.5]decan-2-one		INT-1038	314.1
INT-1043	(CIS)-8-(dimethylamino)-8-(3 -fluoro-5-methylphenyl)-1,3-diazas-piro[4.5]decan-2-one		INT-1038	306.2
INT-1044	(CIS)-8-(3-chlorophenyl)-8-(dimethylamino)-1,3-diazaspiro[4.5] decan-2-one		INT-1038	308.2
INT-1045	(CIS)-3-(5-chloro-3-fluoropyridin-2-yl)-8-(dimethylamino)-8-phe-nyl-1,3-diazaspiro[4.5]decan-2-one		INT-989	403.2

(continued)

Intermediate	Chemical Name	Chemical Structure	in analogy to method	m/z $[M+H]^+$
INT-1047	(CIS)-8-(methyl(oxetan-3-ylmethyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one		INT-1026	330.5
INT-1048	(CIS)-3 -(6-chloropyridin-3 -yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one		INT-989	385.2
INT-1049	(CIS)-3-(5-chloropyridin-2-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one		INT-989	385.2
INT-1061	TRANS-1-(cyclopropyl-methyl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one		INT-984	328.2

(continued)

Intermediate	Chemical Name	Chemical Structure	in analogy to method	m/z $[M+H]^+$
INT-1063	CIS-1-(cyclopropylmethyl)-8-(dimethylamino)-8-(3-fluorophenyl)-1,3-diazaspiro[4.5]decan-2-one		INT-1031	346.2
INT-1066	TRANS-1-(cyclobutylmethyl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one		INT-987	342.3
INT-1070	CIS-8-(dimethylamino)-8-phenyl-1-(3,3,3-trifluoropropyl)-1,3-diazaspiro[4.5]decan-2-one		INT-1068	360.2
INT-1074	CIS-8-(dimethylamino)-8-(3-fluorophenyl)-1-((1-hydroxycyclobutyl)methyl)-1,3-diazaspiro[4.5]decan-2-one		INT-1031	376.2

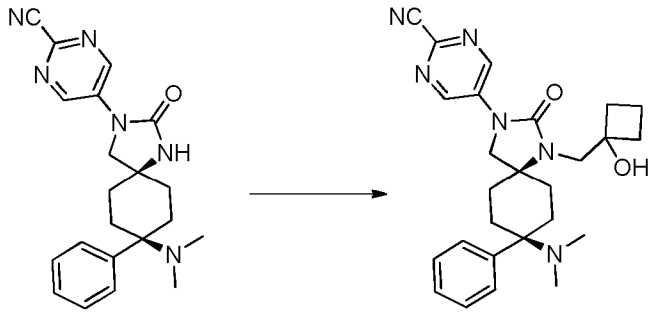
(continued)

Intermediate	Chemical Name	Chemical Structure	in analogy to method	m/z $[M+H]^+$
INT-1076	CIS-3-(2-chloro-4-methylpyrimidin-5-yl)-8-(dimethylamino)-8-(3 -fluorophenyl)-1,3 - diazaspiro[4.5]decan-2-one		INT-989	418.2
INT-1077	CIS-3-(4-chloro-2-(trifluoromethyl)pyrimidin-5-yl)-8-(dimethylamino)-8-(3-fluorophenyl)-1,3 - diazaspiro[4.5]decan-2-one		INT-989	472.2
INT-1078	CIS-3-(4-chloro-2-cyclopropylpyrimidin-5-yl)-8-(dimethylamino)-8-(3 -fluorophenyl)-1,3 - diazaspiro[4.5]decan-2-one		INT-989	444.2

Synthesis of exemplary compounds

Synthesis of SC_3013: cis-5-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3 -diazaspiro[4.5] decan-3 -yl] -pyrimidine-2-carbonitrile

[0225]

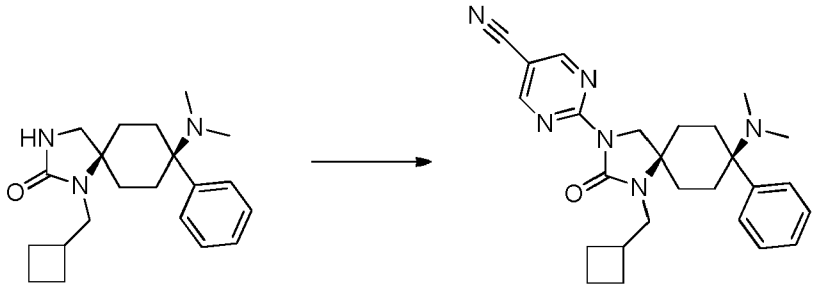


INT-600 **SC_3013**

[0226] NaH (60% in mineral oil, 0.076 g, 3.19 mmol, 3 equiv.) was added to a solution of 5-(cis-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carbonitrile **INT_600** (0.4 g, 1.06 mmol) in DMF (5 mL) at 0°C. The mixture was stirred for 30 min at RT and then cooled to 0°C. (1-(Tert-butyldimethylsilyloxy)cyclobutyl)methyl 4-methylbenzene-sulfonate (1.18 g, 3.19 mmol, 3 equiv.) was added dropwise over a period of 5 min and the reaction mixture was allowed to warm up to RT and further heated to 70°C for 16 h. The reaction mixture was diluted with water (10 mL) and extracted with EtOAc (3 × 20 mL). The combined organic layers were dried over anhydrous Na_2SO_4 and the solvent was removed *in vacuo.* The residue was purified by silica gel flash chromatography to afford CIS-5-[8-dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile (0.25 g).

Synthesis of SC_3014: cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-5-carbonitrile

[0227]

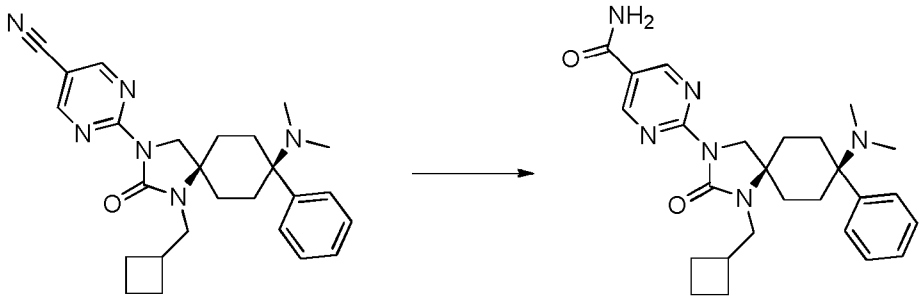


INT-987 **SC_3014**

[0228] cis-1-(Cyclobutylmethyl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **INT-987** (500 mg, 1.464 mmol), 2-chloropyrimidine-5-carbonitrile (409 mg, 2.928 mmol) and Cs_2CO_3 (954 mg, 2.928 mmol) in 1,4-dioxane (6 ml) were stirred under an nitrogen atmosphere for 18 h at 105°C. The reaction mixture was cooled to RT, 2N aqueous NaOH solution (3 ml) was added and stirring was continued for 10 min. The mixture was extracted first with EtOAc and then with a blend of DCM (30 ml) and methanol (5 ml). The organic layers were combined and concentrated under reduced pressure. The residue was purified by flash chromatography on silica gel (elution with a DCM/EtOAc gradient) provided cis-2-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-5-carbonitrile **SC_3014** (57 mg).

Synthesis of SC_3016: cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-5-carboxylic acid amide

[0229]

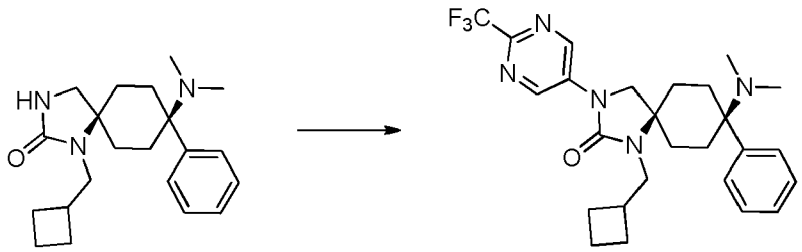


SC_3014 **SC_3016**

[0230] cis-2-[1-(Cyclobutylmethyl)-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]pyrimidine-5-carbonitrile **SC_3014** (40 mg, 0.09 mmol) was dissolved in DMSO (1.2 mL) and K_2CO_3 (25 mg, 0.18 mmol) and hydrogen peroxide (30%, 0.13 mL 1.260 mmol) were added. The reaction mixture was stirred at RT for 20 h, then diluted with 2N NaOH (10 mL) and extracted with DCM (3x 20 mL). The combined organic layers were dried over Na_2SO_4, concentrated *in vacuo.* The residue was purified by flash chromatography to yield cis- 2-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-5-carboxylic acid amide **SC_3016** (40 mg) as a white solid.

Synthesis of SC_3022: cis-1-(Cyclobutylmethyl)-8-(dimethylamino)-8-phenyl-3-[2-(trifluoromethyl)pyrimidin-5-yl] -1,3-diazaspiro[4.5]decan-2-one

[0231]

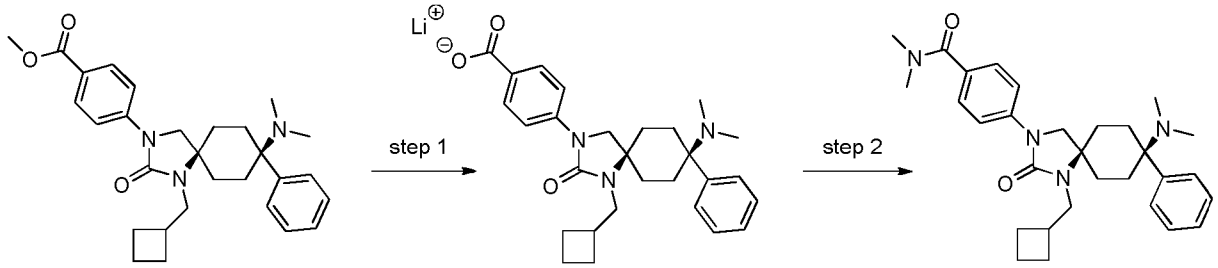


INT-987 **SC_3022**

[0232] cis-1-(Cyclobutylmethyl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **INT-987** (240 mg, 0.7 mmol), Pd-XPhos Generation 2 (138 mg, 0.17 mmol), Cs_2CO_3 (457 mg, 1.4 mmol) and 5-bromo-2-(trifluoromethyl) pyrimidine (319 mg, 1.4 mmol) were suspended in anhydrous 1,4-dioxane (3 mL) under nitrogen atmosphere and the resulting mixture was stirred at 100°C overnight. The reaction mixture was cooled to RT and water (3 mL) was added. The aqueous layer was extracted with DCM (3x10 mL), the combined organic layers were dried over Na_2SO_4 and concentrated *in vacuo.* The residue was purified by flash chromatography on silica gel to yield the title compound. Final purification using a strong cation exchange resin gave cis-1-(cyclobutylmethyl)-8-(dimethylamino)-8-phenyl-3-[2-(trifluoromethyl)pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one SC_3022 (145 mg) as a white solid.

Synthesis of SC_3028: cis-4-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3 -yl] -N,N-dimethyl-benzamide

[0233]



SC_3081 SC_3028

Step 1: Lithium 4-(cis-1-(cyclobutylmethyl)-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl) benzoate

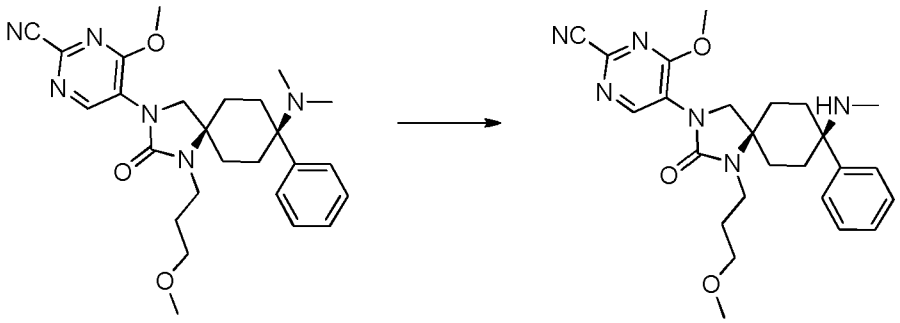
[0234] Methyl 4-(cis-1-(cyclobutylmethyl)-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro [4.5]decan-3-yl)benzoate **SC_3081** (400 mg) was dissolved in methanol (5 mL) and DCM (5 mL). Lithium hydroxide solution (2 M in water, 1 mL) was added and the resulting mixture was stirred overnight at RT. All volatiles were removed *in vacuo* to yield lithium 4-(cis-1-(cyclobutylmethyl)-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)benzoate (403 mg).

Step 2 cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5]decan-3-yl]-N,N-dimethyl-benzamide (SC_3028)

[0235] Lithium 4-(cis-1-(cyclobutylmethyl)-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro [4.5]decan-3-yl)benzoate (80 mg, 0.17 mmol) was suspended in DCM (1 mL) and triethylamine (0.23 mL, 1.7 mmol) and dimethylamine (2M solution in THF, 0.17 mL) and T3P (0.20 mL, 0.34 mmol) were sequentially added. The resulting mixture was stirred for 18 h at RT. Water (10 mL) was added and the mixture was extracted with DCM (3x 20 mL). The combined organic layers were dried over Na_2SO_4, concentrated *in vacuo* and the residue was purified by flash chromatography to yield cis-4-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N,N-dimethyl-benzamide **SC_3028** (28 mg) as white solid.

Synthesis of SC_3045: cis-4-Methoxy-5-[1-(3-methoxypropyl)-8-(methylamino)-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl]pyrimidine-2-carbonitrile

[0236]

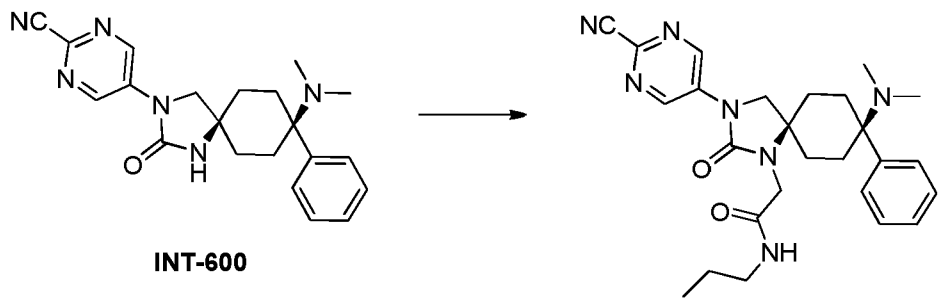


SC_3040 SC_3045

[0237] N-iodosuccinimide (150 mg, 0.67 mmol) was added to a suspension of cis-5-[8-(dimethylamino)-1-(3-methoxypropyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidine-2-carbonitrile **SC_3040** (214 mg, 0.44 mmol) in acetonitrile/THF (2/1 v/v, 10 mL) at RT and the resulting mixture was stirred for 16 h at RT. The reaction mixture was basified with 2N NaOH solution to pH~10 and the organic product was extracted with DCM (10 mL × 3). The combined organic extracts were dried over anhydrous Na_2SO_4, the solvent was removed *in vacuo* and the residue was purified by preparative flash chromatography to give cis-4-methoxy-5-[1-(3-methoxypropyl)-8-(methylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]pyrimidine-2-carbonitrile **SC_3045** (81 mg) as a solid.

Synthesis of SC_3064: cis-2-[3-(2-cyano-pyrimidin-5-yl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl]-N-propyl-acetamide

[0238]

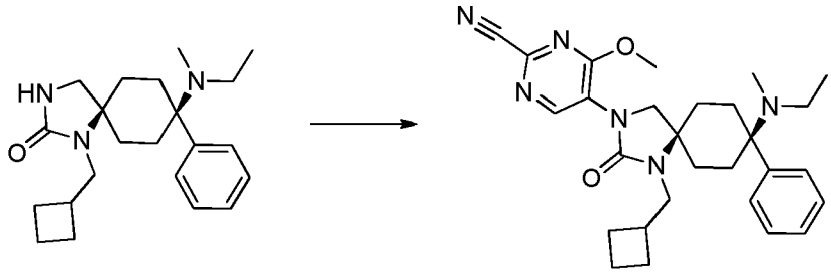


INT-600 **SC_3064**

[0239] Sodium hydroxide (51 mg, 1.3 mmol) was added to anhydrous DMSO (4.5 mL) and stirred for 10 minutes at room temperature. cis-5-[8-(Dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]pyrimidine-2-carbonitrile **INT_600** (80 mg, 0.21 mmol) was added and the resulting mixture was stirred at room temperature for 5 min and then heated to 50°C. 2-Bromo-N-propyl-acetamide (153 mg, 0.85 mmol) was added and stirring was continued at 50°C for one hour. The reaction mixture was quenched with water (25 mL) and extracted with ethyl acetate (2 × 10 mL). The combined organic layers were washed with water (5 mL) and brine (5 mL), dried over Na_2SO_4 and concentrated under reduced pressure. The residue was purified by flash chromatography on silica gel to yield cis-2-[3-(2-cyano-pyrimidin-5-yl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl]-N-propyl-acetamide **SC_3064** (22 mg) as a solid.

Synthesis of SC_3065: 5-(cis-1-(Cyclobutylmethyl)-8-(ethyl(methyl)amino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-4-methoxypyrimidine-2-carbonitrile

[0240]

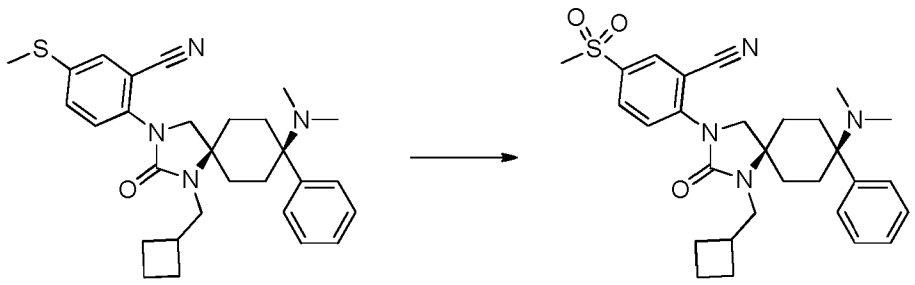


INT-986 **SC_3065**

[0241] Cs_2CO_3 (274 mg, 0.84 mmol) was added to the solution of cis-1-(cyclobutylmethyl)-8-(ethyl(methyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **INT_986** (150 mg, 0.42 mmol), Xanthphos (36 mg, 0.063 mmol), $Pd_2(dba)_3$ (19 mg, 0.0211 mmol) and 5-bromo-4-methoxypyrimidine-2-carbonitrile (135 mg, 0.633 mmol) in 1,4-dioxane (10 mL) under argon atmosphere. The mixture was flushed again with argon for 5 min and the reaction mixture was stirred at 90°C for 5h. The reaction mixture was cooled to room temperature. The residue was diluted with water (20 mL) and the organic product was extracted with ethyl acetate (3x10 mL). The combined organic extracts were dried over anhydrous Na_2SO_4 and the solvent was concentrated under reduced pressure. The residue was purified by preparative TLC (EtOAc / petroleum ether 1/9) to afford a white solid (0.15 g), which was further washed with n-pentane to give 0.1 g of 5-(cis-1-(cyclobutylmethyl)-8-(ethyl(methyl)amino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-4-methoxypyrimidine-2-carbonitrile **SC_3065.**

Synthesis of SC_3008: cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-5-methylsulfonyl-benzonitrile

[0242]

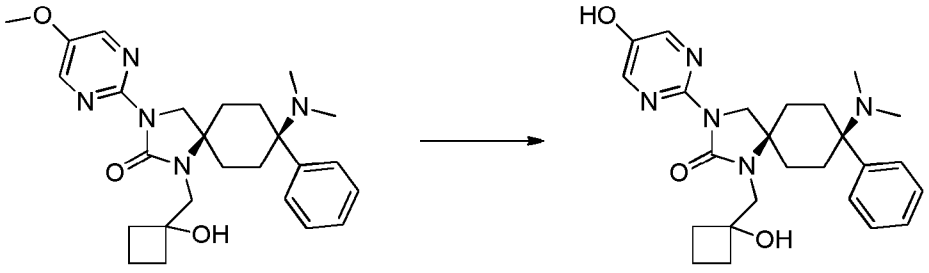


SC_3008

[0243] cis-2-[1-(Cyclobutylmethyl)-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-5-methylsulfanyl-benzonitrile (320 mg, 0.66 mmol, prepared from 2-iodo-5-(methylthio)benzonitrile and **INT-987** analogously to **SC_3022**) was dissolved in a mixture of methanol (9 mL) and water (8 mL). Oxone® (807 mg, 1.3 mmol) was added at RT and the resulting mixture was stirred at RT for 18 h. Water (10 mL) was added and the mixture was extracted with DCM (3x 20 mL). The combined organic layers were dried over Na_2SO_4, concentrated *in vacuo.* The residue was purified by flash chromatography on silica gel to yield cis-2-[1-(cyclobutylmethyl)-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-5-methylsulfonyl-benzonitrile **SC_3008** (66 mg) as a white solid.

Synthesis of SC_3023: cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-hydroxy-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one

[0244]

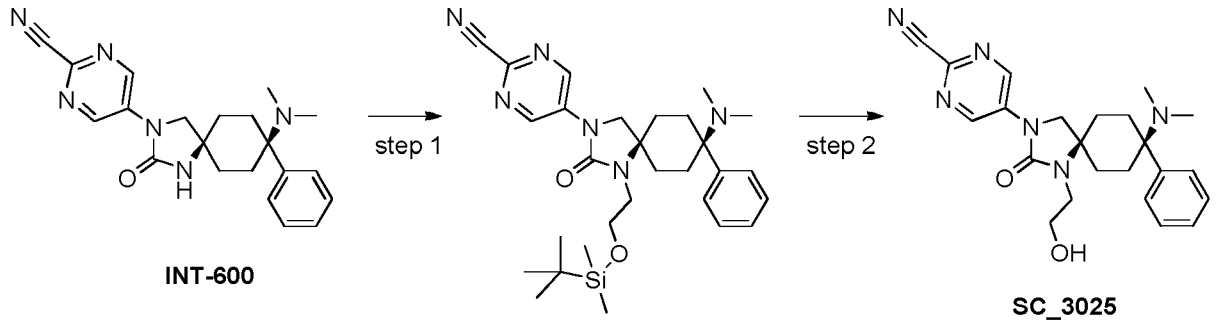


SC_3015 SC_3023

[0245] Boron tribromide (1M in DCM, 0.38 mL, 0.387 mmol) was added to the solution of cis-8-dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-methoxy-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one SC_3015 (180 mg, 0.387 mmol) in DCM (2 mL) at 0°C. The reaction mixture was stirred for 30 min at 0°C and then for 16 h at room temperature, quenched with methanol (2 mL), the solvents were removed under reduced pressure and the residue was purified by normal phase preparative HPLC to yield cis-8-dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl] -3 -(2-hydroxy-pyrimidin-5-yl)-8-phenyl-1,3 -diazaspiro [4.5]decan-2-one **SC_3023** (60 mg, 34%) as a white solid. ^{1}H NMR (400 MHz, DMSO-d6, δ in ppm): δ 8.43 (s, 2H), 7.35-7.25 (m, 5H), 5.50 (s, 1H), 3.67 (s, 2H), 3.19 (s, 2H), 2.69-2.65 (m, 2H), 2.19-2.10 (m, 4H), 1.98-1.85 (m, 8H), 1.68-1.61 (m, 1H), 1.51-1.39 (m, 5H).

Synthesis of SC_3025: cis-5-[8-Dimethylamino-1-(2-hydroxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3 -yl] -pyrimidine-2-carbonitrile

[0246]



Step 1: 5-(cis-1-(2-(tert-Butyldimethylsilyloxy)ethyl)-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carbonitrile

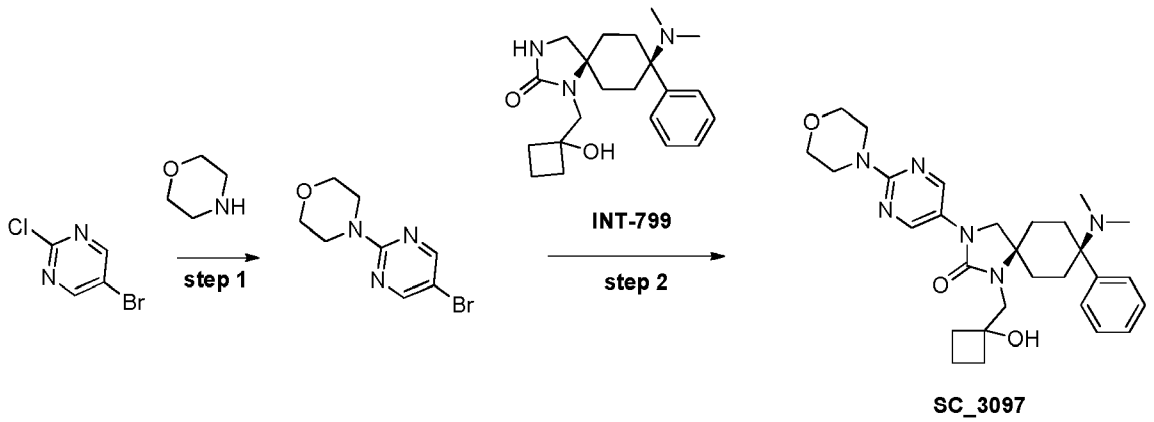
[0247] NaH (60% in mineral oil, 63.8 mg, 1.59 mmol) was added at 0°C to the solution of 5-(cis-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carbonitrile **INT-600** (0.2 g, 0.53 mmol) in DMF (8 mL) for 10 min at 0°C. The reaction mixture was stirred at RT for 30 min, (3-bromopropoxy)(tert-butyl)dimethylsilane (252 mg, 1.06 mmol) was added dropwise over 5 min at 0°C and the mixture was stirred for further 16 h at RT. The reaction mixture was diluted with water (15 mL) and extracted with diethyl ether (3 × 25 mL). The combined organic extracts were dried over anhydrous Na_2SO_4, the solvents were removed under reduced pressure and the residue was purified by flash chromatography on silica gel to afford 5-(cis-1-(2-(tert-butyldimethylsilyloxy)ethyl)-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carbonitrile (100 mg, 34%) as a white solid.

Step 2: cis-5-[8-Dimethylamino-1-(2-hydroxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile (SC_3025)

[0248] 1M TBAF solution in THF (0.36 mL, 0.36 mmol) was added to 5-(cis-1-(2-(tert-butyldimethylsilyloxy)ethyl)-8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carbonitrile (0.1 g, 0.18 mmol) in THF (5 mL) at 0°C. The reaction mixture was stirred at RT for 30 min, diluted with water (10 mL) and extracted with diethyl ether (3x25 mL). The combined organic extracts were washed with sat. aq. $NaHCO_3$, water and brine and dried over anhydrous Na_2SO_4. The solvents were evaporated under reduced pressure and the residue was purified by preparative TLC (ethyl acetate/n-hexane = 45:55) and then washed with n-pentane (5 mL) to give of cis-5-[8-dimethylamino-1-(2-hydroxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile (70 mg, 80%) as a white solid. ^1H NMR (400 MHz, DMSO-d6, δ in ppm): δ 9.18 (s, 2H), 7.38-7.26 (m, 5H), 4.84 (t, 1H), 3.82 (s, 2H), 3.55-3.51 (m, 2H), 3.26-3.20 (m, 2H), 2.73-2.70 (m, 2H), 2.17-2.11 (m, 2H), 2.00 (s, 6H), 1.57-1.43 (m, 4H).

Synthesis of SC_3097: CIS-8-dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0249]



starting from here until the end of the section all procedures were added

Step 1: 4-(5-bromopyrimidin-2-yl)morpholine

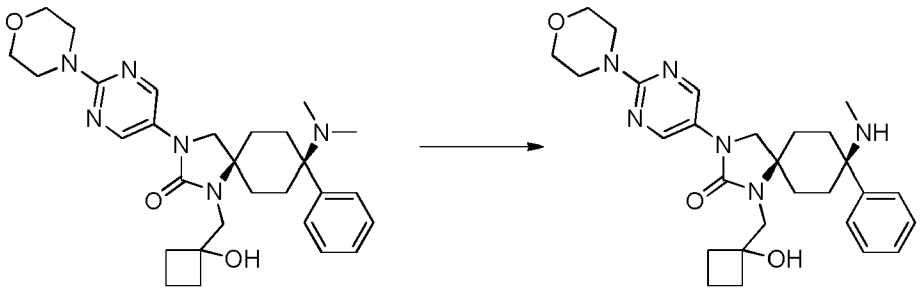
[0250] K_2CO_3 (14.2g, 103mmol) was added to the solution of morpholine (9.0 g, 103 mmol) in acetonitrile (900 mL) and the resulting suspension was stirred at RT for 1 h. 5-Bromo-2-chloropyrimidine (20 g, 103 mmol) was added portionwise. The reaction mixture was stirred for 16h at 80°C, then cooled down to RT and diluted with EtOAc (100 mL) and water (50 mL). The organic product was extracted with EtOAc (2x100 mL). The combined organic layer was washed with brine (100 mL), dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. The resulting residue was purified by column chromatography on silica gel (100-200 mesh) (20% EtOAc in petroleum ether) to afford 18.0 g (71%) of 4-(5-bromopyrimidin-2-yl)morpholine as an off white solid (TLC system: 30% EtOAc in pet ether, Rf: 0.6).

Step 2: CIS-8-dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (SC_3097)

[0251] K_2CO_3 (0.53 g, 3.85 mmol, 2.5 equiv.) was added to the suspension of CIS-8-(dimethylamino)-1-((1-hydroxycyclobutyl)methyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-799)** (0.55 g, 1.54 mmol, 1 equiv.) and 4-(5-bromopyrimidin-2-yl)morpholine (0.37 g, 1.54 mmol, 1 equiv.) in dioxane (20 mL) and the resulting suspension was purged with nitrogen for 5 min. Copper(I) iodide (0.29 g, 1.54 mmol, 1 equiv.) and trans-1,2-diaminocyclohexane (0.35 g, 3.085 mmol, 2 equiv.) were sequentially added, the reaction vessel was sealed and the reaction mixture was stirred at 130°C for 4 h. The reaction mixture was cooled down to RT and diluted with EtOAc (20 mL) and aq. ammonia (10 mL). The organic product was extracted with EtOAc (2x50 mL). The combined organic layer was washed with brine (50mL), dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. Purification of the resulting residue by column chromatography on silica gel (100-200 mesh) (60-70% EtOAc in petroleum ether) afforded 0.35 g (48%) of CIS-8-(dimethylamino)-1-((1-hydroxycyclobutyl)methyl)-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(SC_3097)** as an off white solid (TLC system: EtOAc, R_f: 0.7). ^{1}H NMR (DMSO-d6): δ 8.60 (s, 2H), 7.36-7.35 (m, 4H), 7.27-7.24 (m, 1H), 5.50 (s, 1H), 3.72 (s, 2H), 3.62-3.61 (m, 8H), 3.21 (s, 2H), 2.70-2.66 (m, 2H), 2.19-2.11 (m, 4H), 1.98 (s, 6H), 1.93-1.85 (m, 2H), 1.66-1.64 (m, 1H), 1.53-1.42 (m, 5H). Mass: m/z 521.3 $(M+H)^+$.

Synthesis of SC_3099: CIS-1-[(1-hydroxy-cyclobutyl)-methyl]-8-methylamino-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0252]

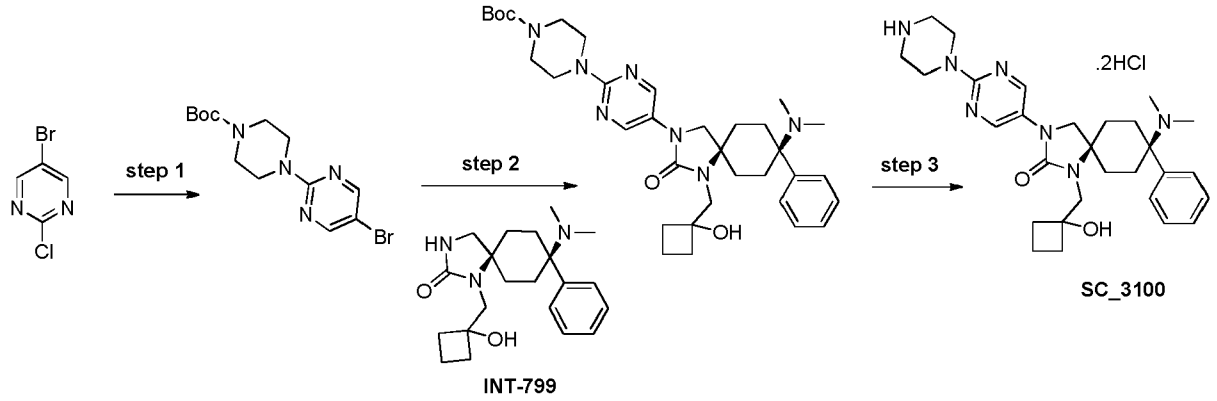


SC_3097 **SC_3099**

[0253] N-Iodosuccinimide (162 mg, 0.72 mmol) was added to the solution CIS-8-(dimethylamino)-1-((1-hydroxycyclobutyl)methyl)-3-(2-morpholinopyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(SC-3097)** (250 mg, 0.48 mmol) in acetonitrile (8.0 mL) and THF (8.0 mL) at 0°C and the resulting mixture was stirred for 16 h at RT. The reaction mixture was concentrated under reduced pressure. The residue was dissolved in EtOAc (2x30 mL), the organic layer was washed with 2N aq. NaOH solution, dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. The residue was purified by reverse phase prep. HPLC to yield 0.12 g (49%) of CIS-1-((1-hydro xycyclobutyl)methyl)-8-(methylamino)-3-(2-morpholinopyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(SC_3099)** as an off white solid (TLC system 5% MeOH in DCM R_f: 0.5.). Preparative reverse phase HPLC conditions: column: Luna-Phenyl-Hexyl-C18 (150*19mm) 5 μm; mobile phase: 10mM ammonium bicarbonate/acetonitrile, gradient (T/%B): 0/50, 7/85, 7.1/98, 9/98, 9.1/50, 12/50; flow Rate: 25 ml/min; diluent: mobile phase + THF. ^{1}H NMR (DMSO-d6): δ 8.63 (s, 2H), 7.49-7.47 (m, 2H), 7.34-7.30 (t, 2H), 7.21-7.17 (m, 1H), 5.60 (s, 1H), 3.76 (s, 2H), 3.64-3.62 (m, 8H), 3.35 (m, 2H), 2.26-2.20 (m, 3H), 2.12-2.08 (m, 2H), 1.90-1.88 (m, 7H), 1.79-1.73 (m, 2H), 1.65-1.63 (m, 1H), 1.52-1.44 (m, 3H). Mass: m/z 507.3 $(M+H)^+$.

Synthesis of SC_3100: CIS-8-dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-8-phenyl-3-(2-piperazin-1-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one hydrochloride

[0254]



Step 1: tert-butyl 4-(5-bromopyrimidin-2-yl)piperazine-1-carboxylate

[0255] In analogy to the method described for **SC_3097 step 1** tert-butyl piperazine-1-carboxylate was reacted with 5-bromo-2-chloropyrimidine to be converted into tert-butyl 4-(5-bromopyrimidin-2-yl)piperazine-1-carboxylate.

Step 2: tert-butyl 4-(5-((cis)-8-(dimethylamino)-1-((1-hydroxycyclobutyl)methyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5]decan-3-yl)pyrimidin-2-yl)piperazine-1-carboxylate

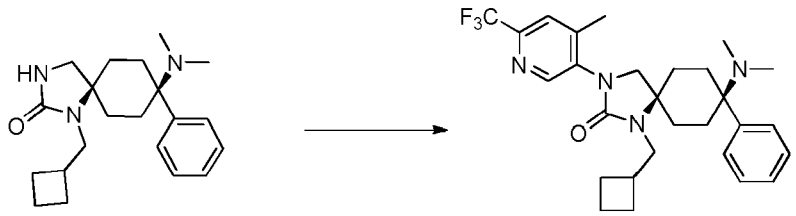
[0256] K_2CO_3 (0.38 g, 2.8 mmol, 2.5 equiv.) was added to the suspension of CIS-8-(dimethylamino)-1-((1-hydroxycyclobutyl)methyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (0.4 g, 1.12 mmol, 1 equiv.) **(INT-799)** and tert-butyl 4-(5-bromopyrimidin-2-yl)piperazine-1-carboxylate (0.38 g, 1.12 mmol, 1 equiv.) in dioxane (25 mL) and the resulting mixture was purged with nitrogen for 5 min. Copper(I) iodide (0.21g, 1.12 mmol, 1 equiv.) and trans-1,2-diaminocyclohexane (0.25 g, 2.24 mmol, 2 equiv.) were sequentially added, the reaction vessel was sealed and the reaction mixture was stirred for 10h at 130°C. The reaction mixture was cooled down to RT and diluted with EtOAc (20 mL) and aq. ammonia (10 mL). The organic product was extracted with e EtOAc (2x50 mL). The combined organic layer was washed with brine (50 mL), dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. Purification of the residue by column chromatography on silica gel (100-200 mesh) (60-70% EtOAc in petroleum ether) afforded 0.5 g (72%) of tert-butyl 4-(5-((cis)-8-(dimethylamino)-1-((1-hydroxycyclobutyl)methyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidin-2-yl)piperazine-1-carboxylate as an off white solid (TLC system: 1:1 EtOAc/pet ether, R_f: 0.3).

Step 3: CIS-8-(dimethylamino)-1-((1-hydroxycyclobutyl)methyl)-8-phenyl-3-(2-(piperazin-1-yl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one hydrochloride (SC_3100)

[0257] 4N HCl in dioxane (2 mL) was added to tert-butyl 4-(5-(cis-8-(dimethylamino)-1-((1-hydroxycyclobutyl) methyl)-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-3-yl)pyrimidin-2-yl)piperazine-1-carboxylate (0.15 g, 0.24 mmol). The resulting mixture was stirred at 0°C for 6 h and then concentrated under reduced pressure to give a pale yellow solid which was triturated with n-pentane and lyophilized with water for 16 h to yield 0.14g of CIS-8-(dimethylamino)-1-((1-hydroxycyclobutyl)methyl)-8-phenyl-3-(2-(piperazin-1-yl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one hydrochloride (SC_3100) as a pale yellow solid. ^{1}H NMR (DMSO-d6): δ 10.42 (br s, 1H), 9.34 (br s, 2H), 8.63 (s, 2H), 7.70-7.68 (m, 2H), 7.54-7.50 (m, 3H), 3.88-3.86 (m, 4H), 3.77 (m, 4H), 3.16-3.11 (m, 6H), 2.52-2.49 (m, 6H), 2.47 (m, 2H), 2.10-2.07 (m, 2H), 2.00-1.95 (t, 2H), 1.87-1.81 (m, 3H), 1.70-1.68 (m, 2H), 1.58 (m, 1H). Mass: m/z 520.3 $(M+H)^+$.

Synthesis of SC_3103: CIS-1-(cyclobutyl-methyl)-8-dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0258]

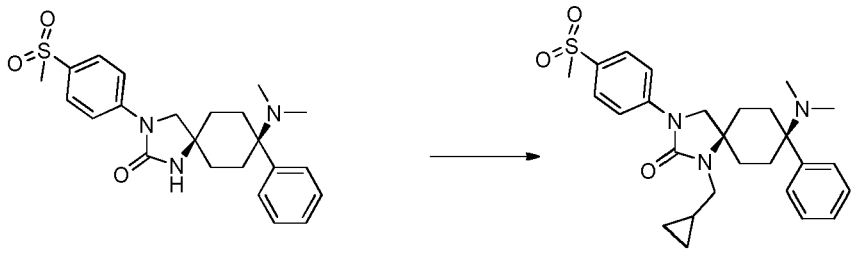


INT-987 SC_3103

[0259] Cs_2CO_3 (2g, 6.451mmol) was added to an argon purged solution of CIS-1-(cyclobutylmethyl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-987)** (1.1 g, 3.225 mmol, 1 equiv.), Xantphos (279 mg, 0.483 mmol, 0.15 equiv.), $Pd_2(dba)_3$ (295 mg, 0.322 mmol, 0.1 equiv.) and 5-bromo-4-methyl-2-(trifluoromethyl)pyridine (774 mg, 3.225 mmol, 1 equiv.) in 1,4-dioxane (55 mL). The mixture was purged again with argon for 15 min. The reaction mixture was stirred at 90°C for 18 h, then cooled down to RT, filtered through Celite and washed with EtOAc (80 mL). The filtrate was concentrated under reduced pressure. The resulting residue was purified by flash chromatography (neutral alumina, 0-3% methanol in DCM) to afford 0.6 g (37%) of CIS-1-(cyclobutylmethyl)-8-(dimethylamino)-3 -(4-methyl-6-(trifluoromethyl)pyridin-3 -yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (SC_3103) as an off white solid. (TLC system: 5% MeOH in DCM; Rf: 0.5). ^{1}H NMR (DMSO-d6): δ 8.56 (s, 1H), 7.80 (s, 1H), 7.34-7.24 (m, 5H), 3.71 (s, 2H), 3.17 (d, 2H), 2.70-2.56 (m, 3H), 2.31 (s, 3H), 2.17-2.11 (m, 2H), 2.03-2.00 (m, 8H), 1.82-1.73 (m, 4H), 1.54-1.41 (m, 4H). Mass: m/z 501.3 $(M+H)^+$.

Synthesis of SC_3105: CIS-1-(cyclopropyl-methyl)-8-dimethylamino-3-(4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0260]

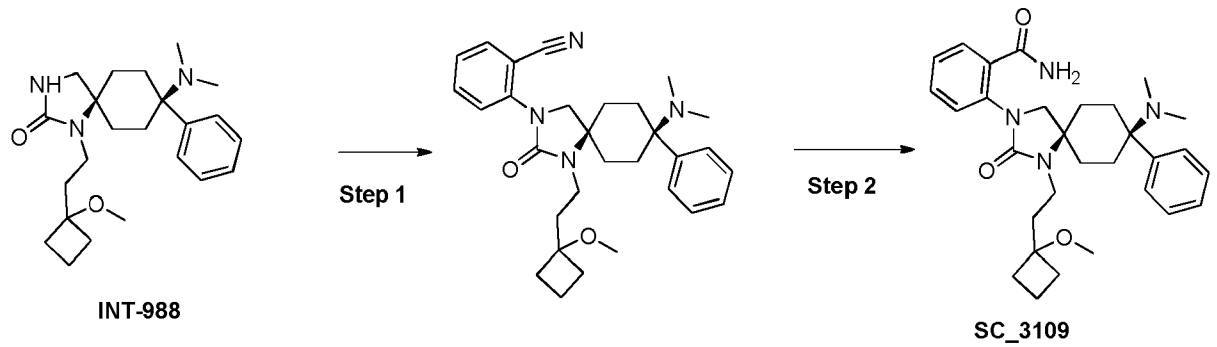


SC_3105

[0261] NaH (60% in mineral oil) (36.80mg, 0.92mmol) was added portionwise to the solution of CIS-8-(dimethylamino)-3-(4-(methylsulfonyl)phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (200mg, 0.46mmol, prepared from **INT-976** and 1-bromo-4-(methylsulfonyl)benzene by analogy with **SC_3103)** in DMF (30 mL) at 0°C under argon atmosphere and the resulting mixture was stirred for 10 min. (Bromomethyl)cyclopropane (122mg, 0.92mmol) was added dropwise at 0°C, ice bath was removed and the reaction mixture was further stirred for 4h at room temperature. The reaction progress was monitored by TLC. The reaction mixture was diluted with water (30mL) and the precipitated solid was filtered. Purification by column chromatography (silica gel 100-200mesh, 50-60% ethyl acetate in hexane as eluent) to get 80mg (35%) of CIS-1-(cyclopropylmethyl)-8-(dimethylamino)-3-(4-(methylsulfonyl)phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(SC_3105)** as off white solid (TLC system: 10% MeOH in DCM; Rf: 0.70). 1H NMR (CDCl3): δ 7.85-7.83 (d, 2H), 7.73-7.71 (d, 2H), 7.39-7.36 (m, 2H), 7.32-7.27 (m, 3H), 3.64 (s, 2H), 320 (d, 2H), 3.00 (s, 3H), 2.75-2.71 (m, 2H), 2.43-2.36 (m, 2H), 2.07 (s, 6H), 1.57 (m, 2H), 1.50 (m, 2H), 1.11-1.06 (m, 1H), 0.59-0.54 (m, 2H), 0.41-0.37 (m, 2H). Mass: m/z 482.2 $(M+H)^+$.

Synthesis of SC_3109: CIS-2-[8-Dimethylamino-1-[2-(1-methoxy-cyclobutyl)-ethyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzamide

[0262]



Step 1: CIS-2-(8-(dimethylamino)-1-(2-(1-methoxycyclobutyl)ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)benzonitrile

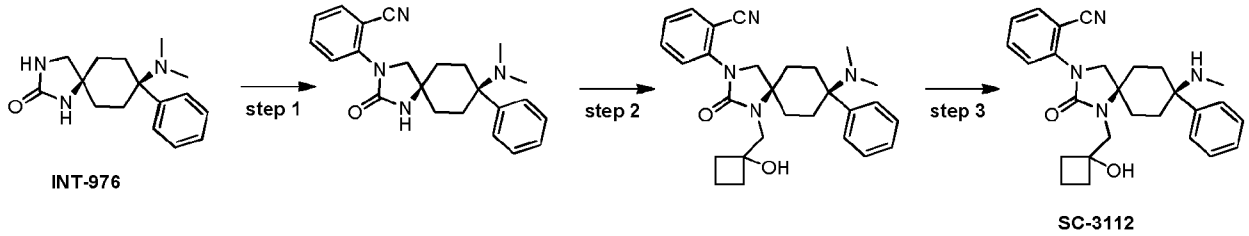
[0263] In analogy to the method described for **SC_3103** CIS-8-(dimethylamino)-1-(2-(1-methoxycyclobutyl)ethyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one was reacted with 2-bromobenzonitrile to be converted into CIS-2-(8-(dimethylamino)-1-(2-(1-methoxycyclobutyl)ethyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5]decan-3 -yl)benzonitrile.

Step 2: CIS-2-[8-Dimethylamino-1-[2-(1-methoxy-cyclobutyl)-ethyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzamide SC_3109

[0264] CIS-2-[8-(dimethylamino)-1-[2-(1-methoxycyclobutyl)ethyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl] benzonitrile (57.0 mg, 1.0 equiv.) was dissolved in DMSO (1.6 mL), hydrogen peroxide (0.167 mL, 14.0 equiv., 30 mass% in water solution) and K_2CO_3 (32.4 mg, 2.0 equiv.) were added and the reaction mixture was stirred at RT for 18 h. The reaction mixture was then quenched with 10 mL water, extracted with DCM (3x10 mL), the combined organic extracts were dried over Na_2SO_4 and concentrated under reduced pressure (24 mg crude product). The aqueous phase was concentrated to dryness (91 mg), suspended in DCM, the precipitate was filtered off and the organic solution was concentrated under reduced pressure to give additional 56 mg of the crude product. The combined crude product was purified by column chromatography on silica gel (DCM/EtOH 95/5) to give 37 mg (62%) of CIS-2-[8-dimethylamino-1-[2-(1-methoxy-cyclobutyl)-ethyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzamide **(SC_3109)** as a white solid. ^{1}H NMR (600 MHz, DMSO) δ 7.52 - 7.48 (s, 1H), 7.47 - 7.31 (m, 7H), 7.29 - 7.23 (m, 1H), 7.25 - 7.22 (s, 1H), 7.24 - 7.18 (m, 1H), 3.68 - 3.65 (s, 3H), 3.13 - 3.10 (s, 2H), 3.09 - 3.02 (m, 2H), 2.71 - 2.65 (m, 2H), 2.21 - 2.12 (m, 2H), 2.09 - 1.99 (m, 2H), 2.02 - 1.98 (s, 6H), 1.97 - 1.86 (m, 4H), 1.77 - 1.67 (m, 1H), 1.64 - 1.52 (m, 3H), 1.44 - 1.36 (td, 2H). Mass: m/z 505.32 $(M+H)^+$.

Synthesis of SC_3112: CIS- 2-(1-((1-hydroxycyclobutyl)methyl)-8-(methylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)benzonitrile

[0265]



Step 1: CIS-2-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)benzonitrile

[0266] In analogy to the method described for **SC_3103** 1-bromo-2-cyanobenzene was reacted with CIS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-976)** to be converted into CIS-2-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)benzonitrile.

Step 2: CIS-2-(8-(dimethylamino)-1-((1-hydroxycyclobutyl)methyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5] decan-3-yl)benzonitrile

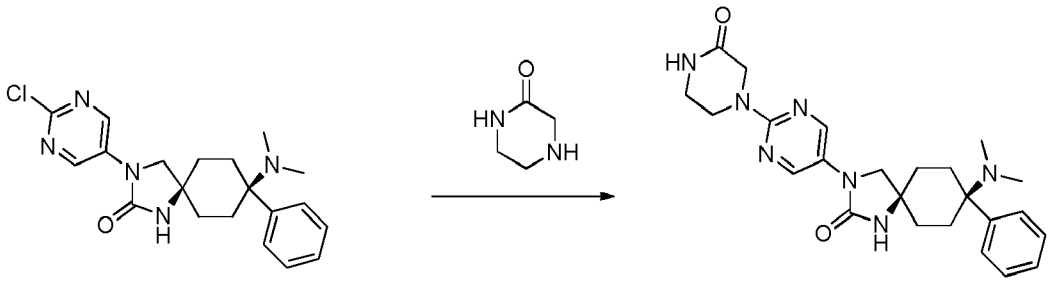
[0267] To a solution of CIS-2-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)benzonitrile (500 mg, 1.336 mmol, 1.0 equiv.) in DMSO (16 ml) was added sodium hydroxide (213 mg, 5.334 mmol, 4.0 equiv.) and the mixture was stirred at 60°C for 30 min. A solution of 1-oxa-spiro[2.3]hexane (237 mg, 6.68 mmol, 5.0 equiv.) in DMSO (4 ml) was added at RT and the reaction mixture was stirred at 55°C for 16h. The reaction mixture was diluted with water (100 ml) and extracted with EtOAc (100 ml). The organic layer was washed with water (50 ml) and brine (50 ml), dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. The residue was purified by column chromatography on silica gel (EtOAc/Hexane, 7/3) to yield CIS-2-(8-(dimethylamino)-1-((1-hydroxycyclobutyl)methyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5]decan-3-yl)benzonitrile (200 mg, 0.436 mmol, 32 %) as an off white solid. Mass: m/z 459.4 $(M+H)^+$

Step 3: CIS- 2-(1-((1-hydroxycyclobutyl)methyl)-8-(methylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)benzonitrile (SC_3112)

[0268] In analogy to the method described for **SC_3099** CIS-2-(8-(dimethylamino)-1-((1-hydroxycyclobutyl)methyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)benzonitrile was reacted with N-iodosuccinimide to be converted into CIS-2-(1-((1-hydroxycyclobutyl)methyl)-8-(methylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)benzonitrile **(SC_3112).** Yield: 29%. ^{1}H NMR (DMSO-d6, 400 MHz), δ (ppm) = 7.75 (dd, 1H, J = 7.76 Hz, 1.16 Hz), 7.70-7.65 (m, 1H), 7.50 (d, 1H, J = 8.16 Hz), 7.44-7.42 (m, 2H), 7.35-7.25 (m, 3H), 7.17-7.15 (m, 1H), 5.49 (s, 1H), 3.85 (s, 2H), 3.32 (s, 2H), 2.29-2.23 (m, 2H), 2.12-2.23 (m, 2H), 1.87 (bs, 6H), 1.73-1.46 (m, 6H). Mass: m/z 445.26 $(M+H)^+$.

Synthesis of SC_3120: CIS-8-(dimethylamino)-3-(2-(3-oxopiperazin-1-yl)pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0269]

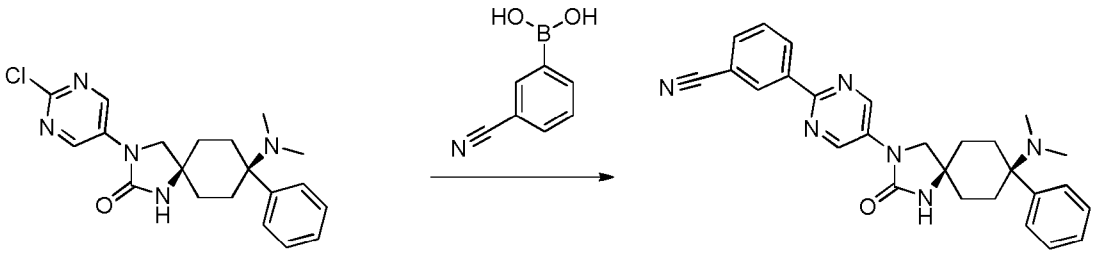


INT-989 **SC_3120**

[0270] CIS-3-(2-chloropyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-989)** (100 mg, 0.259 mmol) was placed into a reaction vial for microvawe reactor (5 mL), the vial was flushed with nitrogen, anhydrous n-butanol (50 equiv., 13.0 mmol, 1.2 mL), diisopropylethylamine (5 equiv., 1.30 mmol, 0.224 mL) and piperazine-2-one (1.2 equiv., 0.311 mmol, 31 mg) were added, the vial was sealed and the reaction mixture was stirred for 2.5 h at 140°C (conventional heating). The reaction mixture was cooled down, transferred into a 1-neck flask and concentrated under reduced pressure. The resulting residue (128 mg) was purified by flash chromatography on aluminium oxide (neutral) (DCM/MeOH gradient 100/0 to 97/3) to yield 65 mg (56%) CIS-8-(dimethylamino)-3-(2-(3-oxopiperazin-1-yl)pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro-[4.5]decan-2-one **(SC_3120).** ^{1}H NMR (600 MHz, DMSO) δ 8.60 (s, 2H), 8.01 (s, 1H), 7.46 (s, 1H), 7.43 - 7.30 (m, 4H), 7.27 (td, 1H), 4.09 (s, 2H), 3.91 - 3.75 (m, 2H), 3.62 - 3.40 (m, 2H), 3.30 - 3.09 (m, 2H), 2.61-2.51 (m, 2H), 2.44 - 2.25 (m, 2H), 1.97 (s, 6H), 1.93-1.80 (m, 2H), 1.55 - 1.41 (m, 2H). Mass: m/z 437.27 $(M+H)^+$.

Synthesis of SC_3129: CIS- 3-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidin-2-yl)benzonitrile

[0271]

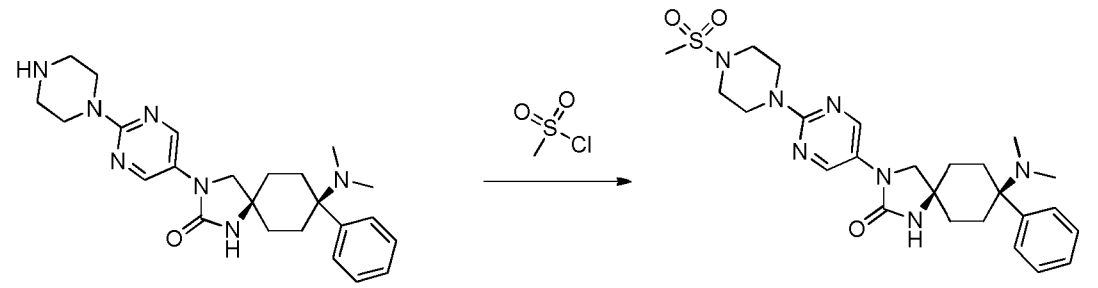


INT-989 SC_3129

[0272] CIS-3-(2-chloropyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-989)** (1 equiv., 0.47 mmol, 180 mg), $Pd(PPh_3)_4$ (0.1 equiv., 0,047 mmol, 54 mg) and (3-cyanophenyl)boronic acid (1.5 equiv., 0.70 mmol, 103 mg) were dissolved in degassed dry tetrahydrofurane (9.5 mL) and sodium carbonate 1M aq. sol. (1.9 equiv., 0.89 mmol, 0.89 mL) was added. The resulting clear reaction mixture was stirred overnight at 70°C. Additional portion of $Pd(PPh_3)_4$ (0.1 equiv., 0,047 mmol, 54 mg) was added and the reaction was stirred further 12 h at 70°C. The reaction mixture was diluted with EtOAc (50 mL), stirred for 10 min, the precipitate was filtered off and the filtrate was concentrated under reduced pressure. The resulting residue (285 mg) was purified by flash chromatography on silica gel (gradient DCM/MeOH, 100/0 to 80/20) to yield 130 mg (62%) of CIS- 3-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidin-2-yl)benzonitrile (SC_3129). ^{1}H NMR (600 MHz, DMSO) δ 9.13 (s, 2H), 8.60 (dp, 2H), 7.93 (dt, 1H), 7.88 (s, 1H), 7.72 (dd, 1H), 7.42 - 7.35 (m, 5H), 7.28 (d, 1H), 3.73 (s, 2H), 2.01 - 1.91 (m, 2H), 1.98 (s, 10H), 1.57 - 1.48 (m, 2H). Mass: m/z 453.24 $(M+H)^+$.

Synthesis of SC_3130: CIS-8-(dimethylamino)-3-(2-(4-(methylsulfonyl)piperazin-1-yl)pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0273]

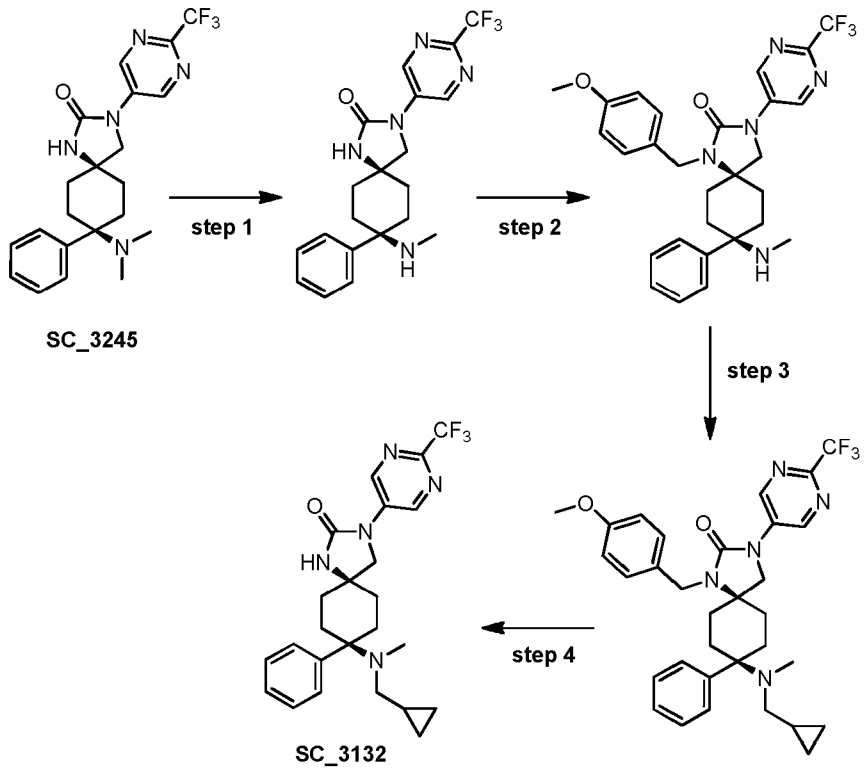


SC_3124 SC_3130

[0274] CIS-8-(dimethylamino)-8-phenyl-3-(2-(piperazin-1-yl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one (SC_3124) (100 mg, 0.23 mmol) was dissolved in DCM (150 equiv., 34 mmol, 2.2 mL) under nitrogen atmosphere. To the resulting solution 4-dimethylaminopyridine (0.05 equiv., 0.012 mmol, 1.4 mg) and diisopropylethylamine (3 equiv., 0.67 mmol, 0.119 mL) were added and the mixture was cooled to 0°C. Methansulfonylchloride (2 equiv., 0.46 mmol, 0.036 mL) was added, ice bath was removed and the reaction mixture was stirred for 2 h at RT. The reaction mixture was quenched with water (5 mL), diluted with DCM (10 mL), the resulting brown suspension was filtered through a glass filter, the filtrate transferred to a separating funnel, the organic phase separated and the aqueous phase extracted with DCM (2x10 mL). The combined organic phases were dried over $MgSO_4$ and concentrated under reduced pressure. The resulting residue (81 mg) was purified by flash chromatography on aluminium oxide (gradient DCM/EtOH 97/3 to 96/4) to yield 51 mg (43%) of CIS-8-(dimethylamino)-3-(2-(4-(methylsulfonyl)piperazin-1-yl)pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro-[4.5]decan-2-one **(SC_3130).** ^{1}H NMR (600 MHz, DMSO) δ 8.59 (s, 2H), 7.46 (s, 1H), 7.39 (d, 1H), 7.37 (s, 3H), 7.28 (d, 1H), 3.79 - 3.74 (m, 4H), 3.54 (s, 2H), 3.18 - 3.13 (m, 4H), 2.87 (s, 3H), 2.43 - 2.32 (m, 2H), 1.97 (s, 6H), 1.92 - 1.87 (m, 2H), 1.51 - 1.41 (m, 2H). Mass: m/z 514.26 $(M+H)^+$.

Synthesis of SC_3132: CIS-8-((cyclopropylmethyl)(methyl)amino)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one

[0275]



Step 1: CIS-8-(methylamino)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-one

[0276] In analogy to the method described for SC_3099 CIS-8-(dimethylamino)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one (SC_3245) was reacted with N-iodosuccinimide to be converted into CIS-8-(methylamino)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one.

Step 2: CIS-1-(4-methogybenzyl)-8-(methylamino)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-one

[0277] NaH (60% in mineral oil) (296.3mg, 7.407 mmol, 1.5 equiv.) was added portionwise to the solution CIS-8-(methylamino)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one (2 g, 4.938 mmol, 1 equiv.) in DMF (20 mL) at 0°C under argon atmosphere and the resulting mixture was stirred for 10 min. 1-(Bromomethyl)-4-methoxybenzene (1.092 g, 5.432 mmol, 1.1 equiv.) was added dropwise. The reaction mixture was allowed to warm up to RT and stirred for 16h. The reaction progress was monitored by LCMS. The reaction mixture was diluted with water (150 mL) and the organic product was extracted with EtOAc (3x60mL). The combined organic extracts were dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. The resulting residue was purified by flash chromatography (silica gel 230-400 mesh; 0-4% MeOH/DCM) to afford 2 g (77%) of CIS-1-(4-methoxybenzyl)-8-(methylamino)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one as an off white solid (TLC system 5% MeOH in DCM Rf: 0.55).

Step 3: CIS-8-((cyclopropylmethyl)(methyl)amino)-1-(4-methoxybenzyl)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one

[0278] (Bromomethyl)cyclopropane (0.461 mL, 4.762 mmol, 5 equiv.) was added dropwise to a mixture of CIS-1-(4-methoxybenzyl)-8-(methylamino)-8-phenyl-3 -(2-(trifluoromethyl)pyrimidin-5-yl)-1,3 -diazaspiro-[4.5]decan-2-one (500 mg, 0.952 mmol, 1 equiv.) and K_2CO_3 (657 mg, 4.762 mmol, 5 equiv.) in acetonitrile (20 mL) at RT under argon atmosphere. The reaction vessel was sealed and the mixture was stirred at 95°C for 24h. Reaction progress was monitored by LCMS. The reaction mixture was diluted with water (50 mL) and the organic product was extracted with EtOAc (2x50 mL). The combined organic extracts were dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. The resulting residue was purified by flash chromatography (silica gel 230-400 mesh; 0-40% EtOAc/petroleum ether) to afford 220 mg (39%) of CIS-8-((cyclopropylmethyl)(methyl)amino)-1-(4-methoxybenzyl)-8-phenyl-3 -(2-(trifluoromethyl)pyrimidin-5-yl)-1,3 - diazaspiro[4.5]decan-2-one as an off white solid (TLC 50% EtOAc in petroleum ether, Rf:

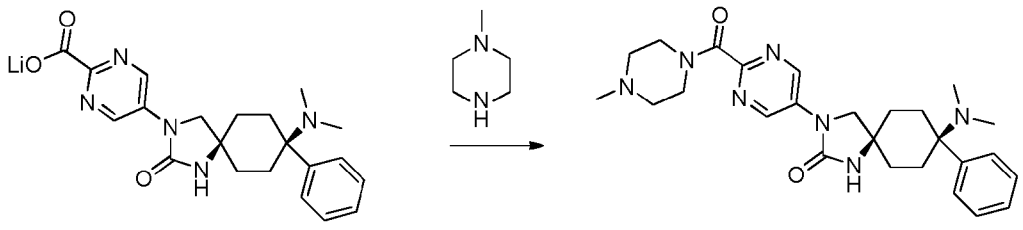
0.65) and 230 mg of the unreacted starting material.

Step 4: CIS-8-((cyclopropylmethyl)(methyl)amino)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one (SC_3132)

[0279] TFA (4.2mL) was added drop wise to a solution of CIS-8-((cyclopropylmethyl)(methyl)amino)-1-(4-methoxybenzyl)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one (210mg, 0.363mmol) in DCM (0.05mL) at 0 °C under argon atmosphere. The reaction mixture was allowed to warm up to RT and stirred for 16h. The reaction progress was monitored by LCMS. The excess of TFA was evaporated under reduced pressure and the residual amount of TFA was removed as an azeotropic mixture with DCM (2x5mL). The crude product was purified by preparative HPLC to yield 105mg (63%) of CIS-8-((cyclopropylmethyl)(methyl)amino)-8-phenyl-3-(2-(trifluoromethyl) pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-one (SC_3132) as an off white solid (TLC system 50% EtOAc in pe ether, Rf: 0.35). ^{1}H NMR (DMSO-d6): δ 9.17 (s, 2H), 8.10 (br s, 1H), 7.35-7.33 (m, 4H), 7.25-7.22 (m, 1H), 3.72 (s, 2H), 2.43 (m, 2H), 2.13 (s, 3H), 1.97-1.82 (m, 6H), 1.49 (m, 2H), 0.75-0.71 (m, 1H), 0.41-0.39 (m, 2H), 0.06- -0.01 (m, 2H). Mass: m/z = 460.2 (M+H).

Synthesis of SC_3133: CIS-8-Dimethylamino-3-[2-(4-methyl-piperazine-1-carbonyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-one

[0280]

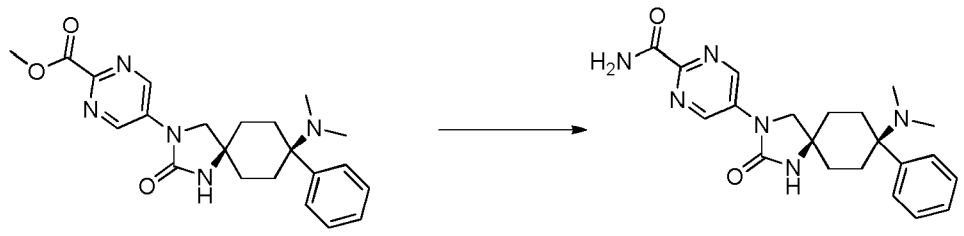


INT-990 **SC_3133**

[0281] 1-Methylpiperazine (2 equiv., 0.5 mmol, 55 μL) and [5-[8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5] decan-3-yl]pyrimidine-2-carbonyl]oxylithium **(INT-990)** (100 mg, 0.25 mmol) were suspended in DCM (1.6 mL), triethylamine (10 equiv., 2.5 mmol, 336 μL) and propylphosphonic anhydride (≥50 wt.% solution in ethyl acetate) (2 equiv., 0.5 mmol, 297 μL) were sequentially added and the reaction mixture was stirred at RT for 2 h. The resulting mixture was quenched with 2M aq. NaOH (2 mL), organic phase was separated and aqueous phase was extracted with dichloromethane (3x10 mL). The combined organic extracts were dried over Na_2SO_4 and concentrated under reduced pressure. The residue (88 mg) was dissolved in 3 mL DCM and 6 mL pentane were slowly added. The resulting mixture was stirred for 30 min. The precipitate was filtered off and dried under reduced pressure to give 69 mg (58%) of CIS-8-dimethylamino-3-[2-(4-methyl-piperazine-1-carbonyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(SC_3133).** ^{1}H NMR (600 MHz, DMSO) δ 9.03 (s, 2H), 7.87 (s, 1H), 7.42 - 7.34 (m, 5H), 7.28 (d, 1H), 3.69 (s, 2H), 3.62 (dd, 2H), 3.17 - 3.12 (m, 2H), 2.57 - 2.51 (m, 2H), 2.36 (t, 2H), 2.25 - 2.21 (m, 2H), 2.21 (s, 3H), 1.98 - 1.89 (m, 2H), 1.96 (s, 6H), 1.56 - 1.46 (m, 2H). Mass: m/z 478.29 $(M+H)^+$.

Synthesis of SC_3146: CIS-5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carboxamide

[0282]

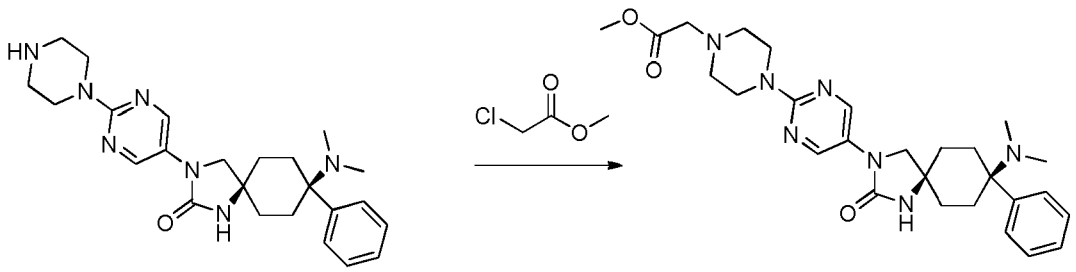


INT_990 **SC_3140**

[0283] Methyl CIS-5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carboxylate (**INT-990**) (100 mg, 0.244 mmol) was dissolved in 7N NH_3 in methanol (25 equiv. NH_3, 0.9 mL) in a microwave reactor vial. The reaction vessel was sealed, the reaction mixture was stirred for 5 days at RT and then concentrated under reduced pressure. The residue was purified by flash chromatography on neutral aluminum oxide (DCM/ EtOH, gradient 90/10 to 74/26) to yield 38 mg (39%) of CIS-5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carboxamide **(SC_3140).** ^{1}H NMR (600 MHz, DMSO) δ 9.07 (s, 2H), 8.02 (d, 1H), 7.93 (s, 1H), 7.59 - 7.55 (m, 1H), 7.38 (d, 4H), 7.28 (ddd, 1H), 3.72 (s, 2H), 2.49 - 2.37 (m, 2H), 1.99 - 1.92 (m, 8H), 1.88 - 1.75 (m, 2H), 1.56 - 1.45 (m, 2H). Mass: m/z 395.22 $(M+H)^+$.

Synthesis of SC_3146: methyl CIS-2-(4-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl) pyrimidin-2-yl)piperazin-1-yl)acetate

[0284]

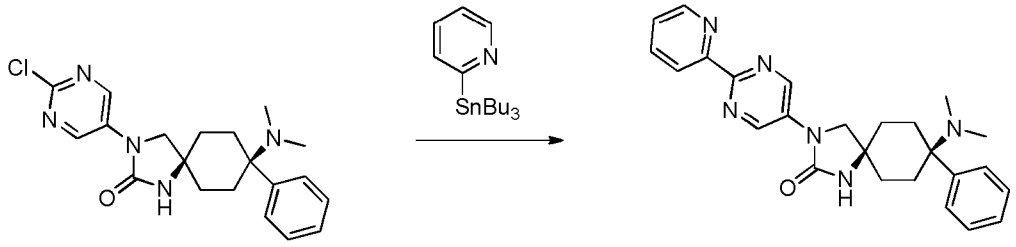


SC_3124 **SC_3146**

[0285] CIS-8-(dimethylamino)-8-phenyl-3-(2-(piperazin-1-yl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one **(SC_3124)** (200 mg, 0.46 mmol) was dissolved in dry acetonitrile (5 mL) under nitrogen atmosphere, K_2CO_3 (1.2 equiv., 0.55 mmol, 76 mg) and methyl-2-chloroacetate (1.5 equiv., 0.69 mmol, 0.06 mL) were sequentially added and the reaction mixture was stirred at reflux for 5 h. A new portion of methyl-2-chloroacetate (1.5 equiv., 0.69 mmol, 0.06 mL) was added and the reaction mixture was stirred at reflux overnight. The reaction mixture was concentrated under reduced pressure. The residue was suspended in DCM, the precipitate was filtered off and washed with DCM. The combined filtrate was concentrated under reduced pressure to give 106 mg of crude product. Flash chromatography on silica gel (eluent DCM/EtOH gradient 98/2 to 96/4) yielded 168 mg (72%) of methyl CIS-2-(4-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidin-2-yl)piperazin-1-yl)acetate **(SC_3146).** ^{1}H NMR (600 MHz, DMSO) δ 8.54 (s, 2H), 7.42 (s, 1H), 7.37 (m, 4H), 7.27 (m, 1H), 3.63 (t, 7H), 3.52 (s, 2H), 3.27 (s, 2H), 2.54 (t, 4H), 2.45 - 2.30 (m, 2H), 1.96 (s, 6H), 1.93 - 1.83 (m, 4H), 1.52 - 1.42 (m, 2H). Mass: m/z 508.4 $(M+H)^+$.

Synthesis of SC_3162: CIS-8-(dimethylamino)-8-phenyl-3-(2-(pyridin-2-yl)pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-one

[0286]



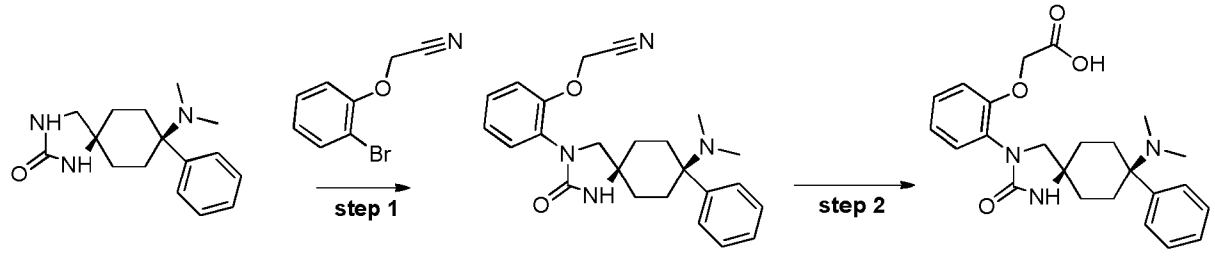
INT-989 **SC_3162**

[0287] CIS-3-(2-chloropyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-989)** (200 mg, 0.52 mmol), tributyl(2-pyridyl)stannane (1.5 equiv., 0.78 mmol, 286 mg) and $Pd(PPh_3)_4$ (0.1 equiv., 0.052 mmol, 60 mg) were dissolved in degassed anhydrous DMF (150 equiv., 77.7 mmol, 6 mL) under nitrogen atmosphere. Cesium fluoride (2.2 equiv., 1.14 mmol, 173 mg) was added and the reaction mixture was stirred at 90°C overnight. The resulting suspension was cooled down to RT, diluted with water (10 mL), extracted with ethylacetate (30 mL), then DCM (30 mL), the DCM phase was dried over $MgSO_4$ and concentrated under reduced pressure to give 320 mg of crude product. Flash

chromatography on silica gel (eluent DCM/0.1N NH_3 in MeOH, gradient 95/5 to 70/30) yielded 72 mg (33%) of CIS-8-(dimethylamino)-8-phenyl-3-(2-(pyridin-2-yl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one **(SC_3162).** ^{1}H NMR (600 MHz, DMSO) δ 9.13 (s, 2H), 8.71 - 8.67 (m, 1H), 8.30 (d, 1H), 7.92 (td, 1H), 7.86 (s, 1H), 7.46 (dd, 1H), 7.43 - 7.35 (m, 5H), 7.31 - 7.25 (m, 1H), 3.73 (s, 2H), 2.48 - 2.33 (m, 2H), 2.00 - 1.78 (m, 10H), 1.57 - 1.47 (m, 2H). Mass: m/z 429.2 $(M+H)^+$.

Synthesis of SC_3169: CIS-2-(2-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)phenoxy) acetic acid

[0288]



Step 1: CIS-2-(2-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)phenoxy)acetonitrile

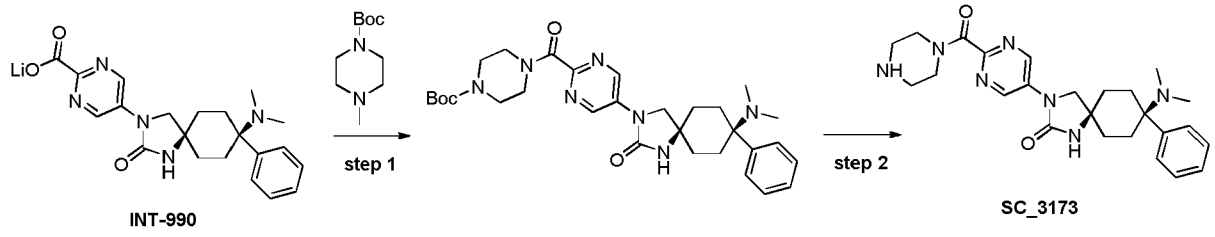
[0289] In analogy to the method described for SC_3103 CIS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (INT-976) was reacted with 2-(2-bromophenoxy)acetonitrile to be converted into CIS-2-(2-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)phenoxy)acetonitrile.

Step 2: CIS-2-(2-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)phenoxy)acetic acid (SC_3169)

[0290] CIS-2-(2-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)phenoxy)acetonitrile (134 mg, 0.331 mmol) was dissolved in conc. aq. HCl (1.4 mL, 50 equiv.). The reaction mixture was heated to 100°C for 2 h and cooled down to RT. The precipitate was filtered off, washed with water (2x) and dried under reduced pressure to give 31 mg (22%) of CIS-2-(2-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)phenoxy)acetic acid **(SC_3169).** ^{1}H NMR (600 MHz, DMSO) δ 7.75 - 7.71 (m, 1H), 7.59 - 7.48 (m, 4H), 7.27 (dd, 1H), 7.15 (ddd, 1H), 6.97 - 6.90 (m, 2H), 4.65 (s, 2H), 3.43 (s, 2H), 2.70 (d, 2H), 2.56 (s, 6H), 2.31 (t, 2H), 1.93 - 1.86 (m, 2H), 1.33 - 1.22 (m, 2H). Mass: m/z 424.2 $(M+H)^+$.

Synthesis of SC _3173: CIS-8-(dimethylamino)-8-phenyl-3-(2-(piperazine-1-carbonyl)pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-one

[0291]



Step 1: CIS-tert-butyl 4-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carbonyl)piperazine-1-carboxylate

[0292] In analogy to the method described for **SC_3133** lithium CIS-5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carboxylate **(INT-990)** was reacted with 1-(tert-butoxycarbonyl)piperazine to be con-

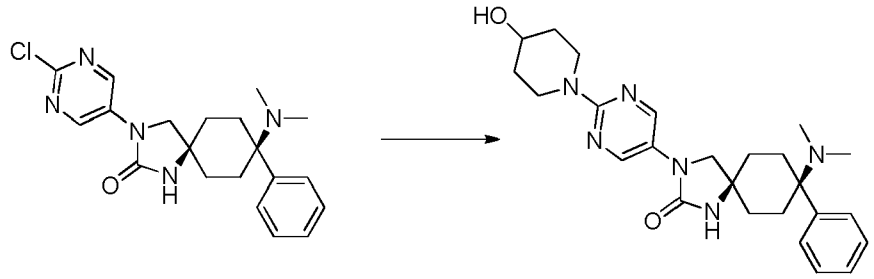
verted into CIS-tert-butyl 4-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carbonyl) piperazine-l-carboxylate.

Step 2: CIS-8-(dimethylamino)-8-phenyl-3-(2-(piperazine-1-carbonyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one (SC_3173)

[0293] CIS-tert-butyl 4-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidine-2-carbonyl) piperazine-1-carboxylate (230 mg, 0.41 mmol) was dissolved in TFA (2.2 mL, 28.6 mmol, 70 equiv.). The reaction mixture was stirred at RT for 2.5 h and then concentrated under reduced pressure. The residue was dissolved in DCM and aq. sat Na_2CO_3 was added (until pH 10). The organic phase was separated and the aq. phase was extracted with DCM (2x). The combined organic extracts were dried over $MgSO_4$ and concentrated under reduced pressure. Recrystallization of the residue from DCM/pentane gave 105 mg (56%) of CIS-8-(dimethylamino)-8-phenyl-3 -(2-(piperazine-1-carbonyl)pyrimidin-5-yl)-1,3 -diazaspiro [4.5]decan-2-one **(SC_3173).** ^{1}H NMR (600 MHz, DMSO) δ 9.04 (s, 2H), 7.89 (s, 1H), 7.42 - 7.32 (m, 4H), 7.31 - 7.26 (m, 1H), 3.69 (s, 2H), 3.65 (t, 2H), 3.21 (t, 2H), 2.90 (t, 2H), 2.79 - 2.74 (m, 2H), 2.43 (s, 2H), 1.98 (s, 9H), 1.89 - 1.75 (m, 1H), 1.53 - 1.47 (m, 2H). Mass: m/z 464.3 $(M+H)^+$.

Synthesis of SC_3182: CIS-8-(dimethylamino)-3-(2-(4-hydroxypiperidin-1-yl)pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one

[0294]

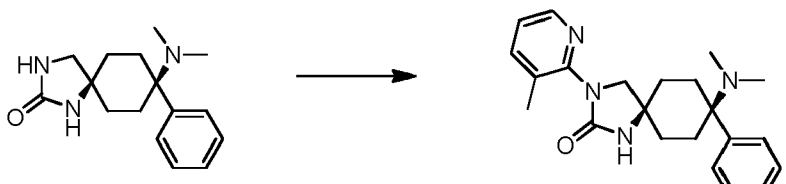


INT-989 **SC_3182**

[0295] Et_3N (0.39 g, 3.89mmol) was added to the solution of CIS-3-(2-chloropyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-989)** (0.5 g, 1.29mmol) and piperidin-4-ol (0.32 g, 3.24mmol) in DMF (10mL) at RT. The reaction mixture was stirred at 130 °C for 16h, cooled down to RT and concentrated under reduced pressure. The residue was diluted with 10% aq. NaOH and the organic product was extracted with 1/9 v/v MeOH/DCM. The combined organic layer was dried over anhydrous Na_2SO_4 and concentrated in vacuo. The residue was purified by preparative TLC using 10% MeOH/DCM as eluent to afford 130mg of CIS-8-(dimethylamino)-3 -(2-(4-hydroxypiperidin-1 -yl)pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(SC_3182)** as an off-white solid (TLC system: 10% MeOH in DCM; Rf: 0.1). ^{1}H NMR (DMSO-d6): δ 8.50 (s, 2H), 7.39-7.26 (m, 6H), 4.68 (d, 1H), 4.19-4.16 (m, 2H), 3.69-3.67 (m, 1H), 3.51 (s, 2H), 3.14 (t, 2H), 2.33 (m, 2H), 1.94-1.71 (m, 12H), 1.45 (m, 2H), 1.30-1.23 (m, 2H). Mass: m/z 451.2 $(M+H)^+$.

Synthesis of SC _3186: CIS-8-(dimethylamino)-3-(3-methylpyridin-2-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one

[0296]



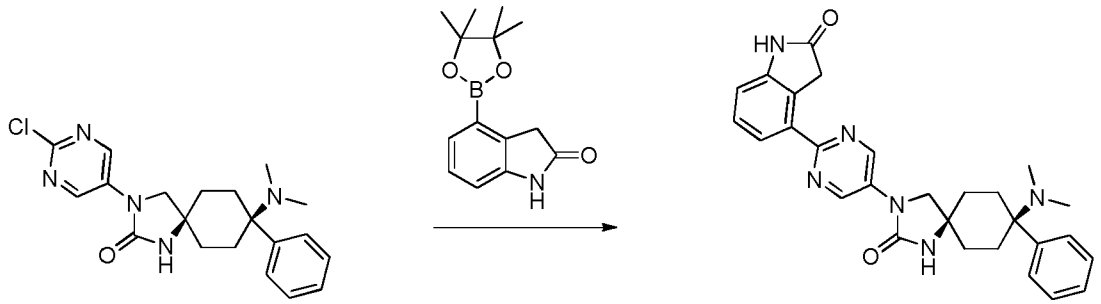
INT-976 **SC_3186**

[0297] Compound was synthesized within a parallel array. An argon-flushed dry reaction vessel equipped with a septum was loaded with the solutions of **INT-976** (0.1 M, 1 mL) and 1-bromo-2-methylbenzene (0.15 M, 1 mL) in dioxane. To the resulting mixture Cs_2CO_3 (200 μmol), XantPhos (10 μmol) and $Pd_2(dba)_3$ (5 μmol) were added. The reaction vessel was

flushed with argon once again, sealed and the reaction mixture was shaken at 100°C overnight. The resulting mixture was cooled down to RT and the solvent was removed under reduced pressure. The residue was taken up in 3 mL dichloromethane and 3 mL water, the organic phase was separated, the aqueous phase was extracted with dichloromethane (2x3 mL). Combined organic phases were concentrated under reduced pressure. The residue was purified by HPLC to give CIS-8-(dimethylamino)-3-(3-methylpyridin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(SC_3186).** Mass: m/z 363.2 $(M+H)^+$.

Synthesis of SC_3208: CIS-4-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidin-2-yl)indolin-2-one

[0298]

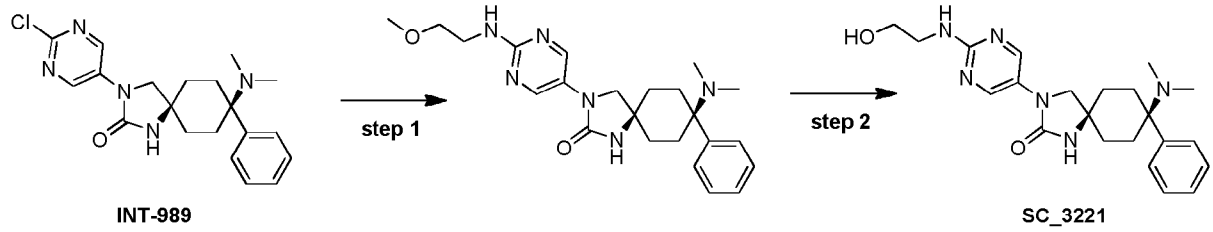


INT-989 **SC_3208**

[0299] CIS-3-(2-chloropyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-989)** (150 mg, 0.38 mmol), $Pd(t\text{-}Bu_3P)_2$ (0.1 equiv., 0.02 mmol, 10 mg) and 4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)indolin-2-one (2 equiv., 0.78 mmol, 201 mg) were dissolved in degassed anhydrous THF (80 equiv., 31 mmol, 2.5 mL) and 1M aq. Na_2CO_3 (5.5 equiv., 2.14 mmol, 2.14 mL) was added. The resulting mixture was stirred at 60°C for 8 h and then at RT overnight. The reaction mixture was diluted with water until precipitation occurred. The precipitate was filtered off, suspended in 30 mL DCM, filtered off again, washed with pentane (5 mL) and dried under reduced pressure to give 143 mg (76%) of CIS-4-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidin-2-yl)indolin-2-one (SC_3208). ^1H NMR (600 MHz, DMSO) δ 10.45 (s, 1H), 9.10 (s, 2H), 7.87 (d, 1H), 7.84 -7.80 (m, 1H), 7.39 (d, 5H), 7.29 (dt, 2H), 6.91 (d, 1H), 3.82 (s, 2H), 3.72 (s, 2H), 2.41 (d, 2H), 2.03 - 1.74 (m, 9H), 1.60 - 1.44 (m, 3H). Mass: m/z 484.26 $(M+H)^+$.

Synthesis of SC_3221: CIS-8-(dimethylamino)-3-(2-((2-hydroxyethyl)amino)pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0300]



INT-989 **SC_3221**

Step1:CIS-8-(dimethylamino)-3-(2-((2-methoxyethyl)amino)pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

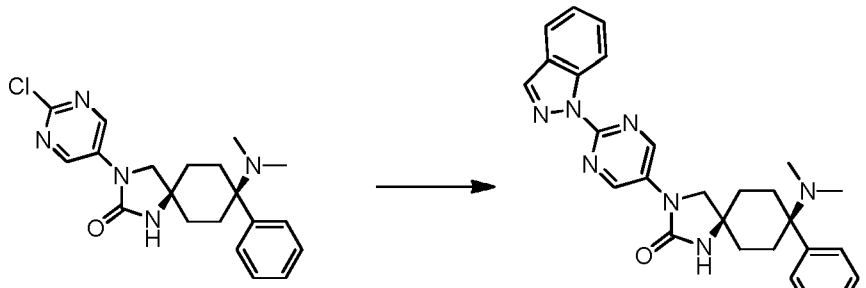
[0301] In analogy to the method described for SC_3103 2-methoxyethanamine was reacted with CIS-3-(2-chloropyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (INT-989) to be converted into CIS-8-(dimethylamino)-3-(2-((2-methoxyethyl)amino)pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one.

Step 2: CIS-8-(dimethylamino)-3-(2-((2-hydroxyethyl)amino)pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (SC_3221)

[0302] BBr_3 (1M in DCM) (2.2mL, 2.22mmol) was added to the solution of CIS-8-(dimethylamino)-3-(2-((2-methoxyethyl)amino)pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (0.55g, 1.06mmol) in DCM (20 mL) at -78°C over 15min. The reaction mixture was stirred at RT for 4 h, then quenched with water and concentrated under reduced pressure. The residue was purified by preparative reverse phase HPLC to afford 82 mg (19%) of CIS-8-(dimethylamino)-3-(2-((2-hydroxyethyl)amino)pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(SC_3221)** (TLC system: 10% MeOH in DCM (Ammonia atmosphere); Rf: 0.3). ^{1}H NMR (DMSO-d6): δ 8.41 (s, 2H), 7.39-7.24 (m, 6H), 6.70 (t, 1H), 4.64 (br, s, 1H), 3.50-3.45 (m, 4H), 3.28-3.25 (m, 2H), 2.37 (br m, 2H), 1.94-1.86 (m, 10H), 1.45 (m, 2H). Mass: m/z 411.2 $(M+H)^+$

Synthesis of SC_3224: CIS-3-(2-(1H-indazol-1-yl)pyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro [4.5]decan-2-one

[0303]

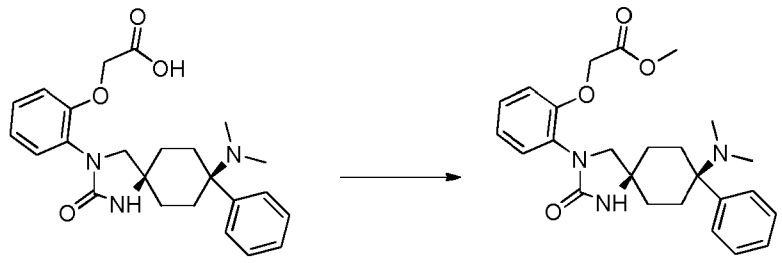


INT-989 **SC_3224**

[0304] K_2CO_3 (0.53g, 3.89mmol) was added to the solution of CIS-3-(2-chloropyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (500mg, 1.29mmol) and 1*H*-indazole (306mg, 2.59mmol) in DMF (10 mL). The reaction mixture was stirred at 140°C for 48h, cooled down to RT and concentrated under reduced pressure. The residue was diluted with DCM (50mL), filtered through Celite and the filtrate was concentrated under reduced pressure. The residue was purified by flash chromatography using neutral alumina (0-10% MeOH/DCM) followed by reverse phase HPLC to afford 77mg (13%) of CIS-3-(2-(1H-indazol-1-yl)pyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5] decan-2-one **(SC_3224)** as off-white solid (TLC system: 10% MeOH in DCM; Rf: 0.6). ^{1}H NMR (DMSO-d6): δ 9.10 (s, 2H), 8.57-8.55 (d, 1H), 8.41 (s, 1H), 7.89-7.87 (d, 1H), 7.82 (br s, 1H), 7.57-7.53 (t, 1H), 7.39-7.28 (m, 6H), 3.72 (s, 2H), 2.45 (m, 2H), 1.98-1.93 (m, 10H), 1.52 (m, 2H). Mass: m/z 468.2 $(M+H)^+$.

Synthesis of SC_3235: CIS-methyl 2-(2-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)phenoxy)acetate

[0305]



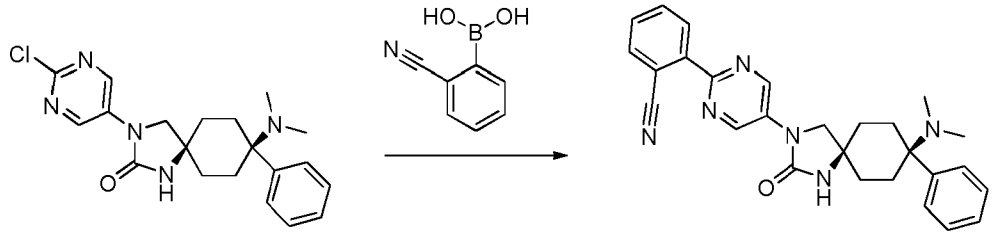
SC_3169 **SC_3235**

[0306] CIS-2-(2-(8-(dimethylamino)-2-oxo-8-phenyl-l,3-diazaspiro[4.5]decan-3-yl)phenoxy)acetic acid (120 mg, 0.28 mmol) was dissolved in methanol (1.4 mL, 125 equiv.) and thionyl chloride (4 equiv., 1.13 mmol, 83 μL) was added dropwise. The reaction mixture was stirred at RT overnight, diluted with aq. sat. $NaHCO_3$ and extracted with DCM (3x). The combined organic phases were dried over $MgSO_4$ and concentrated under reduced pressure. The residue (112 mg) was

purified by flash chromatography on silica get (gradient DCM/ MeOH 97/3 to 88/12) to give 92 mg (74%) of CIS-methyl 2-(2-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)phenoxy)acetate **(SC_3235).** ^{1}H NMR (600 MHz, DMSO) δ 7.40 - 7.33 (m, 4H), 7.29 (dd, 1H), 7.28 - 7.24 (m, 1H), 7.13 (td, 1H), 6.99 - 6.91 (m, 2H), 4.76 (s, 2H), 3.67 (s, 3H), 3.55 (s, 2H), 2.45 - 2.26 (m, 2H), 2.07 (s, 2H), 1.98 (s, 6H), 1.94 - 1.75 (m, 4H), 1.52 - 1.45 (m, 2H). Mass: m/z 438.2 $(M+H)^+$.

Synthesis of SC_3238: CIS-2-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidin-2-yl)benzonitrile

[0307]

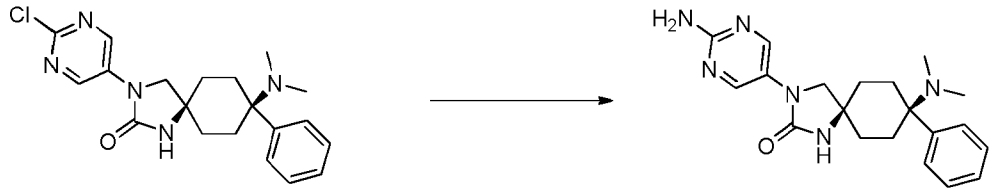


INT-989 **SC_3238**

[0308] CIS-3-(2-chloropyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-989)** (240 mg, 0.56 mmol), [1,1'-bis(diphenylphosphino)ferrocene]dichloropalladium(II) complex with dichloromethane (0.05 equiv., 0.028 mmol, 23 mg) and (2-cyanophenyl)boronic acid (1.125 equiv., 0.63 mmol, 92 mg) were dissolved in degassed 1,2-dimethoxyethane (100 equiv., 56 mmol, 5.8 mL) and Cs_2CO_3 (3.3 equiv., 1.84 mmol, 600 mg) in water (175 equiv., 98 mmol, 1.8 mL) was added. The resulting clear reaction mixture was stirred 3 days at 60°C. The reaction mixture was diluted with water (15 mL) and extracted with EtOAc (2x15 mL). Combined organic phases were dried over $MgSO_4$ and concentrated under reduced pressure. The residue (355 mg) was purified by flash chromatography on silica get (gradient DCM/ MeOH 95/5 to 70/30) to give 60 mg of product, which was further purified by HPLC to give 15.4 mg (6%) of CIS-2-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidin-2-yl)benzonitrile (SC_3238). ^{1}H NMR (600 MHz, DMSO) δ 9.17 (s, 2H), 8.27 (dd, 1H), 7.94 (dd, 1H), 7.81 (td, 1H), 7.65 (td, 1H), 7.42 - 7.35 (m, 5H), 7.28 (ddt, 1H), 3.75 (s, 2H), 2.49 - 2.34 (m, 1H), 2.00 - 1.76 (m, 11H), 1.55 - 1.51 (m, 2H). Mass: m/z 453.24 $(M+H)^+$.

Synthesis of SC_3239: CIS-3-(2-aminopyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0309]

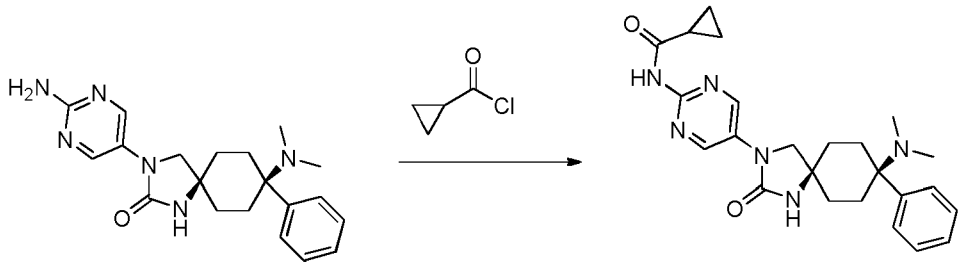


INT-989 **SC_3239**

[0310] Microwave reactor vial was loaded with CIS-3-(2-chloropyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-989)** (250 mg, 0.65 mmol), flushed with nitrogen, 7N solution of NH_3 in methanol (108 equiv., 70 mmol, 10 mL) and dioxane (37 equiv., 24 mmol, 2 mL) were added, the vial was sealed and the reaction mixture was stirred at 115°C for 12 h in the microwave reactor. The reaction mixture was then cooled down to 4 °C overnight. The precipitate formed was filtered off, washed with DCM (small amount), water (2x), ether (2x) and dried under reduced pressure to give 180 mg (76%) of CIS-3-(2-aminopyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(SC_3239)** as an off-white solid. ^{1}H NMR (600 MHz, DMSO) δ 8.39 (s, 2H), 7.40 - 7.32 (m, 5H), 7.26 (tt, 1H), 6.25 (s, 2H), 3.51 (s, 2H), 2.37 (s, 2H), 2.07 (s, 2H), 1.96 (s, 6H), 1.94 - 1.68 (m, 4H), 1.47 (d, 2H). Mass: m/z 367.23 $(M+H)^+$.

Synthesis of SC_3240: CIS-N-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidin-2-yl)cyclopropanecarboxamide

[0311]

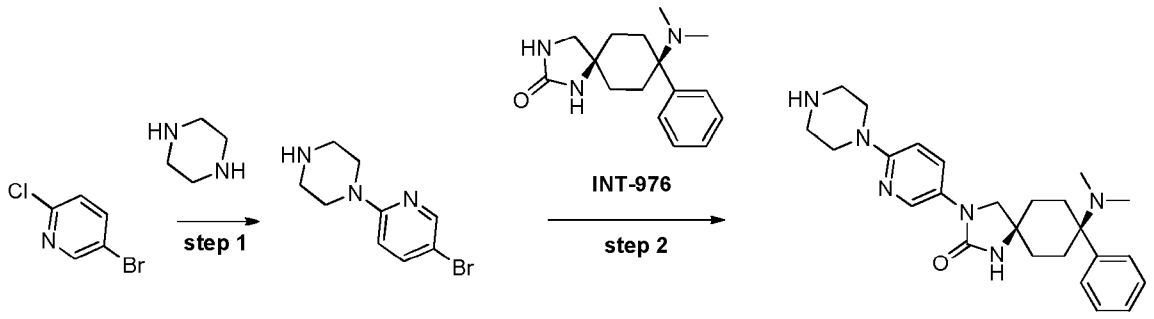


SC_3239 SC_3240

[0312] CIS-3-(2-aminopyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(SC_3239)** (50 mg, 0.14 mmol) and 4-dimethylaminopyridine (1.3 equiv., 0.18 mmol, 22 mg) were dissolved in dry pyridine (200 equiv., 27 mmol, 2.2 mL) under nitrogen atmosphere. Cyclopropancarbonyl chloride (1.3 equiv., 0.18 mmol, 16 μL) was added in one portion and the reaction mixture was stirred at RT for 3 h. Additional portion of cyclopropancarbonyl chloride (3 equiv., 0.42 mmol, 37 μL) was added and the reaction mixture was stirred at 90 °C for 1 h. The reaction mixture was diluted with water (5 mL) and aq. sat. $NaHCO_3$ (5 mL), extracted with DCM (3x10 mL), organic phases were washed with brine, dried over Na_2SO_4 and the solvent was removed under reduced pressure. The residue was suspended thoroughly in 3 mL DCM, the precipitate was filtered off, washed with ether and dried under reduced pressure to give 47 mg (79%) of CIS-N-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidin-2-yl)cyclopropanecarboxamide (SC_3240) as a white solid. ^1H NMR (600 MHz, DMSO) δ 10.66 (s, 1H), 8.81 (s, 2H), 7.67 (s, 1H), 7.41 - 7.33 (m, 4H), 7.31 - 7.21 (m, 1H), 3.62 (s, 2H), 2.45 - 2.32 (m, 2H), 2.01 (td, 1H), 1.96 (s, 6H), 1.93 - 1.78 (m, 3H), 1.52 - 1.47 (m, 2H), 0.82 - 0.72 (m, 4H). Mass: m/z 435.3 $(M+H)^+$.

Synthesis of SC_3242: CIS-8-(dimethylamino)-8-phenyl-3-(6-(piperazin-1-yl)pyridin-3-yl)-1,3-diazaspiro[4.5]decan-2-one

[0313]



SC_3242

Step 1: 4-(5-bromopyrimidin-2-yl)piperazine

[0314] In analogy to the method described for **SC_3097 step 1** 5-bromo-2-chloro-pyridine was reacted with piperazine to be converted into 4-(5-bromopyrimidin-2-yl)piperazine.

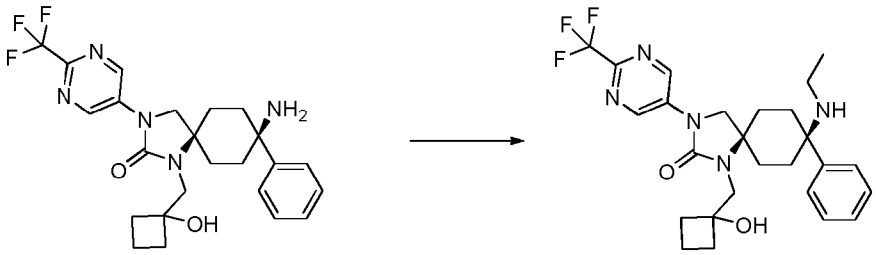
Step 2: CIS-8-(dimethylamino)-8-phenyl-3-(6-(piperazin-1-yl)pyridin-3-yl)-1,3-diazaspiro [4.5]decan-2-one (SC_3242)

[0315] CIS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-976)** (80 mg, 0.29 mmol), 4-(5-bromopyrimidin-2-yl)piperazine (2 equiv., 0.56 mmol, 142 mg) and potassium phosphate (4 equiv., 1.17 mmol, 248 mg) were suspended in N,N'-dimethylethylenediamine (18 equiv., 5.27 mmol, 0.6 mL) under nitrogen atmosphere. The reaction

mixture was stirred at 80°C for 2 h, diluted with water (10 mL) and extracted with DCM (3x15 mL). The combined organic phases contained a precipitate which was filtered off, washed with isopropanol and dried under reduced pressure to give 79 mg (62%) of CIS-8-(dimethyl-amino)-8-phenyl-3-(6-(piperazin-1-yl)pyridin-3-yl)-1,3-diazaspiro [4.5]decan-2-one **(SC_3242).** ^{1}H NMR (600 MHz, DMSO) δ 8.15 (d, 1H), 7.85 (dd, 1H), 7.41 - 7.33 (m, 4H), 7.32 - 7.23 (m, 2H), 6.74 (d, 1H), 3.51 (s, 2H), 3.30 - 3.25 (m, 4H), 2.78 - 2.73 (m, 4H), 2.43 - 2.31 (m, 2H), 1.96 (s, 6H), 1.93 - 1.79 (m, 4H), 1.50 - 1.42 (m, 2H). Mass: m/z 435.3 $(M+H)^+$.

Synthesis of SC_3275: CIS-8-(ethylamino)-1-((1-hydroxycyclobutyl)methyl)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one

[0316]

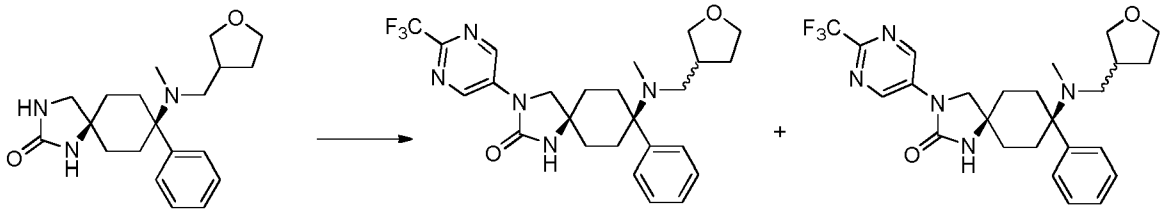


SC_3262 **SC_3275**

[0317] CIS-8-amino-1-((1-hydroxycyclobutyl)methyl)-8-phenyl-3 -(2-(trifluoromethyl)pyrimidin-5-yl)-1,3 - diazaspiro [4.5]decan-2-one (70 mg, 0.15 mmol) was dissolved in anhydrous DCM (3.8 mL) under nitrogen atmosphere. Acetic acid (0.1 equiv., 0.015 mmol, 0.8 μL) and acetaldehyde (1.1 equiv., 0.16 mmol, 9 μL) were sequentially added and the resulting mixture was stirred at RT for 1 h. Sodium triacetoxyborohydride (2 equiv., 0.29 mmol, 62 mg) was added and the reaction mixture was stirred at RT overnight and then at 50°C for 5 h. Additional amounts of acetaldehyde (1.1 equiv., 0.16 mmol, 9 μL) and sodium triacetoxyborohydride (2 equiv., 0.29 mmol, 62 mg) were added and the reaction mixture was stirred further 24 h at 50°C. The resulting mixture was cooled down to RT, quenched with aq. sat. $NaHCO_3$ until pH > 7, diluted with water and extracted with DCM (3x). The combined organic layers were dried over Na_2SO_4 and concentrated under reduced pressure. The residue (70 mg) was purified by flash chromatography on silica gel (DCM/EtOH gradient 99/1 to 95/5) to yield 43 mg (58%) of CIS-8-(ethylamino)-1-((1-hydroxycyclobutyl)methyl)-8-phenyl-3-(2-(trifluoromethyl) pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one **(SC_3275).** ^{1}H NMR (600 MHz, DMSO) δ 9.26 (s, 2H), 7.55 - 7.49 (m, 2H), 7.33 (t, 2H), 7.21 (d, 1H), 3.92 (s, 2H), 2.38 (td, 2H), 2.17 - 2.06 (m, 3H), 2.00 - 1.87 (m, 4H), 1.81 (td, 2H), 1.72 - 1.64 (m, 1H), 1.60 - 1.50 (m, 1H), 1.49 - 1.43 (m, 2H), 0.99 (t, 3H). Mass: m/z 504.3 $(M+H)^+$

Synthesis of SC_3292 and SC_3293: enantiomer 1 and enantiomer 2 of CIS-8-(methyl((tetrahydrofuran-3-yl) methyl)amino)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one

[0318]



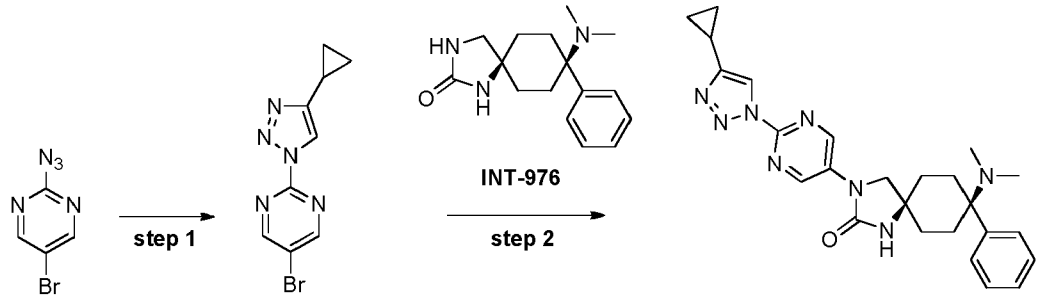
rac **INT-1026** enantiomer 1 **SC_3292** enantiomer 2 **SC_3293**

[0319] Cs_2CO_3 (0.85g, 2.61mmol) was added to an argon purged solution of CIS-8-(methyl((tetrahydrofuran-3-yl) methyl)amino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-1026)** (0.3 g, 0.87 mmol), Xanthphos (45 mg, 0.087 mmol), $Pd_2(dba)_3$ (80 mg, 0.087 mmol) and 5-bromo-2-(trifluoromethyl)pyrimidine (0.29 g, 1.30 mmol) in 1,4-dioxane (15 mL). The mixture was purged with argon for 5 min and stirred at 90°C for 16 h. The reaction mixture was cooled to RT, diluted with EtOAc (20mL), filtered through Celite and the filtrate was concentrated under reduced pressure. The crude product was purified by flash chromatography (silica gel 230-400 mesh; 3% MeOH in DCM) to get the compound which was further

purified by reverse phase preparative HPLC to afford 0.1g (23%) of CIS-8-(methyl((tetrahydrofuran-3-yl)methyl)amino)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one (TLC system: 10% MeOH in DCM; Rf: 0.4) as a mixture of enantiomers. Reverse phase preparative HPLC conditions: mobile phase: 10mM ammonium bicarbonate in H_2O/acetonitrile; column: X-BRIDGE-C18 (150*19), 5 μm; mobile phase gradient (min/%B): 0/30, 8/82, 8.1/100, 10/100, 10.1/30, 12/30; flow rate: 19 ml/min; diluent: mobile phase + THF. Enantiomeric mixture of CIS-8-(methyl((tetrahydrofuran-3-yl)methyl)amino)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one (100mg) was separated by chiral SFC to afford 35 mg of enantiomer 1 **(SC-3292)** and 40 mg of enantiomer 2 **(SC-3293)** as off-white solids. Preparative SFC conditions: column: Chiralpak IA (250x30) mm, 5μm; % CO_2: 50.0%; % co-solvent: 50.0% (100% Methanol); total flow: 70.0 g/min; back pressure: 100.0 bar; UV: 256 nm; stack time: 13.5 min; load/inj.: 9.5 mg; no. of injections: 11. **SC-3292:** ^{1}H NMR (DMSO-d6): δ 9.15 (s, 2H), 8.23 (broad s, 1H), 7.37-7.25 (m, 5H), 3.68-3.58 (m, 5H), 3.37-3.36 (m, 1H), 2.32 (m, 3H), 2.13-1.89 (m, 10H), 1.47 (m, 3H). **SC-3293:** ^{1}H NMR (DMSO-d6): δ 9.15 (s, 2H), 8.23 (broad s, 1H), 7.37-7.36 (m, 4H), 7.26-7.24 (m, 1H), 3.68-3.56 (m, 5H), 3.37-3.36 (m, 1H), 2.31-2.28 (m, 3H), 2.13-1.86 (m, 10H), 1.48 (m, 3H). Mass: m/z 490.3 $(M+H)^+$.

Synthesis of SC_3313: CIS-3-(2-(4-cyclopropyl-1H-1,2,3-triazol-1-yl)pyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0320]



SC_3313

Step 1: 5-bromo-2-(4-cyclopropyl-1H-1,2,3-triazol-1-yl)pyrimidine

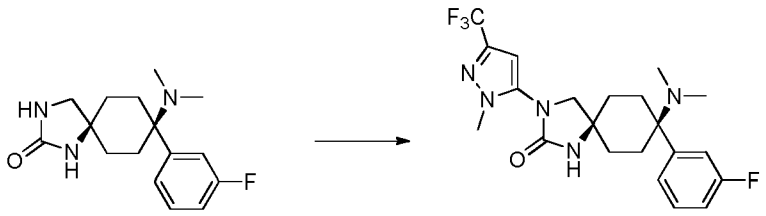
[0321] 2-Azido-5-bromo-pyrimidine (400 mg, 1.94 mmol) and ethynylcyclopropane (1.3 equiv., 2.522 mmol, 0.21 mL) were dissolved in tert-butanol (5 mL). The solutions of sodium ascorbate (0.1 equiv., 0.194 mmol, 38 mg) in water (2.5 mL) and copper(II) sulfate pentahydrate (0.1 equiv., 0.194 mmol, 48 mg) in water (2.5 mL) were sequentially added. The reaction mixture was stirred under ambient conditions for 18 h, then diluted with 20 mL 1M aq. NH_4OH and extracted with EtOAc (3x30 mL). The combined organic extracts were washed with brine, dried over Na_2SO_4 and concentrated under reduced pressure. Crude product (510 mg) was purified by flash chromatography on silica gel (DCM/EtOH 99/1) to yield 143 mg of 5-bromo-2-(4-cyclopropyl-1H-1,2,3-triazol-1-yl)pyrimidine as a white solid. Mass: m/z 266.0 $(M+H)^+$.

Step 2: CIS-3-(2-(4-cyclopropyl-1H-1,2,3-triazol-1-yl)pyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (SC_3313)

[0322] In analogy to the method described for **SC_3103** CIS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-976)** was reacted with 5-bromo-2-(4-cyclopropyl-1H-1,2,3-triazol-1-yl)pyrimidine to be converted into CIS-3-(2-(4-cyclopropyl-1H-1,2,3-triazol-1-yl)pyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(SC_3313).** ^{1}H NMR (600 MHz, DMSO) δ 9.09 (d, 2H), 8.50 (d, 1H), 7.91 (s, 1H), 7.42 - 7.34 (m, 2H), 7.38 (s, 3H), 7.31 - 7.25 (m, 1H), 3.72 (s, 2H), 2.48 - 2.31 (m, 2H), 2.10 - 2.01 (m, 1H), 1.99 - 1.77 (m, 10H), 1.58 - 1.46 (m, 2H), 1.00 - 0.91 (m, 2H), 0.84 (tt, 2H). Mass: m/z 459.3 $(M+H)^+$.

Synthesis of SC_3319: CIS-8-(methyl((tetrahydrofuran-3-yl)methyl)amino)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one

[0323]

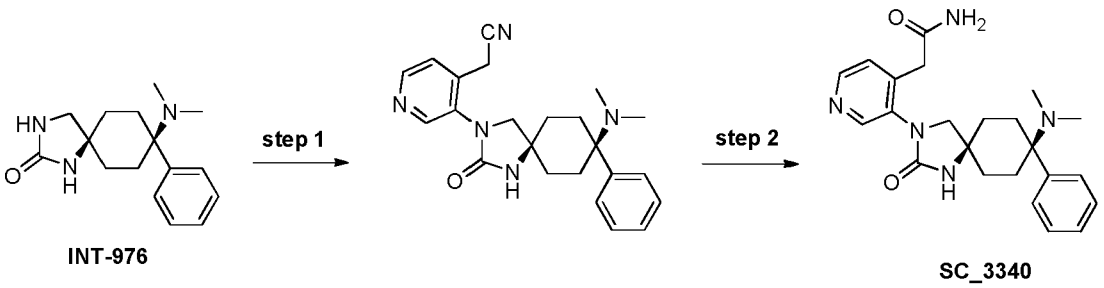


INT-1024 SC_3319

[0324] Cs_2CO_3 (145 mg, 0.45 mmol, 2 equiv.), CIS-8-(dimethylamino)-8-(3-fluorophenyl)-1,3-diazaspiro[4.5]decan-2-one **(INT-1024)** (65 mg, 0.223 mmol, 1 equiv.), Xanthphos (19 mg, 0.033 mmol, 0.15 equiv.), $Pd_2(dba)_3$ (10 mg, 0.011 mmol, 0.05 equiv.) and 5-bromo-1-methyl-3-(trifluoromethyl)pyrazole (102 mg, 0.446 mmol, 2 equiv.) were loaded into a microwave reactor vial (2-5mL), the vial was sealed and flushed with nitrogen (3x). 1,4-Dioxane (1.5 mL) was added via syringe and the reaction mixture was stirred at 110°C in the microwave reactor for 10 h. The resulting mixture was cooled down to RT, solution of Xanthphos (19 mg, 0.033 mmol, 0.15 equiv.) and $Pd_2(dba)_3$ (10 mg, 0.011 mmol, 0.05 equiv.) in 1,4 dioxane (1 mL) was added, and the reaction mixture was stirred at 130°C in the microwave reactor for further 10 h. The resulting suspension was cooled to RT, quenched with water and extracted with DCM (3x). The combined organic layer was dried over Na_2SO_4 and concentrated under reduced pressure. The resulting residue was purified by flash chromatography (gradient 0% to 16% MeOH in DCM) to yield 41 mg (42%) of CIS-8-(methyl((tetrahydrofuran-3-yl) methyl)amino)-8-phenyl-3-(2-(trifluoromethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one (SC_3319). ^{1}H NMR (600 MHz, DMSO) δ 7.71 (s, 1H), 7.41 (q, 1H), 7.21 - 7.12 (m, 2H), 7.09 (td, 1H), 6.63 (s, 1H), 3.75 (s, 2H), 3.55 (s, 2H), 2.42 - 2.27 (m, 2H), 1.99 - 1.89 (m, 8H), 1.88 - 1.73 (m, 2H), 1.56 - 1.49 (m, 2H). Mass: m/z 440.2 $(M+H)^+$.

Synthesis of SC_3340: CIS-2-(3-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyridin-4-yl) acetamide

[0325]



INT-976 SC_3340

Step 1: CIS-2-(3-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyridin-4-yl)acetonitrile

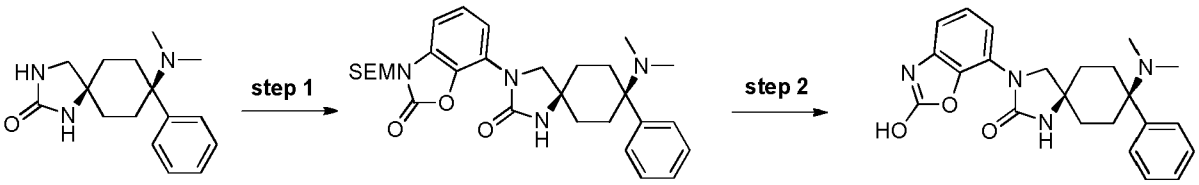
[0326] In analogy to the method described for SC_3097 step 2 CIS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5] decan-2-one **(INT-976)** was reacted with (3-bromo-pyridin-4-yl)-acetonitrile to be converted into CIS-2-(3-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)pyridin-4-yl)acetonitrile.

Step 2: CIS-2-(3-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyridin-4-yl)acetamide (SC_3340)

[0327] To a solution of CIS-2-(3-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyridin-4-yl)acetonitrile (600 mg, 1.54 mmol, 1.0 equiv.) in EtOH (50 ml) was added NaOH (247 mg, 6.16 mmol, 4.0 equiv.). The reaction mixture was stirred at reflux for 16 h and then concentrated under reduced pressure. The resulting residue was purified by column chromatography (neutral alumina; 4% MeOH in DCM) and finally by preparative HPLC (column: Gemini NX-C18 (50 x 4.6), 3μm, diluent: DMSO, mobile phase: gradient 0.05% HCOOH in water/ACN flow rate: 1ml/min) to yield CIS-2-(3-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyridin-4-yl)acetamide **(SC_3340)** (40 mg, 0,098 mmol, 4% yield after two steps) as an off white solid. ^{1}HNMR (DMSO, 400 MHz) δ 8.40 (s, 1H), 8.32 (d, 1H, J = 4.92 Hz), 7.49 (s, 1H), 7.36-7.24 (m, 7H), 6.99 (s, 1H), 3.49-3.46 (m, 4H), 2.32 (bs, 2H), 1.94-1.77 (m, 10H), 1.52 (bs, 2H). Mass: m/z 408.2 $(M+H)^+$.

Synthesis of SC_3352: CIS-8-(dimethylamino)-3-(2-hydroxybenzo[d]oxazol-7-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one

[0328]



INT-976 **SC_3352**

Step 1: CIS-7-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3-((2-(trimethylsilyl)ethoxy) methyl)benzo[d]oxazol-2(3H)-one

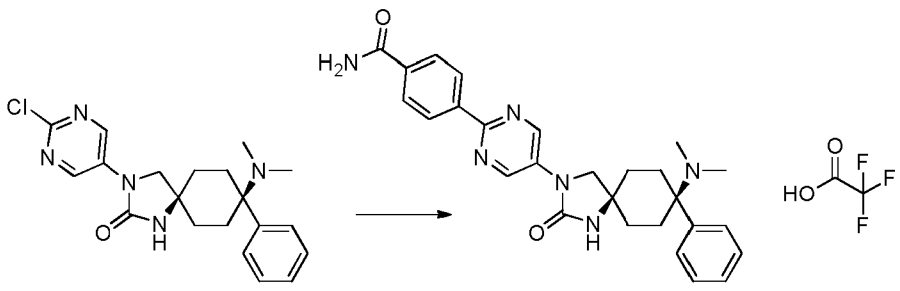
[0329] In analogy to the method described for **SC_3103** CIS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-976)** was reacted with 7-bromo-3-(2-trimethylsilanyl-ethoxymethyl)-3H-benzooxazol-2-one (prepared from 7-bromobenzo[d]oxazol-2(3H)-one and trimethylsilylethoxymethylchloride following a standart procedure) to be converted into CIS-7-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3-((2-(trimethylsilyl)ethoxy)methyl)benzo [d]oxazol-2(3H)-one. Mass: m/z 537.2 $(M+H)^+$.

Step 2: CIS-8-(dimethylamino)-3-(2-hydroxybenzo[d]oxazol-7-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (SC_3352)

[0330] To a solution of CIS-7-[8-dimethylamino-2-oxo-8-phenyl-1-(2-trimethylsilanyl-ethoaηmethyl)-1,3-diaza-spiro [4.5]dec-3-yl]-3H-benzooxazol-2-one (350 mg, 0.65 mmol, 1.0 eq) in 1,4-dioxane (2 mL) was added 4M HCl in dioxane (6 mL) dropwise at 0°C. The reaction mixture was stirred at RT for 48 h and then concentrated under reduced pressure. The residue was taken in DCM (200 mL) and washed with sat. aq. $NaHCO_3$ (100 mL). Organic layer was dried over Na_2SO_4 and concentrated under reduced pressure to get the crude product which was purified by column chromatography (neutral alumina; 2% MeOH/DCM) to yield CIS-7-(8-dimethylamino-2-oxo-8-phenyl-1,3-diaza-spiro[4.5]dec-3-yl)-3H-benzoox-azol-2-one **(SC_3352)** (85 mg, 0.21 mmol, 32%) as an off white solid. ^{1}HNMR (DMSO-d6, 400 MHz at 100°C), δ (ppm) = 11.19 (bs, 1H), 7.37-7.23 (m, 6H), 7.14 (s, 1H), 7.04 (t, 1H, J = 8.06), 6.76 (d, 1H, J = 7.68 Hz), 3.69 (s, 2H), 2.38-2.26 (m, 2H), 2.08-1.76 (m, 10H), 1.56-1.51 (m, 2H). Mass: m/z 407.1 $(M+H)^+$.

Synthesis of SC_3354: CIS-4-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidin-2-yl)benzamide trifluoroacetate salt

[0331]



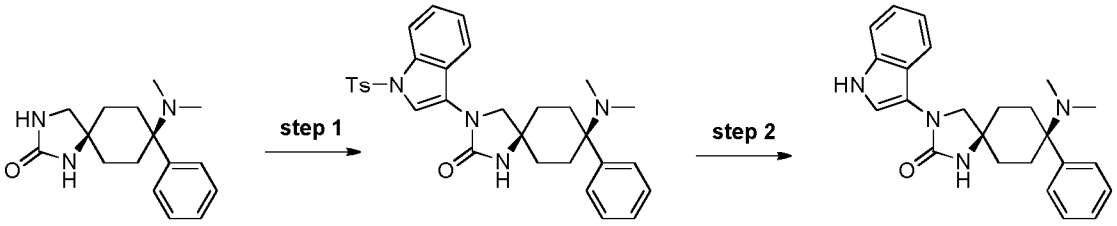
INT-989 **SC_3340**

[0332] 3-(2-chloropyrimidin-5-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT 989)** (200 mg, 0.52 mmol, 1 equiv.), 4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)benzamide (129 mg, 0.52 mmol, 1 equiv.), $Pd_2(dba)_3$ (95 mg, 0.10 mmol, 0.2 equiv.), 2-dicyclohexylphosphino-2',4',6'-triisopropylbiphenyl (X-Phos) (99 mg, 0.21 mmol, 0.4 equiv.) were loaded into microwave reactor vessel and flushed with nitrogen (2x). Anhydrous 1,4-dioxane (9 mL) and sodium carbonate (213 mg, 2.07 mmol, 4 equiv.) were sequentially added. The reaction mixture was stirred 8 h at 120 °C in the microwave reactor and then concentrated under reduced pressure. The residue was suspended in EtOAc/water (1/1,

v/v) and filtered through a glass filter. The solid residue was dissolved in MeOH/DCM/TFA, filtered through Celite pad and the filtrate was concentrated under reduced pressure to give 75 mg (25%) of CIS-4-(5-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)pyrimidin-2-yl)benzamide trifluoroacetate salt **(SC_3354).** ^{1}H NMR (600 MHz, DMSO) δ 9.05 (s, 2H), 8.42 (s, 1H), 8.34 (d, 2H), 8.03 (s, 1H), 7.98 (d, 2H), 7.74 - 7.65 (m, 2H), 7.58 (t, 2H), 7.56 - 7.52 (m, 1H), 7.40 (s, 1H), 3.58 (s, 2H), 2.70 (d, 2H), 2.60 (s, 6H), 2.25 (t, 2H), 1.91 (d, 2H), 1.39 (t, 2H). Mass: m/z 471.3 $(M+H)^+$.

Synthesis of SC_3357: CIS-8-(dimethylamino)-3-(1H-indol-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one

[0333]



INT-976 **SC_3357**

Step 1: CIS-8-(dimethylamino)-8-phenyl-3-(1-tosyl-1H-indol-3-yl)-1,3-diazaspiro[4.5]decan-2-one

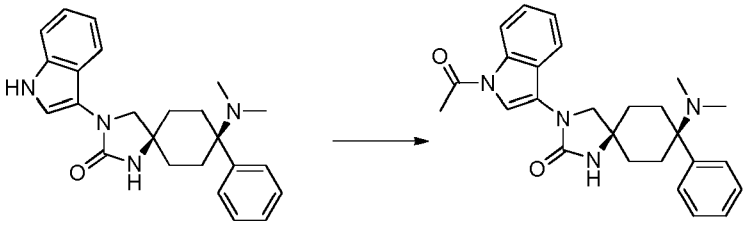
[0334] In analogy to the method described for **SC_3103** CIS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(INT-976)** was reacted with 3-bromo-1-(toluene-4-sulfonyl)-1H-indole to be converted into CIS-8-(dimethylamino)-8-phenyl-3-(1-tosyl-1H-indol-3-yl)-1,3-diazaspiro[4.5]decan-2-one. Mass: m/z 543.1 $(M+H)^+$.

Step 2: CIS-8-(dimethylamino)-3-(1H-indol-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (SC_3357)

[0335] To a solution of 8-dimethylamino-8-phenyl-3-[1-(toluene-4-sulfonyl)-1H-indol-3-yl]-1,3-diazaspiro[4.5]decan-2-one (275 mg, 0.51 mmol, 1.0 eq.) in EtOH (24 mL) was added 10N aq. NaOH (1.2 mL) at RT. The reaction mixture was heated to reflux for 1.5 h, then concentrated, diluted with water (50 mL) and extracted with EtOAc (150 mL). Organic layer was dried over Na_2SO_4 and concentrated under reduced pressure. The residue was purified by column chromatography (neutral alumina; 2% MeOH/DCM) to afford CIS-8-dimethylamino-3-(1H-indol-3-yl)-8-phenyl-1,3-diaza-spiro[4.5]decan-2-one (SC_3357) (130 mg, 0.33 mmol, 65%) as light brown solid. ^{1}H NMR (DMSO-d6, 400 MHz at 100°C), δ (ppm) = 10.55 (bs, 1H), 7.62-7.60 (d, 1H, J = 7.96 Hz), 7.37-7.23 (m, 7H), 7.04 (t, 1H, J = 7.48 Hz), 6.92 (t, 1H, J = 7.44 Hz), 6.71 (bs, 1H), 3.61 (s, 2H), 2.38-2.33 (m, 2H), 2.04-1.82 (m, 10H), 1.59-1.54 (m, 2H). Mass: m/z 389.3 $(M+H)^+$.

Synthesis of SC_3379: CIS-3-(1-acetyl-1H-indol-3-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro [4.5] decan-2-one

[0336]



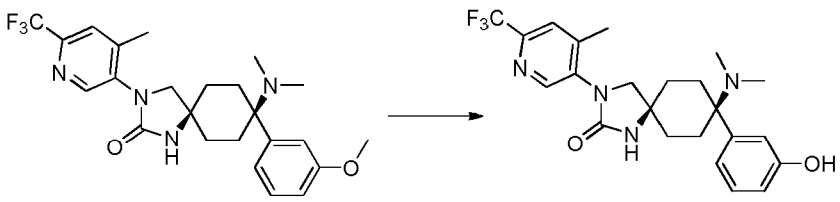
SC_3357 **SC_3379**

[0337] To a solution of 8-dimethylamino-3-(1H-indol-3-yl)-8-phenyl-1,3-diaza-spiro[4.5]decan-2-one **(SC_3357)** (150 mg, 0.38 mmol, 1.0 eq.) in DCM (6 mL) were added NaOH (39 mg, 0.96 mmol, 2.5 eq.) and Bu_4NHSO_4 (129 mg, 0.38 mmol, 1.0 eq.) at 0 °C and the reaction mixture was stirred for 30 min followed by addition of acetyl chloride (54 µl, 0.76 mmol, 2.0 eq.). The reaction mixture was stirred at RT for 16 h, then diluted with DCM (150 ml) and washed with water (50 mL) and brine (50 mL). Organic layer was dried over Na_2SO_4 and concentrated under reduced pressure. The residue was purified

by column chromatography (neutral alumina; 1% MeOH/DCM) followed by prep HPLC to afford 3-(1-acetyl-1H-indol-3-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one **(SC_3379)** as off white solid. Note: Two batches of same reactions were done and yield was calculated accordingly. Yield: 13% (45 mg, 0.1 mmol). 1HNMR (DMSO-d6, 400 MHz at 100oC), δ (ppm) = 8.34-8.32 (d, 1H, J = 7.88 Hz), 7.90 (d, 1H, J = 7.36 Hz), 7.67 (s, 1H), 7.37-7.10 (m, 8H), 3.71 (s, 2H), 2.57 (s, 3H), 2.38-2.32 (m, 2H), 2.04-1.88 (m, 10H), 1.61-1.59 (m, 2H). Mass: m/z 431.2 $(M+H)^+$.

Synthesis of SC_3388: CIS-8-(dimethylamino)-8-(3-hydroxyphenyl)-3-(4-methyl-6-(trifluoromethyl)pyridin-3-yl)-1,3-diazaspiro[4.5]decan-2-one

[0338]

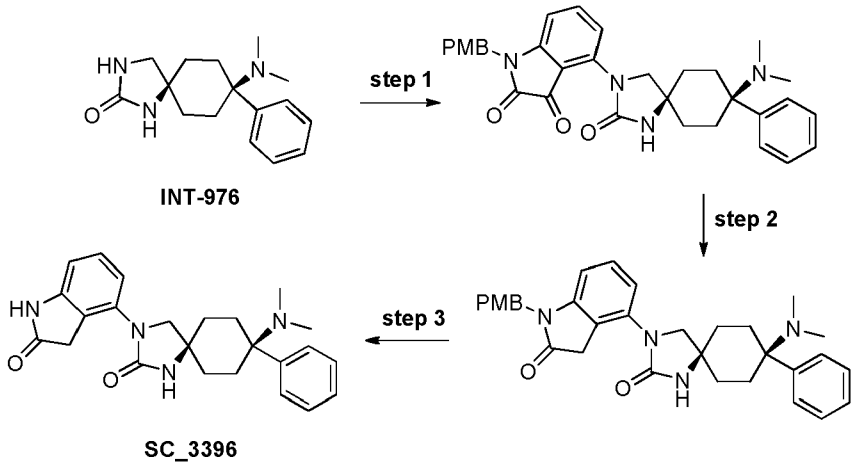


SC_3368 **SC_3388**

[0339] CIS-8-(dimethylamino)-8-(3 -methoxyphenyl)-3-[4-methyl-6-(trifluoromethyl)-3 -pyridyl] -1,3-diazaspiro[4.5]decan-2-one (SC_3368) (42 mg, 0.091 mmol) was dissolved in DCM (2 mL) and the solution was cooled to 0°C. Boron tribromide (1M sol. in DCM, 4 equiv., 0.36 mmol, 0.36 mL) was added in one portion. The reaction mixture was allowed to stir at RT overnight, then quenched with methanol and diluted with water. The resulting mixture was extracted with DCM (2x), the combined organic phases weres dried over Na_2SO_4 and concentrated under reduced pressure. The residue was purified by flash chromatography on silica gel (eluent gradient DCM/EtOH) to yield 16 mg (39%) of CIS-8-(dimethylamino)-8-(3-hydroxyphenyl)-3-(4-methyl-6-(trifluoromethyl)pyridin-3-yl)-1,3-diazaspiro[4.5]decan-2-one **(SC_3388).** ^1H NMR (600 MHz, DMSO) δ 8.57 (s, 1H), 7.80 (s, 1H), 7.52 (s, 1H), 7.14 (t, 1H), 6.77 (d, 1H), 6.74 (s, 1H), 6.66 (dd, 1H), 3.61 (s, 2H), 2.32 (s, 3H), 2.31 - 2.19 (m, 2H), 2.01 - 1.89 (m, 8H), 1.88 - 1.70 (m, 2H), 1.54 (t, 2H). Mass: m/z 449.2 $(M+H)^+$.

Synthesis of SC_3396: CIS-4-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)indolin-2-one

[0340]



INT-976 **SC_3396**

Step 1: CIS-4-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-1-(4-methoxybenzyl)indoline-2,3-dione

[0341] In analogy to the method described for SC_3242 CIS-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (INT-976) was reacted with 4-bromo-1-(4-methoxy-benzyl)-1H-indole-2,3-dione to be converted into CIS-4-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-1-(4-methoxybenzyl)indoline-2,3-dione. Mass: m/z 539.2 $(M+H)^+$.

Step 2: CIS-4-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-1-(4-methoxybenzyl)indolin-2-one

[0342] To a solution of CIS-4-(8-dimethylamino-2-oxo-8-phenyl-1,3-diaza-spiro[4.5]dec-3-yl)-1-(4-methoxybenzyl)-1H-indole-2,3-dione (600 mg, 1.11 mmol, 1.0 eq) in EtOH (9 mL) was added hydrazine hydrate (9 mL) at RT. The reaction mixture was stirred at reflux for 16 h, then concentrated, diluted with water (50 mL) and extracted with EtOAc (200 mL). Organic layer was dried over Na_2SO_4, filtered and concentrated under reduced pressure. The resulting residue was purified by column chromatography (neutral alumina, 0.5% MeOH/DCM) to afford 8-dimethylamino-3-[1-(4-methoxybenzyl)-2-oxo-2,3-dihydro-1H-indol-4-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (275 mg, 0.52 mmol, 47%) as a brown solid. Mass: m/z 525.2 $(M+H)^+$.

Step 3: CIS-4-(8-(dimethylamino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)indolin-2-one (SC_3396)

[0343] A solution of CIS-8-dimethylamino-3-[1-(4-methoxy-benzyl)-2-oxo-2,3-dihydro-1H-indol-4-yl]-8-phenyl-1,3-diaza-spiro[4.5]decan-2-one (275 mg, 0.52 mmol, 1.0 eq.) in TFA (4 mL) was stirred at 90°C in a sealed tube for 16 h. The reaction mixture was cooled to RT, concentrated under reduced pressure, diluted with water (50 mL), basified with sat. aq. $NaHCO_3$ and extracted with EtOAc (200 mL). The organic phase was washed with brine (50 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure. The resulting residue was purified by column chromatography (neutral alumina, 5% MeOH in DCM) to afford CIS-8-dimethylamino-3-(2-oxo-2,3-dihydro-1H-indol-4-yl)-8-phenyl-1,3-diaza-spiro[4.5]decan-2-one **(SC_3396)** (60 mg, 0.14 mmol, 28%) as an off-white solid. ^1H NMR (DMSO-d6, 400 MHz, 100°C): δ (ppm) = 9.98 (bs, 1H), 7.36-7.22 (m, 5H), 7.09 (t, 1H, J = 7.94 Hz), 6.95-6.88 (m, 2H), 6.59 (d, 1H, J = 7.52 Hz), 3.57 (s, 2H), 3.49 (s, 2H), 2.36-2.31 (m, 2H), 2.03 (s, 6H), 1.97-1.85 (m, 4H), 1.55-1.51 (m, 2H). Mass: m/z 405.3 $(M+H)^+$.

[0344] The following compounds were prepared in analogy and by combining previously described methods:

Example	Chemical Name	Reactant I	Reactant II	in analogy to method	m/z [M+-H]+
SC_3001	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl] -pyrimidine-2-carbonitrile	INT-987	5-bromopyrimidine-2-carbonitrile	SC-3022	445.3
SC_3002	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl] -pyrazine-2-carbonitrile	INT-987	5 -bromopy razine-2-carbonitrile	SC-3022	445.3
SC_3003	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidine-2-carbonitrile	INT-987	5-bromo-4-methoxypyrimidine-2-carbonitrile	SC-3022	475.3
SC_3004	cis-5-[8-Dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl] -pyrimidine-2-carbonitrile	INT-980	5-bromopyrimidine-2-carbonitrile	SC-3022	435.2
SC_3005	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carboxylic acid amide	SC_3001	-	SC_3016	463.3

(continued)

Example	Chemical Name	Reactant I	Reactant II	in analogy to method	m/z [M+-H]+
SC_3006	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-2-methylsulfonyl-pyrimidine-4-carbonitrile	INT-987	5-bromo-2-(methylthio)-pyrimidine-4-carbonitrile	SC-3022 (step 1); SC_3008 (step 2)	523.2
SC_3007	cis-5-[1-(2-Methoxy-ethyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile	SC_3004	-	SC_3045	421.2
SC_3008	cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-5-methylsulfonyl-benzonitrile	INT-987	2-iodo-5-(methylthio)benzonitrile (step 1)	SC-3022 (step 1); SC_3008 (step 2)	521.3
SC_3009	cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -benzamide	SC_3090	-	SC_3016	461.3
SC_3010	cis-3-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -benzamide	SC_3072	-	SC_3016	461.3
SC_3011	cis-5-[8-Dimethylamino-1 -[(1 -hydro xy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3 -diazaspiro [4.5]decan-3 -yl] -pyrimidine-2-carboxylic acid amide	SC_3013	-	SC_3016	479.3
SC_3012	cis-5-[1-(Cyclobutyl-methyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidine-2-carbonitrile	SC_3003	-	SC_3045	461.3
SC_3013	cis-5-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3 -diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile	INT-600	-	SC_3013	461.3
SC_3014	cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3 -yl]-pyrimidine-5-carbonitrile	INT-987	2-chloropyrimidine-5-carbonitrile	SC_3014	445.3
SC_3015	cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-methoxy-pyrimidin-5-yl)-8-phenyl-1,3 -diazaspiro [4.5]decan-2-one	INT-976	5-bromo-2-methoxypyrimidine (step 1); 1-(tert-butyl-dimethyl-silyloxy)cyclobutyl)methyl 4-methylbenzene-sulfonate (step 2)	SC_3013	466.3

(continued)

Example	Chemical Name	Reactant I	Reactant II	in analogy to method	m/z [M+-H]+
SC_3016	cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-5-carboxylic acid amide	SC_3014	-	SC_3016	463.3
SC_3017	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl] -N-methyl-benzamide	SC_3081	methanamine	SC_3028	475.3
SC_3018	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1 -propyl-1,3-diazaspiro [4.5]decan-3-yl)-pyrimidine-2-carbonitrile	INT-600	1-bromopropane	SC_3013	419.2
SC_3019	cis-5-[8-Dimethylamino-1-(3-methoxy-propyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile	INT-600	1 -bromo-3 -methoxypropane	SC-3013	449.3
SC_3020	cis-5-[1-(Cyclopropyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3 -yl] -pyrimidine-2-carbonitrile	INT-600	(bromomethyl)cyclopropane	SC-3013	431.2
SC_3021	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -benzamide	SC_3081	ammonia	SC-3028	461.3
SC_3022	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3 -[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-987	5-bromo-2-(trifluoromethyl) pyrimidine	SC_3022	488.3
SC_3023	cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-hydroxy-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	SC_3015	-	SC_3023	452.3
SC_3024	cis-5-[8-Dimethylamino-1-(2-methyl-propyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile	INT-600	1-bromo-2-methylpropane	SC_3013	433.3
SC_3025	cis-5-[8-Dimethylamino-1-(2-hydroxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile	INT-600	(3 -bromopropoxy)(tert-butyl)dimethylsilane	SC-3025	421.2
SC_3026	cis-5-[1-(Cyclobutyl-methyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl]-4-methyl-pyridine-2-carbonitrile	SC_3078	-	SC_3045	444.3

(continued)

Example	Chemical Name	Reactant I	Reactant II	in analogy to method	m/z [M+-H]+
SC_3027	cis-1-(Cyclobutyl-methyl)-3-(5-methoxy-pyrazin-2-yl)-8-methylamino-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	SC_3075	-	SC_3045	436.3
SC_3028	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -N,N-dimethyl-benzamide	SC_3081	-	SC_3028	489.3
SC_3029	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N-ethyl-N-(2-hydroxy-ethyl)-benzamide	SC_3081	-	SC_3028	533.3
SC_3030	cis-2-[1-(Cyclobutyl-methyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl]-5-methylsulfonyl-benzonitrile	SC_3008	-	SC_3045	507.2
SC_3031	cis-1-(Cyclobutyl-methyl)-8-methylamino-3 -[2-methylsulfonyl-4-(trifluoromethyl)-phenyl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-one	SC_3084	-	SC_3031	550.2
SC_3032	cis-4-[1-(Cyclobutyl-methyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3 -yl] -N,N-dimethyl-3 -(trifluoromethyl)-benzenesulfonic acid amide	SC_3089	-	SC_3032	579.3
SC_3033	cis-4-[1-(Cyclobutyl-methyl)-8-(ethyl-methyl-amino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5] decan-3-yl]-benzonitrile	INT-797	4-bromobenzonitrile (step 1); (bromomethyl)cyclobutane (step 2)	SC_3013	457.3
SC_3034	cis-1-(Cyclobutyl-methyl)-8-(ethyl-methyl-amino)-8-phenyl-3 -[2-(trifluoromethyl)-pyrimidin-5-yl] -1,3 -diazaspiro [4.5] decan-2-one	INT-797	5-bromo-2-(trifluoromethyl) pyrimidine (step 1); (bromomethyl)cyclobutane (step 2)	SC-3013	502.3
SC_3035	cis-5-[1-(Cyclobutyl-methyl)-8-(ethyl-methyl-amino)-2-oxo-8-phenyl-1,3 -diazaspiro[4.5] decan-3-yl]-pyrimidine-2-carbonitrile	INT-797	5-bromopyrimidine-2-carbonitrile (step 1); (bromomethyl)cyclobutane (step 2)	SC_3013	459.3
SC_3036	cis-5-[8-Dimethylamino-1-[(1-methyl-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3 -diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile	INT-982	5-bromopyrimidine-2-carbonitrile	SC_3022	459.3

(continued)

Example	Chemical Name	Reactant I	Reactant II	in analogy to method	m/z [M+-H]+
SC_3037	cis-2-[3-(2-Cyano-pyrimidin-5-yl)-8-dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-1-yl] -N,N-dimethyl-acetamide	INT-978	5-bromopyrimidine-2-carbonitrile	SC_3065	462.3
SC_3038	cis-1-(Cyclobutyl-methyl)-8-methylamino-8-phenyl-3 -[2-(trifluoromethyl)-pyrimidin-5-yl] -1,3 -diazaspiro [4.5] decan-2-one	SC_3022	-	SC_3038	474.2
SC_3039	cis-5-[8-Dimethylamino-8-(3-fluorophenyl)-1-(4-methoxy-butyl)-2-oxo-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitrile	INT-601	1-bromo-4-methoxybutane	SC_3064	481.3
SC_3040	cis-5-[8-Dimethylamino-1-(3-methoxy-propyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidine-2-carbonitrile	INT-979	5-bromo-4-methoxypyrimidine-2-carbonitrile	SC_3022	479.3
SC_3041	cis-5-[1-[(1-Cyano-cyclobutyl)-methyl] -8-dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5] decan-3 -yl] -pyrimidine-2-carbonitrile	INT_600	(1-cyanocyclobutyl)methyl 4-methylbenzenesulfonate	SC_3013	470.3
SC_3042	cis-N-(Cyclobutyl-methyl)-5-[1-(cyclobutyl-methyl)-8-dimethylamino-8-(3 -fluorophenyl)-2-oxo-1,3 -diazaspiro [4.5]decan-3-yl] -pyrimidine-2-carboxylic acid amide	INT-601	(bromomethyl)cyclobutane	SC_3064	549.3
SC_3043	cis-5-[1-(3 -Methoxy-propyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile	SC_3019	-	SC_3043	435.2
SC_3044	cis-5-[8-Dimethylamino-8-(3-fluorophenyl)-1-methyl-2-oxo-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile	INT_600	iodomethane	SC_3013	409.2
SC_3045	cis-4-Methoxy-5-[1-(3-methoxy-propyl)-8-methylamino-2-oxo-8-phenyl-1,3 -diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile	SC_3040	-	SC_3045	465.3
SC_3046	cis-4-[8-Dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile	INT-980	4-bromopyrimidine-2-carbonitrile	SC_3022	435.2

(continued)

Example	Chemical Name	Reactant I	Reactant II	in analogy to method	m/z [M+-H]+
SC_3047	cis-5-[8-Dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidine-2-carbonitrile	INT-980	5-bromo-4-methoxypyrimidine-2-carbonitrile	SC_3022	465.3
SC_3048	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-2-carbonitrile	INT-987	4-bromopyrimidine-2-carbonitrile	SC_3022	445.3
SC_3049	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3-(6-methylsulfanyl-pyrimidin-4-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-987	4-bromo-6-(methylthio)-pyrimidine	SC_3022	466.3
SC_3050	cis-2-[3-(2-Cyano-pyrimidin-4-yl)-8-dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-1 -yl] -N,N-dimethyl-acetamide	SC_3022	4-bromopyrimidine-2-carbonitrile	SC_3022	462.3
SC_3051	cis-6-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-4-carbonitrile	INT-987	6-bromopyrimidine-4-carbonitrile	SC_3022	445.3
SC_3052	cis-2-(8-Dimethylamino-2-oxo-3,8-diphenyl-1,3-diazaspiro [4.5] decan-1-yl)-N,N-dimethyl-acetamide	INT-987	bromobenzene	SC_3022	435.3
SC_3053	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3,8-diphenyl-1,3-diazaspiro[4.5]decan-2-one	INT-987	bromobenzene	SC_3022	418.3
SC_3054	cis-2-[8-Dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -pyrimidine-5 -carbonitrile	INT-980	5-chloropyrimidine-2-carbonitrile	SC_3022	435.2
SC_3055	cis-8-Dimethylamino-1 -(2-methoxy-ethyl)-3,8-diphenyl-1,3-diazaspiro [4.5]decan-2-one	INT-980	bromobenzene	SC_3022	408.3
SC_3056	cis-5-[8-Dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl]-4-methyl-pyridine-2-carbonitrile	INT-980	5-bromo-4-methylpicolinonitrile	SC_3022	448.3
SC_3057	cis-N,N-Dimethyl-2-(8-methylamino-2-oxo-3,8-diphenyl-1,3-diazaspiro[4.5]decan-1-yl)-acetamide	SC_3052	-	SC_3045	421.3

(continued)

Example	Chemical Name	Reactant I	Reactant II	in analogy to method	m/z [M+-H]+
SC_3058	cis-5-[1-[(1-Cyano-cyclobutyl)-methyl] -8-methylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5] decan-3 -yl] -pyrimidine-2-carbonitrile	SC_3041	-	SC_3058	456.2
SC_3059	cis-5-[1-[(1-Cyano-cyclobutyl)-methyl]-8-(ethyl-methyl-amino)-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-3 -yl] -pyrimidine-2-carbonitrile	INT-797	5-bromopyrimidine-2-carbonitrile (step 1); 1-(bromomethyl)cyclobutanecarbonitrile (step 2)	SC_3013	484.3
SC_3060	CIS-4-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5] decan-3-yl]-benzonitrile	INT-987	4-bromobenzonitrile (step 1); (1-(tert-butyldimethylsilyloxy)cyclobuty l)methyl 4-methylbenzenesulfonate (2 step)	SC_3013	459.3
SC_3061	cis-3-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3 -diazaspiro [4.5] decan-3 -yl] -benzonitrile	INT-987	3-bromobenzonitrile (step 1); (1-(tert-butyldimethylsilyloxy)cyclobuty l)methyl 4-methylbenzenesulfonate (step 2)	SC_3013	459.3
SC_3063	cis-5-[1-[(1-Cyano-cyclobutyl)-methyl] -8-dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro [4.5] decan-3 -yl] -pyridine-2-carbonitrile	INT-987	5-bromopicolinonitrile (step 1); 1-(bromomethyl)cyclobutanecarbonitrile (step 2)	SC_3013	469.3
SC_3064	cis-2-[3-(2-Cyano-pyrimidin-5-yl)-8-dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro [4.5]decan-1 -yl] -N-propyl-acetamide	INT-600	2-bromo-N-propylacetamide	SC_3064	476.3
SC_3065	cis-5-[1-(Cyclobutyl-methyl)-8-(ethyl-methyl-amino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5] decan-3-yl]-4-methoxy-pyrimidine-2-carbonitrile	INT-986	5-bromo-4-methoxypyrimidine-2-carbonitrile	SC_3065	489.3
SC_3066	cis-4-[1-(Cyclobutyl-methyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -3 -methoxy-benzonitrile	SC_3080	-	SC_3066	459.3
SC_3067	cis-5-[8-Dimethylamino-1-(3-methoxy-propyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-6-methoxy-pyridine-2-carbonitrile	INT-979	5-bromo-6-methoxypicolinonitrile	SC_3022	478.3
SC_3068	cis-4-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3 -diazaspiro [4.5] decan-3 -yl] -benzamide	SC_3060	-	SC_3016	477.3

(continued)

Example	Chemical Name	Reactant I	Reactant II	in analogy to method	m/z [M+-H]+
SC_3069	cis-5-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3 -diazaspiro [4.5] decan-3 -yl] -pyridine-2-carbonitrile	INT-976	5-bromopicolinonitrile (step 1); 1-(tert-butyldimethylsilyloxy)-cyclobutyl)methyl 4-methylbenzene-sulfonate (step 2)	SC_3013	460.3
SC_3070	cis-5-[8-Dimethy lamino-1 -[(1 -hydro xy-cy clobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro[4.5] decan-3-yl]-N-[(1-hydroxy-cyclobuty1)-methyl]-pyridine-2-carboxylic acid amide	INT-976	5-bromopicolinonitrile (step 1); 1-(tert-butyldimethylsilyloxy)-cyclobutyl)methyl 4-methylbenzene-sulfonate (step 2)	SC_3013	562.3
SC_3071	cis-2-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3 -diazaspiro [4.5] decan-3 -yl] -benzonitrile	INT-976	2-bromobenzonitrile (step 1); 1-(tert-butyldimethylsilyloxy)-cyclobutyl)methyl 4-methylbenzene-sulfonate (step 2)	SC_3013	459.3
SC_3072	cis-3-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3 -yl] -benzonitrile	INT-987	3 -iodobenzonitrile	SC_3022	443.3
SC_3073	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3 -[2-(trifluoromethyl)-pyrimidin-5-yl] -1,3 -diazaspiro [4.5] decan-2-one	INT-987	5-bromo-2-(trifluoromethyl) pyrimidine	SC_3022	488.3
SC_3074	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methyl-pyridine-2-carboxylic acid methyl ester	INT-987	methyl 5-bromo-4-methyl-picolinate	SC_3022	491.3
SC_3075	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3 -(5-methoxy-pyrazin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-987	2-bromo-5-methoxypyrazine	SC_3022	450.3
SC_3076	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3 -(2-methoxy-pyrimidin-5-yl)-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	INT-987	5-bromo-2-methoxypyrimidine	SC_3022	450.3
SC_3077	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3 -yl] -benzonitrile	INT-987	4-iodobenzonitrile	SC_3022	443.3
SC_3078	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl]-4-methyl-pyridine-2-carbonitrile	INT-987	5-bromo-4-methylpicolinonitrile	SC_3022	458.3

(continued)

Example	Chemical Name	Reactant I	Reactant II	in analogy to method	m/z [M+-H]+
SC_3079	cis-1 -(Cyclobutyl-methyl)-8-dimethylamino-3 -(5-fluoro-pyrimidin-2-yl)-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-987	2-bromo-5-fluoropyrimidine	SC_3022	438.3
SC_3080	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -3 -methoxy-benzonitrile	INT-987	4-bromo-3 -methoxybenzonitrile	SC_3022	473.3
SC_3081	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzoic acid methyl ester	INT-987	methyl 4-iodobenzoate	SC_3022	476.3
SC_3082	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3-(2-pyrrolidin-1-yl-pyrimidin-4-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-987	4-iodo-2-(pyrrolidin-1-yl) pyrimidine	SC_3022	489.3
SC_3083	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3-(5-pyridin-2-yl-thiophen-2-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-987	2-(5-bromothiophen-2-yl) pyridine	SC_3022	501.3
SC_3084	cis-1 -(Cyclobutyl-methyl)-8-dimethylamino-3 -[2-methylsulfonyl-4-(trifluoromethyl)-phenyl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-one	INT-987	1-bromo-2-(methylsulfonyl)-4-(trifluoromethyl)benzene	SC_3022	564.2
SC_3085	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3 -[6-(trifluoromethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-987	5-bromo-2-(trifluoromethyl) pyridine	SC_3022	487.3
SC_3086	cis-1-(Cyclobutyl-methyl)-3 -(2,4-dimethoxy-phenyl)-8-dimethylamino-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-987	1-bromo-2,4-dimethoxy-benzene	SC_3022	478.3
SC_3087	cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -4-methylsulfonyl-benzonitrile	INT_987	2-iodo-4-(methylthio)-benzonitrile (SC_3022)	SC_3022 / SC_3008	521.3
SC_3088	cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -2-fluoro-benzonitrile	INT-987	5-bromo-2-fluorobenzonitrile	SC_3022	461.3
SC_3089	cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3 -yl] -N,N-dimethyl-3 -(trifluoromethyl)-benzenesulfonic acid amide	INT-987	4-bromo-N,N-dimethyl-3 -(trifluoromethyl)benzenesulfona mide	SC_3022	593.3

(continued)

Example	Chemical Name	Reactant I	Reactant II	in analogy to method	m/z [M+-H]+
SC_3090	cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl] -benzonitrile	INT-987	2-bromobenzonitrile	SC_3022	443.3
SC_3091	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3 -(2-methyl-imidazo[1,2-a]pyrazin-6-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-987	6-bromo-2-methylimidazo [1,2-a]pyrazine	SC_3022	473.3
SC_3092	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3-(4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-987	(4-iodophenyl)(methyl)sulfane	SC_3022 / SC_3008	496.3
SC_3093	cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl]-5-methoxy-benzonitrile	INT-987	2-bromo-5-methoxybenzonitrile	SC_3022	473.3
SC_3094	cis-1 -(Cyclobutyl-methyl)-8-dimethylamino-3,8-diphenyl-1,3-diazaspiro[4.5]decan-2-one	INT-987	bromobenzene	SC_3022	418.3
SC_3096	cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3 -pyrazin-2-yl-1,3-diazaspiro[4.5]decan-2-one	INT-987	2-bromopyrazine	SC_3022	420.3

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3098	cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-[2-(4-methyl-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-799	5-bromo-2-(4-methylpiperazin-1-yl)pyrimidine	SC_3097	1H NMR (DMSO-d6): δ 8.56 (s, 2H), 7.36-7.35 (m, 4H), 7.27-7.24 (m, 1H), 5.52 (s, 1H), 3.71 (s, 2H), 3.64 (m, 4H), 3.21 (s, 2H), 2.69-2.67 (m, 2H), 2.32 (m, 4H), 2.19-2.11 (m, 7H), 1.98 (s, 6H), 1.92-1.86 (m, 2H), 1.66-1.64 (m, 1H), 1.52-1.42 (m, 5H).	534.4
SC_3101	cis-1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-3-[2-(4-methyl-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	SC_3098		SC_3099	1H NMR (DMSO-d6): δ 8.58 (s, 2H), 7.48 (d, 2H), 7.32 (t, 2H), 7.19 (t, 1H), 5.61 (s, 1H), 3.75 (s, 2H), 3.66-3.64 (m, 4H), 3.30 (s, 2H), 2.35-2.32 (m, 4H), 2.25-2.19 (m, 5H), 2.12-2.07 (m, 2H), 1.90-1.88 (m, 7H), 1.79-1.73 (m, 2H), 1.65-1.63 (m, 1H), 1.50-1.44 (m, 3H)	520.4
SC_3102	cis-1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-8-phenyl-3-(2-piperazin-1-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one dihydrochloride	SC_3100		SC_3099	1H NMR (DMSO-d6): δ 9.51 (br s, 2H), 9.15 (br s, 2H), 8.65 (s, 2H), 7.69-7.68 (m, 2H), 7.50-7.41 (m, 3H), 3.88-3.86 (m, 4H), 3.79 (m, 2H), 3.65 (m, 2H), 3.16-3.13 (m, 4H), 2.64-2.62 (m, 2H), 2.38-2.33 (m, 2H), 2.16-2.04 (m, 7H), 1.90-1.84 (m, 2H), 1.76-1.70 (m, 3H), 1.60-1.58 (m, 1H).	506.3
SC_3104	cis-1-(Cyclobutyl-methyl)-8-methylamino-3-[4-methyl-6-(trifluoro-methyl)-pyridin-3 -yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one	SC_3103		SC_3099	1H NMR (DMSO-d6): δ 8.59 (s, 1H), 7.81 (s, 1H), 7.44 (d, 2H), 7.30 (t, 2H), 7.17 (t, 1H), 3.76 (s, 2H), 3.21 (d, 2H), 2.61-2.57 (m, 1H), 2.32 (s, 3H), 2.29-2.17 (m, 3H), 2.03-1.97 (m, 2H), 1.91-1.88 (m, 5H), 1.84-1.67 (m, 6H), 1.51-1.48 (m, 2H).	487.3
SC_3106	cis-1-(Cyclopropyl-methyl)-8-methylamino-3 -(4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	SC_3105		SC_3099	1H NMR (DMSO-d6): δ 7.90-7.88 (d, 2H), 7.82-7.80 (d, 2H), 7.50-7.48 (d, 2H), 7.35-7.32 (m, 2H), 7.22-7.19 (m, 1H), 3.80 (s, 2H), 3.14-3.10 (m, 5H), 2.29-2.23 (m, 3H), 1.91-1.79 (m, 7H), 1.42-1.39 (m, 2H), 1.05-1.04 (m, 1H), 0.50-0.47 (m, 2H), 0.34-0.32 (m, 2H).	468.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3107	cis-1-(Cyclopropyl-methyl)-8-dimethylamino-3 -(2-fluoro-4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5] decan-2-one	INT-983	1 -bromo-2-fluoro-4-(methylsulfonyl)benzene (step 1), (Bromomethyl)cycloprop ane (step 2)	SC3103 (step 1), SC_3105(step 2)	1H NMR (DMSO-d6): δ 7.85 (t, 1H), 7.79-7.76 (m, 1H), 7.72-7.69 (m, 1H), 7.37-7.33 (m, 4H), 7.27-7.24 (m, 1H), 3.81 (s, 2H), 3.24 (s, 3H), 3.07 (d, 2H), 2.71-2.68 (m, 2H), 2.28-2.22 (m, 2H), 1.99 (s, 6H), 1.53-1.42 (m, 4H), 1.00-0.99 (m, 1H), 0.53-0.49 (m, 2H), 0.34-0.30 (m, 2H).	500.2
SC_3108	cis-2-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -benzamide; formic acid	SC_3071		SC_3016	1H NMR (600 MHz, DMSO) δ 7.59 - 7.55 (s, 1H), 7.47 - 7.39 (m, 2H), 7.39 - 7.31 (m, 5H), 7.30 - 7.21 (m, 3H), 3.77 - 3.73 (s, 2H), 3.21 - 3.17 (s, 1H), 2.72 - 2.66 (d, 2H), 2.17 - 2.09 (m, 5H), 2.02 - 1.99 (s, 6H), 1.95 - 1.86 (m, 2H), 1.71 - 1.60 (m, 3H), 1.49 - 1.37 (m, 3H)	477.3
SC_3109	cis-2-[8-Dimethylamino-1-[2-(1-methoxy-cyclobutyl)-ethyl]-2-oxo-8-phenyl-1,3 -diazaspiro [4.5] decan-3 -yl] -benzamide	INT988	2-bromobenzonitrile	SC_3097 (step 1), SC_3109 (step 2)	1H NMR (600 MHz, DMSO) δ 7.52 - 7.48 (s, 1H), 7.47 - 7.31 (m, 7H), 7.29 - 7.23 (m, 1H), 7.25 - 7.22 (s, 1H), 7.24 - 7.18 (m, 1H), 3.68 - 3.65 (s, 3H), 3.13 - 3.10 (s, 2H), 3.09 - 3.02 (m, 2H), 2.71 - 2.65 (m, 2H), 2.21 - 2.12 (m, 2H), 2.09 - 1.99 (m, 2H), 2.02 - 1.98 (s, 6H), 1.97 - 1.86 (m, 4H), 1.77 - 1.67 (m, 1H), 1.64 - 1.52 (m, 3H), 1.44 - 1.36 (td, 2H).	505.3
SC_3110	cis-8-Dimethylamino-1-[2-(1-methoxy-cyclobutyl)-ethyl]-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5] decan-2-one	INT-988	5-bromo2-methylpyrimidine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.94 - 8.90 (s, 2H), 7.41 - 7.34 (d, 4H), 7.32 - 7.24 (ddd, 1H), 3.76 - 3.72 (s, 2H), 3.15 - 3.08 (m, 5H), 2.72 - 2.65 (m, 2H), 2.57 - 2.52 (s, 3H), 2.25 - 2.16 (m, 2H), 2.11 - 2.02 (m, 2H), 2.03 - 1.99 (s, 6H), 1.99 - 1.86 (m, 4H), 1.78 - 1.68 (tq, 1H), 1.65 - 1.51 (m, 3H), 1.50 - 1.44 (d, 2H).	478.3

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3111	cis-5-[1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-3 -yl] - pyrimidine-2-carbonitrile	INT-799	5-bromo-2-cyanopyrimidine	SC_3103 (step 1), SC_3099(step 2)	1H NMR (600 MHz, DMSO) δ 9.24 - 9.20 (s, 2H), 7.53 - 7.48 (m, 2H), 7.37 - 7.31 (t, 2H), 7.25 - 7.19 (t, 1H), 3.93 - 3.89 (s, 2H), 3.42 - 3.36 (m, 2H), 2.35 - 2.26 (td, 2H), 2.18 - 2.10 (tt, 2H), 2.09 - 2.04 (s, 1H), 1.97 - 1.88 (m, 2H), 1.93 - 1.90 (s, 6H), 1.86 - 1.77 (td, 2H), 1.72 - 1.62 (s, 1H), 1.59 - 1.54 (d, 1H), 1.48 - 1.43 (d, 2H).	447.3
SC_3113	cis-4-[1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-3 -yl] -3 - methoxy-benzonitrile	INT-976	1-bromo-4-cyano-2-methoxy-benzene (step 1)	SC_3112	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 7.54 (s, 1H), 7.50 (d, 1H, J = 8.16 Hz), 7.46-7.39 (m, 3H), 7.30 (t, 2H, J = 7.48 Hz), 7.18 (t, 1H, J = 7.16 Hz), 5.59 (s, 1H), 3.85 (s, 3H), 3.73 (s, 2H), 3.30 (s, 2H, merged with DMSO-water), 2.32-2.08 (m, 4H), 1.91-1.87 (m, 7H), 1.68-1.47 (m, 6H).	475.3
SC_3114	cis-4-[8-Ethylamino-1-[(1-hydroxy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-3-methoxy-benzonitrile	INT-1008	4-Bromo-3-methoxy-benzonitrile (step 1)	SC_3112 (step 1, step 2)	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 7.54 (s, 1H), 7.51-7.45 (m, 3H), 7.40 (d, 1H, J = 8.24 Hz), 7.29 (t, 2H, J = 7.58 Hz), 7.17 (t, 1H, J = 7.12 (Hz), 5.60 (s, 1H), 3.85 (s, 3H), 3.73 (s, 2H), 3.21 (s, 2H, merged with DMSO-H2O), 2.32-2.27 (m, 2H), 2.08 (bs, 5H), 1.96-1.87 (m, 4H), 1.68-1.46 (m, 6H), 0.97 (t, 3H, J = 4.0 Hz).	489.1
SC_3115	cis-2-[8-Ethylamino-1-[(1-hydroxy-cyclobutyl)-methyl] -2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -benzonitrile	INT-1008	2-bromo-benzonitrile (step 1)	SC_3112 (step 1, step 2)	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 7.82 (d, 1H, J = 7.56 Hz), 7.71 (t, 1H, J = 6.98 Hz), 7.53-7.47 (m, 3H), 7.37-7.27 (m, 3H), 7.19-7.17 (m, 1H), 5.55 (s, 1H), 3.87 (s, 2H), 3.38 (s, 2H), 2.36-2.32 (m, 2H), 2.10 (bs, 4H), 1.94-1.86 (m. 4H), 1.75-1.48 (6H), 0.98 (bs, 3H).	458.9

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3116	cis-5-[1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-2-oxo-8-phenyl-1,3 -diazaspiro [4.5]decan-3 -yl] -4-methoxy-pyrimidine-2-carbonitrile	INT-799	5-bromo-4-methoxy-pyrimidine-2-carbonitrile (step 1)	SC_3103(step 1), SC_3099(step 2)	1HNMR (DMSO-d6, 400 MHz, at 100 0C), δ (ppm) = 8.79 (s, 1H), 7.46 (d, 2H, J = 7.84 Hz), 7.32 (t, 2H, J = 7.12 Hz), 7.19 (t, 1H, J = 7.28 Hz), 5.09 (bs, 1H), 4.05 (s, 3H), 3.85 (s, 2H), 3.38 (s, 2H), 2.31-2.15 (m, 4H), 1.98 (m, 7H), 1.74-1.51 (m, 6H).	477.2
SC_3117	cis-2-[8-Dimethylamino-1-(oxetan-3-yl-methyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl] -benzamide	SC_3274	toluene-4-sulfonic acid oxetan-3-ylmethyl ester (step 1)	SC_3105(step 1), SC_3016(step 2)	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 7.52 (s,1H), 7.43-7.33 (m, 6H), 7.30-7.17 (m, 4H), 4.63 (t, 2H, J = 6.9 Hz), 4.39 (t, 2H, J = 6.08 Hz), 3.64 (s, 2H), 3.38 (d, 2H, J = 7.32 Hz), 3.21-3.15 (m, 1H), 2.70-2.66 (m, 2H), 2.08-1.98 (m, 8H), 1.54-1.35 (m, 4H).	463.4
SC_3118	cis-4-Methoxy-5-(8-methylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-3 -yl)-pyrimidine-2-carbonitrile	INT-976	5-bromo-4-methoxy-pyrimidine-2-carbonitrile (step 1)	SC_3103 (step 1), SC_3099(step 2)	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 8.80 (s, 1H), 7.86 (bs, 1H), 7.43 (d, 2H, J = 7.84 Hz), 7.32 (t, 2H, J = 7.32 Hz), 7.21-7.18 (m, 1H), 4.02 (s, 3H), 3.83 (s, 2H), 2.07-2.00 (m, 3H), 1.90-1.74 (m, 7H), 1.48 (d, 2H, J = 13.8 Hz).	393.0
SC_3119	cis-2-(8-Methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzamide	INT-976	2-bromo-benzonitrile (step 1)	SC_3103(step 1), SC_3099(step 2), SC_3016(step 3)	1HNMR (DMSO-d6, 400 MHz) δ 7.51 (bs, 1H), 7.43-7.37 (m, 4H), 7.33-2.29 (m, 3H, J = 8.28 Hz), 7.22-7.16 (m, 3H), 6.93 (bs, 1H), 3.64 (s, 2H), 2.03-1.97 (m, 2H), 1.86 (bs, 5H), 1.73-1.58 (m, 4H).	379.4
SC_3121	cis-3-(2-Cyclopropyl-pyrimidin-5-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	5-bromo-2-cyclopropyl-pyrimidine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.80 (s, 2H), 7.67 (s, 1H), 7.41 - 7.32 (m, 4H), 7.31 - 7.22 (ddt, 1H), 3.60 (s, 2H), 2.42 - 2.36 (m, 2H), 2.18 - 2.08 (m, 1H), 1.98 - 1.85 (m, 4H), 1.96 (s, 6H), 1.47 (s, 2H), 0.98 - 0.91 (m, 2H), 0.93 - 0.86 (m, 2H).	392.3
SC_3122	cis-8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3 -yl] -8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	INT-976	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.57 (s, 1H), 7.79 (s, 1H), 7.52 (s, 1H), 7.40 - 7.32 (m, 4H), 7.30 - 7.22 (tt, 1H), 3.61 (s, 2H), 2.39 - 2.30 (m, 5H), 1.96 (s, 6H), 2.00 - 1.91 (m, 2H), 1.84 (s, 2H), 1.57 - 1.53 (s, 2H).	433.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3123	cis-8-Dimethylamino-3 -(2-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-976	1-bromo-2-methylsulfonyl-benzene	SC_3103	1H NMR (600 MHz, DMSO) δ 7.98 - 7.92 (dd, 1H), 7.81 - 7.74 (td, 1H), 7.61 - 7.54 (td, 1H), 7.52 - 7.46 (m, 2H), 7.41 - 7.31 (m, 2H), 7.35 (s, 2H), 7.29 - 7.22 (tt, 1H), 3.49 (s, 2H), 3.25 (s, 3H), 2.37 (s, 2H), 1.99 - 1.96 (m, 1H), 1.98 - 1.94 (s, 6H), 1.95 - 1.91 (d, 1H), 1.83 - 1.79 (m, 2H), 1.58 - 1.55 (s, 2H).	428.2
SC_3124	cis-8-Dimethylamino-8-phenyl-3-(2-piperazin-1-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-989	Piperazine-2-one	SC_3120	1H NMR (600 MHz, DMSO) δ 8.52 (s, 2H), 7.41 - 7.31 (m, 5H), 3.59 - 3.54 (m, 4H), 3.52 (s, 2H), 2.76 - 2.70 (m, 4H), 2.55 (s, 3H), 2.49 - 2.33 (m, 2H), 1.96 (s, 6H),1.93 - 1.83 (m, 4H), 1.51- 1.43 (s, 2H).	436.3
SC_3125	trans-2-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzamide	SC_3127		SC_3016	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 7.56-7.20 (m, 12H), 3.60 (s, 2H), 2.08-1.92 (m, 6H), 1.69 (bs, 2H), 1.56 (bs, 2H), 0.93 (t, 3H).	393.1
SC_3126	cis--2-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzamide	SC_3128		SC_3016	^{1}HNMR (DMSO-d_6, 400 MHz), δ (ppm) = 7.51-2.38 (m, 5H), 7.32 -7.30 (m, 3H), 7.22-7.18 (m, 3H), 6.93 (s, 1H), 3.63 (s, 2H), 2.07-1.98 (m, 4H), 1.86-1.72 (m, 4H), 1.60-1.57 (m, 2H), 0.93 (t, 3H).	393.4
SC_3127	cis-2-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzonitrile	INT-1009	2-bromo-benzonitrile	SC_3103	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 7.77 (d, 1H, J= 6.8 Hz), 7.69-7.65 (m, 1H), 7.51 (d, 1H, J= 8.4 Hz), 7.44 (d, 2H, J = 7.6 Hz), 7.39 (s, 1H), 7.34-7.28 (m, 3H), 7.17 (t, 1H, 7.2 Hz), 3.77 (s, 2H), 2.10-2.04 (m, 4H), 1.91-1.88 (m, 2H), 1.80-1.74 (m, 3H), 1.61-1.58 (m, 2H), 0.94 (t, 3H, J = 6.8 Hz).	375.1

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3128	cis-2-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5]decan-3 -yl)-benzonitrile	INT-1008	2-bromo-benzonitrile	SC_3103	^{1}HNMR (DMSO-d_6, 400 MHz), δ (ppm) = 7.89 (bs, 1H), 7.79 (d,1H, J = 7.6), 7.69 (t, 1H, J = 7.6 Hz), 7.54-7.50 (m, 3H), 7.36-7.30 (m, 3H), 7.18 (t, 1H, J = 7.2 Hz), 3.73 (s, 2H), 2.08-1.92 (m, 7H), 1.71 (bs, 2H), 1.59 (bs, 2H,), 0.93 (t, 3H, J = 6.4 Hz).	375.1
SC_3131	cis-3-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-benzamide	SC_3129		SC_3016	1H NMR (600 MHz, DMSO) δ 9.11 (s, 2H), 8.79 (t, 1H), 8.43 (dt, 1H), 8.09 (s, 1H), 7.94 (dt, 1H), 7.84 (s, 1H), 7.56 (t, 1H), 7.41 - 7.35 (m, 4H), 7.28 (ddd, 1H), 3.72 (s, 2H), 2.00 - 1.84 (m, 2H), 1.98 (s, 6H), 1.53 (s, 2H).	471.3
SC_3134	trans-4-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3-methoxy-benzonitrile	INT-1009	4-Bromo-3-methoxy-benzonitrile	SC_3103	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 7.71 (bs, 1H), 7.56-7.49 (m, 4H), 7.37 (d, 1H, J = 6.6 Hz), 7.31 (t, 2H, J = 7.10 Hz), 7.19-7.17 (m, 1H), 3.87 (s, 3H), 3.62 (s, 2H), 2.06-1.90 (m, 7H), 1.69-1.53 (m, 4H), 0.92 (t, 3H, J = 6.70 Hz).	405.3
SC_3135	cis-4-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3-methoxy-benzonitrile	INT-1008	4-Bromo-3-methoxy-benzonitrile	SC_3103	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 7.52-7.50 (m, 2H), 7.44-7.43 (m, 2H), 736 (d, 1H, J = 8.04 Hz), 7.30-7.19 (m, 4H), 3.83 (s, 3H), 3.63 (s, 2H), 2.05-1.72 (m, 8H), 1.53-1.50 (m, 2H), 0.92 (t, 3H).	405.2
SC_3136	cis-3-[2-(4-Acetyl-piperazin-1-yl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	SC_3124	acetyl chloride	SC_3130		478.3
SC_3137	cis-8-Dimethylamino-8-phenyl-3-(2-pyridin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-989	pyridine-4-boronic acid	SC_3129	1H NMR (600 MHz, DMSO) δ 9.16 (s, 2H), 8.70 (d, 1H), 8.18 (s, 1H), 7.91 (s, 1H), 7.42 - 7.35 (m, 4H), 7.28 (tt, 1H), 3.73 (s, 2H), 2.49 - 2.37 (m, 2H), 1.98 (s, 6H), 2.01 - 1.87 (m, 2H), 1.58 - 1.47 (m, 2H).	429.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3138	cis-8-Dimethylamino-8-phenyl-3-(2-pyridin-3-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-989	pyridine-3-boronic acid	SC_3129	1H NMR (600 MHz, DMSO) δ 9.43 (dd, 1H), 9.13 (s, 2H), 8.65 (dd, 1H), 8.58 (dt,1H), 7.52 (ddd, 1H), 7.42 - 7.36 (m, 4H), 7.28 (ddd, 1H), 3.72 (s, 2H), 1.98 (s, 6H), 2.02 - 1.89 (m, 4H), 1.57 - 1.46 (m, 4H).	429.2
SC_3139	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-N-(2-hydroxy-ethyl)-pyrimidine-2-carboxylic acid amide	INT-991	2-aminoethanol	SC_3133	1H NMR (600 MHz, DMSO) δ 9.08 (s, 2H), 8.59 (t, 1H), 7.94 (s, 1H), 7.43 - 7.30 (m, 5H), 7.30 - 7.21 (m, 1H), 3.72 (s, 2H), 3.51 (q, 2H), 2.49 - 2.37 (m, 2H), 2.00 - 1.90 (m, 10H), 1.89 - 1.74 (m, 2H), 1.57 - 1.48 (m, 2H), 1.38 - 1.32 (m, 1H).	439.3
SC_3141	cis-8-Dimethylamino-3-[2-morpholin-4-yl-4-(trifluoromethyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	4-[5-bromo-4-(trifluoromethyl) pyrimidi n-2-yl]morpholine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.59 (d, 1H), 7.39 - 7.35 (m, 5H), 7.27 (d, 1H), 3.73 (t, 4H), 3.67 (q, 4H), 3.28 - 3.22 (m, 1H), 2.41 - 2.28 (m, 2H), 1.98 (s, 6H), 1.94 - 1.80 (m, 3H), 1.53 - 1.42 (m, 2H).	505.3
SC_3142	cis-4-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl] -benzonitrile	INT-989	4-cyanophenylboronic acid	SC_3129	1H NMR (600 MHz, DMSO) δ 9.15 (s, 2H), 8.49 - 8.43 (m, 2H), 7.99 - 7.92 (m, 2H), 7.89 (s, 1H), 7.38 (m, 4H), 7.28 (td, 1H), 3.73 (s, 2H), 2.48 - 2.35 (m, 1H), 2.03 - 1.90 (m, 10H), 1.55 - 1.48 (m,2H).	453.2
SC_3143	cis-5-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl)-4-methoxy-pyrimidine-2-carbonitrile	INT-1008	5-Bromo-4-methoxy-pyrimidine-2-carbonitrile	SC_3103	(DMSO-d6, 400 MHz), δ (ppm) = 8.79 (s, 1H), 7.60 (s, 1H), 7.41 (d, 2H, J = 7.72 Hz), 7.28 (t, 2H, J = 7.54 Hz), 7.16 (t, 1H, J = 7.32 Hz), 3.97 (s, 3H), 3.72 (s, 2H), 2.02 (bs, 4H), 1.90-1.69 (m, 5H), 1.51-1.48 (m, 2H), 0.89 (t, 3H, J = 6.56 Hz).	407.2
SC_3144	trans-5-(8-Ethylamino-2-oxo-8-phenyl-1,3 -diazaspiro [4.5]decan-3 -yl)-4-methoxy-pyrimidine-2-carbonitrile	INT-1009	5-Bromo-4-methoxy-pyrimidine-2-carbonitrile	SC_3103	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 8.87 (s, 1H), 8.10 (bs, 1H), 7.50 (d, 2H, J = 7.52 Hz), 7.31 (t, 2H, J = 7.20 Hz), 7.18 (t, 1H, J = 6.88 Hz), 4.04 (s, 3H), 3.74 (s, 2H), 2.07-1.95 (m, 6H), 1.70-1.54 (m, 4H), 0.93 (t, 3H, J = 6.62 Hz).	407.3

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3145	cis-8-Dimethylamino-3-[2-(morpholine-4-carbonyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-991	morpholine	SC_3133	1H NMR (600 MHz, DMSO) δ 9.04 (s, 2H), 7.88 (s, 1H), 7.42 - 7.30 (m, 5H), 7.30 - 7.22 (m, 1H), 3.75 - 3.58 (m, 6H), 3.51 (t, 2H), 3.20 (t, 2H), 2.50 - 2.33 (m, 2H), 1.99 - 1.90 (m, 8H), 1.89 - 1.74 (m, 2H), 1.54 - 1.44 (m, 2H).	478.3
SC_3147	cis-8-Dimethylamino-3-[2-(methylsulfonyl-methyl)-phenyl]-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	INT-976	1-bromo-2-(methylsulfonyl-methyl)b enzene	SC_3103	1H NMR (600 MHz, DMSO) δ 7.47 (d, 1H), 7.42 - 7.31 (m, 6H), 7.30 - 7.22 (m, 3H), 4.50 (s, 2H), 3.56 (s, 2H), 2.88 (s, 3H), 2.42 - 2.28 (m, 2H), 2.07 (s, 2H), 1.98 - 1.90 (m, 8H), 1.89 - 1.69 (m, 2H), 1.61 - 1.48 (d, 2H).	442.2
SC_3148	cis-8-Dimethylamino-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-992	morpholine	SC_3120	1H NMR (600 MHz, DMSO) δ 8.14 (s, 1H), 7.40 - 7.32 (m, 4H), 7.26 (td, 1H), 7.21 (s, 1H), 3.69 - 3.60 (m, 8H), 3.38 (s, 2H), 2.41 - 2.27 (m, 2H), 2.20 (s, 3H), 1.97 (s, 6H), 1.95 - 1.76 (m, 4H), 1.54 - 1.45 (s, 2H).	451.3
SC_3149	cis-8-Dimethylamino-3-[2-(1,1-dioxo-[1,4]thiazinan-4-yl)-pyrimidin-5-yl] -8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	INT-989	thiomorpholine-1,1-dioxide hydrochloride	SC_3120	1H NMR (600 MHz, DMSO) δ 8.63 (s, 2H), 7.50 (br s, 1H), 7.41 - 7.33 (m, 4H), 7.27 (td, 1H), 4.17 - 4.12 (m, 4H), 3.55 (s, 2H), 3.12 - 3.06 (m, 4H), 2.47 - 2.27 (m, 2H), 2.04 - 1.74 (m, 10H), 1.51 - 1.42 (m, 2H).	485.2
SC_3150	cis-8-Dimethylamino-3-(4-fluoro-pyridin-3 -yl)-8-phenyl-1,3-diazaspiro[4.5] decan-2-one	INT-976	3-bromo-4-fluoro-pyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.70 (d, 1H), 8.36 (dd, 1H), 7.54 (s, 1H), 7.36 (td, 5H), 7.26 (s, 1H), 3.61 (s, 2H), 2.44 - 2.28 (m, 2H), 2.01 - 1.74 (m, 10H), 1.92 (d, 2H), 1.56 - 1.45 (m, 2H).	369.2
SC_3151	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-N-(2-hydro xy-ethyl)-N-methyl-pyrimidine-2-carboxylic acid amide	INT-991	2-(methylamino)ethanol	SC_3133	1H NMR (600 MHz, DMSO) δ 9.03 (d, 2H), 7.86 (s, 1H), 7.40 - 7.23 (m, 5H), 3.69 (s, 2H), 3.61 (q, 1H), 3.50 (t, 1H), 3.45 (d, 1H), 3.17 (t, 1H), 3.01 and 2.83 (both s, together 3H, amide rotamers), 2.49 - 2.36 (m, 2H), 2.00 - 1.89 (m, 8H), 1.89 - 1.73 (m, 2H), 1.55 - 1.47 (m, 2H).	453.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3152	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-2-morpholin-4-yl-isonicotinonitrile	INT-976	5-bromo-2-morpholino-pyridine-4-carbonitrile	SC_3103	1H NMR (600 MHz, DMSO) δ 8.24 (s, 1H), 7.67 - 7.30 (m, 5H), 7.29 (s, 1H), 3.70 - 3.65 (m, 4H), 3.51 - 3.44 (m, 4H), 2.37 - 2.22 (m, 2H), 2.10 - 1.87 (m, 10H), 1.53 - 1.31 (m, 2H).	461.3
SC_3153	cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzamide	SC_3272		SC_3016	1H NMR (600 MHz, DMSO) δ 7.79 (d, 2H), 7.62 (d, 2H), 7.41 - 7.34 (m, 4H), 7.27 (td, 1H), 7.13 - 7.09 (m, 1H), 3.62 (s, 2H), 2.46 - 2.35 (m, 2H), 1.97 (s, 6H), 1.93 - 1.76 (m, 4H), 1.51 - 1.45 (m, 2H).	393.2
SC_3154	cis-8-Dimethylamino-3-(2-fluoro-4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	1-bromo-2-fluoro-4-methyl-sulfonyl-benzene	SC_3103	1H NMR (600 MHz, DMSO) δ 7.89 - 7.83 (m, 1H), 7.76 (dd, 1H), 7.70 (dd, 1H), 7.40 - 7.32 (m, 5H), 7.29 - 7.23 (m, 1H), 3.69 (s, 2H), 3.23 (s, 3H), 2.43 - 2.30 (m, 2H), 1.96 (s, 6H), 1.94 - 1.88 (m, 2H), 1.53 - 1.47 (m, 2H).	446.2
SC_3155	cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3-fluoro-benzonitrile	INT-976	4-bromo-3-fluoro-benzonitrile	SC_3103	1H NMR (600 MHz, DMSO) δ 7.85 - 7.79 (m, 2H), 7.73 (s, 1H), 7.62 (dd, 1H), 7.40 - 7.31 (m, 4H), 7.26 (tt, 1H), 3.69 (s, 2H), 2.40 - 2.31 (m, 2H), 1.95 (s, 6H), 1.94 - 1.87 (m, 2H), 1.87 - 1.75 (m, 2H), 1.52 - 1.46 (m, 2H).	393.2
SC_3156	cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-3 -yl)-3,5 - difluoro-benzonitrile	INT-976	4-bromo-3,5-difluoro-benzo-nitrile	SC_3103	1H NMR (600 MHz, DMSO) δ 7.85 (d, 2H), 7.61 (s, 1H), 7.39 - 7.31 (m, 4H), 7.25 (tt, 1H), 3.53 (s, 2H), 2.42 - 2.33 (m, 2H), 1.98 - 1.89 (m, 8H), 1.82 - 1.78 (m, 2H), 1.54 - 1.47 (m, 2H).	411.2
SC_3157	cis-8-Dimethylamino-3-(2-methoxy-pyrimidin-5-yl)-8-phenyl-1,3-diazas-piro[4.5]decan-2-one	INT-989	methanol instead of n-butanol as a solvent	SC_3120	1H NMR (600 MHz, DMSO) δ 8.76 (s, 2H), 7.41 - 7.33 (m, 5H), 7.27 (ddt, 1H), 3.86 (s, 3H), 3.60 (s, 2H), 2.47 - 2.30 (m, 2H), 2.01 - 1.74 (m, 10H), 1.52 - 1.45 (m, 2H).	382.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3158	cis-3-[2-(Benzylamino)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-989	benzylamine	SC_3120	1H NMR (600 MHz, DMSO) δ 8.43 (s, 2H), 7.50 - 7.45 (m, 1H), 7.46 - 7.33 (m, 5H), 7.31 - 7.23 (m, 4H), 7.19 (tq, 1H), 4.46 (d, 2H), 4.02 (s, 1H), 3.50 (s, 2H), 2.41 - 2.31 (m, 2H), 1.97 (s, 6H), 1.88 (s, 2H), 1.49 - 1.41 (m, 2H).	457.3
SC_3159	cis-8-Dimethylamino-3-[2-(4-fluoro-phenyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-989	(4-fluorophenyl)boronic acid	SC_3129	1H NMR (600 MHz, DMSO) δ 9.07 (s, 2H), 8.37 - 8.30 (m, 2H), 7.83 (s, 1H), 7.44 - 7.35 (m, 4H), 7.34 - 7.25 (m, 3H), 3.69 (s, 2H), 2.47 - 2.30 (m, 2H), 2.08 - 1.80 (m, 10H), 1.55 - 1.46 (m, 2H).	446.2
SC_3160	trans-8-Benzyl-8-dimethylamino-3 -(2-morpholin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-995	4-(5-bromopyrimidin-2-yl) morpholine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.57 (s, 2H), 7.60 (s, 1H), 7.27 (t, 2H), 7.22 - 7.15 (m, 3H), 3.68 - 3.62 (m, 4H), 3.64 - 3.57 (m, 4H), 3.49 (s, 2H), 2.66 (s, 2H), 2.22 (s, 6H), 1.80 - 1.70 (m, 4H), 1.51 - 1.43 (m, 4H).	451.3
SC_3161	cis-8-Benzyl-8-dimethylamino-3-(2-morpholin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-994	4-(5-bromopyrimidin-2-yl) morpholine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.45 (s, 2H), 7.27 (t, 2H), 7.22 - 7.15 (m, 3H), 7.11 (s, 1H), 3.68 - 3.56 (m, 8H), 2.64 (s, 2H), 2.26 (s, 6H), 1.87 - 1.77 (m, 4H), 1.42 (d, 2H), 1.15 (dt, 2H).	451.3
SC_3163	cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3,5 - difluoro-benzamide	SC_3156		SC_3016	1H NMR (600 MHz, DMSO) δ 8.08 (s, 1H), 7.65 - 7.58 (m, 2H), 7.48 (br s, 1H), 7.39 - 7.31 (m, 4H), 7.28 - 7.22 (m, 1H), 3.49 (s, 2H), 2.40 - 2.32 (m, 2H), 1.96 (s, 6H), 1.95 - 1.90 (m, 2H), 1.87 - 1.77 (m, 2H), 1.54 - 1.49 (m, 2H).	429.2
SC_3164	cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3-fluoro-benzamide	SC_3155		SC_3016	1H NMR (600 MHz, DMSO) δ 7.95 (s, 1H), 7.72 - 7.64 (m, 2H), 7.61 (t, 1H), 7.54 - 7.50 (m, 1H), 7.40 - 7.32 (m, 5H), 7.26 (tt, 1H), 3.62 (s, 2H), 2.41 - 2.31 (m, 2H), 1.96 (s, 6H), 1.93 - 1.88 (m, 2H), 1.86 - 1.75 (m, 2H), 1.53 - 1.45 (m, 2H).	411.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3165	cis-8-Benzyl-8-dimethylamino-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-994	5-bromo-2-(trifluoromethyl) pyrimidi ne	SC_3103	1H NMR (600 MHz, DMSO) δ 9.07 (s, 2H), 7.77 (s, 1H), 7.29 (t, 2H), 7.24 - 7.17 (m, 3H), 3.55 (s, 2H), 2.66 (s, 2H), 2.26 (s, 6H), 1.86 (dt, 4H), 1.44 (d, 2H), 1.25 - 1.17 (m, 2H).	434.2
SC_3166	trans-8-Benzyl-8-dimethylamino-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-995	5-bromo-2-(trifluoromethyl) pyrimidi ne	SC_3103	1H NMR (600 MHz, DMSO) δ 9.16 (s, 2H), 8.28 (s, 1H), 7.27 (t, 2H), 7.22 - 7.16 (m, 3H), 3.67 (s, 2H), 2.66 (s, 2H), 2.24 (s, 6H), 1.84 - 1.72 (m, 4H), 1.49 (q, 4H).	434.2
SC_3167	cis-8-Dimethylamino-8-thiophen-2-yl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-997	5-bromo-2-(trifluoromethyl) pyrimidi ne	SC_3103	1H NMR (600 MHz, DMSO) δ 9.19 (d, 2H), 7.97 (s, 1H), 7.43 (t, 1H), 7.07 (dd, 1H), 6.97 (d, 1H), 3.78 (s, 2H), 2.40 - 2.27 (m, 2H), 2.04 (s, 6H), 1.96 (t, 2H), 1.90 - 1.79 (m, 2H), 1.60 - 1.52 (m, 2H).	426.1
SC_3168	trans-8-Dimethylamino-8-thiophen-2-yl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-998	5-bromo-2-(trifluoromethyl) pyrimidi ne	SC_3103	1H NMR (600 MHz, DMSO) δ 9.20 (s, 2H), 8.00 (s, 1H), 7.45 (dd, 1H), 7.09 (dd, 1H), 7.02 - 6.97 (m, 1H), 3.81 (s, 2H), 2.12 (d, 4H), 2.03 (s, 6H), 1.85 (t, 2H), 1.62 - 1.54 (m, 2H).	426.1
SC_3170	cis-8-Dimethylamino-8-phenyl-3-(2-piperidin-1-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-989	piperidine	SC_3120	1H NMR (DMSO-d6): δ 8.49 (s, 2H), 7.39-7.24 (m, 6H), 3.65-3.63 (m, 4H), 3.50 (s, 2H), 2.36-2.32 (m, 2H), 1.95-1.86 (m, 10H), 1.61-1.56 (m, 2H), 1.50-1.44 (m, 6H).	435.3
SC_3171	cis-8-Dimethylamino-8-phenyl-3-(2-pyrrolidin-1-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-989	pyrrolidine	SC_3120	1H NMR (CDCl3): δ 8.43 (s, 2H), 7.41-7.38 (m, 2H), 7.32-7.30 (m, 3H), 5.05 (br s, 1H), 3.53 (t, 4H), 3.45 (s, 2H), 2.30-2.06 (m, 10H), 1.99-1.96 (m, 6H), 1.62-1.58 (m, 2H).	421.3

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3172	cis-8-Dimethylamino-8-phenyl-3-(2-pyrimidin-5-yl-pyrimidin-5-yl)-1,3 - diazaspiro[4.5]decan-2-one	INT-989	pyrimidin-5 -ylboronic acid	SC_3129	1H NMR (600 MHz, DMF) δ 9.56 (s, 2H), 9.27 (s, 1H), 9.17 (s, 2H), 8.35 (s, 1H), 7.89 (d, 2H), 7.63 (dq, 3H), 3.73 (s, 2H), 3.04 (d, 2H), 2.81 (s, 6H), 2.57 (td, 2H), 2.06 (d, 2H), 1.58 (td, 2H).	430.2
SC_3174	trans-8-Benzyl-8-dimethylamino-3 -[4-methyl-6-(trifluoromethyl)-pyridin-3 -yl] - 1,3-diazaspiro[4.5]decan-2-one	INT-995	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.57 (s, 1H), 7.80 (s, 1H), 7.67 (s, 1H), 7.27 (t, 2H), 7.23 - 7.15 (m, 3H), 3.58 (d, 2H), 2.67 (s, 2H), 2.31 (s, 3H), 2.22 (d, 6H), 1.82 - 1.72 (m, 4H), 1.56 (dd, 2H), 1.48 (td, 2H).	447.2
SC_3175	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-2-morpholin-4-yl-pyridine-4-carboxylic acid amide	SC_3152		SC_3016		480.6
SC_3176	cis-8-Dimethylamino-3-[2-(3,5-dimethyl-isoxazol-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-989	(3,5-dimethylisoxazol-4-yl) boronic acid	SC_3129	1H NMR (600 MHz, DMSO) δ 9.05 (s, 2H), 7.80 (s, 1H), 7.43 - 7.34 (m, 4H), 7.28 (tt, 1H), 3.68 (s, 2H), 2.69 (s, 3H), 2.47 (s, 3H), 2.43 - 2.35 (m, 2H), 2.01 - 1.79 (m, 10H), 1.50 (s, 2H).	447.2
SC_3177	cis-3-[2-(Benzothiazol-6-yl)-pyrimidin-5-yl] -8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-989	1,3-benzothiazol-6-ylboronic acid	SC_3129	1H NMR (600 MHz, DMSO) δ 9.46 (s, 1H), 9.12 (s, 2H), 9.07 (s, 1H), 8.49 (d, 1H), 8.16 (d, 1H), 7.84 (s, 1H), 7.39 (d, 4H), 7.29 (d, 1H), 3.73 (s, 2H), 2.42 (d, 2H), 1.97 (d, 10H), 1.54 (d, 2H).	485.2
SC_3178	cis-8-Dimethylamino-3-[2-fluoro-4-(trifluoromethyl)-phenyl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	1-bromo-2-fluoro-4-(trifluoromethyl)benzene	SC_3103	1H NMR (600 MHz, DMSO) δ 7.80 (t, 1H), 7.65 (dd, 1H), 7.53 (dd, 1H), 7.40 - 7.32 (m, 4H), 7.29 - 7.23 (m, 1H), 3.66 (s, 2H), 2.36 (s, 2H), 1.97 - 1.88 (m, 8H), 1.85 - 1.75 (m, 2H), 1.53 - 1.46 (m, 2H).	436.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3179	cis-8-Dimethylamino-3-(6-morpholin-4-yl-pyridin-3 -yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	4-(5-bromo-2-pyridyl)morpholine	as SC_3097 step 2	1H NMR (600 MHz, DMSO) δ 8.20 (d, 1H), 7.89 (dd, 1H), 7.37 (p, 5H), 7.27 (d, 1H), 6.79 (d, 1H), 3.71 - 3.66 (m, 4H), 3.53 (s, 2H), 2.43 - 2.32 (m, 2H), 1.96 (s, 7H), 1.91 - 1.85 (m, 5H), 1.49 - 1.42 (m, 2H).	436.3
SC_3180	cis-8-Dimethylamino-8-phenyl-3-(2-phenyl-thiazol-4-yl)-1,3 - diazaspiro [4.5]decan-2-one	INT-976	4-bromo-2-phenylthiazole	SC_3103	1H NMR (DMSO-d6): δ 7.89-7.87 (m, 2H), 7.55 (br s, 1H), 7.43-7.35 (m, 8H), 7.29-7.26 (m, 1H), 3.82 (s, 2H), 2.45 (br m, 2H), 1.96-1.79 (m, 10H), 1.53-1.50 (m, 2H).	433.2
SC_3181	cis-8-Dimethylamino-8-phenyl-3-[2-(tetrahydro-pyran-4-ylamino)-pyrimidin-5-yl]-1,3-diazaspiro[4.5] decan-2-one	INT-989	tetrahydro-2H-pyran-4-amine	SC_3103	1H NMR (DMSO-d6): δ 8.42 (s, 2H), 7.39-7.35 (m, 5H), 7.27-7.24 (m, 1H), 6.83 (d, 1H), 3.84-3.79 (m, 3H), 3.50 (s, 2H), 3.38-3.35 (m, 2H), 2.36-2.32 (m, 2H), 1.94-1.77 (m, 12H), 1.50-1.40 (m, 4H).	451.3
SC_3183	cis-8-Dimethylamino-8-phenyl-3-(4-phenyl-thiazol-2-yl)-1,3-diazaspiro [4.5]decan-2-one	INT-976	2-bromo-4-phenylthiazole	SC_3103	1H NMR (DMSO-d6): δ 8.09 (br s, 1H), 7.87 (d, 2H), 7.51 (s, 1H), 7.37-7.24 (m, 8H), 3.87 (s, 2H), 2.43 (m, 2H), 1.96-1.84 (m, 10H), 1.54 (m, 2H).	433.2
SC_3184	cis-8-Dimethylamino-8-phenyl-3-[2-(1H-pyrrolo [2,3 -b]pyridin-1-yl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5] decan-2-one	INT-976	1H-pyrrolo [2,3-b]pyridine	SC_3103	1H NMR (DMSO-d6): δ 9.07 (s, 2H), 8.35-8.33 (m, 1H), 8.10-8.04 (m, 2H), 7.83 (br s, 1H), 7.41-7.37 (m, 4H), 7.29-7.21 (m, 2H), 6.72-6.71 (d, 1H), 3.71 (s, 2H), 2.49 (m, 2H), 1.97 (m, 10H), 1.52 (m, 2H).	468.2
SC_3185	cis-8-Dimethylamino-8-phenyl-3-[2-(3,4,5-trifluoro-phenyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-989	(3,4,5-trifluorophenyl)boronic acid	SC_3129	1H NMR (600 MHz, DMSO) δ 9.11 (s, 2H), 8.12 - 8.03 (m, 2H), 7.89 (s, 1H), 7.42 - 7.34 (m, 4H), 7.28 (dq, 1H), 3.71 (s, 2H), 2.48 - 2.35 (m, 2H), 1.99 - 1.79 (m, 10H), 1.58 - 1.47 (m, 2H).	481.2
SC_3187	cis-8-Dimethylamino-3-m-tolyl-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	INT-976	1-bromo-3-methylbenzene	SC_3186		363.2
SC_3188	cis-8-Dimethylamino-8-phenyl-3-p-tolyl-1,3 -diazaspiro[4.5]decan-2-one	INT-976	1-bromo-4-methylbenzene	SC_3186		363.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3189	cis-8-Dimethylamino-8-phenyl-3-[4-(trifluoromethyl)-phenyl]-1,3-diazaspiro[4.5]decan-2-one	INT-976	1-bromo-4-trifluoromethyl-benzene	SC_3186		417.2
SC_3190	cis-8-Dimethylamino-8-phenyl-3-[3-(trifluoromethyloxy)-phenyl]-1,3-diazaspiro[4.5]decan-2-one	INT-976	1-bromo-3-(trifluoromethoxy) benze ne	SC_3186		433.2
SC_3191	cis-8-Dimethylamino-8-phenyl-3-[4-(trifluoromethyloxy)-phenyl]-1,3-diazaspiro[4.5]decan-2-one	INT-976	1-bromo-4-(trifluoromethoxy) benze ne	SC_3186		433.2
SC_3192	cis-2-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-3 -yl)-benzoic acid methyl ester	INT-976	methyl 2-bromobenzoate	SC_3186		407.2
SC_3193	cis-3-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-3 -yl)-benzoic acid methyl ester	INT-976	methyl 3-bromobenzoate	SC_3186		407.2
SC_3194	cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-3 -yl)-benzoic acid methyl ester	INT-976	methyl 4-bromobenzoate	SC_3186		407.2
SC_3195	cis-3 -(1,3 -Benzodioxol-5-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-976	5-bromobenzo[d] [1,3]diox ole	SC_3186		393.2
SC_3196	cis-8-Dimethylamino-8-phenyl-3 - quinolin-5-yl-1,3 -diazaspiro[4.5]decan-2-one	INT-976	5-bromoquinoline	SC_3186		400.2
SC_3197	cis-3-(2,3-Dihydro-1H-indol-6-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-976	6-bromoindoline	SC_3186		390.2
SC_3198	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-4-methylpyridine-2-carboxylic acid methyl ester	INT-976	methyl 5-bromo-4-methylpicolinate	SC_3186		422.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3199	cis-8-Dimethylamino-3-(6-methoxy-4-methyl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	5-bromo-2-methoxy-4-methylpyridine	SC_3186		394.2
SC_3200	cis-8-Dimethylamino-3-[2-methyl-5-(trifluoromethyl)-2H-pyrazol-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	5-bromo-1-methyl-3-(trifluoromethyl)-1H-pyrazole	SC_3186		421.2
SC_3201	cis-8-Dimethylamino-3-(3-methoxypyridin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	2-bromo-3-methoxypyridine	SC_3186		380.2
SC_3202	cis-8-Dimethylamino-8-phenyl-3-[5-(trifluoromethyl)-pyridin-2-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-976	2-bromo-5-trifluoromethylpyridine	SC_3186		418.2
SC_3203	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-nicotinonitrile	INT-976	3-bromo-5-cyanopyridine	SC_3186		375.2
SC_3204	cis-8-Dimethylamino-3 -(3 -methylpyridin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	2-bromo-3-methylpyridine	SC_3186		364.2
SC_3205	cis-8-Dimethylamino-3-(6-methoxypyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	5-bromo-2-methoxypyridine	SC_3186		380.2
SC_3206	cis-8-Dimethylamino-8-phenyl-3 -[3 -(trifluoromethyl)phenyl]-1,3-diazaspiro[4.5]decan-2-one	INT-976	1-bromo-3-trifluoromethylbenzene	SC_3186		417.2
SC_3207	cis-3 -(1,3 -Benzodioxol-4-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	4-bromobenzo[d] [1,3]diox ole	SC_3186		393.2
SC_3209	cis-8-Dimethylamino-3-[2-(3,5-dimethyl-1H-pyrazol-1-yl)-pyrimidin-5-yl] -8-phenyl-1,3 -diazaspiro [4.5]decan-2-one	INT-976	3,5-dimethyl-1H-pyrazole	SC_3103	1H NMR (DMSO-d6): δ 9.00 (s, 2H), 7.81 (br s, 1H), 7.38-7.27 (m, 5H), 6.07 (s, 1H), 3.69 (s, 2H), 2.45 (m, 5H), 2.17 (s, 3H), 1.96-1.91 (m, 10H), 1.51(brm ,2H).	446.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3210	cis-8-Dimethylamino-3-[2-(3-hydroxy-piperidin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-989	rac-piperidin-3-ol	SC_3182	1H NMR (DMSO-d6): 8.48 (s, 2H), 7.39-7.35 (m, 5H), 7.27-7.24 (m, 1H), 4.82 (d, 1H), 4.39-4.36 (m, 1H), 4.24-4.21 (m, 1H), 3.51 (s, 2H), 3.41-3.36 (m, 1H), 2.92-2.87 (m, 1H), 2.77-2.72 (m, 1H), 2.42-2.32 (m, 2H), 2.00-1.66 (m, 12H), 1.46-1.39 (m, 2H), 1.34 (t, 2H).	451.2
SC_3211	cis-8-Dimethylamino-3 -[2-(3 -hydroxy-piperidin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3 -diazaspiro [4.5]decan-2-one	INT-989	rac-piperidin-3-ol	SC_3182	1H NMR (DMSO-d6): 8.48 (s, 2H), 7.35 (m, 5H), 7.25 (m, 1H), 4.82 (d, 1H), 4.39-4.37 (m, 1H), 4.24-4.21 (m, 1H), 3.51 (s, 2H), 3.40-3.39 (m, 1H), 2.90-2.87 (m, 1H), 2.77-2.72 (m, 1H), 2.37 (m, 2H), 2.00-1.66 (m, 12H), 1.45 (m, 2H), 1.34 (t, 2H).	451.3
SC_3212	cis-8-Dimethylamino-3-[2-[4-(2-hydro-xy-ethyl)-piperazin-1-yl]-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]de-can-2-one	INT-989	2-piperazin-1-ylethanol	SC_3120	1H NMR (600 MHz, DMSO) δ 8.53 (s, 2H), 7.37 (p, 5H), 7.27 (d, 1H), 3.62 (t, 4H), 3.53 (q, 4H), 2.49 - 2.27 (m, 7H), 1.96 (s, 6H), 1.94 - 1.73 (m, 4H), 1.51 - 1.40 (m, 2H).	480.3
SC_3213	cis-2-[4-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro [4.5]decan-3 -yl)-pyrimidin-2-yl]-piperazin-1-yl]-ace-tic acid	SC_3146		INT-991	1H NMR (600 MHz, DMSO) δ 8.53 (s, 2H), 7.57 (s, 1H), 7.42 (d, 4H), 7.33 (d, 1H), 3.68 (t, 4H), 3.19 (s, 2H), 2.62 (t, 4H), 2.37 (d, 2H), 2.20 - 1.96 (m, 8H), 1.88 (t, 2H), 1.43 (t, 2H).	494.3
SC_3214	cis-8-Dimethylamino-3-[2-(1-methyl-1H-pyrrolo[2,3-b]pyridin-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-dia-zaspiro[4.5]decan-2-one	INT-989	1-methyl-4-(4,4,5,5-tetra-methyl-1,3,2-dioxaborolan-2-yl)-2,3-dihydropyrrolo [2,3-b] pyridine	SC_3208	1H NMR (600 MHz, DMSO + 2vol% TFA) δ 9.85 (s, 1H), 9.13 (s, 2H), 8.41 (d, 2H), 7.99 (s, 1H), 7.72 (s, 2H), 7.66 - 7.46 (m, 4H), 7.30 (s, 1H), 3.88 (s, 2H), 3.60 (s, 6H), 2.77 - 2.71 (m, 2H), 2.30 - 2.26 (m, 2H), 1.94 - 1.89 (m, 2H), 1.75 (s, 3H), 1.41 - 1.35 (m, 2H).	484.3
SC_3215	cis-8-Benzyl-8-dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-994	5-bromo-4-methyl-2-(trifluoro-methyl)pyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.52 (s, 1H), 7.76 (s, 1H), 7.23 (dd, 2H), 7.19 - 7.11 (m, 4H), 2.62 (s, 2H), 2.27 (s, 6H), 2.25 (s, 3H), 1.86 (td, 2H), 1.80 (dt, 2H), 1.57 - 1.49 (m, 2H), 1.09 (td, 2H).	447.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3216	trans-8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-one	INT-998	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.61 (s, 1H), 7.83 (s, 1H), 7.53 - 7.49 (m, 1H), 7.45 (dd, 1H), 7.09 (dd, 1H), 6.99 (dd, 1H), 3.70 (s, 2H), 2.35 (s, 3H), 2.19 - 2.05 (m, 4H), 2.02 (s, 6H), 1.93 - 1.85 (m, 2H), 1.64 (dt, 2H).	439.2
SC_3217	cis-8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-one	INT-997	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.58 (s, 1H), 7.80 (s, 1H), 7.45 (s, 1H), 7.42 (dd, 1H), 7.05 (dd, 1H), 6.95 (dd, 1H), 3.67 (s, 2H), 2.33 (s, 3H), 2.32 - 2.25 (m, 2H), 2.04 (s, 6H), 2.00 - 1.92 (m, 2H), 1.89 - 1.76 (m, 2H), 1.62 (dt, 2H).	439.2
SC_3218	cis-8-Dimethylamino-3-[2-(1,1-dioxo-[1,4]thiazinan-4-yl)-4-(trifluoromethyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	4-[5-bromo-4-(trifluoromethyl) pyrimidi n-2-yl]-1,4-thiazinane 1,1-dioxide (prepared as SC_3097 step 1)	SC_3103	1H NMR (600 MHz, DMSO) δ 8.65 (s, 1H), 7.42 (s, 1H), 7.41 - 7.31 (m, 5H), 7.25 (tt, 1H), 4.23 (t, 4H), 3.22 (t, 4H), 2.40 - 2.26 (m, 2H), 1.97 - 1.88 (m, 8H), 1.87 - 1.75 (m, 2H), 1.54 - 1.42 (m, 2H).	553.2
SC_3219	cis-8-Dimethylamino-8-(1-methyl-1H-benzoimidazol-2-yl)-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro [4.5]decan-2-one	INT-1000	5-bromo-2-(trifluoromethyl) pyrimidi ne	SC_3103	1H NMR (600 MHz, DMSO) δ 9.14 (s, 2H), 8.65 (s, 1H), 7.63 (d, 1H), 7.51 (d, 1H), 7.25 (ddd, 1H), 7.19 (ddd, 1H), 4.02 (s, 3H), 3.61 (s, 2H), 2.26 (d, 2H), 2.18 (s, 6H), 2.16 - 2.09 (m, 2H), 1.87 (s, 2H), 1.78 (d, 2H).	474.2
SC_3220	cis-8-Dimethylamino-8-(1-methyl-1H-benzoimidazol-2-yl)-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-1000	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.56 (s, 1H), 8.10 (s, 1H), 7.80 (s, 1H), 7.60 (d, 1H), 7.50 (d, 1H), 7.23 (ddd, 1H), 7.17 (td, 1H), 4.02 (s, 3H), 3.50 (s, 2H), 2.34 - 2.25 (m, 5H), 2.19 - 2.09 (m, 8H), 1.90 - 1.74 (m, 4H).	487.3
SC_3222	cis-3-[2-(Benzyl-methyl-amino)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	N-benzyl-5-bromo-N-methyl-pyrimidin-2-amine	SC_3103	1H NMR (DMSO-d6): δ 8.52 (s, 2H), 7.39-7.33 (m, 5H), 7.30-7.17 (m, 6H), 4.81 (s, 2H), 3.52 (s, 2H), 3.03 (s, 3H), 2.45-2.32 (m, 2H), 1.95-1.86 (m, 10H), 1.47-1.43 (m, 2H).	471.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3223	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-N-[2-[2-[2-(2-methoxy-ethoxy)-ethoxy]-ethoxy] - ethyl]-pyrimidine-2-carboxylic acid amide	INT-976	ethyl 5-bromopyrimidine-2-carboxylate (step 1), 2,5,8,11-tetraoxatridecan-13-amine (step 3)	SC_3103 (step 1), INT-991 (step 2), SC_3133 (step 3)	1H NMR (DMSO-d6): δ 9.04 (s, 2H), 8.24-8.23 (m, 1H), 7.42-7.39 (m, 2H), 7.32-7.31 (m, 3H), 5.70 (s, 1H), 3.70-3.60 (m, 16H), 3.54-3.52 (m, 2H), 3.35 (s, 3H), 2.21-2.00 (m, 12H), 1.66-1.64 (m, 2H).	585.3
SC_3225	cis-8-Dimethylamino-3-[2-[(2-hydroxy-ethyl)-methyl-amino] -pyrimidin-5-yl] -8-phenyl-1,3 -diazaspiro [4.5]decan-2-one	INT-989	2-(methylamino)ethanol	SC_3182	1H NMR (DMSO-d6): δ 8.46 (s, 2H), 7.39-7.33 (m, 5H), 7.27-7.24 (m, 1H), 4.62 (t, 1H), 3.61-3.50 (m, 6H), 3.08 (s, 3H), 2.36-2.33 (m, 2H), 1.95-1.86 (m, 10H), 1.47-1.45 (m, 2H).	425.2
SC_3226	cis-3-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzamide	INT-976	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3103 (step 1), SC_3016 (step 2)		487.3
SC_3227	cis-8-Dimethylamino-3-[3-fluoro-5-(trifluoromethyl)-pyridin-2-yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	2-bromo-3-fluoro-5-(trifluoromethyl)pyridine	SC_3186		417.1
SC_3228	cis-8-Dimethylamino-3-(5-methyl-pyrazin-2-yl)-8-phenyl-1,3-diazaspiro[4.5] decan-2-one	INT-976	2-bromo-5-methylpyrazine	SC_3186		459.1
SC_3229	cis-8-Dimethylamino-3-(5-fluoro-pyrimidin-4-yl)-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-976	4-bromo-5-fluoropyrimidine	SC_3186		433.2
SC_3230	cis-8-Dimethylamino-3-(5-fluoro-pyrimidin-2-yl)-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-976	2-bromo-5-fluoropyrimidine	SC_3186		458.1
SC_3231	cis-8-Dimethylamino-8-phenyl-3 - pyrazin-2-yl-1,3 -diazaspiro [4.5]decan-2-one	INT-976	2-bromopyrazine	SC_3186		471.1
SC_3232	cis-3-([2,1,3]Benzoxadiazol-5-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-976	5-bromobenzo[c][1,2,5]-oxadiazole	SC_3186		444.1

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3233	cis-2-[2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-phenoxy]-acetamide	SC_3169	ammonium chloride	SC_3133	1H NMR (600 MHz, DMSO) δ 7.73 (s, 1H), 7.40 - 7.32 (m, 4H), 7.31 (s, 1H), 7.26 (dd, 1H), 7.18 (td, 1H), 6.98 - 6.91 (m, 2H), 4.50 (s, 2H), 3.52 (s, 2H), 2.42 - 2.29 (m, 2H), 2.01 - 1.71 (m, 10H), 1.55 - 1.48 (m, 2H).	423.2
SC_3234	cis-8-Dimethylamino-8-phenyl-3-(5-pyridin-4-yl-thiophen-2-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-976	4-(5-bromothiophen-2-yl)pyridine	SC_3103	1H NMR (DMSO-d6): δ 8.45-8.43 (d, 2H), 7.87 (br s, 1H), 7.54-7.53 (d, 1H), 7.49-7.48 (m, 2H), 7.38-7.27 (m, 5H), 6.35-6.34 (d, 2H), 3.64 (s, 2H), 2.42 (m, 2H), 1.96-1.90 (m, 10H), 1.51-1.49 (m, 2H).	433.2
SC_3236	cis-8-Dimethylamino-3-(2-morpholin-4-yl-pyrimidin-4-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-1002	morpholine	SC_3120	1H NMR (600 MHz, DMSO) δ 8.07 (d, 1H), 7.93 (s, 1H), 7.37 (dt, 5H), 7.27 (t, 1H), 3.65 (s, 2H), 3.58 (s, 8H), 2.40 - 2.27 (m, 2H), 1.94 (s, 6H), 1.92 - 1.80 (m, 4H), 1.43 (d, 2H).	437.3
SC_3237	cis-3-[2-(3,4-Difluoro-phenyl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	INT-989	(3,4-difluorophenyl)boronic acid	SC_3129	1H NMR (600 MHz, DMSO) δ 9.08 (s, 2H), 8.22 - 8.12 (m, 2H), 7.54 (dt, 1H), 7.41 - 7.37 (m, 4H), 7.29 (s, 1H), 3.70 (s, 2H), 2.06 - 1.75 (m, 12H), 1.50 (d, 2H).	463.2
SC_3241	cis-2-[4-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-3 -yl)-pyrimidin-2-yl]-piperazin-1-yl]-acetamide	SC_3213	ammonium chloride	SC_3133	1H NMR (600 MHz, DMSO) δ 8.53 (s, 2H), 7.38 (d, 5H), 7.27 (s, 1H), 7.23 (s, 1H), 7.11 (s, 1H), 3.67 (t, 4H), 3.54 - 3.50 (m, 2H), 2.89 (s, 2H), 2.47 (t, 4H), 2.39 - 2.35 (m, 2H), 1.96 (s, 7H), 1.93 - 1.82 (m, 3H), 1.48 - 1.44 (m, 2H).	493.3
SC_3243	cis-8-Dimethylamino-3-[6-(4-methylpiperazin-1-yl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	1-(5-bromo-2-pyridyl)-4-methyl-piperazine	SC_3242 (step 2)	1H NMR (600 MHz, DMSO) δ 8.16 (d, 1H), 7.86 (dd, 1H), 7.41 - 7.33 (m, 4H), 7.32 (s, 1H), 7.27 (t, 1H), 6.78 (d, 1H), 3.51 (s, 2H), 2.55 - 2.45 (m, 4H), 2.42 - 2.27 (m, 6H), 2.21 (s, 3H), 1.96 (s, 6H), 1.93 - 1.73 (m, 4H), 1.46 (t, 2H).	449.3

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3244	cis-8-Dimethylamino-3-[2-(1,1-dioxo-[1,4]thiazinan-4-yl)-4-methyl-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-976	4-(5-bromo-4-methyl-pyrimidin-2-yl)-1,4-thiazinane 1,1-dioxide	SC_3103	1H NMR (600 MHz, DMSO) δ 8.20 (s, 1H), 7.36 (h, 4H), 7.30 - 7.17 (m, 2H), 4.23 - 4.17 (m, 4H), 3.13 (t, 4H), 2.44 - 2.28 (m, 2H), 2.24 (s, 3H), 1.97 (s, 6H), 1.91 (d, 4H), 1.55 - 1.44 (m, 2H).	499.3
SC_3245	cis-8-Dimethylamino-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro [4.5]decan-2-one	INT-976	5-bromo-2-(trifluoromethyl)-pyrimidine	SC_3103	1H NMR (600 MHz, DMSO) δ 9.17 (s, 2H), 8.03 (s, 1H), 7.38 (s, 4H), 7.28 (tt, 1H), 3.73 (s, 2H), 2.49 - 2.35 (m, 2H), 1.97 (s, 6H), 1.97 - 1.92 (m, 2H), 1.90 - 1.73 (m, 2H), 1.55 - 1.49 (m, 2H).	419.2
SC_3246	cis-2-[8-Dimethylamino-1-(3-methoxy-propyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5]decan-3-yl]-pyrimidine-5-carbonitrile	INT-979	2-chloropyrimidine-5-carbonitrile	SC_3103	1H NMR (600 MHz, DMSO) δ 9.02 (s, 2H), 7.40 - 7.31 (m, 5H), 3.86 (s, 2H), 3.26 (s, 3H), 3.29 - 3.19 (m, 2H), 2.73 - 2.67 (m, 2H), 2.16 (td, 2H), 2.00 (s, 7H), 1.83 (dt, 2H), 1.50 - 1.40 (m, 5H).	449.3
SC_3247	cis-8-Dimethylamino-3-[2-(4-methylpiperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-989	1-Methylpiperazin	SC_3120	1H NMR (600 MHz, DMSO) δ 8.54 (s, 2H), 7.48 - 7.33 (m, 5H), 7.31 - 7.21 (m, 1H), 3.63 (dd, 4H), 2.45 - 2.29 (m, 6H), 2.20 (s, 3H), 1.96 (s, 6H), 1.94 - 1.78 (m, 4H), 1.51-1.42 (m, 2H).	450.3
SC_3248	cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one	SC_3245	[1-[tert-butyl(dimethyl)silyl]-oxycyclobutyl]methyl 4-methylbenzenesulfonate	INT-988 (step 1)	1H NMR (600 MHz, DMSO) δ 9.24 (s, 2H), 7.38 (d, 4H), 7.27 (p, 1H), 3.89 (s, 2H), 2.73 - 2.67 (m, 2H), 2.26 (ddd, 2H), 2.19 (tt, 2H), 2.08 (s, 1H), 2.00 (s, 6H), 1.92 (qd, 2H), 1.73 - 1.64 (m, 1H), 1.60 - 1.50 (m, 3H), 1.50 - 1.45 (m, 2H).	504.3
SC_3249	cis-2-[1-(3-Methoxy-propyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5]decan-3-yl]-pyrimidine-5-carbonitrile	SC_3246		SC_3099	1H NMR (600 MHz, DMSO) δ 9.05 (s, 2H), 7.49 - 7.44 (m, 2H), 7.34 (t, 2H), 7.21 (t, 1H), 3.90 (s, 2H), 3.26 (s, 3H), 2.23 (td, 2H), 2.07 (s, 1H), 1.91 (d, 5H), 1.86 - 1.78 (m, 2H), 1.73 (tt, 2H), 1.42 (d, 2H).	435.3

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3250	cis-8-Dimethylamino-8-phenyl-3-[6-(trifluoromethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-976	5-bromo-2-(trifluoromethyl) pyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.88 (d, 1H), 8.24 (dd, 1H), 7.86 (s, 1H), 7.78 (d, 1H), 7.41 - 7.34 (m, 4H), 7.27 (t, 1H), 3.69 (s, 2H), 2.42 (s, 2H), 1.97 (s, 6H), 1.96 - 1.74 (m, 4H), 1.53 - 1.47 (m, 2H).	419.3
SC_3251	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro [4.5]decan-3 -yl)-pyridine-2-carbonitrile	INT-976	5-bromopyridine-2-carbonitrile	SC_3103	1H NMR (600 MHz, DMSO) δ 8.92 (d, 1H), 8.15 (dd, 1H), 7.95 (br s, 1H), 7.90 (d, 1H), 7.41 - 7.34 (m, 4H), 7.27 (t, 1H), 3.69 (s, 2H), 2.44 - 2.40 (m, 2H), 1.97 (s, 6H), 1.96 - 1.89 (m, 3H), 1.90 - 1.70 (m, 1H), 1.53 - 1.46 (m, 2H).	376.2
SC_3252	cis-8-Dimethylamino-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-989	morpholine	SC_3120	1H NMR (600 MHz, DMSO) δ 8.57 (s, 2H), 7.46 - 7.42 (m, 1H), 7.40 - 7.34 (m, 4H), 7.27 (td, 1H), 3.64 (dd, 4H), 3.59 (dd, 4H), 3.54 (s, 2H), 2.46 - 2.29 (m, 2H), 1.96 (s, 7H), 1.93 - 1.73 (m, 3H), 1.50 - 1.44 (m, 2H).	437.3
SC_3253	cis-8-Dimethylamino-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-976	5-bromo-2-methylpyrimidine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.86 (s, 2H), 7.69 (s, 1H), 7.41 - 7.33 (m, 5H), 7.31 - 7.19 (m, 1H), 3.62 (s, 2H), 2.53 (s, 3H), 2.48 - 2.31 (m, 2H), 1.97 (s, 6H), 1.95 - 1.77 (m, 4H), 1.52 - 1.46 (m, 2H).	366.3
SC_3254	cis-8-Dimethylamino-1-[(2-methoxy-phenyl)-methyl] -3 -(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5] decan-2-one	SC_3253	2-methoxybenzyl bromide	SC_3105	1H NMR (DMSO-d6): δ 8.90 (s, 2H), 7.39-7.34 (m, 3H), 7.28-7.22 (m, 4H), 6.95-6.87 (m, 2H), 4.58 (s, 2H), 3.89 (s, 3H), 3.63 (s, 2H), 2.68-2.64 (m, 5H), 2.35-2.28 (m, 2H), 2.01(s, 6H), 1.49-1.43 (m, 4H).	486.2
SC_3255	cis-1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one	SC_3248		SC_3099	1H NMR (600 MHz, DMSO) δ 9.26 (s, 2H), 7.51 (d, 2H), 7.34 (t, 2H), 7.22 (t, 1H), 3.92 (s, 2H), 3.41 (s, 1H), 2.31 (td, 2H), 2.15 (td, 2H), 2.07 (d, 1H), 1.93 (d, 7H), 1.83 (dt, 2H), 1.67 (t, 1H), 1.56 (q, 1H), 1.47 (d, 2H).	490.3

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3256	cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	SC_3253	[1-[tert-butyl(dimethyl)silyl]-oxycyclobutyl]methyl4-methylbenzenesulfonate	INT-988 (step 1)	1H NMR (600 MHz, DMSO) δ 8.92 (s, 2H), 7.37 (d, 4H), 7.27 (td, 1H), 3.79 (s, 2H), 3.27 (s, 1H), 2.72 - 2.65 (m, 2H), 2.54 (s, 3H), 2.25 - 2.19 (m, 2H), 2.16 (tt, 2H), 2.07 (s, 2H), 2.00 (s, 6H), 1.95 - 1.86 (m, 2H), 1.67 (qd, 1H), 1.55 (td, 2H), 1.51 - 1.42 (m, 3H).	450.3
SC_3257	cis-1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-8-phenyl-3-pyrimidin-5-yl-1,3-diazaspiro [4.5]decan-2-one	SC_3260		SC_3099	1H NMR (600 MHz, DMSO) δ 9.07 (s, 2H), 8.81 (s, 1H), 7.53 - 7.48 (m, 2H), 7.33 (t, 2H), 7.24 - 7.18 (m, 1H), 3.86 (s, 2H), 2.29 (td, 2H), 2.14 (tt, 2H), 2.07 (s, 1H), 1.96 - 1.87 (m, 8H), 1.82 (td, 2H), 1.71 - 1.62 (m, 1H), 1.54 (dp, 1H), 1.49 - 1.43 (m, 2H).	422.3
SC_3258	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-4-methylpyridine-2-carbonitrile	INT-976	5-bromo-4-methylpyridine-2-carbonitrile	SC_3103	1H NMR (600 MHz, DMSO) δ 8.57 (s, 1H), 7.92 (s, 1H), 7.61 - 7.57 (m, 1H), 7.42 - 7.32 (m, 4H), 7.25 (tt, 1H), 3.63 (s, 2H), 2.38 (d, 2H), 2.28 (s, 3H), 2.00 - 1.90 (m, 9H), 1.90 - 1.72 (m, 1H), 1.59 - 1.49 (m, 2H).	390.2
SC_3259	cis-8-Dimethylamino-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1-(pyridin-2-yl-methyl)-1,3-diazaspiro[4.5]decan-2-one	SC_3253	2-(bromomethyl)pyridine	SC_3105	1H NMR (DMSO-d6): δ 8.94 (s, 2H), 8.52-8.51 (m, 1H), 7.77-7.74 (m, 1H), 7.45-7.42 (d, 1H), 7.38-7.22 (m, 6H), 4.47 (s, 2H), 3.84 (s, 2H), 2.66-2.63 (m, 2H), 2.54 (s, 3H), 2.06-2.03 (m, 2H), 1.92(s, 6H), 1.57-1.42 (m, 4H).	457.2
SC_3260		INT-976	5-bromopyrimidine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.98 (s, 2H), 8.76 (s, 1H), 7.78 (s, 1H), 7.41 - 7.34 (m, 4H), 7.31 - 7.24 (m, 1H), 3.65 (s, 2H), 2.49 - 2.34 (m, 2H), 1.97 (s, 6H), 1.95 - 1.76 (m, 4H), 1.50 (t, 2H).	352.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3261	cis-8-Dimethylamino-1-[(1-hydroaη-cyclobutyl)-methyl]-8-phenyl-3-pyrimidin-5-yl-1,3-diazaspiro[4.5]decan-2-one	SC_3260	[1-[tert-butyl(dimethyl)silyl]-oxycyclobutyl]methyl4-methylbenzenesulfonate	INT-988 (step 1)	1H NMR (600 MHz, DMSO) δ 9.04 (s, 2H), 8.80 (s, 1H), 7.37 (d, 4H), 7.27 (p, 1H), 3.83 (s, 2H), 3.28 (s, 1H), 2.72 - 2.65 (m, 2H), 2.23 (td, 1H), 2.17 (tt, 1H), 2.07 (s, 2H), 2.00 (s, 6H), 1.91 (dt, 2H), 1.72 - 1.63 (m, 1H), 1.60 - 1.45 (m, 5H).	436.3
SC_3262	cis-8-Amino-1-[(1-hydroxy-cyclobutyl)-methyl]-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one	SC_3255		SC_3099	1H NMR (600 MHz, DMSO) δ 9.29 (s, 2H), 7.68 - 7.63 (m, 2H), 7.33 (t, 2H), 7.26 - 7.18 (m, 1H), 3.97 (s, 2H), 3.45 (s, 2H), 2.43 (td, 2H), 2.14 (tt, 2H), 1.99 (td, 2H), 1.96 - 1.90 (m, 2H), 1.71 - 1.54 (m, 4H), 1.52 - 1.47 (m, 2H).	476.2
SC_3263	cis-8-Dimethylamino-3-(3-fluorophenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	1-bromo-3-fluorobenzene	SC_3103	1H NMR (600 MHz, DMSO) δ 7.58 - 7.50 (m, 2H), 7.41 - 7.33 (m, 4H), 7.33 - 7.23 (m, 3H), 6.77 - 6.71 (m, 1H), 3.58 (s, 2H), 2.48 - 2.31 (m, 2H), 1.97 (s, 6H), 1.92 - 1.80 (m, 4H), 1.47 (t, 2H).	368.2
SC_3264	cis-8-Dimethylamino-3-(3-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	1-bromo-3-methylsulfonyl-benzene	SC_3103	1H NMR (600 MHz, DMSO) δ 8.13 (t, 1H), 7.88 (d, 1H), 7.65 (s, 1H), 7.53 (t, 1H), 7.47 (dt, 1H), 7.41 - 7.35 (m, 4H), 7.28 (qd, 1H), 3.66 (s, 2H), 3.16 (s, 3H), 2.49 - 2.36 (m, 2H), 1.97 (s, 6H), 1.96 - 1.74 (m, 4H), 1.53 - 1.47 (m, 2H).	428.2
SC_3265	cis-8-Dimethylamino-3-(4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	1-bromo-4-methylsulfonyl-benzene	SC_3103	1H NMR (600 MHz, DMSO) δ 7.83 - 7.70 (m, 5H), 7.41 - 7.34 (m, 4H), 7.27 (tt, J = 7.1, 1.9 Hz, 1H), 3.65 (s, 2H), 3.12 (s, 3H), 2.49 - 2.31 (m, 2H), 1.97 (s, 6H), 1.95 - 1.75 (m, 4H), 1.49 (t, J = 8.6 Hz, 2H).	428.2
SC_3266	cis-8-Dimethylamino-8-phenyl-3-pyridazin-3-yl-1,3-diazaspiro[4.5]decan-2-one	INT-976	3 -bromopyridazine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.82 (dd, J = 4.6, 1.4 Hz, 1H), 8.45 (dd, J = 9.2, 1.4 Hz, 1H), 7.95 (br s, 1H), 7.55 (dd, J = 9.2, 4.5 Hz, 1H), 7.42 - 7.34 (m, 4H), 7.28 (t, J = 6.8 Hz, 1H), 3.83 (s, 2H), 2.47 - 2.29 (m, 1H), 1.97 (s, 10H), 1.54 - 1.48 (m, 2H).	352.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3267	cis-3-Methoxy-4-(8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzonitrile	INT-976	4-bromo-3-methoxy-benzonitrile (step 1)	SC_3103 (for step 1), SC_3099 (for step 2)	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 7.50-7.50 (m, 2H), 7.42-7.31 (m, 5H), 7.18 (bs, 2H), 3.83 (s, 3H), 3.64 (s, 2H), 2.05-21.99 (m, 2H), 1.85 (bs, 5H), 1.70 (bs, 2H), 1.53-1.50 (m, 2H).	391.2
SC_3268	cis-8-Dimethylamino-3-(2-fluorophenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	1-bromo-2-luorobenzene	SC_3103	1H NMR (600 MHz, DMSO) δ 7.46 (td, J = 8.0, 1.6 Hz, 1H), 7.40 - 7.32 (m, 5H), 7.26 (td, J = 6.7, 3.3 Hz, 1H), 7.24 - 7.12 (m, 3H), 3.53 (s, 2H), 2.37 - 2.33 (m, 2H), 1.96 (s, 6H), 1.95 - 1.74 (m, 4H), 1.49 (t, J = 9.3 Hz, 2H).	368.2
SC_3269	cis-8-Dimethylamino-8-phenyl-3-(2-phenyl-pyrimidin-5-yl)-1,3-diazaspir [4.5]decan-2-one	INT-976	5-bromo-2-phenyl-pyrimidine	SC_3103	1H NMR (600 MHz, DMSO) δ 9.07 (s, 2H), 8.34 - 8.28 (m, 2H), 7.82 (s, 1H), 7.52 - 7.42 (m, 4H), 7.39 (s, 1H), 7.38 (s, 3H), 7.28 (t, J = 4.8 Hz, 1H), 3.70 (s, 2H), 2.43 - 2.39 (m, 2H), 2.06 - 1.72 (m, 10H), 1.52 (d, J = 10.8 Hz, 2H).	428.3
SC_3270	cis-8-Methylamino-1-(oxetan-3-yl-methyl)-8-phenyl-3-[2-(trifluoro-methyl)-pyrimidin-5-yl]-1,3-diazaspiro [4.5]decan-2-one	SC_3245	oxetan-3-ylmethyl 4-methyl-benzenesulfonate (step 2)	SC_3099 (for stepl), SC_3105 (for step 2)	1H NMR (DMSO-d6): δ 9.24 (s, 2H), 7.49 (d, 2H), 7.34 (t, 2H), 7.21 (t, 1H), 4.66-4.62 (m, 2H), 4.44 (t, 2H), 3.87 (s, 2H), 3.55 (d, 2H), 3.28-3.23 (m, 1H), 2.36 (m, 1H), 2.20-2.14 (m, 2H), 1.95-1.91 (m, 5H), 1.84-1.77 (m, 2H), 1.43-1.40 (m, 2H).	476.2
SC_3271	cis-1-(Cyclopropyl-methyl)-8-methylamino-8-phenyl-3-[2-(trifluoro-methyl)-pyrimidin-5-yl]-1,3-diazaspiro [4.5]decan-2-one	SC_3245	(bromomethyl)-cyclopropane	SC_3099 (for step1), SC_3105 (for step 2)	1H NMR (DMSO-d6): δ 9.26 (s, 2H), 7.50 (d, 2H), 7.35 (t, 2H), 7.22 (t, 1H), 3.89 (s, 2H), 3.13 (d, 2H), 2.29-2.23 (m, 3H),1.92-1.82 (m, 7H), 1.47-1.44 (m, 2H), 1.08-1.05 (m, 1H), 0.52-0.48 (m, 2H), 0.36-0.36-0.32 (m, 2H).	460.1
SC_3272	cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzonitrile	INT-976	4-bromobenzonitrile	SC_3103	1H NMR (600 MHz, DMSO) δ 7.82 - 7.71 (m, 3H), 7.72 - 7.67 (m, 2H), 7.41 - 7.33 (m, 4H), 7.30 - 7.23 (m, 1H), 3.63 (s, 2H), 2.45 - 2.39 (m, 2H), 1.97 (s, 6H), 1.95 - 1.72 (m, 4H), 1.51 - 1.44 (m, 2H).	375.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3273	cis-8-Dimethylamino-3 -(4-fluorophenyl)-8-phenyl-1,3 - diazaspiro[4.5]decan-2-one	INT-976	1-bromo-4-fluorobenzene	SC_3103		368.2
SC_3274	cis-2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzonitrile	INT-976	2-bromobenzonitrile	SC_3103	1H NMR (600 MHz, DMSO) δ 7.77 (dd, J = 7.5, 1.6 Hz, 1H), 7.66 (ddd, J = 8.3, 7.5, 1.6 Hz, 1H), 7.60 (s, 1H), 7.48 (dd, J = 8.3, 1.1 Hz, 1H), 7.39 - 7.34 (m, 4H), 7.32 (td, J = 7.5, 1.1 Hz, 1H), 7.26 (tt, J = 7.5, 1.6 Hz, 1H), 3.68 (s, 2H), 2.46 - 2.30 (m, 2H), 2.01 - 1.75 (m, 10H), 1.59 - 1.50 (m, 2H).	375.2
SC_3276	cis-1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	SC_3256		SC_3099	1H NMR (600 MHz, DMSO) δ 8.94 (s, 2H), 7.53 - 7.47 (m, 2H), 7.39 - 7.30 (m, 2H), 7.24 - 7.17 (m, 1H), 3.83 (s, 2H), 3.54 - 3.36 (m, 2H), 2.56 (s, 3H), 2.28 (td, 2H), 2.18 - 2.09 (m, 2H), 1.97 - 1.86 (m, 7H), 1.81 (td, 2H), 1.71 - 1.61 (m, 1H), 1.59 - 1.47 (m, 1H), 1.49 - 1.42 (m, 2H).	436.3
SC_3277	cis-8-Dimethylamino-3-[2-(morpholin-4-yl-methyl)-pyrimidin-5-yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	4-[(5-bromopyrimidin-2-yl) methyl]morpholine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.93 (s, 2H), 7.87 - 7.65 (m, 1H), 7.42 - 7.34 (m, 4H), 7.28 (dq, 1H), 3.66 - 3.62 (m, 2H), 3.61 (s, 2H), 3.54 (t, 4H), 2.43 (t, 4H), 1.98 (s, 6H), 1.96 - 1.74 (m, 4H), 1.52 - 1.46 (m, 2H).	
SC_3278	cis-8-Dimethylamino-3-[2-(methyl-tetrahydro-pyran-4-yl-amino)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-one	INT-989	N-methyltetrahydro-2H-pyran-4-amine	SC_3120	1H NMR (DMSO-d6): δ 8.50 (s, 2H), 7.39-7.35 (m, 5H), 7.27-7.24 (m, 1H), 4.74-4.67 (m, 1H), 3.94-3.90 (m, 2H), 3.50 (s, 2H), 3.39 (t, 2H), 2.93 (s, 3H), 2.35 (m, 2H), 1.99-1.71 (m, 12H), 1.50-1.44 (m, 4H).	465.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3279	cis-5-[8-Dimethylamino-1-[(1-hydroaη-cyclobutyl)-methyl] -2-oxo-8-phe-nyl-1,3-diazaspiro[4.5]decan-3-yl]-N-[2-[2-[2-(2-methoxy-ethox-y)-ethoxy]-ethoxy]-ethyl]-pyrimidine-2-carboxylie acid amide	INT-990	(1-(tert-butyldimethylsilyloxy) cy clobutyl)methyl 4-methyl-benzenesulfonate (step 1), 2,5,8,11-tetraoxatridecan-13-amine (step 2)	SC_3105 (step 1), SC_3133 (step 2)	1H NMR (DMSO-d6): δ 9.12 (s, 2H), 8.63 (t, 1H), 7.36-7.33 (m, 4H), 7.26-7.23 (m, 1H), 5.25 (s, 1H), 3.85 (s, 2H), 3.52-3.34 (m, 16H), 3.35 (m, 2H), 3.19 (s, 3H), 2.69-2.66 (m, 2H), 2.25-2.13 (m, 4H), 1.97 (s, 6H), 1.92-1.87 (m, 2H), 1.57-1.44 (m, 6H).	669.4
SC_3280	cis-1 -(Cyclopropyl-methyl)-3 -(2-fluoro-4-methylsulfonyl-phenyl)-8-methylamino-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-976	1-bromo-2-fluoro-4-(methyl-sulfonyl)benzene (step 1), (Bromomethyl)cycloprop ane (step 2)	SC_3103 (for step 1), SC_3105 (step 2), SC_3099 (step 3)	1H NMR (DMSO-d6): δ 7.86 (t, 1H), 7.81-7.77 (m, 1H), 7.73-7.70 (m, 1H), 7.45 (d, 2H), 7.31 (t, 2H), 7.19 (t, 1H), 3.85 (s, 2H), 3.24 (s, 3H), 3.09 (d, 2H), 2.29-2.22 (m, 3H), 1.93-1.90 (m, 5H), 1.74-1.68 (m, 2H), 1.49-1.46 (m, 2H), 1.04 (m, 1H), 0.51-0.46 (m, 2H), 0.34-0.30 (m, 2H).	486.2
SC_3281	cis-2-[[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3 -yl)-pyrimidin-2-yl]-methyl-amino] -acetamide	INT-989	2-(methylamino)acetamide hydrochloride	SC_3120	1H NMR (DMSO-d6): δ 8.48 (s, 2H), 7.39-7.35 (m, 5H), 7.27-7.25 (m, 2H), 6.89 (s, 1H), 4.08 (s, 2H), 3.51 (s, 2H), 3.07 (s, 3H), 2.36-2.33 (m, 2H), 1.94-1.86 (m, 10H), 1.45 (m, 2H).	438.2
SC_3282	cis-2-[[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3 -yl)-pyrimidin-2-yl]amino]-acetamide	INT-976	tert-butyl (5-bromopyrimi-din-2-yl)(cyanomethyl)car-bam ate (step 1)	SC_3103 (for step 1), SC_3100 step 3 (for step 2)	1H NMR (DMSO-d6): δ 8.45 (s, 2H), 7.39-7.33 (m, 5H), 7.27-7.22 (m, 2H), 6.92 (s, 1H), 6.86 (t, 1H), 3.74 (d, 2H), 3.51 (s, 2H), 2.46-2.28 (m, 2H), 1.95-1.86 (m, 10H), 1.45 (m, 2H).	424.2
SC_3283	cis-1-(Cyclopropyl-methyl)-8-methyla-mino-3 -[4-methyl-6-(trifluoro-methyl)-pyridin-3-yl]-8-phenyl-1,3-dia-zaspiro[4.5]decan-2-one	SC_3284		SC_3099	1H NMR (DMSO-d6): δ 8.61 (s, 1H), 7.82 (s, 1H), 7.46-7.44 (m, 2H), 7.30 (t, 2H), 7.18 (t, 1H), 3.80 (s, 2H), 3.08 (d, 2H), 2.33-2.25 (m, 6H), 1.92-1.89 (m, 5H), 1.72 (t, 2H), 1.56-1.53 (m, 2H), 1.04 (m, 1H), 0.51-0.46 (m, 2H), 0.33-0.30 (m, 2H).	473.3

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3284	cis-1-(Cyclopropyl-methyl)-8-dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-984	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3103	1H NMR (DMSO-d6): δ 8.59 (s, 1H), 7.82 (s, 1H), 7.35-7.34 (m, 4H), 7.27-7.23 (m, 1H), 3.75 (s, 2H), 3.06 (d, 2H), 2.71-2.68 (m, 2H), 2.33-2.24 (m, 5H), 2.00 (m, 6H), 1.59-1.56 (m, 2H), 1.46 (t, 2H), 1.02-0.99 (m, 1H), 0.53-0.48 (m, 2H), 0.33-0.30 (m, 2H).	487.3
SC_3285	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro [4.5]decan-3 -yl)-pyrimidin - 2-yl] -thiophene- 2-carboxy lic acid amide	SC_3239	thiophene-2-carbonyl chloride	SC_3240	1H NMR (600 MHz, DMSO) δ 8.90 (s, 2H), 8.08 - 8.04 (m, 1H), 7.84 (dd, 1H), 7.71 (s, 1H), 7.38 (d, 5H), 7.27 (td, 1H), 7.19 (dd, 1H), 3.66 (s, 2H), 2.48 - 2.34 (m, 2H), 1.99 - 1.75 (m, 10H), 1.54 - 1.48 (m, 2H).	477.2
SC_3286	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro [4.5]decan-3 -yl)-pyrimidin-2-yl] -benzamide	SC_3239	benzoyl chloride	SC_3240	1H NMR (600 MHz, DMSO) δ 10.84 (s, 1H), 8.91 (s, 2H), 7.98 - 7.93 (m, 2H), 7.62 - 7.55 (m, 1H), 7.50 (t, 2H), 7.39 (d, 4H), 7.28 (dt, 1H), 3.67 (s, 2H), 2.48 - 2.32 (m, 2H), 2.05 - 1.76 (m, 10H), 1.55 - 1.49 (m, 2H).	471.3
SC_3287	cis-8-Dimethylamino-8-phenyl-3-(5-phenyl-thiophen-2-yl)-1,3-diazaspiro [4.5]decan-2-one	INT-976	2-bromo-5-phenylthiophene	SC_3103	1H NMR (DMSO-d6): δ 7.80-7.70 (br s, 1H), 7.52 (d, 2H), 7.38-7.28 (m, 7H), 7.20-7.17 (m, 2H), 6.27 (d, 1H), 3.61 (s, 2H), 2.49 (m, 2H), 1.95-1.91 (m, 10H), 1.48 (m, 2H).	432.2
SC_3288	cis-1-(Cyclopropyl-methyl)-8-dimethylamino-3 - [2-(methylsulfonyl-methyl)-phenyl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-984	1-bromo-2-(methylsulfonyl-methyl)b enzene	SC_3103	1H NMR (CDCl3): δ 7.49 (d, 1H), 7.41-7.22 (m, 8H), 4.45 (s, 2H), 3.64 (s, 2H), 3.15 (d, 2H), 2.79 (s, 3H), 2.71-2.67 (m, 2H), 2.37 (t, 2H), 2.06 (s, 6H), 1.67-1.64 (m, 2H), 1.55-1.44 (m, 2H), 1.10-1.06 (m, 1H), 0.57-0.52 (m, 2H), 0.39-0.35 (m, 2H).	496.3

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3289	cis-1-(Cyclopropyl-methyl)-8-methylamino-3-[2-(methylsulfonyl-methyl)-phenyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	SC_3288		SC_3099	1H NMR (DMSO-d6): δ 7.49-7.37 (m, 5H), 7.32-7.30 (m, 3H), 7.19-7.15 (m, 1H), 4.49 (s, 2H), 3.71 (s, 2H), 3.05 (d, 2H), 2.87 (s, 3H), 2.26-2.20 (m, 3H), 1.91-1.87 (m, 5H), 1.71-1.56 (m, 4H), 1.03-1.01 (m, 1H), 0.49-0.45 (m, 2H), 0.31-0.28 (m, 2H).	482.3
SC_3290	cis-8-Dimethylamino-8-(3-fluorophenyl)-3-[2-(methylsulfonyl-methyl)-phenyl]-1,3-diazaspiro[4.5]decan-2-one	INT-1024	1-bromo-2-(methylsulfonyl-methyl)b enzene	SC_3103	1H NMR (600 MHz, DMSO) δ 7.46 (dd, 1H), 7.39 (td, 2H), 7.33 (dd, 1H), 7.31 - 7.21 (m, 1H), 7.18 (d, 1H), 7.15 (dd, 1H), 7.08 (td, 1H), 4.50 (s, 2H), 3.56 (s, 2H), 2.88 (s, 3H), 2.42 - 2.24 (m, 2H), 1.99 - 1.89 (m, 8H), 1.88 - 1.75 (m, 2H), 1.60 - 1.48 (m, 2H).	460.3
SC_3291	cis-8-Dimethylamino-8-(4-fluorophenyl)-3-[2-(methylsulfonyl-methyl)-phenyl]-1,3-diazaspiro[4.5]decan-2-one	INT-1025	1-bromo-2-(methylsulfonyl-methyl)b enzene	SC_3103	1H NMR (600 MHz, DMSO) δ 7.46 (dd, 1H), 7.43 - 7.34 (m, 3H), 7.33 (dd, 1H), 7.28 (td, 2H), 7.16 (t, 2H), 4.49 (s, 2H), 3.55 (s, 2H), 2.88 (s, 3H), 2.35 - 2.32 (m, 2H), 1.95 (s, 6H), 1.94 - 1.88 (m, 2H), 1.88 - 1.65 (m, 2H), 1.59 - 1.47 (m, 2H).	460.3
SC_3294	cis-8-Dimethylamino-8-(3-fluorophenyl)-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-1024	4-(5-bromo-4-methyl-pyrimidin-2-yl)morpholine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.13 (s, 1H), 7.40 (td, 1H), 7.22 - 7.11 (m, 4H), 7.08 (td, 1H), 3.69 - 3.60 (m, 8H), 2.34 - 2.31 (m, 2H), 2.20 (s, 3H), 1.96 (s, 6H), 1.96 - 1.70 (m, 4H), 1.56 - 1.43 (m, 2H).	469.3
SC_3295	cis-3-[6-(4-Acetyl-piperazin-1-yl)-4-methyl-pyridin-3-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	1-[4-(5-bromo-4-methyl-pyridin-2-yl)-piperazin-1-yl]-ethanone	SC_3103	1HNMR (DMSO-d6, 400 MHz at 100 0C), δ (ppm) = 7.88 (s, 1H), 7.35-7.22 (m, 5H), 6.73 (s, 1H), 6.64 (s, 1H), 3.53-3.50 (m, 8H), 3.38 (s, 2H), 2.33-2.30 (m, 2H), 2.14 (s, 3H), 2.03-1.88 (m, 13H), 1.56-1.51 (m, 2H).	491.3

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3296	cis-3-[2-(4-Acetyl-piperazin-1-yl)-4-methyl-pyrimidin-5-yl] -8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	1-[4-(5-bromo-4-methyl-pyrimidin-2-yl)-piperazin-1 -yl] -ethanone	SC_3103	1H-NMR (DMSO-d6, 400 MHz at 100 0C), δ (ppm) = 8.11 (s, 1H), 7.35-7.24 (m, 5H), 6.88 (s, 1H), 3.73 (bs, 4H), 3.52 (bs, 4H), 3.38 (s, 2H), 2.33 (bs, 2H), 2.22 (s, 3H), 2.03-1.87 (m, 13H), 1.56-1.53 (m, 2H).	492.3
SC_3297	cis-8-Dimethylamino-3-(4-methyl-6-pyridin-4-yl-pyridin-3 -yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	5-bromo-2-chloro-4-methyl-pyridine (step 1), 4-pyridinyl-boronic acid (step 2)	SC_3103 (for step 1), SC_3129 (for step 2)	1H-NMR (DMSO-d6, 400 MHz at 100 0C), δ (ppm) = 8.65 (d, 2H, J = 5.92 Hz), 8.50 (s, 1H), 7.96 (d, 2H, J = 5.96 Hz), 7.91 (s, 1H), 7.36-7.23 (m, 5H), 7.07 (s, 1H), 3.57 (s, 2H), 2.38-2.33 (m, 5H), 2.04 (s, 6H), 2.00-1.88 (m, 4H), 1.61-1.57 (m, 2H).	442.3
SC_3298	cis-3-[2-(4-Acetyl-piperazin-1-yl)-4-(trifluoromethyl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-976	1-[4-(5-bromo-4-trifluoromethyl-pyrimidin-2-yl)-piperazin-1 -yl] -ethanone	SC_3103	1H-NMR (DMSO-d6, 400 MHz at 100 0C), δ (ppm) = 8.52 (s, 1H), 7.35-7.22 (m, 5H), 7.07 (s, 1H), 3.79-3.78 (t, 4H, 5.08 Hz), 3.57 (t, 4H, 5.26 Hz), 3.39 (s, 2H), 2.36-2.32 (m, 2H), 2.04-1.85 (m, 13H), 1.54-1.50 (m, 2H).	546.3
SC_3299	cis-8-Dimethylamino-3-[2-(3-oxo-piperazin-1-yl)-4-(trifluoromethyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-976	4-(5-bromo-4-trifluoromethyl-pyrimidin-2-yl)-piperazin-2-one	SC_3103	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 8.55 (s, 1H), 7.77 (bs, 1H), 7.35-7.23 (m, 5H), 7.09 (s, 1H), 4.20 (s, 2H), 3.92 (t, 2H, J = 5.04 Hz), 3.39 (s, 2H), 3.33 (bs, 2H), 2.36-2.33 (m, 2H), 2.03-1.85 (m, 10H), 1.54-1.39 (m, 2H).	518.2
SC_3300	cis-8-Dimethylamino-3 -isoquinolin-4-yl-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	4-bromo-isoquinoline	SC_3103	1HNMR (DMSO-d6, 400 MHz at 100 0C), δ (ppm) = 9.16 (s, 1H), 8.41 (s, 1H), 8.13 (d, 1H, J = 8.12 Hz), 7.91 (d, 1H, J = 8.64 Hz), 7.71 (t, 1H, J = 7.58 Hz), 7.67 (t, 1H, J = 7.46 Hz), 7.36-7.23 (m, 5H), 7.14 (s, 1H), 3.67 (s, 2H), 2.41-2.36 (m, 2H), 2.10-1.89 (m, 10H), 1.68-1.64 (m, 2H).	401.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3301	cis-8-Dimethylamino-3-isoquinolin-5-yl-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	5-bromo-isoquinoline	SC_3103	1HNMR (DMSO-d6, 400 MHz at 100 0C), δ (ppm) = 9.29 (s,1H), 8.48 (d,1H, J = 5.92 Hz) 7.98-7.96 (m, 1H), 7.70-7.64 (m, 3H), 7.36-7.23 (m, 5H), 7.13 (s, 1H), 3.65 (s, 2H), 2.41-2.36 (m, 2H), 2.10-1.90 (m, 10H), 1.68-1.63 (m, 2H).	401.2
SC_3302	cis-8-Dimethylamino-8-phenyl-3-(1H-pyrrolo[2,3-b]pyridin-4-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-976	4-bromo- 1H-pyrrolo [2,3-b] pyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 11.42 (s, 1H), 7.99 (d, 1H), 7.66 (br s, 1H), 7.43 - 7.33 (m, 5H), 7.27 (t, 1H), 7.22 (t, 1H), 6.65 - 6.60 (m, 1H), 3.91 (s, 2H), 2.45 - 2.27 (m, 2H), 1.98 - 1.82 (m, 10H), 1.56 - 1.49 (m, 2H).	390.2
SC_3303	cis-8-Dimethylamino-8-phenyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1,3 - diazaspiro[4.5]decan-2-one	INT-976	4-bromo-2-(pyridin-4-yl)thiazole	SC_3103	1H NMR (DMSO-d6): δ 8.62 (d, 2H), 7.82 (d, 2H), 7.61 (broad s, 1H), 7.54 (s, 1H), 7.40-7.37 (m, 4H), 7.29-7.27 (m, 1H), 3.84 (s, 2H), 2.49 (m, 2H), 1.96-1.79 (m, 10H), 1.51 (m, 2H).	434.1
SC_3304	cis-8-[Methyl-(tetrahydro-furan-3-yl-methyl)-amino]-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (enantiomer 1)	INT-1026	4-(5-bromopyrimidin-2-yl) morpholine	step 2 of SC_3097 (for synthesis), SC_3292 and SC_3293 (for separation of enantiomers)	1H NMR (DMSO-d6): δ 8.56 (s, 2H), 7.65 (broad s, 1H), 7.36-7.23 (m, 5H), 3.66-3.55 (m, 10H), 3.49 (s, 2H), 3.38 (m, 1H), 2.32-2.26 (m, 3H), 2.11-1.94 (m, 6H),1.86-1.82 (m, 3H),1.50-1.41(m, 3H).	507.3
SC_3305	cis-8-[Methyl-(tetrahydro-furan-3-yl-methyl)-amino] -3 -(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (enantiomer 2)	INT-1026	4-(5-bromopyrimidin-2-yl) morpholine	step 2 of SC_3097 (for synthesis), SC_3292 and SC_3293 (for separation of enantiomers)	1H NMR (DMSO-d6): δ 8.56 (s, 2H), 7.66 (broad s, 1H), 7.35-7.24 (m, 5H), 3.63-3.49 (m, 12H), 3.31 (m, 1H), 2.27 (m, 3H), 2.11-1.84 (m, 10H), 1.42 (m, 3H).	507.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3306	cis-3-[2-(Azetidin-1-yl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	2-azetidin-1 -yl-5 -bromopyrimidine	step 2 of SC_3242	1HNMR (DMSO-d6, 400 MHz at 100 0C), δ (ppm) = 8.48 (s, 2H), 7.36-7.26 (m, 5H), 7.07 (s, 1H), 3.99 (t, 4H, J = 7.18 Hz), 3.50 (s, 2H), 2.35-2.26 (m, 4H), 2.03 (s, 6H), 1.95-1.91 (m, 2H), 1.52-1.50 (m, 2H).	407.2
SC_3307	cis-3-[2-(3,3-Difluoro-azetidin-1-yl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	INT-976	5-bromo-2-(3,3-difluoro-azetidin-1-yl)-pyrimidine	step 2 of SC_3242	1HNMR (DMSO-d6, 400 MHz at 100 0C), δ (ppm) = 8.62 (s, 2H), 7.37-7.25 (m, 5H), 7.20 (s, 1H), 4.38 (t, 4H, J = 12.40 Hz), 3.55 (s, 2H), 2.36-233 (m, 2H), 2.03 (s, 6H) 1.97-1.89 (m, 4H), 1.53-1.51 (m, 2H).	443.2
SC_3308	cis-8-Dimethylamino-3-[6-morpholin-4-yl-5-(trifluoromethyl)-pyridin-3-yl]-8-phenyl-1,3 -diazaspiro [4.5]decan-2-one	INT-976	4-(5-bromo-3-trifluoromethyl-pyridin-2-yl)-morpholine	SC_3103	1HNMR (DMSO-d6, 400 MHz at 100 0C), δ (ppm) = 8.63 (s, 1H), 8.38 (s, 1H), 7.37-7.25 (m, 6H), 3.71 (bs, 4H), 3.65 (s, 2H), 3.03 (bs, 4H), 2.37-2.32 (m, 2H), 2.03 (s, 6H), 1.98-1.88 (m, 4H), 1.55-1.52 (m, 2H).	504.3
SC_3309	cis-8-Methylamino-3-[6-morpholin-4-yl-5-(trifluoromethyl)-pyridin-3-yl]-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	SC_3308		SC_3099	1HNMR (DMSO-d6, 400 MHz at 100 0C), δ (ppm) = 8.68 (s, 1H), 8.42 (s, 1H), 7.48 (d, 2H, J = 8.12 Hz), 7.33 (t, 2H, J = 7.62 Hz), 7.20 (t, 1H, J = 7.38 Hz), 7.14 (s, 1H), 3.75-3.71 (m, 6H), 3.03 (t, 4H, J = 8.88 Hz), 2.08-2.02 (m, 2H), 1.95-1.79 (m, 8H), 1.58-1.55 (m, 2H).	490.4
SC_3310	cis-8-Dimethylamino-8-phenyl-3-[5-(trifluoromethyloxy)-pyridin-2-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-976	2-bromo-5-(trifluoromethoxy)-pyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.32 - 8.26 (m, 2H), 7.86 - 7.82 (m, 1H), 7.79 (dd, 1H), 7.41 - 7.33 (m, 4H), 7.27 (t, 1H), 3.71 (s, 2H), 2.46 - 2.33 (m, 2H), 1.96 (s, 6H), 1.94 - 1.72 (m, 4H), 1.47 (t, 2H).	435.2
SC_3311	cis-8-Dimethylamino-3-(5-methylsulfonyl-pyridin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	2-bromo-5-methylsulfonylpyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.66 (dd, 1H), 8.39 (dd, 1H), 8.14 (dd, 1H), 8.06 (s, 1H), 7.42 - 7.33 (m, 4H), 7.28 (t, 1H), 3.77 (s, 2H), 3.21 (s, 3H), 2.46 - 2.32 (m, 2H), 2.03 - 1.68 (m, 10H), 1.52 - 1.46 (m, 2H).	429.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3312	cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-3-yl)-nicotinonitrile	INT-976	6-bromopyridine-3 - carbonitrile	SC_3103	1H NMR (600 MHz, DMSO) δ 8.66 (d, 1H), 8.34 (d, 1H), 8.08 (dd, 1H), 7.41 - 7.33 (m, 4H), 7.28 (t, 1H), 3.74 (s, 2H), 2.46 - 2.30 (m, 2H), 1.96 (s, 6H), 1.94 - 1.73 (m, 4H), 1.51 - 1.44 (m, 2H).	376.2
SC_3314	cis-8-Dimethylamino-3-[4-methyl-2-(3-oxo-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	INT-976	4-(5-bromo-4-methyl-pyrimidin-2-yl)-piperazin-2-one	SC_3103	1HNMR (DMSO-d6, 400 MHz at 100oC), δ (ppm) = 8.14 (s, 1H), 7.65 (bs, 1H), 7.34-7.23 (m, 5H), 6.89 (s, 1H), 4.16 (s, 2H), 3.88 (bs, 2H), 3.39 (s, 2H), 3.29 (bs, 2H), 2.33 (bs, 2H), 2.24 (s, 3H), 2.03-1.87 (m, 10H), 1.53 (bs, 2H).	464.2
SC_3315	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-3 -yl)-pyridine-2-carboxylic acid amide	SC_3312		SC_3016	1H NMR (600 MHz, DMSO) δ 8.80 (d, 1H), 8.10 (dd, 1H), 7.95 - 7.89 (m, 2H), 7.79 (s, 1H), 7.42 - 7.35 (m, 5H), 7.28 (s, 1H), 3.67 (s, 2H), 2.48 - 2.28 (m, 2H), 1.95 (d, 10H), 1.53 - 1.46 (m, 2H).	394.2
SC_3316	cis-3-[4-(Azetidin-1-yl)-2-methyl-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3 -diazaspiro [4.5]decan-2-one	INT-976	4-azetidin-1 -yl-5 -bromo-2-methyl-pyrimidine	step 2 of SC_3242	1HNMR (DMSO-d6, 400 MHz at 100 0C), δ (ppm) = 7.85 (s, 1H), 7.34-7.23 (m, 5H), 6.93 (s, 1H), 4.11 (t, 4H, J = 7.40 Hz), 3.33 (s, 2H), 2.33-2.30 (m, 7H), 2.02 (s, 6H), 1.96-1.87 (m, 4H), 1.53-1.48 (m, 2H).	421.2
SC_3317	cis-2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzamide	INT-976	2-bromobenzonitrile	SC_3103 (step 1), SC_3016 (step 2)	1H NMR (600 MHz, DMSO) δ 7.50 (s, 1H), 7.42 (dd, 1H), 7.42 - 7.32 (m, 5H), 7.31 (d, 1H), 7.26 (t, 1H), 7.23 - 7.13 (m, 3H), 3.53 (s, 2H), 2.41 - 2.27 (m, 2H), 1.96 (s, 6H), 1.90 (t, 2H), 1.86 - 1.68 (m, 2H), 1.52 - 1.48 (m, 2H).	393.2
SC_3318	cis-8-Dimethylamino-3-[2-(methylsulfonyl-methyl)-phenyl]-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-one	INT-997	1-bromo-2-(methylsulfonyl-methyl)-benzene	SC_3103	1H NMR (600 MHz, DMSO) δ 7.47 (dd, 1H), 7.43 - 7.36 (m, 2H), 7.34 (dd, 1H), 7.29 (ddd, 1H), 7.19 (s, 1H), 7.05 (ddd, 1H), 6.94 (d, 1H), 4.50 (s, 2H), 3.61 (s, 2H), 2.89 (s, 3H), 2.35 - 2.21 (m, 2H), 2.04 (s, 6H), 1.98 - 1.90 (m, 2H), 1.86 - 1.70 (m, 2H), 1.66 - 1.59 (m, 2H).	448.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3320	cis-8-Dimethylamino-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-one	INT-997	4-(5-bromo-4-methyl-pyrimidin-2-yl)morpholine	SC_3319	1H NMR (600 MHz, DMSO) δ 8.15 (d, 1H), 7.41 (dt, 1H), 7.13 (s, 1H), 7.05 (ddd, 1H), 6.94 (dd, 1H), 3.71 - 3.60 (m, 8H), 3.44 (s, 2H), 2.32 - 2.24 (m, 2H), 2.21 (s, 3H), 2.04 (s, 6H), 1.98 - 1.88 (m, 2H), 1.87 - 1.75 (m, 2H), 1.62 - 1.54 (m, 2H).	457.2
SC_3321	cis-8-Dimethylamino-3 -(6-methylsulfonyl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	5-bromo-2-methylsulfonylpyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.89 (d, J = 2.6 Hz, 1H), 8.28 (dd, J = 8.9, 2.6 Hz, 1H), 7.93 (d, 1H), 7.42 - 7.34 (m, 4H), 7.31 - 7.25 (m, 1H), 3.71 (s, 2H), 3.18 (s, 3H), 2.48 - 2.33 (m, 2H), 2.04 - 1.76 (m, 10H), 1.54 - 1.48 (m, 2H).	429.2
SC_3322	cis-8-Dimethylamino-8-phenyl-3 -(1H-pyrrolo[2,3-b]pyridin-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-976	tert-butyl 5-bromopyrrolo [2,3-b]pyridine-1-carboxylate (step 1)	SC_3103 (for step 1), SC_3173 (for step 2)	1H NMR (600 MHz, DMSO) δ 11.45 (s, 1H), 8.38 (s, 1H), 8.00 (d, 1H), 7.85 - 7.81 (m, 1H), 7.70 - 7.66 (m, 2H), 7.57 - 7.53 (m, 3H), 7.41 (t, 1H), 6.35 (dd, 1H), 3.54 (s, 2H), 2.75 - 2.41 (m, 8H, overlapps with solvent residual peak), 2.30 - 2.26 (m, 2H), 1.89 (d, 2H), 1.41 - 1.37 (m, 2H).	390.2
SC_3323	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro [4.5]decan-3 -yl)-pyrimidin-2-yl]-acetamide (enantiomer 1)	SC_3239	acetyl chloride	SC_3240	1H NMR (600 MHz, DMSO) δ 10.36 (s, 1H), 8.82 (s, 2H), 8.40 (s, rotamer), 7.67 (s, 1H), 7.44 - 7.31 (m, 4H), 7.27 (td, 1H), 3.62 (s, 2H), 2.46 - 2.30 (m, 2H), 2.11 (s, 3H), 2.08 (s, rotamer), 1.96 (s, 6H), 1.97 (s, rotamer), 1.95 - 1.75 (m, 4H), 1.52 - 1.47 (m, 2H).	409.2
SC_3324	cis-3-[2-(4-Methyl-piperazin-1-yl)-pyrimidin-5-yl]-8-[methyl-(tetrahydrofuran-3-yl-methyl)-amino]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one (enantiomer 2)	INT-1026	5-bromo-2-(4-methylpiperazin-1 - yl)pyrimidine	step 2 of SC_3097 (for synthesis), SC_3292 and SC_3293 (for separation of enantiomers)	1H NMR (DMSO-d6): δ 8.52 (s, 2H), 7.64 (broad s, 1H), 7.36-7.23 (m, 5H), 3.66-3.55 (m, 7H), 3.48 (s, 2H), 3.37-3.36 (m, 1H), 2.33-2.13 (m, 11H), 2.01-1.82 (m, 9H), 1.50-1.41 (m, 3H).	518.3

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3325	cis-3-[2-(4-Methyl-piperazin-1-yl)-pyrimidin-5-yl]-8-[methyl-(tetrahydrofuran-3-yl-methyl)-amino]-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	INT-1026	5-bromo-2-(4-methylpiperazin-1-yl)pyrimidine	step 2 of SC_3097 (for synthesis), SC_3292 and SC_3293 (for separation of enantiomers)	1H NMR (DMSO-d6): δ 8.52 (s, 2H), 7.64 (broad s, 1H), 7.36-7.24 (m, 5H), 3.66-3.55 (m, 7H), 3.48 (s, 2H), 3.36 (m, 1H), 2.34-2.13 (m, 10H), 2.01-1.83 (m, 10H), 1.50-1.41 (m, 3H).	518.3
SC_3326	cis-8-Dimethylamino-3-(4,6-dimethyl-2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3 -diazaspiro [4.5]decan-2-one	INT-976	4-(5-bromo-4,6-dimethyl-pyrimidin-2-yl)morpholine	SC_3103		465.3
SC_3327	cis-8-Dimethylamino-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-thiophen-2-yl-1,3 - diazaspiro [4.5]decan-2-one	INT-1027	morpholine	SC_3120	1H NMR (600 MHz, DMSO) δ 8.58 (s, 2H), 7.43 (dd, 1H), 7.40 - 7.32 (m, 1H), 7.07 (dd, 1H), 6.96 (dd, 1H), 3.67 - 3.61 (m, 4H), 3.62 - 3.57 (m, 6H), 2.31 - 2.27 (m, 2H), 2.04 (s, 6H), 1.91 (t, 2H), 1.86 - 1.82 (m, 2H), 1.56 - 1.50 (m, 2H).	443.2
SC_3328	cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyridine-3-carboxylic acid amide	SC_3312		SC_3016	1H NMR (600 MHz, DMSO) δ 8.71 (d, J = 2.3 Hz, 1H), 8.24 (d, J = 8.9 Hz, 1H), 8.12 (dd, J = 9.0, 2.4 Hz, 1H), 7.95 (s, 1H), 7.86 (s, 1H), 7.36 (dq, J = 13.7, 6.6, 5.6 Hz, 5H), 7.27 (t, J = 7.2 Hz, 1H), 3.74 (s, 2H), 2.41 - 2.37 (m, 2H), 1.96 (s, 6H), 1.94 - 1.87 (m, 2H), 1.86 - 1.80 (m, 2H), 1.51 - 1.44 (m, 2H).	394.2
SC_3329	cis-8-Dimethylamino-3-[2-methyl-5-(trifluoromethyl)-2H-pyrazol-3-yl]-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-one	INT-997	5-bromo-1-methyl-3-(trifluoromethyl)pyrazole	SC_3319	1H NMR (600 MHz, DMSO) δ 7.66 - 7.63 (m, 1H), 7.42 (dd, 1H), 7.06 (dd, 1H), 6.95 (dd, 1H), 6.64 (s, 1H), 3.75 (s, 3H), 3.60 (s, 2H), 2.30 - 2.26 (m, 2H), 2.04 (s, 6H), 1.98 - 1.90 (m, 2H), 1.83 - 1.79 (m, 2H), 1.64 - 1.57 (m, 2H).	428.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3330	cis-8-Dimethylamino-3-[2-[(2-hydroxyethyl)-methyl-amino]-pyrimidin-5-yl]-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-one	INT-1027	2-(methylamino)ethanol	SC_3120	1H NMR (600 MHz, DMSO) δ 8.48 (s, 2H), 7.43 (d, 1H), 7.30 (s, 1H), 7.07 (dd, 1H), 6.96 (d, 1H), 3.61 (dd, 2H), 3.58 - 3.51 (m, 4H), 3.09 (s, 3H), 2.34 - 2.22 (m, 2H), 2.04 (s, 6H), 1.96 - 1.76 (m, 4H), 1.56 - 1.50 (m, 2H).	431.2
SC_3331	cis-8-Dimethylamino-3-[2-(2-oxo-1,3-dihydro-indol-4-yl)-pyrimidin-5-yl]-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-one	INT-1027	4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)indolin-2-one	SC_3208	1H NMR (600 MHz, DMSO) δ 10.46 (s, 1H), 9.12 (s, 2H), 7.87 (d, 1H), 7.47 - 7.42 (m, 1H), 7.31 (t, 1H), 7.08 (dd, 1H), 6.98 (dd, 1H), 6.92 (d, 1H), 3.83 (s, 2H), 3.77 (s, 2H), 2.35 - 2.30 (m, 2H), 2.05 (s, 6H), 1.96 (t, 2H), 1.88 (s, 2H), 1.60 - 1.54 (m, 2H).	489.2
SC_3332	cis-8-Dimethylamino-3-[4-methyl-6-(3-oxo-piperazin-1-yl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	4-(5-bromo-4-methyl-pyridin-2-yl)-piperazin-2-one	step 2 of SC_3097	1H-NMR (DMSO-d6, 400 MHz at 100oC), δ (ppm) = 7.89 (s, 1H), 7.62 (bs, 1H), 7.35-7.22 (m, 5H), 6.73 (s, 1H), 6.62 (s, 1H), 3.96 (s, 2H), 3.68 (t, 2H, J = 5.2 Hz), 3.39 (s, 2H), 3.30 (bs, 2H), 2.35-2.30 (m, 2H), 2.15 (s, 3H), 2.03-1.86 (m, 10H), 1.56-1.51 (m, 2H).	463.2
SC_3333	cis-8-Dimethylamino-3-(4-methyl-6-pyridin-2-yl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	5-bromo-2-chloro-4-methyl-pyridine (step 1), 2-tributyl-stannanyl-pyridine (step 2)	SC_3103 (for step 1), SC_3162 (for step 2)	1H-NMR (DMSO-d6, 400 MHz at 100 0C), δ (ppm) = 8.64 (d, 1H, J = 4.0 Hz), 8.45 (s, 1H), 8.31 (d, 1H, J = 8.68 Hz), 8.22 (s, 1H), 7.88 (t, 1H, J = 7.04 Hz), 7.39-7.35 (m, 5H), 7.26-7.23 (m, 1H), 7.03 (s, 1H), 3.57 (s, 2H), 2.39-2.33 (m, 5H), 2.04 (s, 6H), 2.01-1.88 (m, 4H), 1.61-1.57 (m, 2H).	442.3
SC_3334	cis-8-Dimethylamino-3-(4-methylsulfonyl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	3-bromo-4-methylsulfanyl-pyridine (step 1)	SC_3103 (for step 1), SC_3008 (for step 2)	1HNMR at 100oC (DMSO-d6, 400 MHz), δ (ppm) = 8.77-8.72 (m, 2H), 7.85-7.84 (m, 1H), 7.35-7.23 (m, 6H), 3.60 (s, 2H), 3.31 (s, 3H), 2.36 (bs, 2H), 2.03-1.82 (m, 10H), 1.60-1.58 (m, 2H).	429.3
SC_3335	cis-3-(Benzothiazol-7-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	7-bromo-benzothiazole	SC_3103		407.1

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3336	cis-8-Dimethylamino-8-(4-fluorophenyl)-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-1025	4-(5-bromo-4-methyl-pyrimidin-2-yl)morpholine	SC_3319	1H NMR (600 MHz, DMSO) δ 8.13 (s, 1H), 7.41 - 7.35 (m, 2H), 7.22 - 7.13 (m, 3H), 3.69 - 3.60 (m, 8H), 2.35 - 2.31 (m, 2H), 2.20 (s, 3H), 1.94 (s, 6H), 1.93 - 1.74 (m, 4H), 1.53 - 1.43 (m, 2H).	469.3
SC_3337	cis-2-[8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl]-N,N-dimethyl-acetamide	SC_3122	2-chloro-N,N-dimethylacetamide	INT-988 (step 1)	1H NMR (600 MHz, DMSO) δ 8.59 (s, 1H), 7.82 (s, 1H), 7.37 - 7.32 (m, 4H), 7.25 (ddd, 1H), 4.00 (s, 2H), 3.80 (s, 2H), 3.07 (s, 3H), 2.87 (s, 3H), 2.71 - 2.64 (m, 2H), 2.55 (s, 3H), 2.34 (s, 3H), 2.03 (td, 2H), 1.98 (s, 6H), 1.67 - 1.58 (m, 2H), 1.49 - 1.40 (m, 2H).	518.3
SC_3338	cis-8-Dimethylamino-3-[2-(2-methyl-1-oxo-2,3-dihydro-isoindol-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-989	2-methyl-4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)isoindolin-1 -one	SC_3208	1H NMR (600 MHz, DMSO) δ 9.57 (s, 1H), 9.08 (s, 2H), 8.52 (d, 1H), 8.43 (s, 1H), 7.77 (d, 1H), 7.72 (d, 2H), 7.63 (t, 1H), 7.59 (t, 2H), 7.55 (t, 1H), 4.86 (s, 2H), 3.59 (s, 2H), 3.13 (s, 3H), 2.72 (d, 2H), 2.61 (s, 6H), 2.25 (td, 2H), 1.91 (d, 2H), 1.43 - 1.35 (m, 2H).	497.3
SC_3339	cis-2-[[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-2-methyl-pyrimidin-4-yl]amino]-acetamide	INT-976	(5-bromo-2-methyl-pyrimidin-4-ylamino)-acetonitrile (step 1)	step 2 of SC_3242 (for step 1), SC_3016 (for step 2)	^{1}HNMR at 100°C (DMSO-d6, 400 MHz), δ (ppm) = 7.93 (s, 1H), 7.36-7.22 (m, 5H), 7.12 (s, 1H), 6.91 (bs, 2H), 6.58 (bs, 1H), 3.94 (d, 2H), 3.46 (s, 2H), 2.35-2.32 (m, 5H), 2.03-1.97 (m, 8H), 1.91-1.84 (m, 2H), 1.61-1.56 (m, 2H).	438.4
SC_3341	cis-8-Dimethylamino-3-[4-(methylsulfonyl-methyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	3-bromo-4-methanesulfonyl-methyl-pyridine	step 2 of SC_3097	1HNMR at 100_0C (DMSO-d6, 400 MHz), δ (ppm) = 8.53 (s, 1H), 8.43 (d, 1H, J = 4.88 Hz), 7.48 (d, 1H, J = 4.88 Hz), 7.36-7.23 (m, 5H), 7.15 (s, 1H), 4.55 (s, 2H), 3.64 (s, 2H), 2.95 (s, 3H), 2.38-2.33 (m, 2H), 2.04 (s, 6H), 1.99-1.83 (m, 4H), 1.62-1.57 (m, 2H).	443.4

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3342	cis-8-Dimethylamino-3-[6-(4-methyl-3-oxo-piperazin-1-yl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	4-(5-bromo-2-pyridyl)-1-methyl-piperazin-2-one	SC_3242 (step 2)	1H NMR (600 MHz, CDCl3) δ 8.09 (d, 1H), 8.00 (dd, 1H), 7.45 - 7.39 (m, 2H), 7.37 - 7.28 (m, 3H), 6.61 (d, 1H), 5.71 (s, 1H), 4.04 (s, 2H), 3.87 - 3.82 (m, 2H), 3.51 (s, 2H), 3.45 (t, 2H), 3.03 (s, 3H), 2.32 - 2.02 (m, 10H), 2.02 - 1.94 (m, 2H), 1.64 - 1.53 (m, 2H).	463.3
SC_3343	cis-8-Dimethylamino-3-(2,4-dimethyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	5-bromo-2,4-dimethyl-pyrimidine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.46 (s, 1H), 7.45 - 7.33 (m, 5H), 7.28 - 7.24 (m, 1H), 3.51 (s, 2H), 2.54 (s, 3H), 2.41 - 2.28 (m, 5H), 2.03 - 1.77 (m, 10H), 1.56 - 1.49 (m, 2H).	380.3
SC_3344	cis-8-Dimethylamino-3-[2-(1-oxo-2,3-dihydro-isoindol-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one; 2,2,2-trifluoro-acetic acid	INT-989	4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)isoindolin-1-one	SC_3208	1H NMR (600 MHz, DMSO) δ 9.06 (s, 2H), 8.67 (s, 1H), 8.52 (d, 1H), 8.39 (s, 1H), 7.75 (dd, 3H), 7.66 - 7.51 (m, 4H), 4.75 (s, 2H), 3.58 (s, 2H), 3.18 (s, 2H), 2.75 (d, 2H), 2.60 (s, 6H), 2.27 (t, 2H), 1.91 (d, 2H), 1.39 (t, 2H).	483.3
SC_3345	cis-8-Dimethylamino-3-[6-[(2-hydroxy-ethyl)-methyl-amino-5-(trifluoro-methyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	2-[[5-bromo-3-(trifluoro-methyl)-2-pyridyl]-methyl-amino]ethanol	SC_3103	1H NMR (600 MHz, DMSO) δ 8.55 - 8.51 (m, 1H), 8.35 (d, 1H), 7.62 (s, 1H), 7.37 (td, 4H), 7.27 (td, 1H), 3.63 (s, 2H), 3.50 (td, 2H), 3.20 (t, 2H), 2.78 (s, 3H), 2.43 - 2.36 (m, 2H), 1.96 (s, 6H), 1.95 - 1.75 (m, 4H), 1.48 (t, 2H).	492.3
SC_3346	cis-8-Dimethylamino-8-phenyl-3-[2-[4-(trifluoromethyl)-1H-[1,2,3]triazol-1-yl]-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-976	3,3,3-trifluoroprop-1-yne, 2-azido-5-bromopyrimidine	SC_3313	1H NMR (600 MHz, DMSO) δ 9.56 (d, 1H), 9.16 (s, 2H), 7.99 (s, 1H), 7.42 - 7.35 (m, 4H), 7.31 - 7.25 (m, 1H), 3.75 (s, 2H), 2.49 - 2.34 (m, 2H), 2.05 - 1.75 (m, 10H), 1.60 - 1.47 (m, 2H).	487.3
SC_3347	cis-8-Dimethylamino-3-[2-(4-isopropyl-1H-[1,2,3]triazol-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	3-methylbut-1-yne, 2-azido-5-bromopyrimidine	SC_3313	1H NMR (600 MHz, DMSO) δ 9.10 (s, 2H), 8.50 (d, 1H), 7.91 (s, 1H), 7.42 - 7.35 (m, 5H), 7.28 (td, 1H), 3.73 (s, 2H), 3.08 (hept, 1H), 2.44 (s, 2H), 2.01 - 1.76 (m, 10H), 1.59 - 1.48 (m, 2H), 1.30 (d, 6H).	461.3

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3348	cis-8-Dimethylamino-3-[6-(1,1-dioxo-[1,4]thiazinan-4-yl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	1,4-thiazinane 1,1-dioxide, 5-bromo-2-chloro-pyridine (step 1)	SC_3242	1H NMR (600 MHz, DMSO) δ 8.23 (d, 1H), 7.93 (dd, 1H), 7.41 - 7.33 (m, 5H), 7.27 (t, 1H), 6.98 (d, 1H), 3.97 (t, 4H), 3.53 (s, 2H), 3.04 (t, 4H), 2.43 - 2.28 (m, 2H), 1.96 (s, 6H), 1.92 - 1.72 (m, 4H), 1.51 - 1.40 (m, 2H).	484.2
SC_3349	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-2-morpholin-4-yl-nicotinonitrile	INT-976	5-bromo-2-chloropyridine-3-carbonitrile, morpholine	SC_3242	1H NMR (600 MHz, DMSO-d6) δ 8.66 (d, J = 2.9 Hz, 1H), 8.25 (d, J = 2.8 Hz, 1H), 7.60 (s, 1H), 7.41 - 7.33 (m, 4H), 7.30 - 7.24 (m, 1H), 3.74 - 3.69 (m, 4H), 3.60 (s, 2H), 2.48 - 2.29 (m, 2H), 1.96 (s, 6H), 1.94 - 1.68 (m, 4H), 1.52 - 1.41 (m, 2H).	461.3
SC_3350	cis-8-Dimethylamino-3-(1-methylsulfonyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	5-bromo-1-methylsulfonyl-pyrrolo [2,3 -b]pyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.64 (d, 1H), 8.28 (d, 1H), 7.65 (dd, 1H), 7.57 (s, 1H), 7.38 (dd, 4H), 7.28 (dt, 1H), 6.72 (dd, 1H), 3.68 (s, 2H), 3.65 (s, 3H), 2.48 - 2.29 (m, 2H), 1.98 (s, 10H), 1.53 - 1.44 (m, 2H).	468.2
SC_3351	cis-8-Dimethylamino-3-(1H-indol-4-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	4-bromo-1 -(toluene-4-sulfonyl)-1H-indole (step 1)	SC_3357	1H-NMR (DMSO-d6, 400 MHz at 100 0C), δ (ppm) = 10.77 (bs, 1H), 7.37 (bs, 4H), 7.24-7.18 (m, 3H), 7.02-6.94 (m, 2H), 6.81 (bs, 1H), 6.41 (s, 1H), 3.66 (s, 2H), 2.36-2.33 (m, 2H), 2.05-1.96 (m, 10H), 1.60-156 (m, 2H).	389.3
SC_3353	cis-8-Dimethylamino-3-[2-fluoro-4-(trifluoromethyloxy)-phenyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	1-bromo-2-fluoro-4-(trifluoromethoxy)-benzene	SC_3103	1H NMR (600 MHz, DMSO) δ 7.62 (t, 1H), 7.50 - 7.46 (m, 1H), 7.40 (dd, 1H), 7.38 - 7.31 (m, 4H), 7.25 (t, 1H), 7.21 (d, 1H), 3.57 (s, 2H), 2.38 (d, 2H), 1.97 - 1.88 (m, 8H), 1.84 - 1.79 (m, 2H), 1.53 - 1.46 (m, 2H).	452.2
SC_3355	cis-8-Dimethylamino-3-(1-methyl-1H-pyrrolo[2,3-b]pyridin-4-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	4-bromo-1 -methyl - pyrrolo [2,3 -b]pyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.04 (d, 1H), 7.70 (s, 1H), 7.47 (d, 1H), 7.41 - 7.33 (m, 4H), 7.31 - 7.24 (m, 2H), 6.65 (d, 1H), 3.91 (s, 2H), 3.74 (s, 3H), 2.44 - 2.25 (m, 2H), 2.08 - 1.74 (m, 10H), 1.52 (t, 2H).	404.3

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3356	cis-3-(1-Acetyl-1H-indol-4-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	SC_3351	acetyl chloride	SC_3379	1H-NMR (DMSO-d6, 400 MHz at 100 0C), δ (ppm) = 8.12 (d, 1H, J = 8.28 Hz), 7.68 (d, 1H, J = 3.64 Hz), 7.36-7.22 (m, 6H), 7.16 (d, 1H, J = 7.80 Hz), 7.01 (s, 1H), 6.69 (d, 1H, J = 3.8 Hz), 3.66 (s, 2H), 2.62 (s, 3H), 2.38-2.33 (m, 2H), 2.05-1.92 (m, 10H), 1.61-1.56 (m, 2H).	431.2
SC_3358	cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-5-methyl-nicotinonitrile	INT-976	6-chloro-5-methylpyridine-3-carbonitrile	SC_3103	1H NMR (600 MHz, DMSO) δ 8.64 (s, 1H), 8.12 (s, 1H), 7.76 (s, 1H), 7.39 - 7.34 (m, 4H), 7.27 (s, 1H), 3.71 (s, 2H), 2.43 - 2.15 (m, 5H), 2.11 - 1.70 (m, 10H), 1.52 (s, 2H).	390.2
SC_3359	cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-5-fluoro-nicotinonitrile	INT-976	6-chloro-5-fluoro-pyridine-3-carbonitrile	SC_3103	1H NMR (600 MHz, DMSO) δ 8.64 (d, 1H), 8.30 (dd, 1H), 7.95 (s, 1H), 7.40 - 7.31 (m, 4H), 7.29 - 7.23 (m, 1H), 3.72 (s, 2H), 2.36 - 2.33 (m, 2H), 1.96 (s, 6H), 1.94 - 1.79 (m, 4H), 1.52 (t, 2H).	394.2
SC_3361	cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-5-methylpyridine-3-carboxylic acid amide	SC_3358		SC_3016	1H NMR (600 MHz, DMSO) δ 8.64 (d, 1H), 8.06 - 8.02 (m, 2H), 7.54 (s, 1H), 7.44 (s, 1H), 7.38 - 7.30 (m, 4H), 7.27 - 7.21 (m, 1H), 3.67 (s, 2H), 2.37 - 2.26 (m, 5H), 2.05 - 1.75 (m, 10H), 1.51 (t, 2H).	408.2
SC_3362	cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-5-fluoro-pyridine-3-carboxylic acid amide	SC_3359		SC_3016	1H NMR (600 MHz, DMSO) δ 8.65 - 8.61 (m, 1H), 8.13 (s, 1H), 8.04 (dd, 1H), 7.76 (s, 1H), 7.59 (s, 1H), 7.39 - 7.30 (m, 4H), 7.28 - 7.21 (m, 1H), 3.70 (s, 2H), 2.41 - 2.23 (m, 2H), 1.96 - 1.76 (m, 10H), 1.50 (t, 2H).	412.2
SC_3363	cis-8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-m-tolyl-1,3-diazaspiro[4.5]decan-2-one	INT-1038	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3319	1H NMR (600 MHz, DMSO) δ 8.56 (s, 1H), 7.80 (s, 1H), 7.52 (s, 1H), 7.24 (t, 1H), 7.17 - 7.11 (m, 2H), 7.06 (d, 1H), 3.60 (s, 2H), 2.39 - 2.25 (m, 8H), 2.01 - 1.78 (m, 10H), 1.58 - 1.48 (m, 2H).	447,2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3364	cis-3-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-isonicotinonitrile	INT-976	3 -bromopyridine-4-carbonitrile	SC_3242	1H NMR (600 MHz, DMSO) δ 8.79 (s, 1H), 8.50 (d, 1H), 7.84 - 7.80 (m, 1H), 7.37 (td, 4H), 7.26 (td, 1H), 3.79 (s, 2H), 2.43 - 2.36 (m, 2H), 1.97 (s, 7H), 1.96 - 1.91 (m, 2H), 1.88 - 1.81 (m, 2H), 1.61 - 1.45 (m, 2H).	376,2
SC_3365	cis-8-Dimethylamino-3-[3-fluoro-5-(2-oxo-1,3-dihydro-indol-4-yl)-pyridin-2-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-1045	4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)indolin-2-one (step 2)	SC_3354	1H NMR (600 MHz, DMSO) δ 10.51 (s, 1H), 8.39 (d, 1H), 7.96 (dd, 1H), 7.41 - 7.32 (m, 4H), 7.28 (dt, 2H), 7.08 (d, 1H), 6.88 (d, 1H), 3.71 (s, 2H), 3.67 (s, 2H), 2.44 - 2.22 (m, 2H), 1.98 - 1.87 (m, 11H), 1.58 - 1.46 (m, 2H).	500,2
SC_3366	cis-8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-[3-(trifluoromethyloxy)-phenyl]-1,3-diazaspiro[4.5]decan-2-one	INT-1039	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3319	1H NMR (600 MHz, DMSO) δ 8.55 (s, 1H), 7.79 (s, 1H), 7.51 (t, 2H), 7.38 (dd, 1H), 7.26 (d, 2H), 3.62 (s, 2H), 2.40 - 2.34 (m, 2H), 2.31 (s, 3H), 2.01 - 1.77 (m, 10H), 1.58 - 1.49 (m, 2H).	517,2
SC_3367	cis-8-Dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-8-[3-(trifluoromethyl)phenyl]-1,3-diazaspiro[4.5]decan-2-one	INT-1040	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3319	1H NMR (600 MHz, DMSO) δ 8.55 (s, 1H), 7.79 (s, 1H), 7.69 - 7.56 (m, 5H), 7.52 (s, 1H), 3.61 (s, 2H), 2.44 - 2.36 (m, 2H), 2.31 (s, 3H), 2.02 - 1.80 (m, 10H), 1.60 - 1.47 (m, 2H).	501,2
SC_3368	cis-8-Dimethylamino-8-(3-methoxy-phenyl)-3-[4-methyl-6-(trifluoro-methyl)-pyridin-3-yl]-1,3-diazaspiro [4.5]decan-2-one	INT-1041	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3319	1H NMR (600 MHz, DMSO) δ 8.56 (s, 1H), 7.80 (s, 1H), 7.51 (s, 1H), 7.31-7.25 (m, 1H), 6.92 (dt, 1H), 6.87 - 6.82 (m, 2H), 3.75 (s, 3H), 3.61 (s, 2H), 2.35 - 2.30 (m, 5H), 1.98 (s, 7H), 1.96 - 1.90 (m, 2H), 1.88 - 1.80 (m, 2H), 1.60 - 1.49 (m, 2H).	463,2
SC_3369	cis-8-(5-Chloro-thiophen-2-yl)-8-dimethylamino-3-[4-methyl-6-(trifluoro-methyl)-pyridin-3-yl]-1,3-diazaspiro [4.5]decan-2-one	INT-1042	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3319	1H NMR (600 MHz, DMSO) δ 8.56 (s, 1H), 7.79 (s, 1H), 7.39 (s, 1H), 7.04 - 7.00 (m, 1H), 6.80 (d, 1H), 3.64 (s, 2H), 2.31 (s, 3H), 2.22 - 2.15 (m, 2H), 2.04 (s, 6H), 1.95 - 1.87 (m, 2H), 1.83 - 1.77 (m, 2H), 1.63 - 1.57 (m, 2H).	473,1

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3370	cis-8-Dimethylamino-8-(3-fluorophenyl)-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-1024	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3319	1H NMR (600 MHz, DMSO) δ 8.56 (s, 1H), 7.80 (s, 1H), 7.51 (s, 1H), 7.41 (td, 1H), 7.21 - 7.12 (m, 2H), 7.12 - 7.06 (m, 1H), 3.61 (s, 2H), 2.38 - 2.30 (m, 5H), 1.97 (s, 6H), 1.96 - 1.90 (m, 2H), 1.90 - 1.73 (m, 2H), 1.61 - 1.45 (m, 2H).	451,2
SC_3371	cis-8-Dimethylamino-3-(2-methylamino-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-989	methylamine	SC_3239	1H NMR (600 MHz, DMSO + TFA) δ 8.69 (s, 2H), 8.29 (s, 1H), 7.68 (d, 2H), 7.52 (dt, 3H), 2.90 (s, 3H), 2.68 (d, 2H), 2.59 (s, 6H), 2.24 (t, 2H), 1.86 (d, 2H), 1.39 - 1.31 (m, 2H)	381,2
SC_3372	cis-8-(5-Chloro-thiophen-2-yl)-8-dimethylamino-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-1042	4-(5-bromo-4-methyl-pyrimidin-2-yl)morpholine	SC_3242	1H NMR (600 MHz, DMSO) δ 8.15 (d, 1H), 7.15 (s, 1H), 7.05 (d, 1H), 6.82 (d, 1H), 3.70 - 3.61 (m, 8H), 3.44 (s, 2H), 2.31 - 2.12 (m, 5H), 2.06 (s, 6H), 1.93 - 1.85 (m, 2H), 1.82 - 1.69 (m, 2H), 1.64 - 1.49 (m, 2H).	491,2
SC_3373	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-N-methyl-cyclopropanecarboxylic acid amide	SC_3371	Cyclopropancarbonylchl orid	SC_3240	1H NMR (600 MHz, DMSO) δ 8.97 (s, 2H), 7.83 - 7.73 (m, 1H), 7.41 - 7.34 (m, 4H), 7.30 - 7.24 (m, 1H), 3.66 (s, 2H), 3.27 (s, 3H), 2.47 - 2.29 (m, 2H), 1.99 - 1.87 (m, 10H), 1.49 (t, 2H), 0.88 - 0.80 (m, 2H), 0.70 (dt, 2H).	449.3
SC_3374	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-N,2,5-trimethyl-2H-pyrazole-3-carboxylic acid amide	SC_3371	2,5-dimethylpyrazole-3-carbonyl chloride	SC_3240	1H NMR (600 MHz, DMSO) δ 8.83 (s, 2H), 7.77 (s, 1H), 7.41 - 7.32 (m, 4H), 7.27 (td, 1H), 5.48 (s, 1H), 3.80 (s, 3H), 3.61 (s, 2H), 3.40 (s, 3H), 2.46 - 2.31 (m, 2H), 1.96 (s, 3H), 1.96 (s, 6H), 1.94 - 1.74 (m, 5H), 1.52 - 1.42 (m, 2H).	503.3
SC_3375	cis-3-[4,6-Bis(trifluoromethyl)-pyridin-3-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	5-bromo-2,4-bis(trifluoromethyl)pyrid ine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.98 (s, 1H), 8.20 (s, 1H), 7.79 (s, 1H), 7.40 - 7.32 (m, 4H), 7.26 (td, 1H), 3.62 (s, 2H), 2.44 - 2.24 (m, 2H), 1.98 - 1.91 (m, 8H), 1.86 (s, 2H), 1.53 (t, 2H).	487.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3376	cis-8-Dimethylamino-3-[2-[(2-hydroxyethyl)-methyl-amino]-quinazolin-6-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	2-[(6-bromo-quinazolin-2-yl)-methyl-amino]-ethanol	SC_3242	1HNMR at 100oC (DMSO-d6, 400 MHz), δ (ppm) = 8.99 (s, 1H), 8.28 (d, 1H, J = 9.24 Hz), 7.63 (s, 1H), 7.43-7.26 (m, 6H), 7.13 (s, 1H), 4.31 (bs, 1H), 3.78-3.76 (m, 2H), 3.66 (bs, 4H), 3.24 (s, 3H), 2.43-2.38 (m, 2H), 2.05-1.90 (m, 10H), 1.56-1.54 (m, 2H).	475.1
SC_3377	cis-8-Dimethylamino-3-(2-morpholin-4-yl-quinazolin-6-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	6-bromo-2-morpholin-4-yl-quinazoline	SC_3242	1HNMR at 100oC (DMSO-d6, 400 MHz), δ (ppm) = 9.05 (s, 1H), 8.34 (d, 1H), 7.68 (s, 1H), 7.48 (d, 1H, J = 9.4 Hz), 7.38-7.27 (m, 5H), 7.18 (s, 1H), 3.81-3.67 (m, 10H), 2.40-2.38 (m, 2H), 2.05-1.90 (m, 10H), 1.57-1.54 (m, 2H).	487.2
SC_3378	cis-8-[Methyl-(oxetan-3-yl-methyl)-amino]-8-phenyl-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-1047	2-trifluoromethyl-5-bromopyrimidine	SC_3103	1H NMR (DMSO-d6): δ 9.21-9.15 (s, 2H), 8.19-8.18 (broad s, 1H), 7.41-7.34 (m, 4H), 7.27-7.25 (m, 1H), 4.58-4.56 (m, 2H), 4.18 (s, 1H), 3.69 (s, 2H), 3.05-2.99 (m, 1H), 2.41-2.36 (m, 4H), 1.91 (m, 7H), 1.47 (s, 2H).	476.2
SC_3380	cis-8-Dimethylamino-8-phenyl-3 - quinazolin-6-yl-1,3-diazaspiro[4.5]decan-2-one	INT-976	6-bromo-quinazoline	SC_3103	1HNMR at 100oC (DMSO-d6, 400 MHz), δ (ppm) = 9.35 (s,1H), 9.10 (s,1H), 8.65 (d,1H, J = 9.04) 7.91-7.89 (m, 2H), 7.39-7.27 (m, 5H), 3.75 (s, 2H), 2.42-2.32 (m, 2H), 2.05 (s, 6H), 2.00-1.92 (m, 4H), 1.56 (bs, 2H).	402.2
SC_3381	cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro[4.5]decan-3 -yl)-2-(2-oxo-1,3 -dihydro-indol-4-yl)-isonicotinonitrile	INT-976	5-bromo-2-chloropyridine-4-carbonitrile (step 1), 4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)indolin-2-one (step 2)	SC_3103 (for step 1), SC_3129 (for step 2)	1H NMR (600 MHz, DMSO) δ 8.88 (s, 1H), 8.24 (s, 1H), 7.85 (s, 1H), 7.52 - 7.46 (m, 1H), 7.41 - 7.29 (m, 6H), 7.27 (td, 1H), 6.92 (d, 1H), 3.84 (s, 2H), 3.78 (s, 2H), 2.48 - 2.30 (m, 2H), 1.99 - 1.93 (m, 8H), 1.92 - 1.74 (m, 2H), 1.58 - 1.54 (m, 2H).	507.3

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3382	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-N-methyl-tetrahydropyran-4-carboxylic acid amide	SC_3371	tetrahydropyran-4-carbonyl chloride	SC_3240	1H NMR (600 MHz, DMSO) δ 8.97 (s, 2H), 7.80 (s, 1H), 7.42 - 7.34 (m, 4H), 7.31 - 7.25 (m, 1H), 3.79 (ddd, 2H), 3.67 (s, 2H), 3.25 (s, 2H), 3.17 (td, 2H), 3.04 - 2.96 (m, 1H), 2.49 - 2.34 (m, 2H), 1.97 (s, 6H), 1.95 - 1.74 (m, 4H), 1.68 - 1.53 (m, 4H), 1.54 - 1.48 (m, 2H).	493.3
SC_3383	cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-N,2,2-trimethyl-propionamide	SC_3371	pivaloyl chloride	SC_3240	1H NMR (600 MHz, DMSO) δ 8.98 (s, 2H), 7.42 - 7.34 (m, 4H), 7.30 - 7.26 (m, 1H), 3.69 (s, 2H), 3.14 (s, 3H), 2.46 - 2.41 (m, 2H), 1.99 - 1.87 (m, 10H), 1.54 - 1.45 (m, 2H), 0.97 (s, 9H).	465.3
SC_3384	cis-8-Dimethylamino-3-[2-(1-methyl-2-oxo-1,3-dihydro-indol-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-989	1-methyl-4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)indolin-2-one	SC_3208	1H NMR (600 MHz, CDCl3) δ 9.05 (s, 2H), 8.08 (d, 1H), 7.47 - 7.39 (m, 3H), 7.38 - 7.31 (m, 3H), 6.91 (d, 1H), 5.46 (s, 1H), 4.04 (s, 2H), 3.64 (s, 2H), 3.27 (s, 3H), 2.35 - 2.14 (m, 4H), 2.10 (s, 6H), 2.08 - 2.01 (m, 3H), 1.73 - 1.64 (m, 2H), 1.28 (s, 0H).	497.3
SC_3385	cis-8-Dimethylamino-3-(2-morpholin-4-yl-1H-benzoimidazol-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	6-bromo-1-(tert-butylsilanyl-methoxymethyl)-2-morpholin-4-yl- 1H-benzoimidazole (step 1)	SC_3242 (for step 1), step 2 of SC_3352 (for step 2)	1HNMR at 100oC (DMSO-d6, 400 MHz), δ (ppm) = 10.94 (bs, 1H), 7.50 (bs, 1H), 7.39-7.27 (m, 5H), 7.06 (m, 2 H), 6.84 (bs, 1H), 3.72 (t, 4H, 4.56 Hz), 3.55 (s, 2H), 3.45 (t, 4H, 4.56 Hz), 2.372.24 (m, 2H), 1.95-1.81 (m, 10H), 1.52-1.50 (m, 2H)	475.2
SC_3386	cis-8-Dimethylamino-8-(3-fluoro-5-methyl-phenyl)-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-1043	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3319	1H NMR (600 MHz, DMSO) δ 8.57 (s, 1H), 7.80 (s, 1H), 7.51 (s, 1H), 6.99 (s, 1H), 6.96 - 6.89 (m, 2H), 3.61 (s, 2H), 2.34 (s, 3H), 2.32 (s, 3H), 2.07 (s, 1H), 1.97 (s, 6H), 1.96 - 1.89 (m, 2H), 1.88 - 1.78 (m, 2H), 1.54 (d, 2H).	465.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3387	cis-8-Dimethylamino-3 -[6-(2-oxo-1,3-dihydro-indol-4-yl)-pyridin-3-yl]-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	INT-1048	4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)indolin-2-one	SC_3129	1H NMR (600 MHz, DMSO) δ 8.83 (d, 1H), 8.11 (dd, 1H), 7.77 (d, 1H), 7.64 (s, 1H), 7.43 - 7.34 (m, 5H), 7.31 - 7.24 (m, 2H), 6.84 (d, 1H), 3.73 (s, 2H), 3.68 (s, 2H), 2.45 - 2.31 (m, 2H), 1.99 - 1.79 (m, 10H), 1.51 (t, 2H).	482.3
SC_3389	cis-3-[6-(Azetidin-1-yl)-5-(trifluoromethyl)-pyridin-3-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	5-bromo-2-chloro-3-(trifluoromethyl)pyridine (step 1), azetidine (step 2)	SC_3103 (for step 1), SC_3120 (for step 2, 160 oC)	1H NMR (600 MHz, DMSO) δ 8.40 (d, 1H), 8.21 (d, 1H), 7.47 (s, 1H), 7.41 - 7.33 (m, 4H), 7.30 - 7.24 (m, 1H), 4.03 (t, 4H), 3.58 (s, 2H), 2.47 - 2.29 (m, 2H), 2.25 (p, 2H), 1.96 (s, 6H), 1.89 (s, 4H), 1.47 (t, 2H).	453.2
SC_3390	cis-3-[1-(Cyclopropyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-isonicotinonitrile	SC_3364	bromomethylcyclopropa ne	INT-952	1H NMR (600 MHz, DMSO) δ 8.82 (s, 1H), 8.51 (dd, 1H), 7.81 (d, 1H), 7.40 - 7.33 (m, 4H), 7.29 - 7.23 (m, 1H), 3.93 (s, 2H), 3.10 (d, 2H), 2.76 - 2.70 (m, 2H), 2.29 (ddd, 2H), 2.02 (s, 6H), 1.58 (d, 2H), 1.52 - 1.44 (m, 2H), 1.01 (ddt, 1H), 0.55 - 0.49 (m, 2H), 0.37 - 0.31 (m, 2H).	430.3
SC_3391	cis-3-[3,5-Bis(trifluoromethyl)-pyridin-2-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	2-chloro-3,5-bis(trifluoromethyl)pyrid ine	SC_3103	1H NMR (600 MHz, DMSO) δ 9.04 (d, 1H), 8.58 (d, 1H), 7.96 (s, 1H), 7.41 - 7.32 (m, 4H), 7.29 - 7.23 (m, 1H), 3.75 (s, 2H), 2.41 - 2.25 (m, 2H), 1.98 - 1.89 (m, 10H), 1.52 (t, 2H).	487.2
SC_3392	cis-8-Dimethylamino-3-(5-fluoro-6-morpholin-4-yl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	4-(5-bromo-3-fluoro-2-pyridyl) morpholine	SC_3103	1H NMR (600 MHz, CDCl3) δ 8.13 (dd, 1H), 7.76 (d, 1H), 7.42 (t, 2H), 7.33 (dd, 3H), 5.84 (s, 1H), 3.84 (t, 4H), 3.52 (s, 2H), 3.37 (t, 4H), 2.29 - 2.12 (m, 4H), 2.08 (s, 6H), 2.01 - 1.94 (m, 2H), 1.60 (t, 2H).	454.3
SC_3393	cis-8-(3-Chlorophenyl)-8-dimethylamino-3-[4-methyl-6-(trifluoromethyl)-pyridin-3-yl]-1,3-diazaspiro [4.5] decan-2-one	INT-1044	5-bromo-4-methyl-2-(trifluoromethyl)pyridine	SC_3319	1H NMR (600 MHz, DMSO) δ 8.57 (s, 1H), 7.80 (s, 1H), 7.55 - 7.49 (m, 1H), 7.43 - 7.37 (m, 1H), 7.38 - 7.29 (m, 3H), 3.61 (s, 2H), 2.40 - 2.24 (m, 5H), 1.99 - 1.90 (m, 8H), 1.90 - 1.76 (m, 2H), 1.60 - 1.47 (m, 2H).	467.2

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3394	cis-8-Dimethylamino-3 - [5-(2-oxo-1,3 - dihydro-indol-4-yl)-pyridin-2-yl]-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	INT-1049	4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)indolin-2-one	SC_3354	1H NMR (600 MHz, DMSO) δ 8.41 (d, 1H), 8.26 (d, 1H), 7.92 (dd, 1H), 7.75 (s, 1H), 7.41 - 7.32 (m, 5H), 7.30 - 7.23 (m, 2H), 7.01 (d, 1H), 6.83 (d, 1H), 3.75 (s, 2H), 3.61 (s, 2H), 2.46 - 2.30 (m, 2H), 1.96 (s, 6H), 1.94 - 1.88 (m, 2H), 1.86 - 1.82 (m, 2H), 1.48 (t, 2H).	482.3
SC_3395	cis-8-Dimethylamino-8-phenyl-3-[5-(trifluoromethyl)-[1,3,4]thiadiazol-2-yl] - 1,3-diazaspiro[4.5]decan-2-one	INT-976	2-bromo-5-(trifluoromethyl)-1,3,4-thiadiazole	SC_3103	1H NMR (600 MHz, DMSO) δ 8.69 (s, 1H), 7.42 - 7.34 (m, 4H), 7.28 (t, 1H), 3.89 (s, 2H), 2.45 - 2.31 (m, 2H), 2.07 - 1.88 (m, 8H), 1.88 - 1.84 (m, 2H), 1.60 - 1.53 (m, 2H).	426.2
SC_3397	cis-8-Dimethylamino-3-[2-[(2-hydroxyethyl)-methyl-amino]-1H-benzoimidazol-5-yl]-8-phenyl-1,3-diazaspiro [4.5]decan-2-one	INT-976	2-{[6-bromo-1-(2-trimethylsilanyl-ethoxymethyl)-1H-benzoimidazol-2-yl]-methyl-amino }-ethanol (step 1)	SC_3242 (for step 1), step 2 of SC_3352 (for step 2)	1HNMR (DMSO-d6, 400 MHz at 100oC), δ (ppm) = 10.62 (bs, 1H), 7.48-7.24 (m, 6H), 7.01-6.91 (m, 2H,), 6.76 (s, 1H), 4.58 (bs, 1H), 3.66 (t, 2H, J = 5.62 Hz), 3.54-3.50 (m, 4H), 3.09 (s, 3H), 2.37-2.32 (m, 2H), 2.04 (s, 6H), 1.96-1.91 (m, 4H), 1.52-1.40 (m, 2H).	463.3
SC_3398	cis-8-Dimethylamino-3-(5-methyl-6-morpholin-4-yl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	4-(5-bromo-3-methyl-2-pyridyl)morpholine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.23 (s, 1H), 7.83 (s, 1H), 7.46 - 7.33 (m, 5H), 7.30 - 7.24 (m, 1H), 3.71 (t, 4H), 3.55 (s, 2H), 2.93 (t, 4H), 2.41 - 2.37 (m, 2H), 1.96 (s, 6H), 1.91 - 1.82 (m, 4H), 1.49 - 1.44 (m, 2H).	450.3
SC_3399	cis-1-(Cyclopropyl-methyl)-8-dimethylamino-8-(3-fluorophenyl)-3-(5-methylsulfonyl-pyridin-2-yl)-1,3-diazaspiro [4.5]decan-2-one	SC_3409	bromomethylcyclopropa ne	SC_3105	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 8.68-8.68 (d, 1H, J = 2.32 Hz), 8.42-8.40 (d, 1H, J = 9.04 Hz), 8.18-8.15 (m, 1H), 7.44-7.38 (m, 1H), 7.20-7.08 (m, 3H), 3.90 (s, 2H), 3.22 (s, 3H), 3.11-3.10 (d, 2H, J = 6.68 Hz), 2.71-2.68 (d, 2H, J = 13.6 Hz), 2.27-2.21(m, 2H), 2.00 (s, 6H), 1.53-1.44 (m, 4H), 1.02-0.99 (m, 1H), 0.54-0.50 (m, 2H), 0.36-0.35 (m, 2H).	501.4

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3400	cis-1-(Cyclopropyl-methyl)-8-(3-fluoro-phenyl)-8-methylamino-3-(5-methyl-sulfonyl-pyridin-2-yl)-1,3 - diazaspiro [4.5]decan-2-one	SC_3399		SC_3099	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 8.72-8.71 (d, 1H, J = 2.28 Hz), 8.42-8.40 (d, 1H, J = 9.04 Hz), 8.18-8.15 (m, 1H), 7.40-7.31 (m, 3H), 7.05-7.01 (m, 1H), 3.93 (s, 2H), 3.23 (s, 3H), 3.14-3.13 (d, 2H, J = 6.76 Hz), 2.42 (bs, 1H), 2.28-2.23(m, 2H), 1.96-1.88 (m, 5H), 1.79-1.73 (m, 2H), 1.44-1.41 (d, 2H, J = 12.2 Hz), 1.06-1.02 (m, 1H), 0.52-0.47 (m, 2H), 0.36-0.33 (m, 2H).	487.2
SC_3401	cis-1-(Cyclobutyl-methyl)-8-(3-fluoro-phenyl)-8-methylamino-3-[2-(trifluoro-methyl)-pyrimidin-5-yl] -1,3-diazaspiro [4.5]decan-2-one	SC_3404	bromomethylcyclobutane (step 1)	SC_3105 (for step 1), SC_3099 (for step 2)	1HNMR at 100oC (DMSO-d6, 400 MHz), δ (ppm) = 9.23 (s, 2H), 7.38-7.26 (m, 3H), 7.00 (t, 1H, J = 8.1 Hz), 3.86 (s, 2H), 3.30-3.28 (d, 2H, J = 7.24 Hz), 2.68-2.65 (m, 1H), 2.27-2.16 (m, 3H), 2.06-1.78 (m, 13H), 1.46-1.43 (m, 2H).	492.1
SC_3402	cis-1-(Cyclopropyl-methyl)-8-dimethy-lamino-8-(3-fluorophenyl)-3-[2-(tri-fluoromethyl)-pyrimidin-5-yl] -1,3-dia-zaspiro[4.5]decan-2-one	SC_3404	bromomethylcyclopropa ne	SC_3105	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 9.21 (s, 2H), 7.45-7.39 (m, 1H), 7.22-7.18 (m, 2H), 7.14-7.09 (m, 1H), 3.84 (s, 2H), 3.09 (d, 2H, J = 6.4 Hz), 2.70 (d, 2H, J = 9.6 Hz), 2.32-2.21 (m, 2H), 2.01 (s, 6H), 1.59-1.46 (m, 4H), 1.01-1.00 (m, 1H), 0.54-0.49 (m, 2H), 0.35-0.33 (m, 2H).	492.0
SC_3403	cis-1-(Cyclopropyl-methyl)-8-(3-fluoro-phenyl)-8-methylamino-3-[2-(trifluoro-methyl)-pyrimidin-5-yl] -1,3-diazaspiro [4.5]decan-2-one	SC_3402		SC_3099	1HNMR (DMSO-d6, 400 MHz), δ (ppm) = 9.25 (s, 2H), 7.41-7.30 (m, 3H), 7.04 (t, 1H, J = 6.8 Hz), 3.89 (s, 2H), 3.12 (d, 2H, J = 6.8 Hz), 2.41 (bs, 1H), 2.27-2.22 (m, 2H), 1.93-1.78 (m, 7H), 1.46-1.43 (m, 2H), 1.08-1.03 (m, 1H),0.51-0.47 (m, 2H), 0.33-0.29 (m, 2H).	478.4

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3404	cis-8-Dimethylamino-8-(3-fluorophenyl)-3-[2-(trifluoromethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-one	INT-1024	2-trifluoromethyl-5-bromopyrimidine	SC_3242	1HNMR at 100oC (DMSO-d6, 400 MHz), δ (ppm) = 9.15 (s, 2H), 7.75 (s, 1H), 7.44-7.38 (m, 1H), 7.21-7.04 (m, 3H), 3.73 (s, 2H), 2.38-2.37 (m, 2H), 2.05 (s, 6H), 2.01-1.85 (m, 4H), 1.57-1.53 (m, 2H).	437.9
SC_3405	cis-1-(Cyclopropyl-methyl)-8-dimethylamino-8-(3-fluorophenyl)-3-[2-methyl-5-(trifluoromethyl)-2H-pyrazol-3-yl]-1,3-diazaspiro[4.5]decan-2-one	SC_3319	bromomethylcyclopropa ne	SC_3105	1HNMR at 100oC (DMSO-d6, 400 MHz), δ (ppm) = 7.39-7.36 (m, 1H), 7.19-7.05 (m, 3H), 6.56 (s, 1H), 3.78-3.67 (m, 5H), 3.10-3.08 (d, 2H, J = 6.12 Hz), 2.64-2.60 (d, 2H, J = 13.32 Hz), 2.37-2.26(m, 2H), 2.09 (s, 6H), 1.61-1.49 (m, 4H), 1.10-1.02 (m, 1H), 0.54-0.52 (m, 2H), 0.36-0.33 (m, 2H).	494.3
SC_3406	cis-1 -(Cyclopropyl-methyl)-8-(3 -fluorophenyl)-8-methylamino-3-[2-methyl-5-(trifluoromethyl)-2H-pyrazol-3-yl]-1,3-diazaspiro[4.5]decan-2-one	SC_3405		SC_3099	1HNMR at 100oC (DMSO-d6, 400 MHz), δ (ppm) = 7.39-7.24 (m, 3H), 6.99-6.96 (m, 1H), 6.58 (s, 1H), 3.78-3.71 (m, 5H), 3.11-3.10 (d, 2H, J = 5.40 Hz), 2.30-2.23(m, 2H), 1.99-1.92 (m, 5H), 1.79-1.72 (m, 2H), 1.58-1.56 (m, 2H), 1.10-1.00 (m, 1H), 0.54-0.52 (m, 2H), 0.36-0.33 (m, 2H).	480.0
SC_3407	cis-8-Methylamino-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	SC_3148		SC_3099		437.3
SC_3408	cis-3-[5-(Azetidin-1-yl)-3-methyl-pyridin-2-yl]-8-dimethylamino-8-(3 - fluorophenyl)-1,3-diazaspiro[4.5]decan-2-one	INT-1024	5-(azetidin-1-yl)-2-chloro-3 -methyl-pyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 7.44 - 7.36 (m, 2H), 7.20 - 7.05 (m, 4H), 6.69 (d, 1H), 3.82 (t, 4H), 3.51 (s, 2H), 2.36 - 2.26 (m, 4H), 2.15 (s, 3H), 1.96 (s, 6H), 1.94 - 1.76 (m, 4H), 1.49 (t, 2H).	438.3

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3409	cis-8-Dimethylamino-8-(3-fluorophenyl)-3-(5-methylsulfonyl-pyridin-2-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-1024	2-bromo-5-methylsulfonyl-pyridine	SC_3103	1H NMR (600 MHz, DMSO) δ 8.67 (dd, 1H), 8.39 (dd, 1H), 8.14 (dd, 1H), 8.04 (s, 1H), 7.42 (td, 1H), 7.19 (d, 1H), 7.15 (dt, 1H), 7.11 (td, 1H), 3.78 (s, 2H), 3.21 (s, 3H), 2.41 - 2.37 (m, 2H), 1.97 (s, 6H), 1.94 - 1.75 (m, 4H), 1.54 - 1.45 (m, 2H).	447.2
SC_3410	cis- 3-(6-(azetidin-1-yl)-4-fluoropyridin-3 -yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	INT-976	2-(azetidin-1-yl)-5-bromo-4-fluoropyridine	SC_3103		
SC_3411	cis-3-(6-(azetidin-1-yl)pyridin-3-yl)-8-(dimethylamino)-8-(3-fluorophenyl)-1,3-diazaspiro[4.5]decan-2-one	INT-1024	2-(azetidin-1-yl)-5-bromopyridine	SC_3103		
SC_3412	cis-3-(1-(cyclopropanecarbonyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl)-8-(dimethylamino)-8-(3 -fluorophenyl)-1,3 -diazaspiro[4.5]decan-2-one	INT-1024	(5-bromo-3-(trifluoromethyl)-1H-pyrazol-1-yl)(cyclopropyl)methano ne	SC_3103		
SC_3413	cis-8-(dimethylamino)-8-(3 - fluorophenyl)-3-(1-(2-hydroxyethyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-1024	2-(5-bromo-3-(trifluoromethyl)-1H-pyrazol-1-yl)ethanol	SC_3242		
SC_3414	cis-3-(1-(cyclopropylmethyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl)-8-(dimethylamino)-8-(3-fluorophenyl)-1,3-diazaspiro[4.5]decan-2-one	INT-1024	5-bromo-1-(cyclopropylmethyl)-3 - (trifluoromethyl)-1H-pyrazole	SC_3242		480.2
SC_3415	cis-8-(dimethylamino)-8-(3 - fluorophenyl)-3-(1-(methylsulfonyl)-3 - (trifluoromethyl)-1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-1024	5-bromo-1-(methylsulfonyl)-3-(trifluoromethyl)-1H-pyrazole	SC_3242		
SC_3416	cis-1-(cyclopropylmethyl)-8-(dimethylamino)-8-(3-fluorophenyl)-3 -(1-(methylsulfonyl)-3-(trifluoromethyl)-1H-pyrazol-5-yl)-1,3-diazaspiro [4.5]decan-2-one	SC_3415	bromomethylcyclopropa ne	SC_3105		

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3417	cis-2-(5-(8-(dimethylamino)-8-(3-fluorophenyl)-2-oxo-1,3-diazaspiro[4.5]decan-3-yl)-3-(trifluoromethyl)-1H-pyrazol-1-yl)-N,N-dimethylacetamide	INT-1024	2-(5-bromo-3-(trifluoromethyl)-1H-pyrazol-1-yl)-N,N-dimethylacetamide	SC_3242		
SC_3418	cis-2-(5-(1-(cyclopropylmethyl)-8-(dimethylamino)-8-(3 -fluorophenyl)-2-oxo-1,3-diazaspiro[4.5]decan-3-yl)-3-(trifluoromethyl)-1H-pyrazol-1-yl)-N,N-dimethylacetamide	SC_3417	bromomethylcyclopropa ne	SC_3105		
SC_3419	cis-8-(dimethylamino)-3-(1-methyl-1H-pyrrolo [2,3 -b]pyridin-5-yl)-8-phenyl-1,3 -diazaspiro [4.5]decan-2-one	INT-976	5-bromo-1-methyl-1H-pyrrolo [2,3 -b]pyridine	SC_3103		404.3
SC_3420	cis-8-(dimethylamino)-3 -(3 -fluoro-1H-pyrrolo [2,3 -b]pyridin-5-yl)-8-phenyl-1,3 -diazaspiro[4.5]decan-2-one	INT-976	5 -bromo-3 -fluoro-1 -((2-(trimethylsilyl)ethoxy)m ethyl)-1H-pyrrolo[2,3 - b]pyridine (step 1)	SC_3352		408.2
SC_3421	cis-8-(dimethylamino)-8-phenyl-3 -(1H-pyrrolo [2,3 -c]pyridin-4-yl)-1,3 -diazaspiro[4.5]decan-2-one	INT-976	4-bromo-1-((2-(trimethylsilyl) ethoxy)m ethyl)-1H-pyrrolo [2,3 - c]pyridine	SC_3352		390.2
SC_3422	cis-8-(dimethylamino)-8-phenyl-3 -(2-(pyridazin-4-yl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-989	4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)pyridazine	SC_3354		430.2
SC_3423	cis-8-(dimethylamino)-3-(2-(2-oxo-1,2-dihydropyridin-4-yl)pyrimidin-5-yl)-8-phenyl-1,3 -diazaspiro [4.5]decan-2-one	INT-989	(2-oxo-1,2-dihydropyridin-4-yl)boronic acid	SC_3354		445.2
SC_3424	cis-8-(dimethylamino)-8-(3-fluorophenyl)-3-(1-methyl-3-(thiophen-2-yl)-1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-1024	3,5-dibromo-1-methyl-1H-pyrazole (step 1), thiophen-2-yl-boronic acid (step 2)	SC_3103 (for step 1), SC_3354 (for step 2)		

(continued)

Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3425	cis-8-(dimethylamino)-8-(3 - fluoro-phenyl)-3-(1-methyl-3-morpholino-1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]de-can-2-one	INT-1024	3,5-dibromo-1-methyl-1H-pyr-azole (step 1), morpholine (step 2)	SC_3103 (for step 1), SC_3103 (for step 2)		
SC_3426	cis-8-(dimethylamino)-8-phe-nyl-1-(2,2,2-trifluoroethyl)-3 -(2-(tri-fluoromethyl)pyrimidin-5-yl)-1,3 - dia-zaspiro[4.5]decan-2-one	INT-1068	2-trifluoromethyl-5-bromopyri-midine	SC_3103		502.2
SC_3427	cis-8-(dimethylamino)-8-phenyl-3 -(2-(trifluoromethyl)pyrimidin-5-yl)-1-(3,3,3-trifluoropropyl)-1,3-diazas-piro[4.5]decan-2-one	INT-1070	2-trifluoromethyl-5-bromopyri-midine	SC_3103		
SC_3428	cis-3-(4-methyl-6-(trifluoromethyl)pyri-din-3 -yl)-8-(methylamino)-8-phe-nyl-1,3-diazaspiro[4.5]decan-2-one	SC_3122		SC_3099		
SC_3429	cis-3 -(1 -methyl-3 -(trifluoromethyl)-1H-pyrazol-5-yl)-8-(methylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-one	SC_3200		SC_3099		
SC_3430	cis-8-(dimethylamino)-8-(3 - fluoro-phenyl)-3 -(4-(methylsulfonyl)pyri-din-3-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-1024	3-bromo-4-(methylsulfonyl) pyridine	SC_3103		
SC_3431	cis-8-(dimethylamino)-3-(1-ethyl-3-(tri-fluoromethyl)-1H-pyrazol-5-yl)-8-(3-fluorophenyl)-1,3-diazaspiro[4.5] de-can-2-one	INT-1024	5-bromo-1-ethyl-3-(trifluoro-methyl)-1H-pyrazole	SC_3242		
SC_3432	cis-3-(1-cyclopropyl-3-(trifluoro-methyl)-1H-pyrazol-5-yl)-8-(dimethyla-mino)-8-(3-fluorophenyl)-1,3-diazas-piro[4.5]decan-2-one	INT-1024	5 -bromo-1 -cyclopro-pyl-3-(trifluoromethyl)-1H-pyr-azole	SC_3242		

(continued)

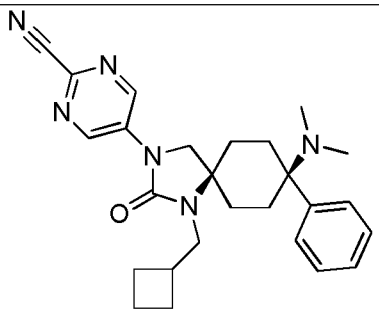
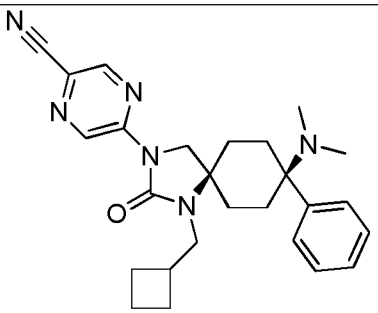
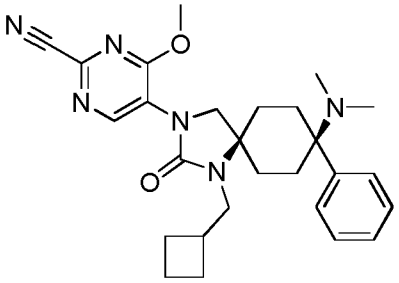
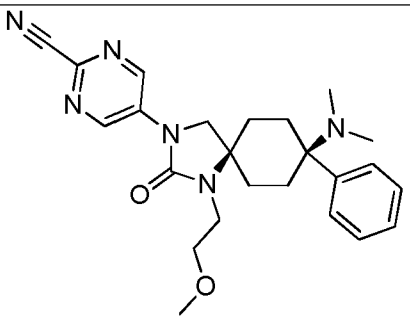
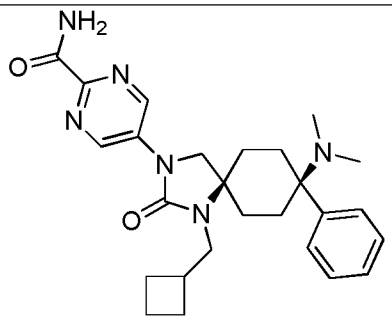
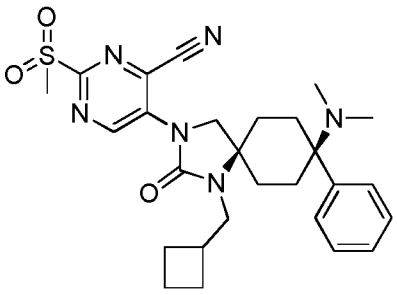
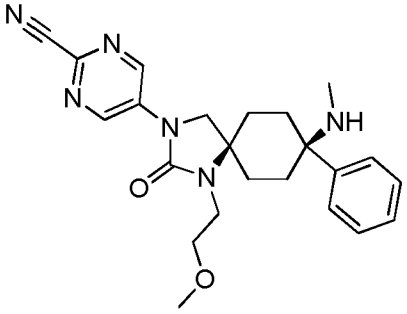
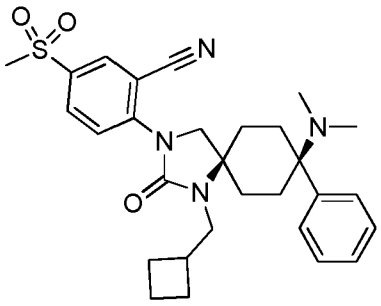
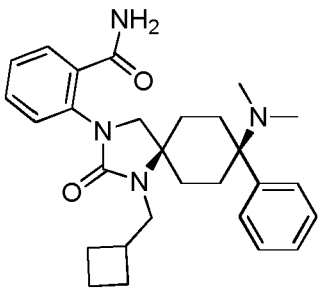
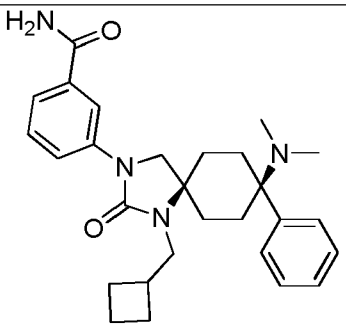
Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3433	cis-8-(dimethylamino)-8-(3-fluorophenyl)-3-(1-(oxetan-3-ylmethyl)-**3** -(trifluoromethyl)- 1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-1024	5 -bromo-1 -(oxetan-3 - ylmethyl)-3-(trifluoromethyl)-1H-pyrazole	SC_3242		
SC_3434	cis-8-(dimethylamino)-8-(3 - fluorophenyl)-3-(1-(2-(methylsulfonyl) ethyl)-3 - (trifluoromethyl)-1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-1024	5-bromo-1-(2-(methylsulfonyl) ethyl)-3 - (trifluoromethyl)-1H-pyrazole	SC_3242		
SC_3435	cis-8-(dimethylamino)-8-(3 - fluorophenyl)-3 -(4-methyl-2-(methylamino) pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-1076	methylamine	SC_3239		
SC_3436	cis-3 -(2-cyclopropoxy-4-methylpyrimidin-5-yl)-8-(dimethylamino)-8-(3-fluorophenyl)-1,3 - diazaspiro[4.5]decan-2-one	INT-1076	cyclopropanol	SC_3224		440.3
SC_3437	cis-N-(5-(8-(dimethylamino)-8-(3-fluorophenyl)-2-oxo-1,3-diazaspiro[4.5]decan-3-yl)-4-methylpyrimidin-2-yl)-N-methylcyclopropanecarboxamide	INT-1024	N-(5-bromo-4-methylpyrimidin-2-yl)-N-methylcyclopropanecarb oxamide	SC_3103		481.3
SC_3438	cis-N-(5-(8-(dimethylamino)-8-(3-fluorophenyl)-2-oxo-1,3-diazaspiro[4.5]decan-3-yl)-4-methylpyrimidin-2-yl)-N-methylpivalamide	INT-1024	N-(5-bromo-4-methylpyrimidin-2-yl)-N-methylpivalamide	SC_3103		497.3
SC_3439	cis-3-(4-(azetidin-1-yl)-2-(trifluoromethyl)pyrimidin-5-yl)-8-(dimethylamino)-8-(3 -fluorophenyl)-1,3 - diazaspiro [4.5]decan-2-one	INT-1077	azetidine	SC_3120		493.2
SC_3440	cis-8-(dimethylamino)-8-(3 - fluorophenyl)-3 -(4-(oxetan-3 - ylmethoxy)-2-(trifluorometlryl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-one	INT-1077	oxetan-3 -ylmethanol	SC_3224		524.2

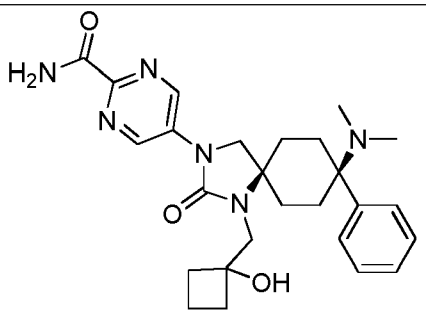
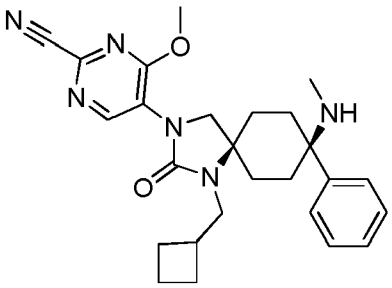
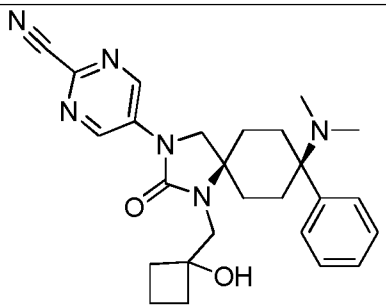
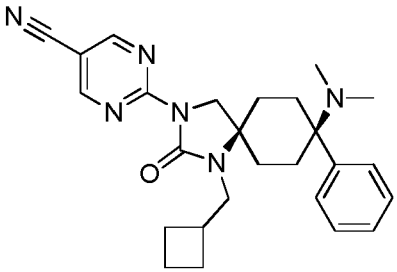
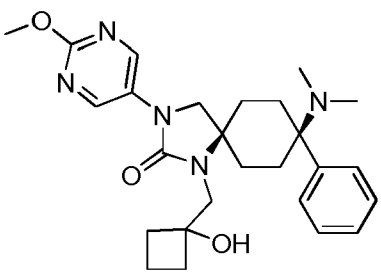
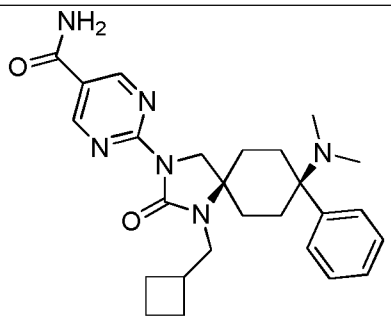
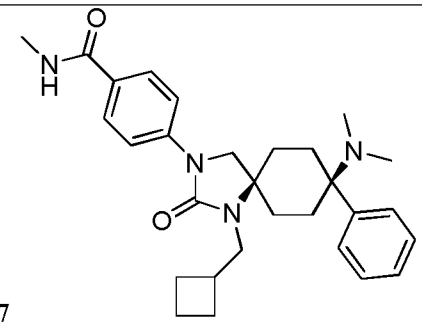
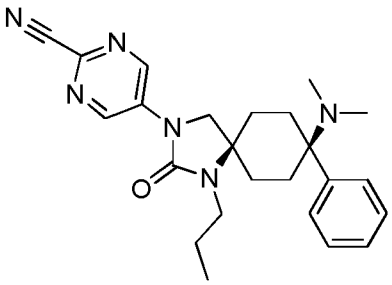
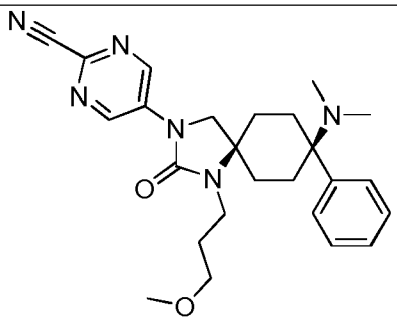
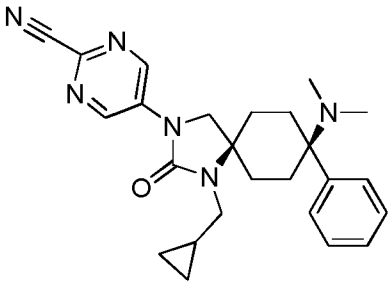
(continued)

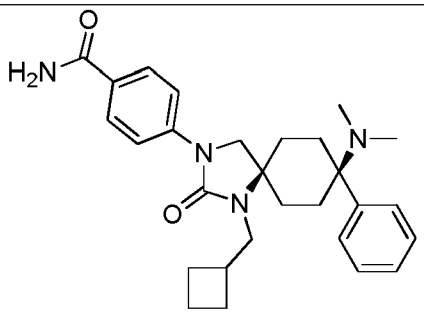
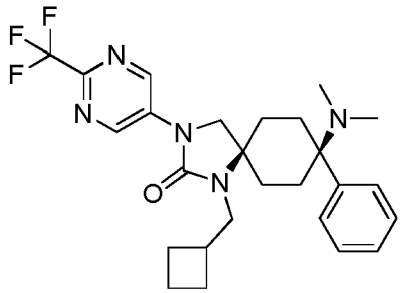
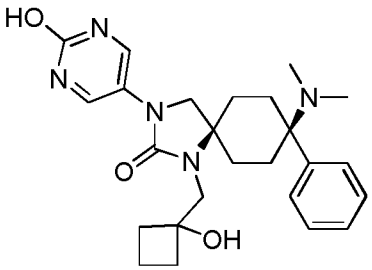
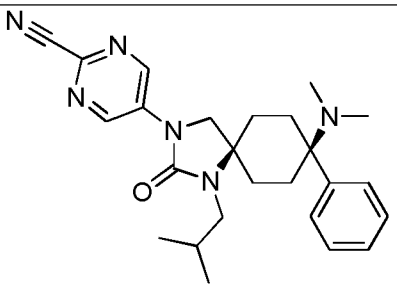
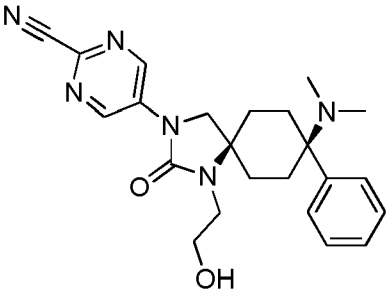
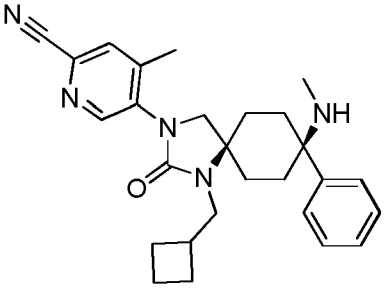
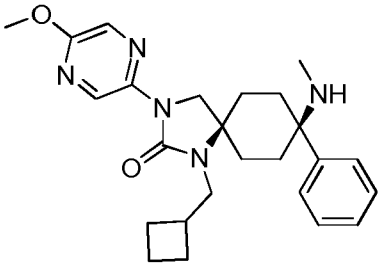
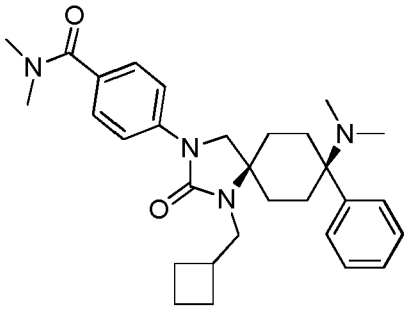
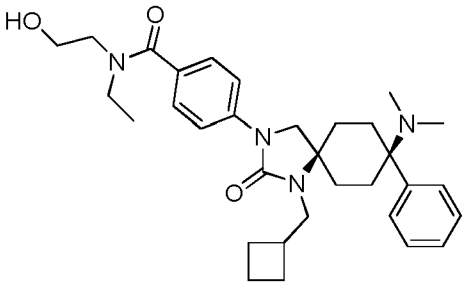
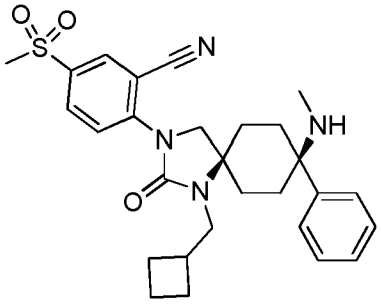
Example	Chemical name	Reactant I	Reactant II	in analogy to method	^{1}H NMR data	m/z $(M+H)^+$
SC_3441	cis-3-(2-cyclopropyl-4-(2,2,2-trifluoroethoxy)pyrimidin-5-yl)-8-(dimethylamino)-8-(3 -fluorophenyl)-1,3-diazaspiro[4.5]decan-2-one	INT-1078	2,2,2-trifluoroethanol	SC_3224		508.2
SC_3442	cis-3 -(2-cyclopropyl-4-((2-hydroxyethyl)(methyl)amino)pyrimidin-5-yl)-8-(dimethylamino)-8-(3-fluorophenyl)-1,3-diazaspiro[4.5]decan-2-one	INT-1078	2-(methylamino)ethanol	SC_3120		483.3

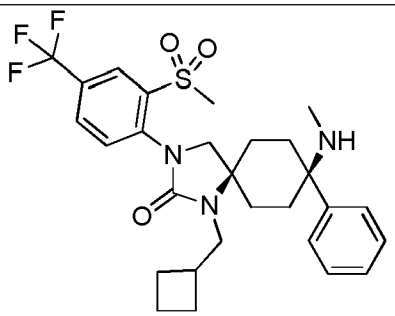
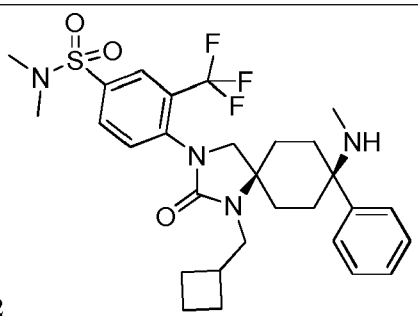
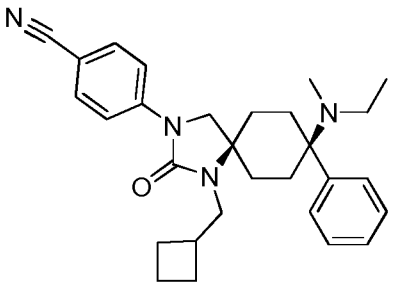
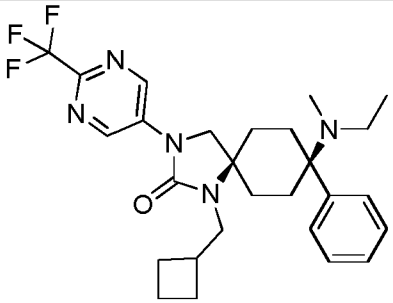
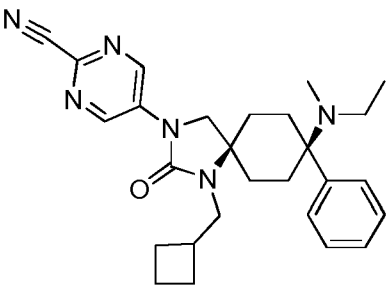
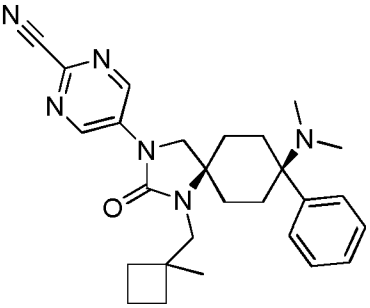
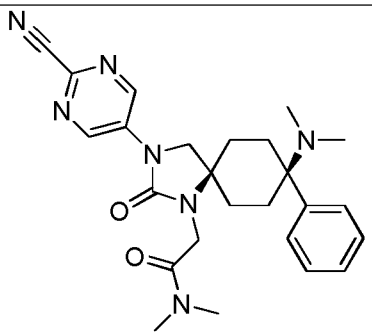
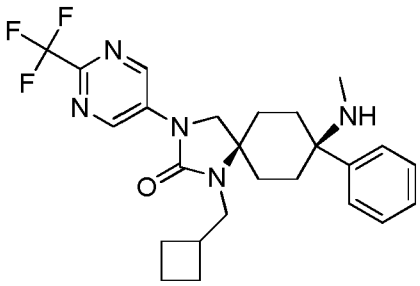
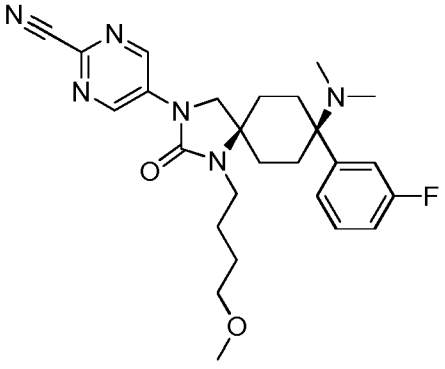
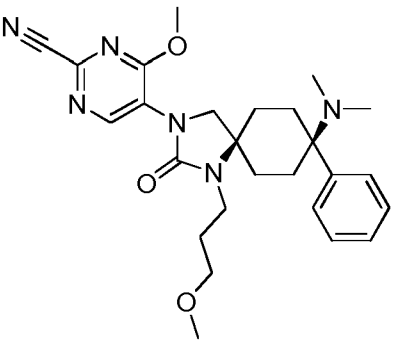
Chemical Structures of all examples

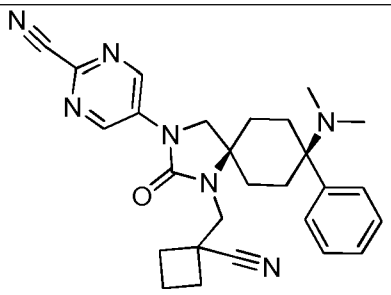
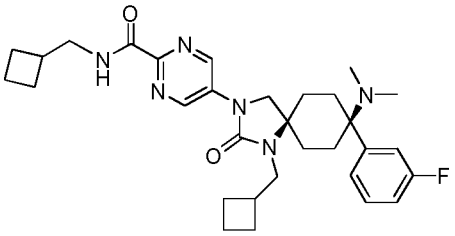
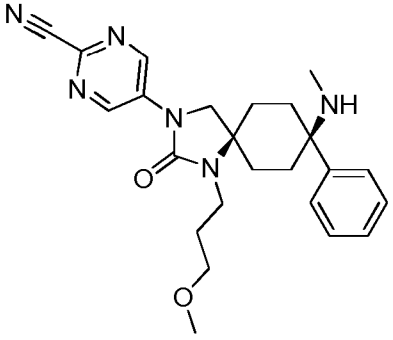
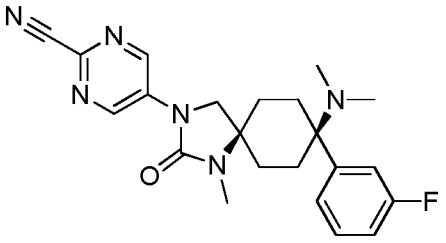
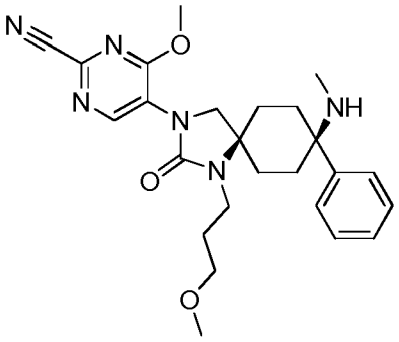
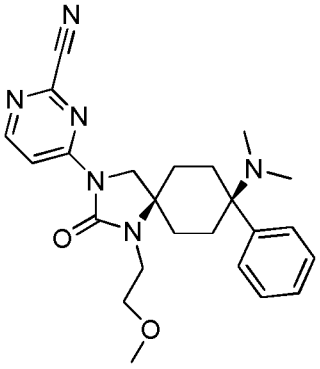
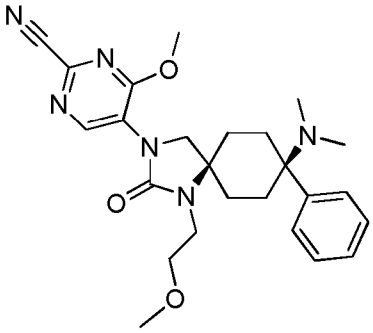
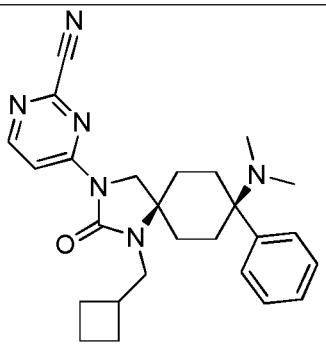
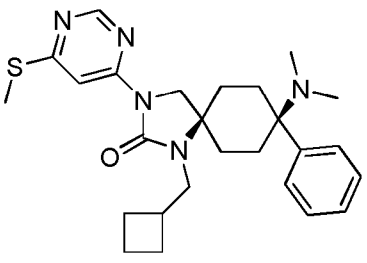
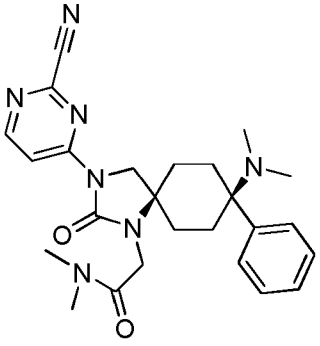
[0345]

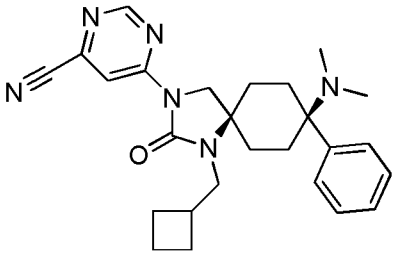
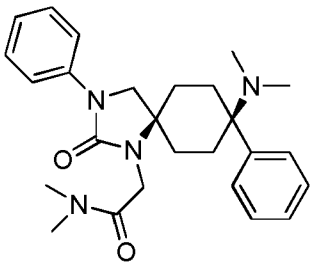
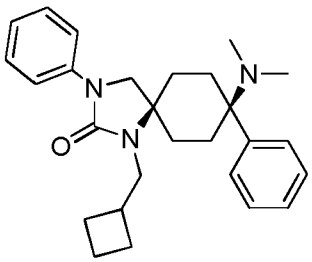
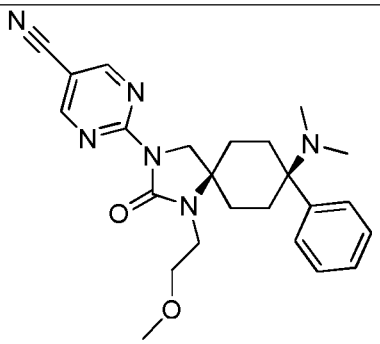
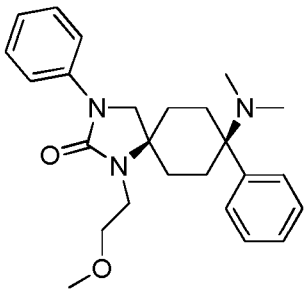
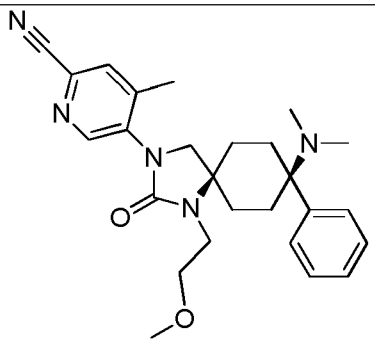
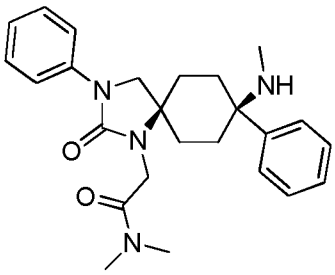
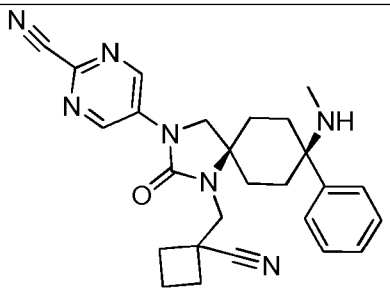
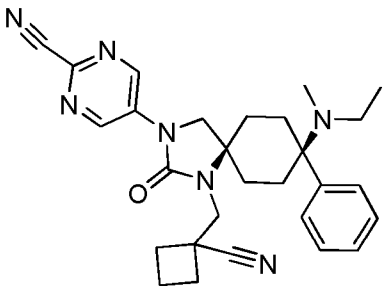
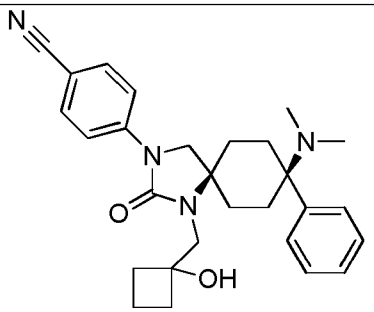
 SC_3001	 SC_3002
 SC_3003	 SC_3004
 SC_3005	 SC_3006
 SC_3007	 SC_3008
 SC_3009	 SC_3010

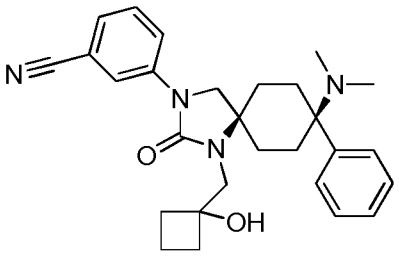
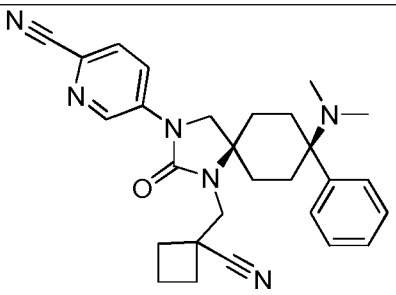
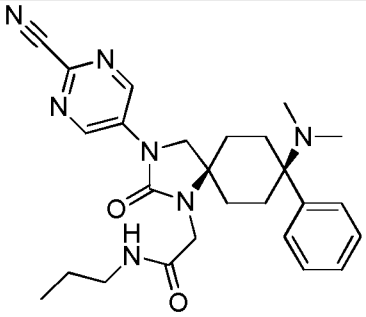
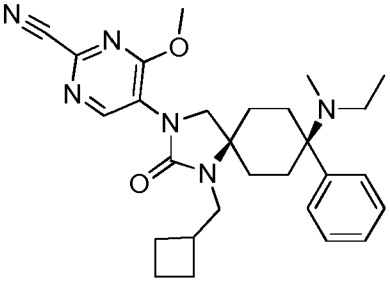
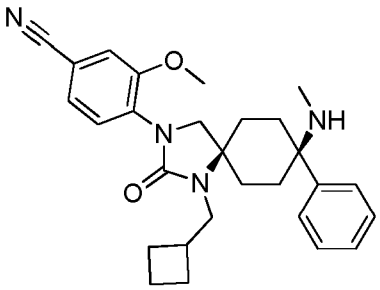
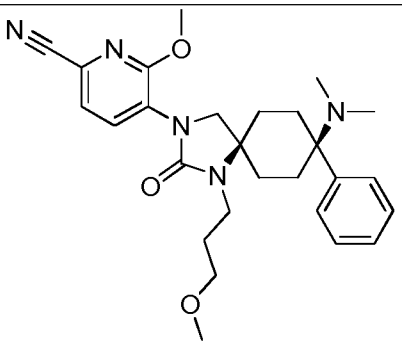
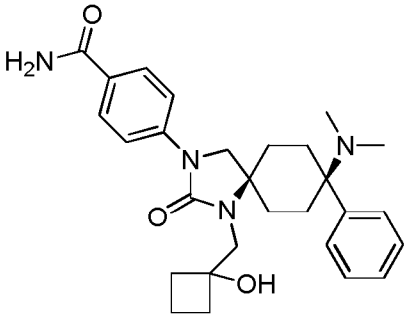
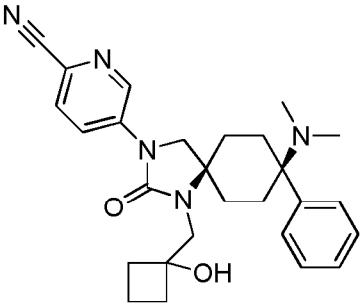
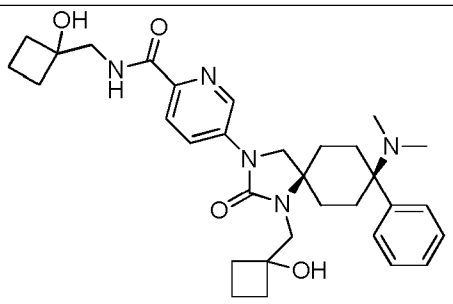
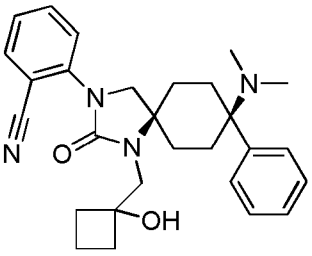
 SC_3011	 SC_3012
 SC_3013	 SC_3014
 SC_3015	 SC_3016
 9SC_3017	 SC_3018
 SC_3019	 SC_3020

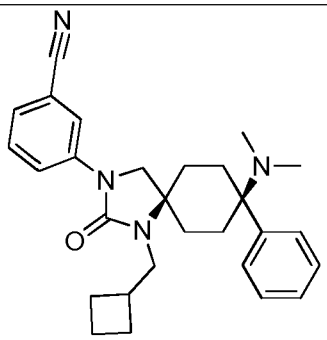
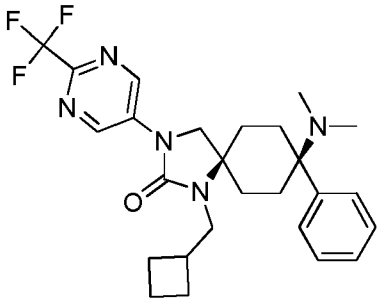
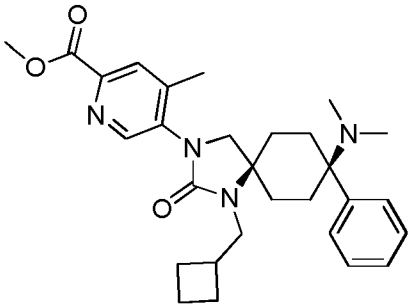
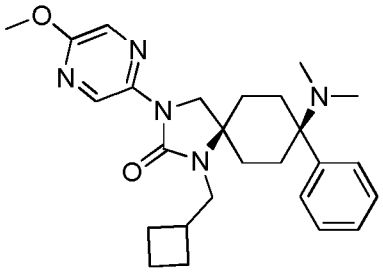
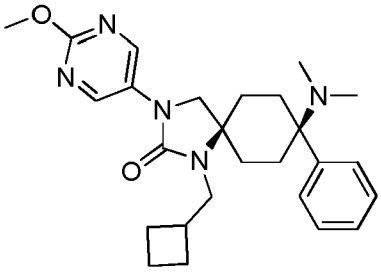
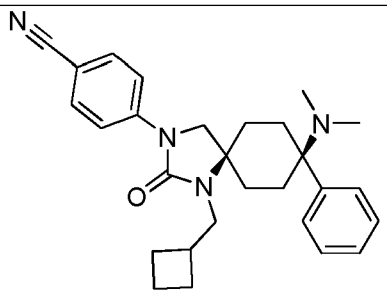
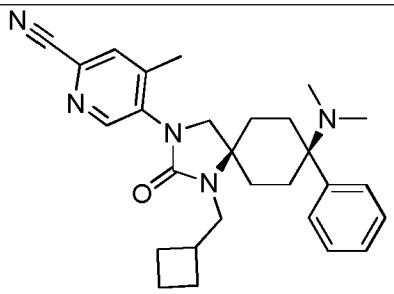
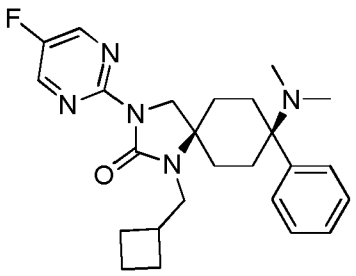
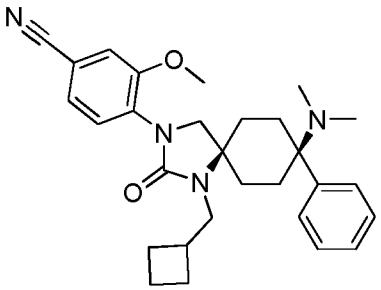
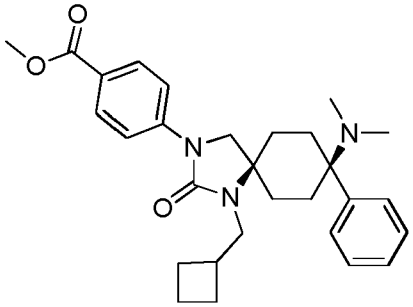
 SC_3021	 SC_3022
 SC_3023	 SC_3024
 SC_3025	 SC_3026
 SC_3027	 SC_3028
 SC_3029	 SC_3030

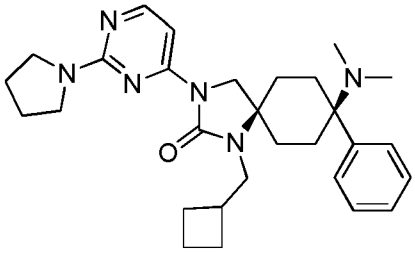
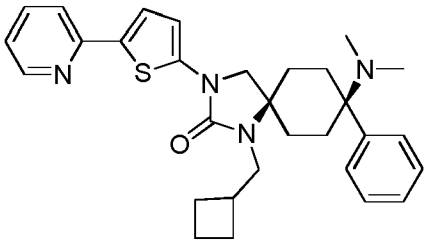
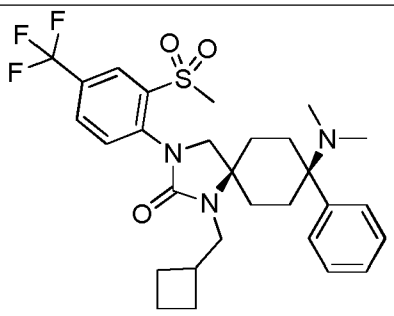
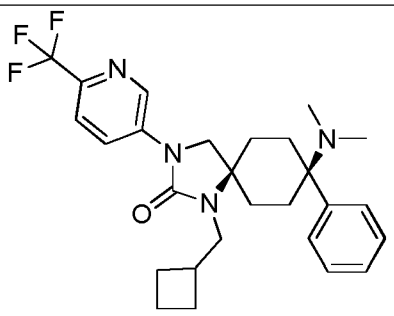
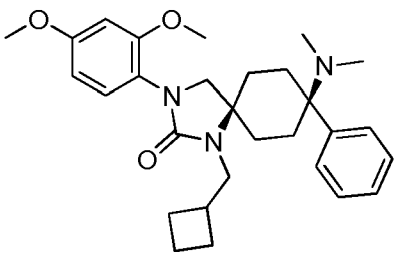
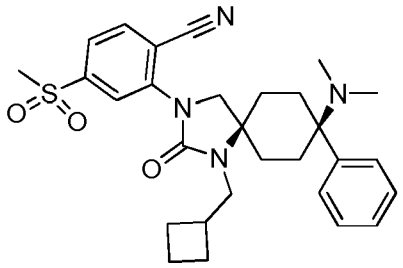
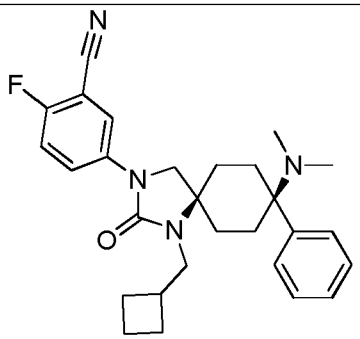
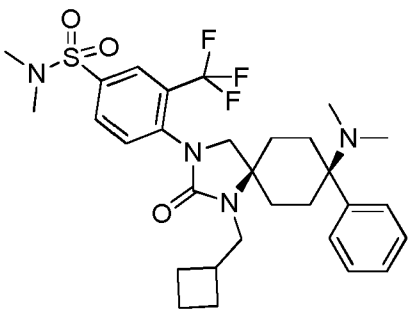
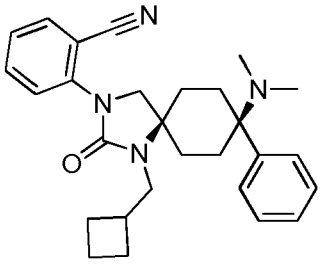
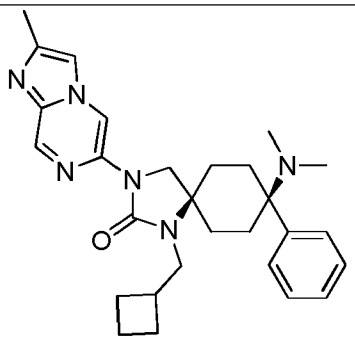
 SC_3031	 SC_3032
 SC_3033	 SC_3034
 SC_3035	 SC_3036
 SC_3037	 SC_3038
 SC_3039	 SC_3040

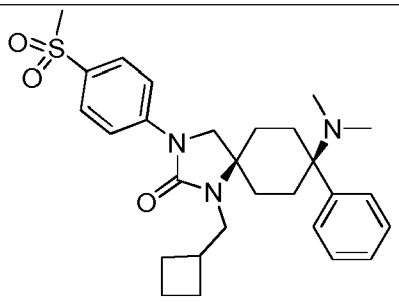
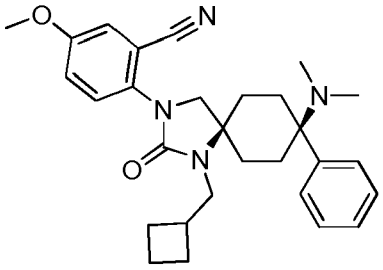
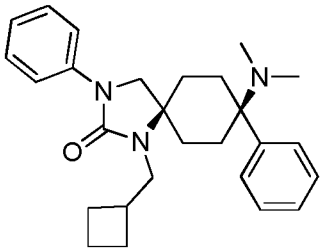
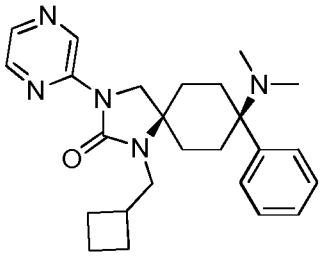
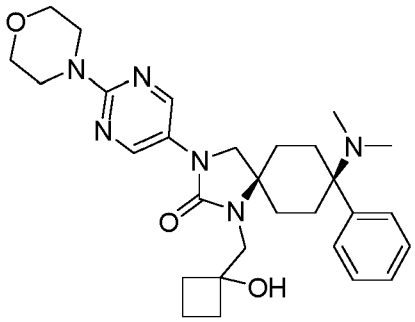
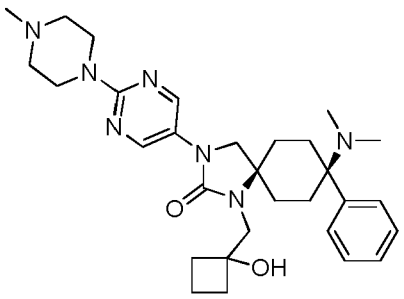
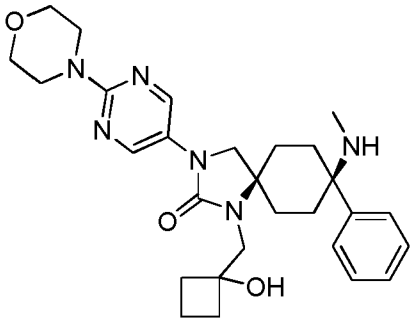
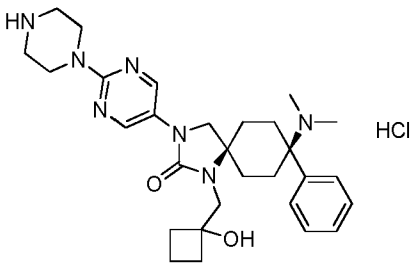
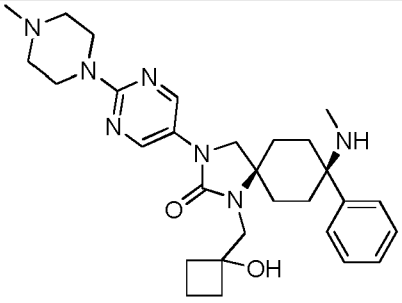
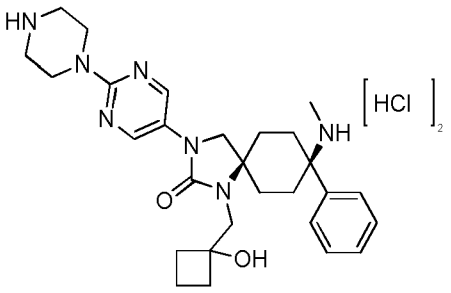
 SC_3041	 SC_3042
 SC_3043	 SC_3044
 SC_3045	 SC_3046
 SC_3047	 SC_3048
 SC_3049	 SC_3050

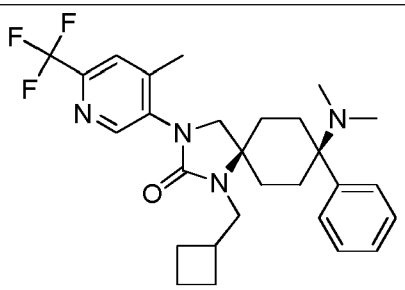
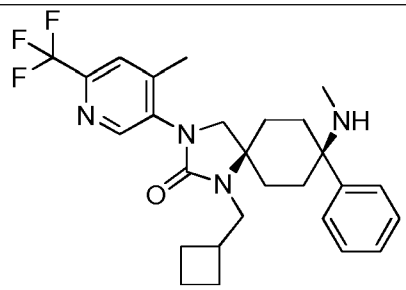
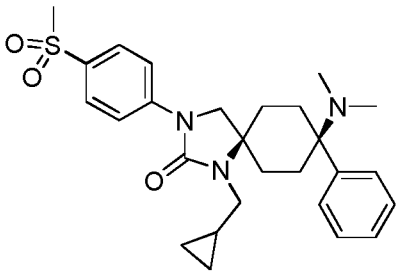
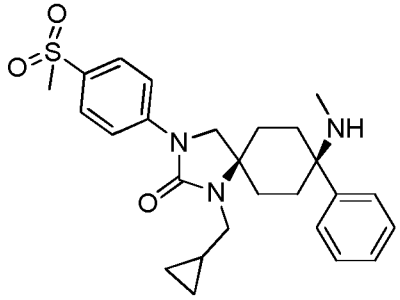
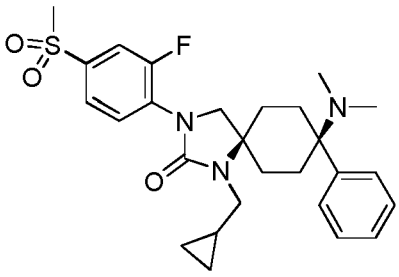
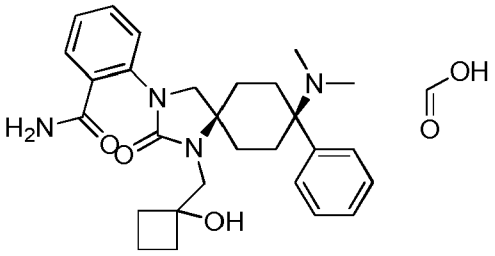
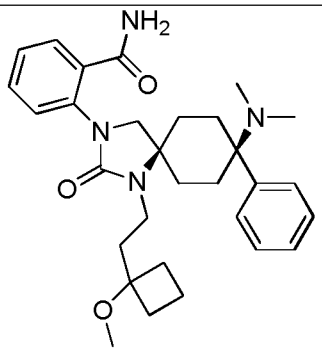
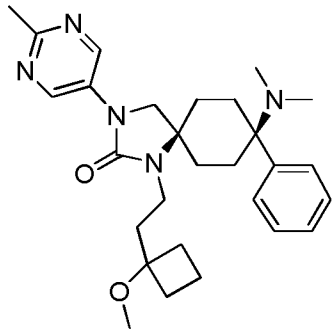
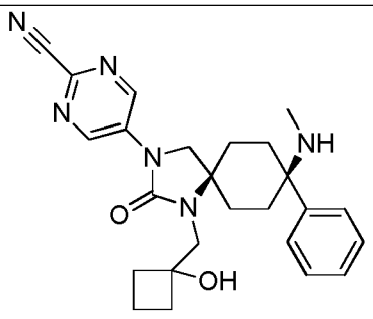
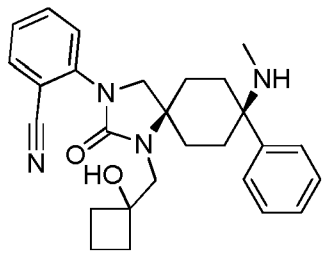
 SC_3051	 SC_3052
 SC_3053	 SC_3054
 SC_3055	 SC_3056
 SC_3057	 SC_3058
 SC_3059	 SC_3060

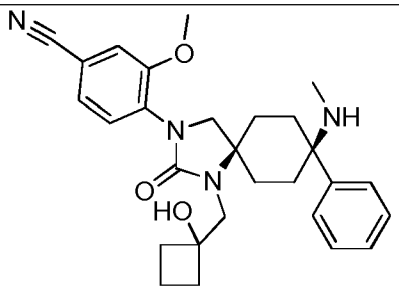
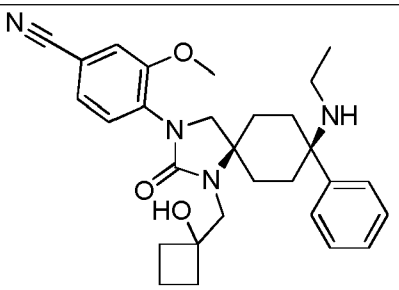
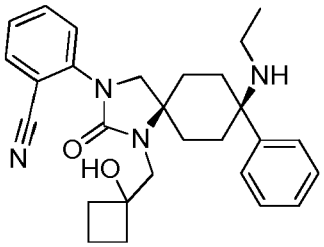
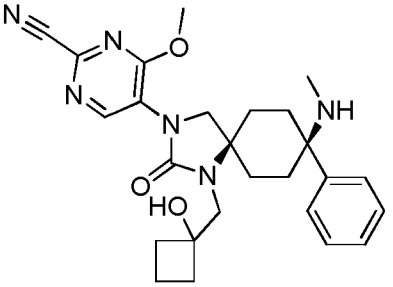
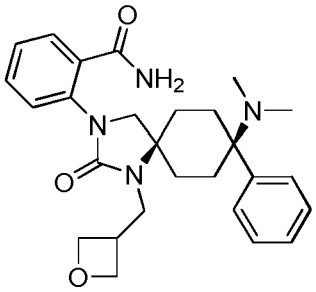
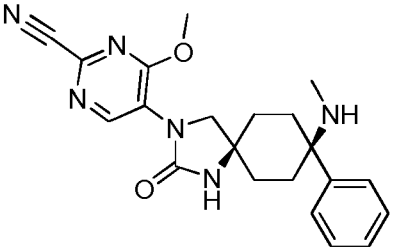
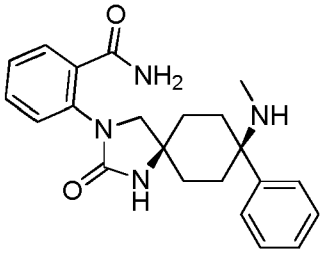
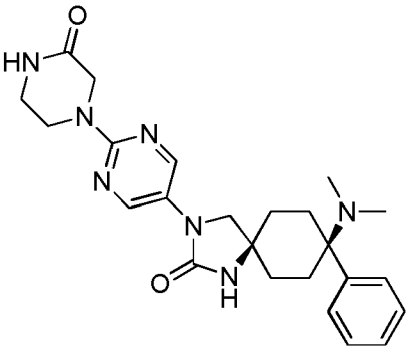
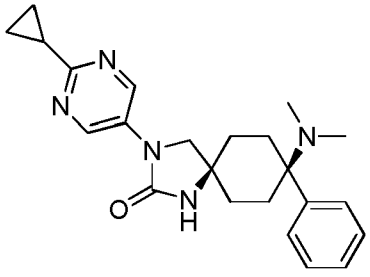
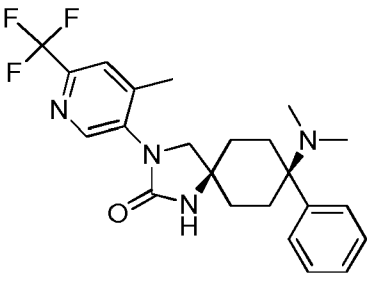
 SC_3061	 SC_3063
 SC_3064	 SC_3065
 SC_3066	 SC_3067
 SC_3068	 SC_3069
 SC_3070	 SC_3071

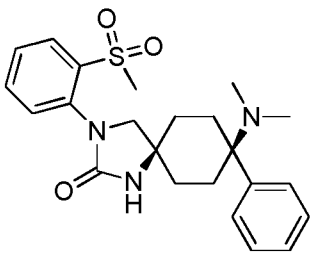
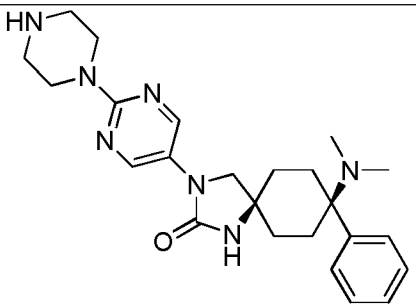
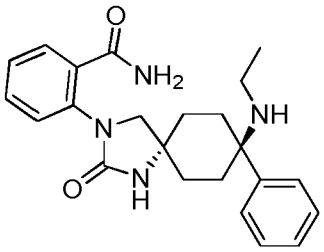
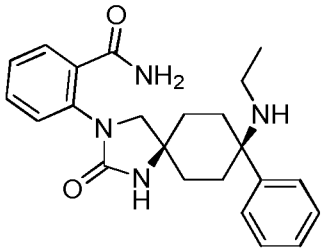
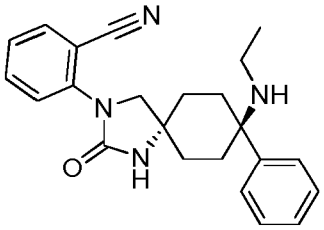
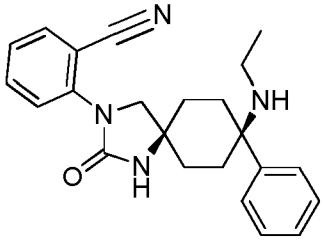
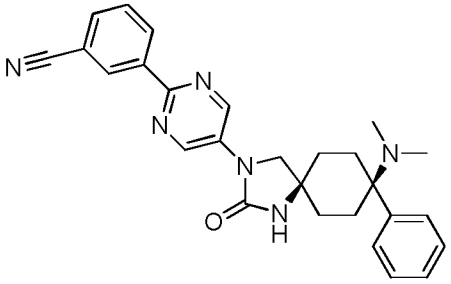
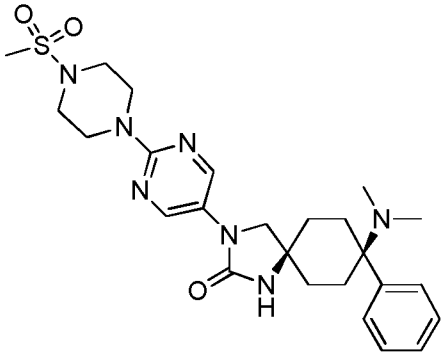
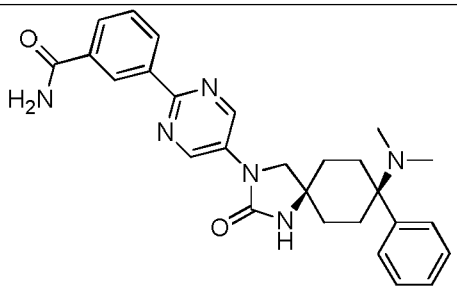
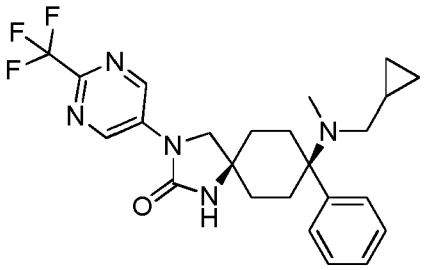
 SC_3072	 SC_3073
 SC_3074	 SC_3075
 SC_3076	 SC_3077
 SC_3078	 SC_3079
 SC_3080	 SC_3081

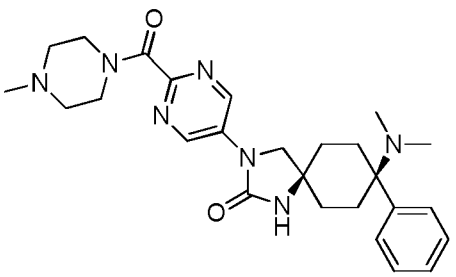
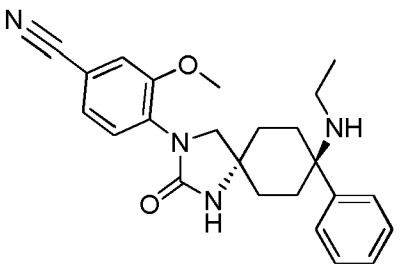
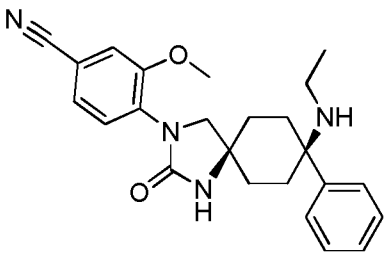
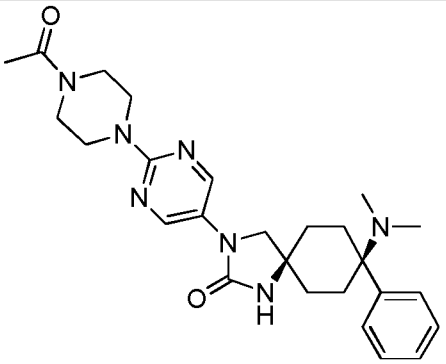
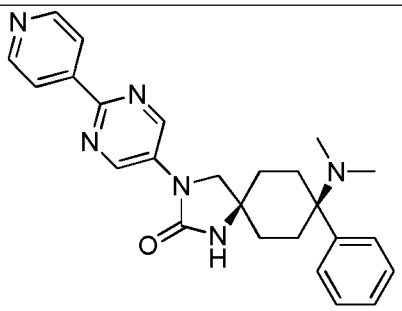
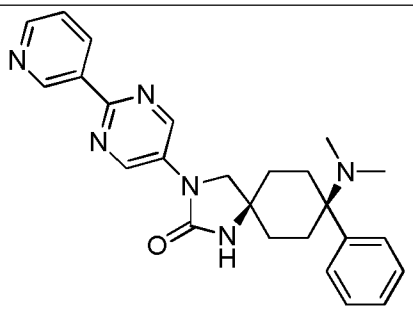
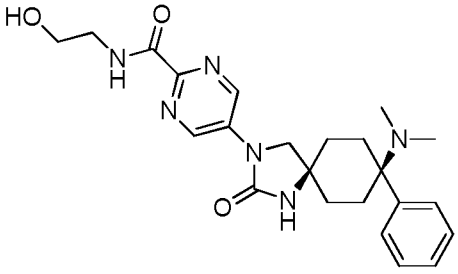
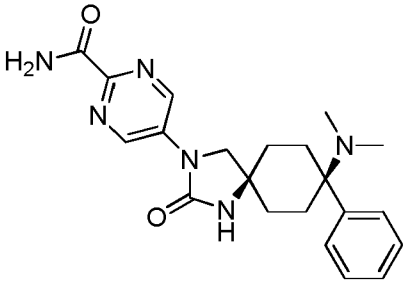
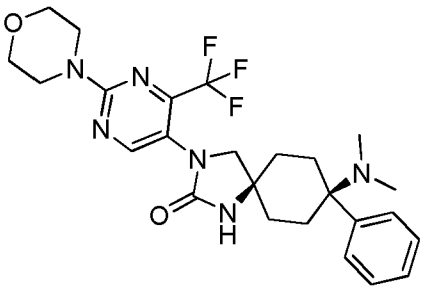
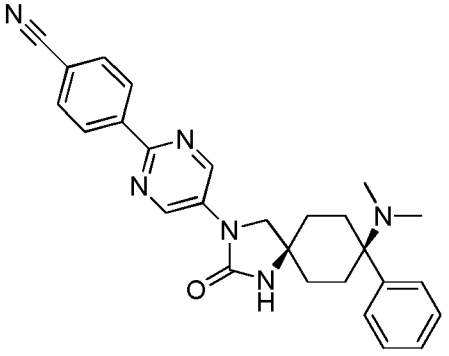
 SC_3082	 SC_3083
 SC_3084	 SC_3085
 SC_3086	 SC_3087
 SC_3088	 SC_3089
 SC_3090	 SC_3091

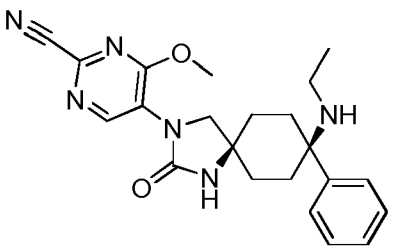
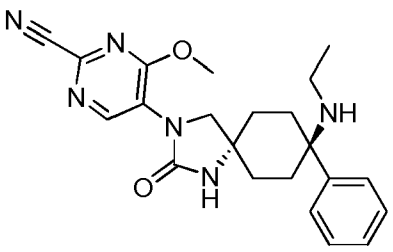
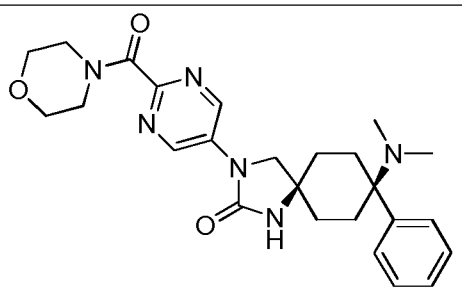
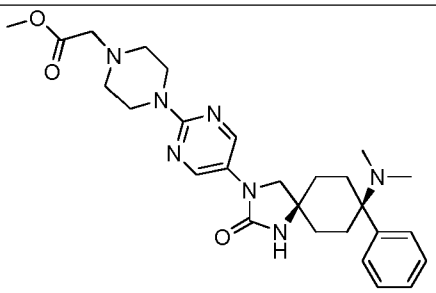
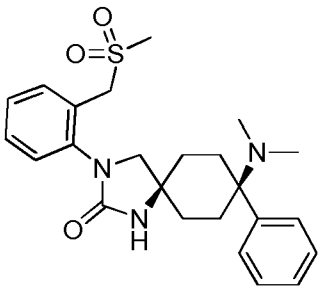
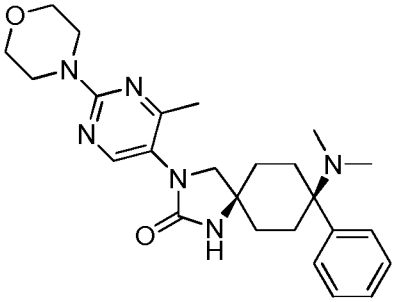
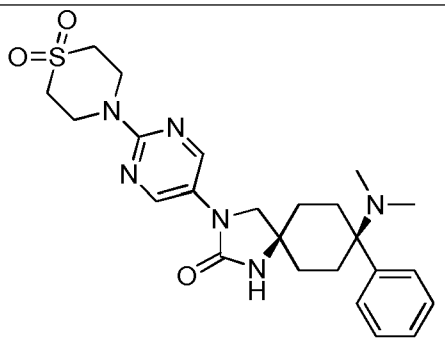
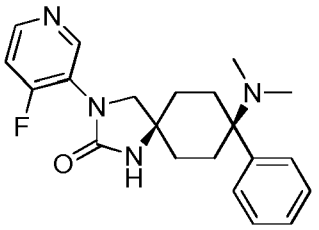
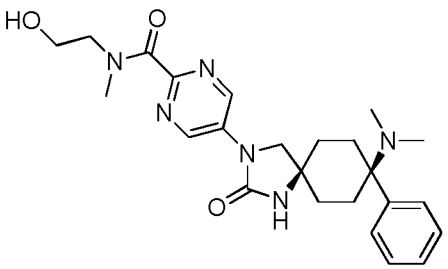
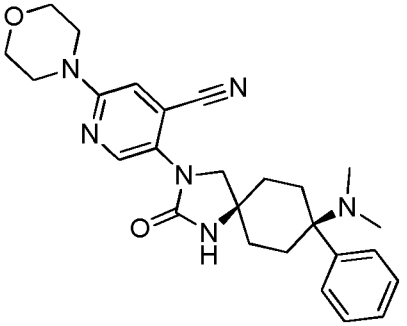
 SC_3092	 SC_3093
 SC_3094	 SC_3096
SC_3097 	 SC_3098
 SC_3099	 SC_3100
 SC_3101	 SC_3102

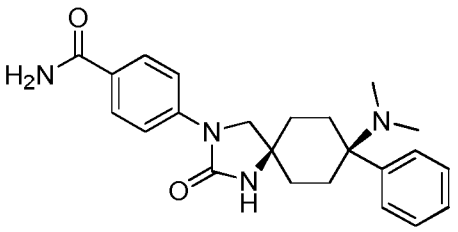
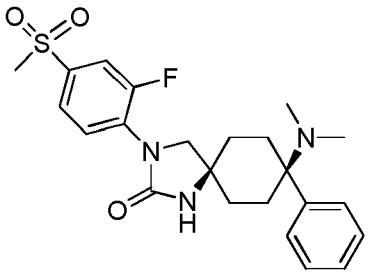
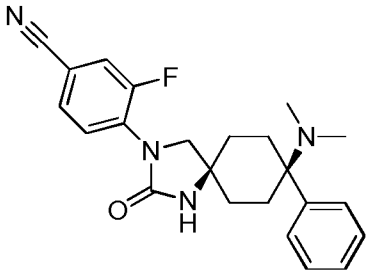
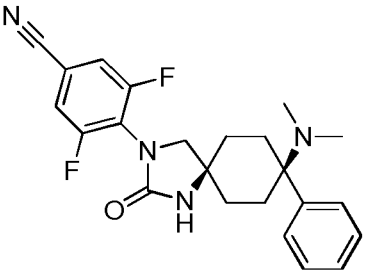
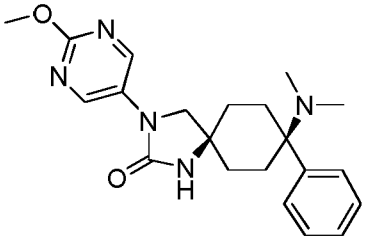
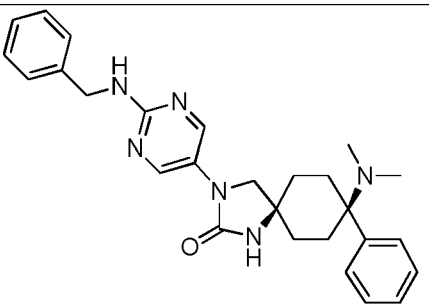
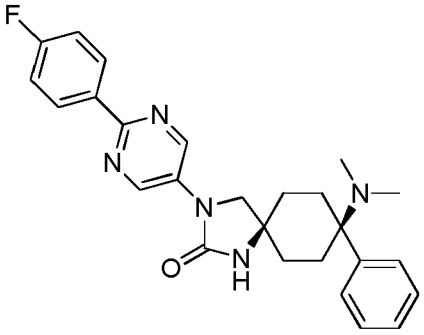
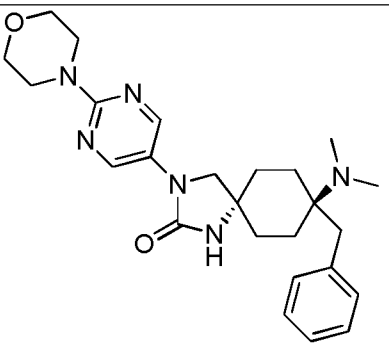
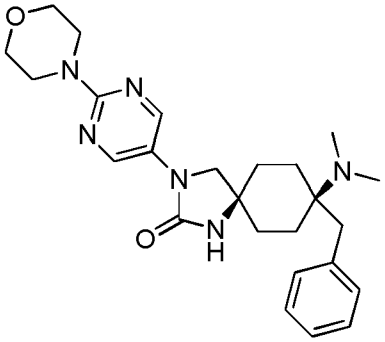
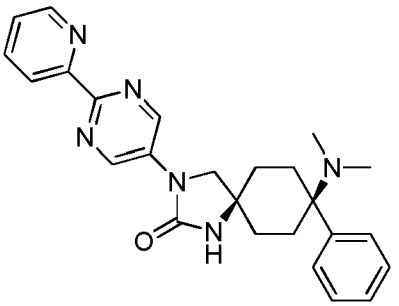
 SC_3103	 SC_3104
 SC_3105	 SC_3106
 SC_3107	SC_3108 
 SC_3109	 SC_3110
 SC_3111	 SC_3112

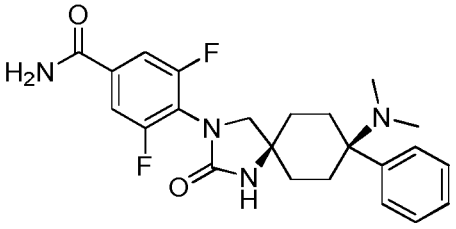
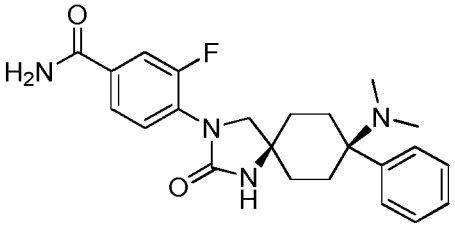
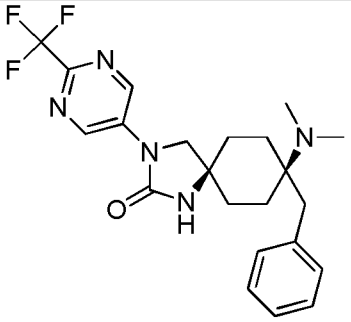
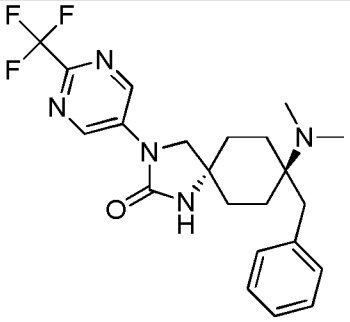
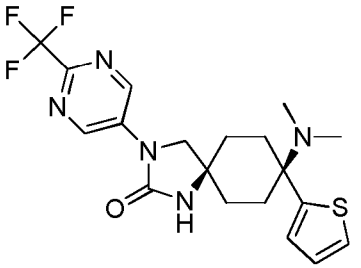
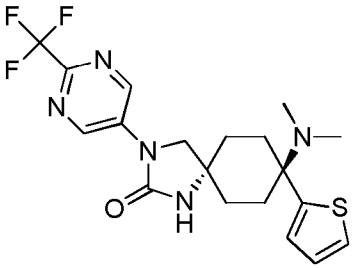
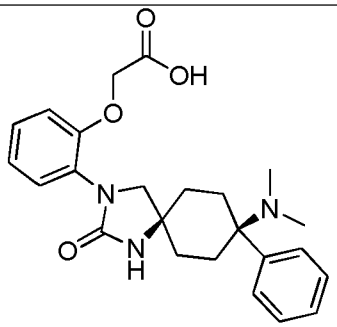
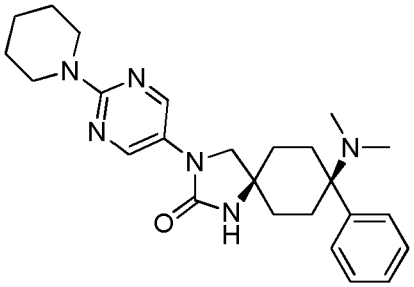
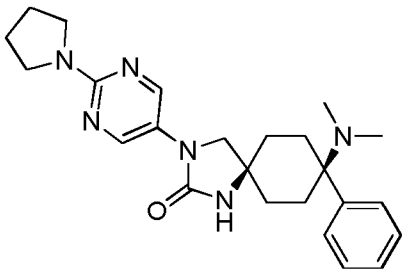
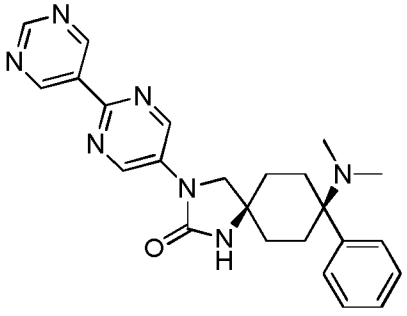
 SC_3113	 SC_3114
 SC_3115	 SC_3116
 SC_3117	 SC_3118
 SC_3119	 SC_3120
 SC_3121	 SC_3122

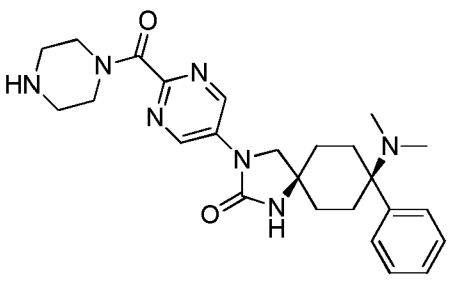
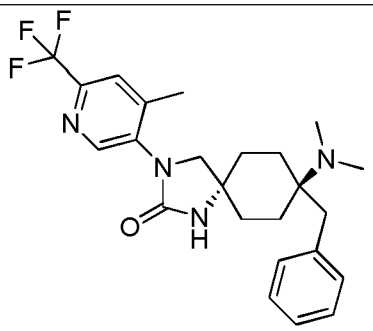
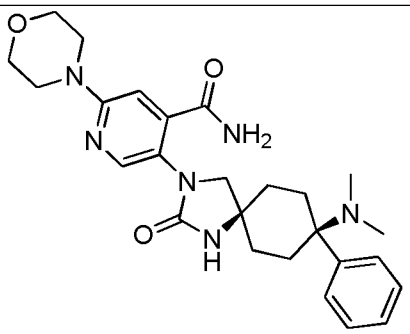
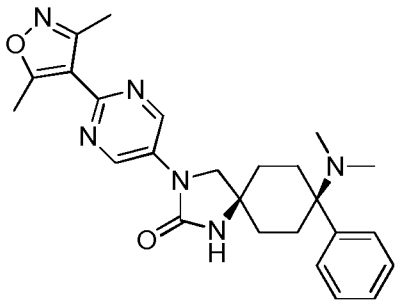
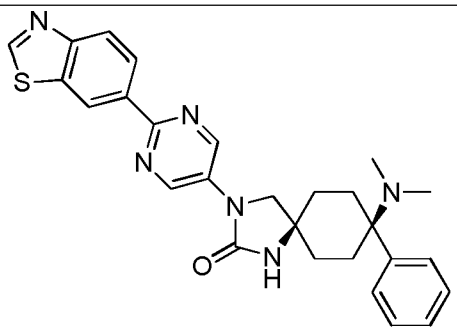
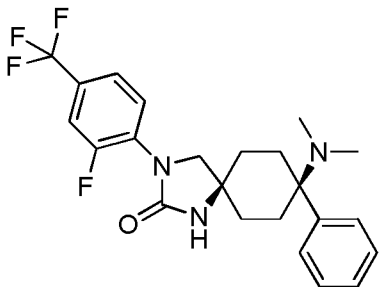
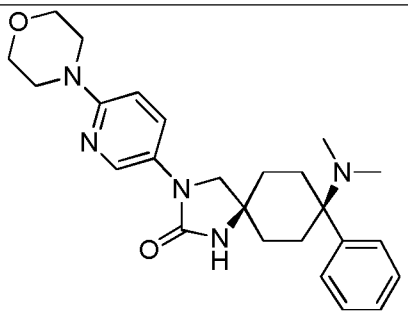
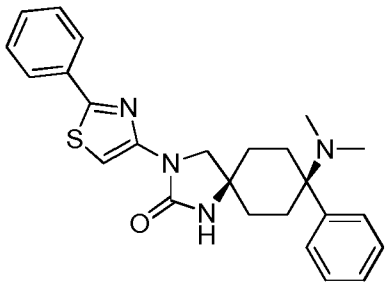
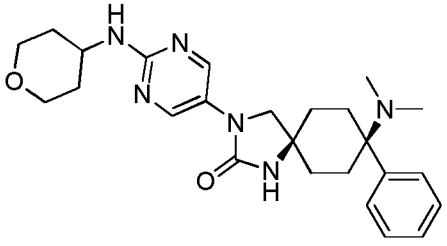
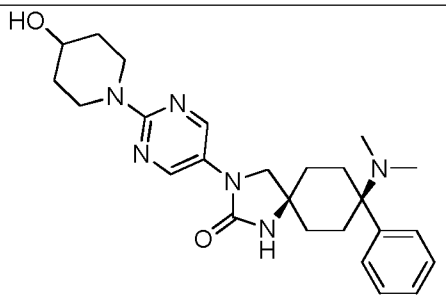
 SC_3123	 SC_3124
 SC_3125	 SC_3126
 SC_3127	 SC_3128
 SC_3129	 SC_3130
 SC_3131	 SC_3132

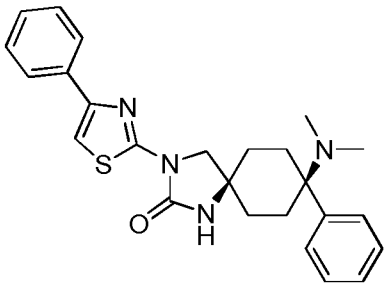
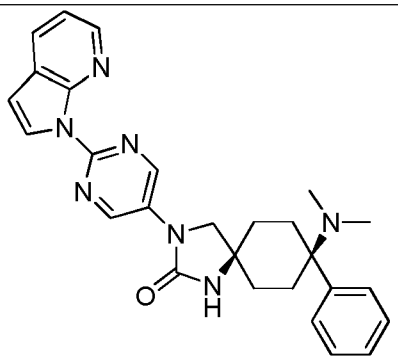
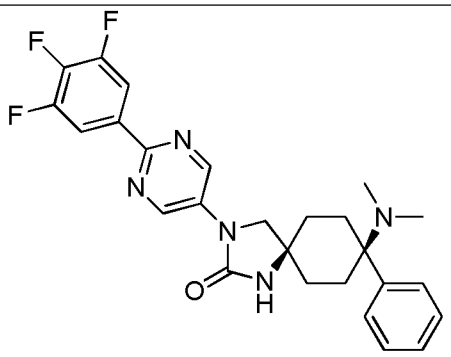
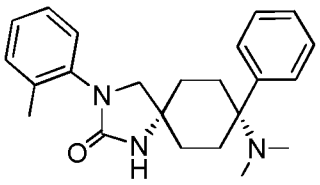
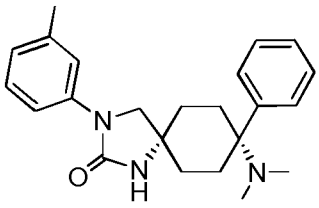
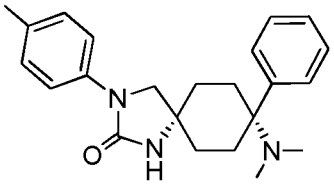
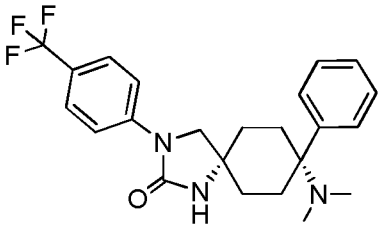
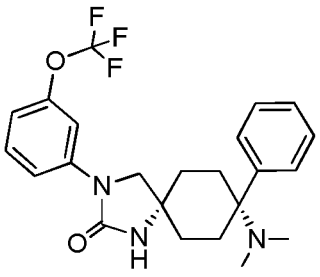
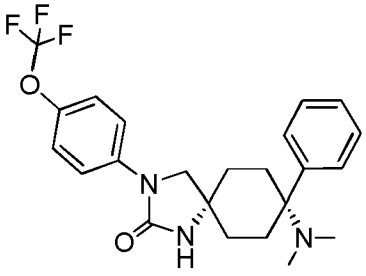
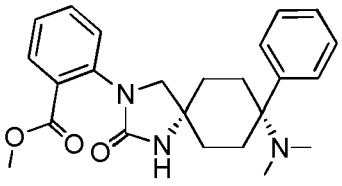
 SC_3133	 SC_3134
 SC_3135	 SC_3136
 SC_3137	 SC_3138
 SC_3139	 SC_3140
 SC_3141	 SC_3142

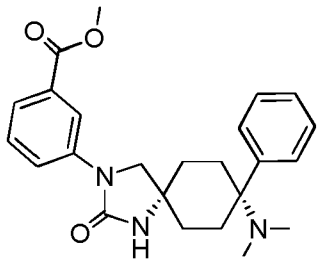
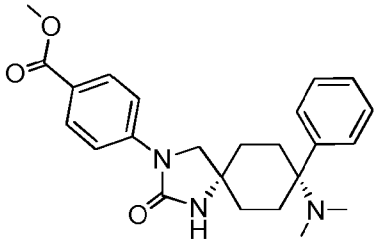
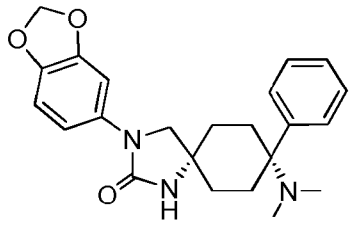
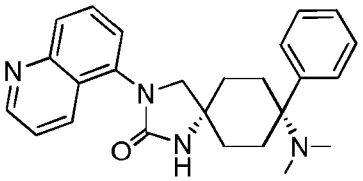
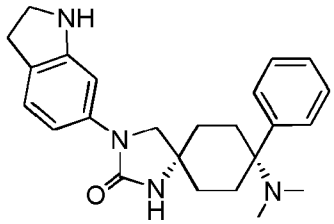
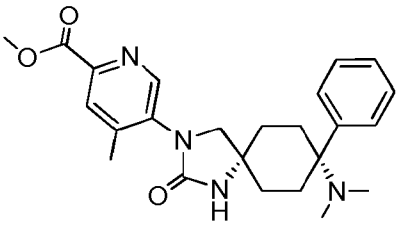
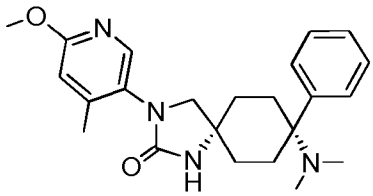
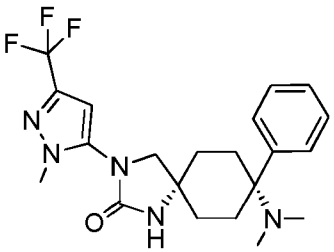
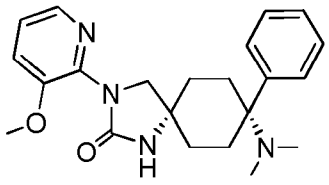
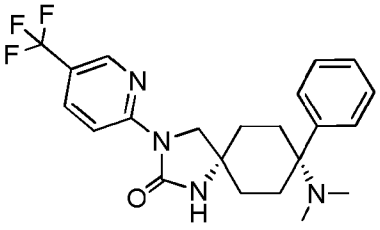
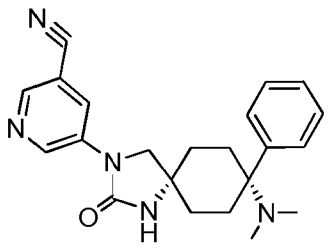
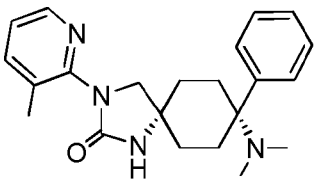
 SC_3143	 SC_3144
 SC_3145	 SC_3146
 SC_3147	 SC_3148
 SC_3149	 SC_3150
 SC_3151	 SC_3152

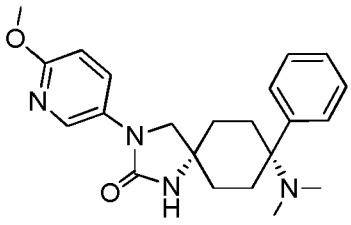
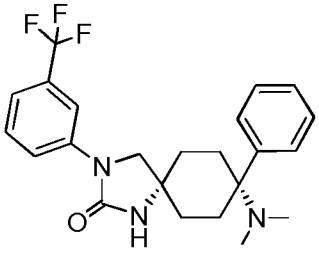
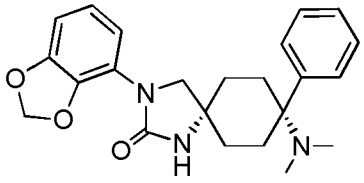
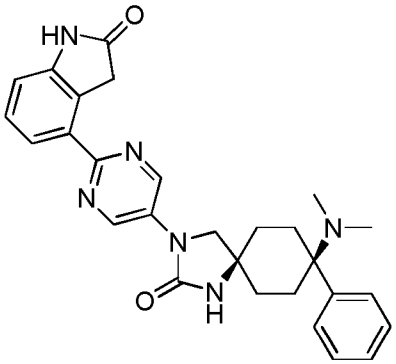
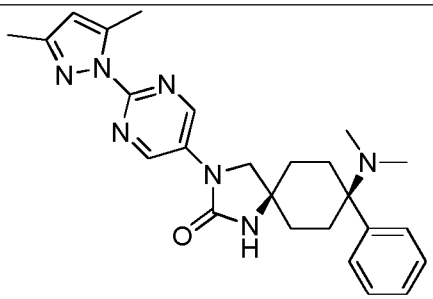
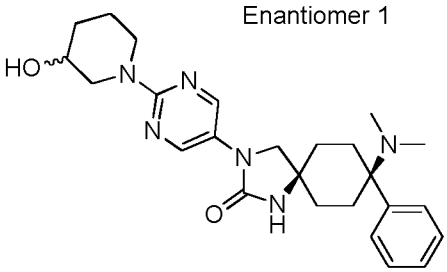
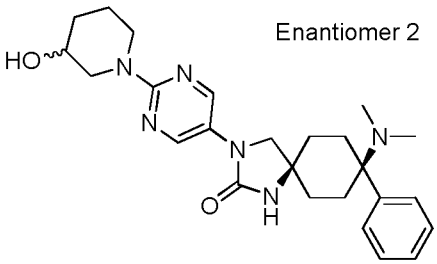
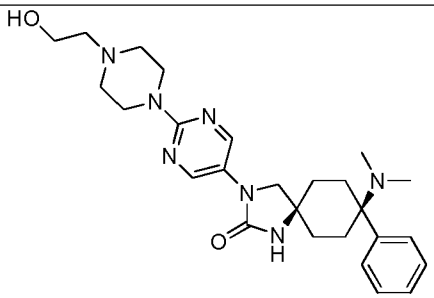
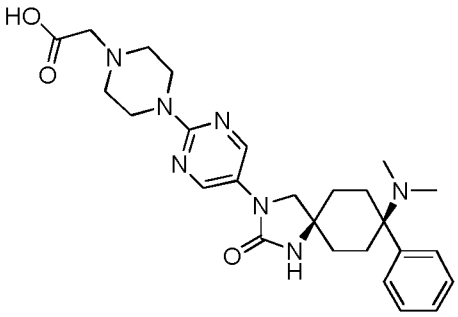
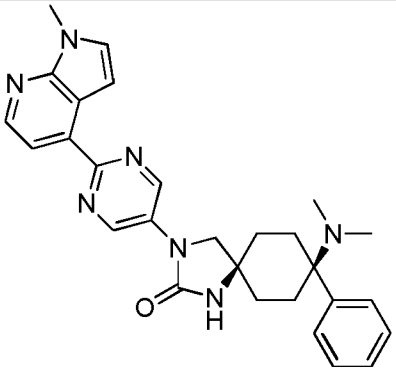
 SC_3153	 SC_3154
 SC_3155	 SC_3156
 SC_3157	 SC_3158
 SC_3159	 SC_3160
 SC_3161	 SC_3162

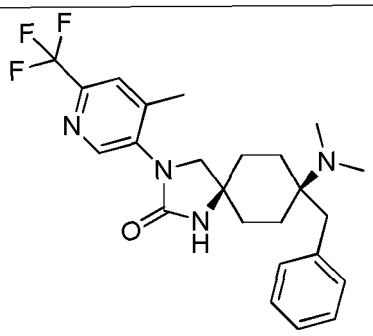
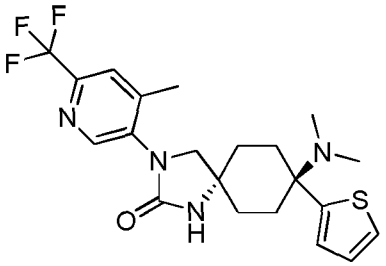
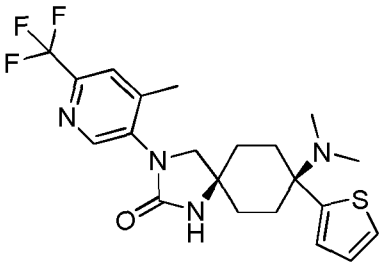
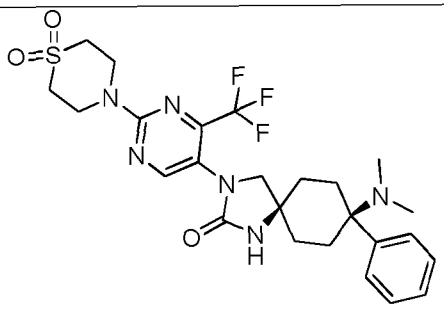
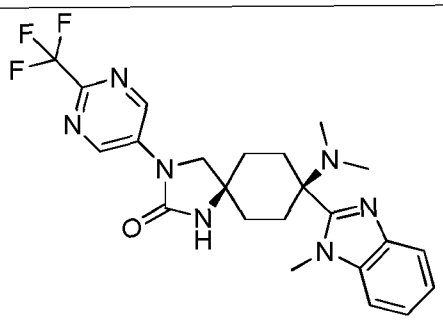
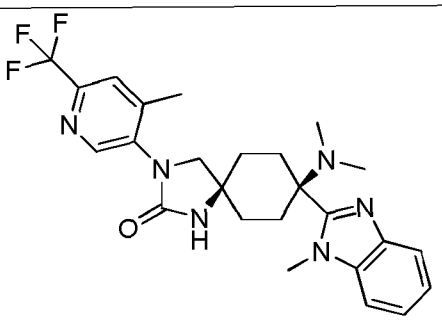
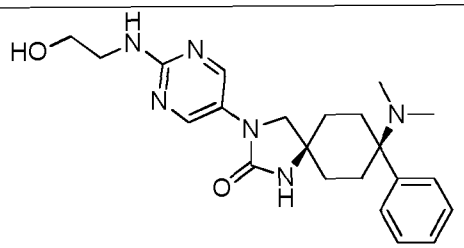
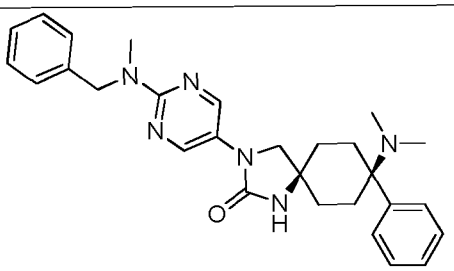
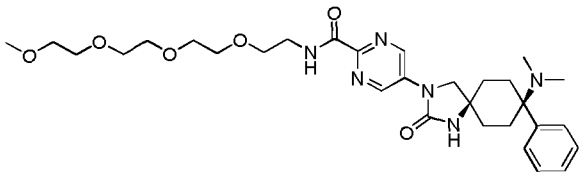
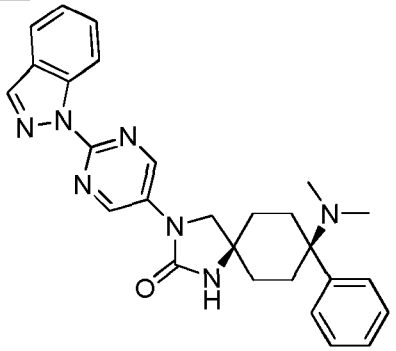
 SC_3163	 SC_3164
 SC_3165	 SC_3166
 SC_3167	 SC_3168
 SC_3169	 SC_3170
 SC_3171	 SC_3172

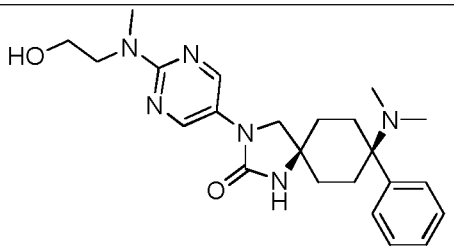
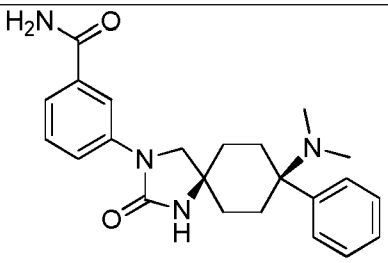
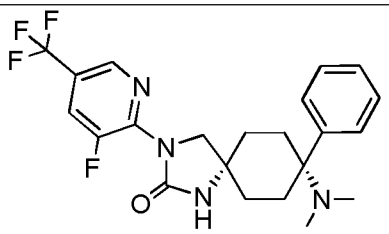
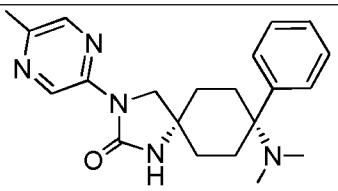
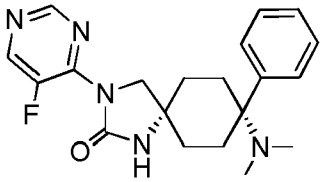
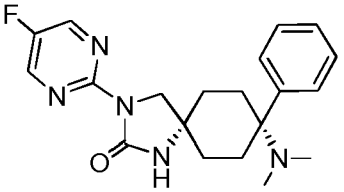
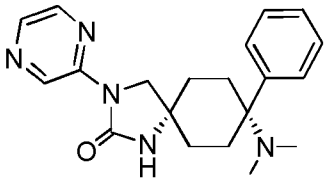
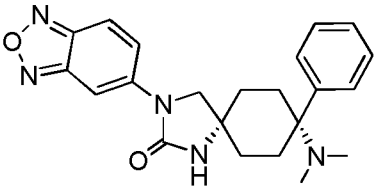
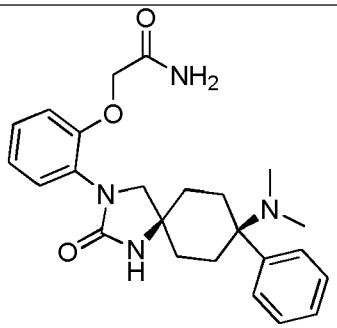
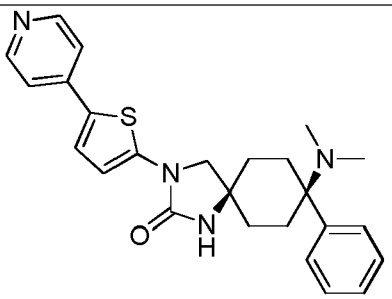
 SC_3173	 SC_3174
 SC_3175	 SC_3176
 SC_3177	 SC_3178
 SC_3179	 SC_3180
 SC_3181	 SC_3182

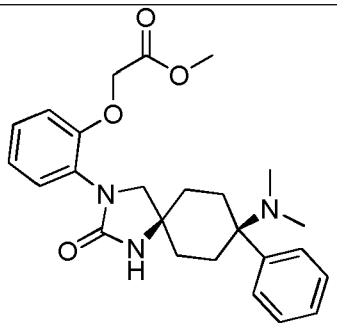
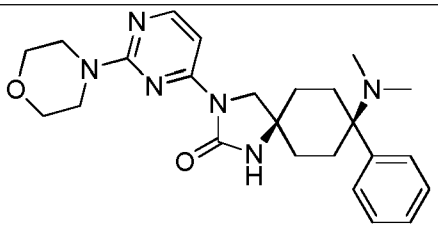
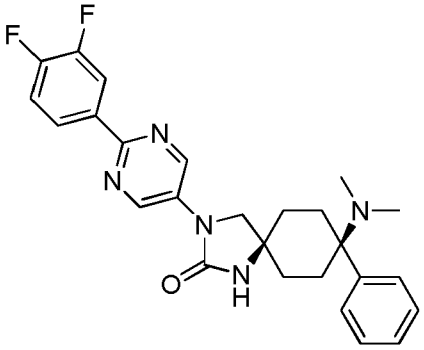
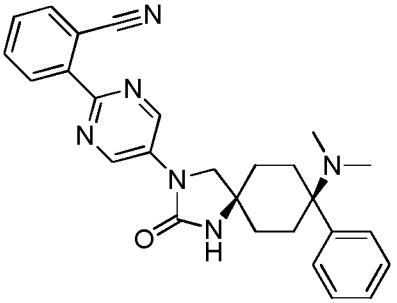
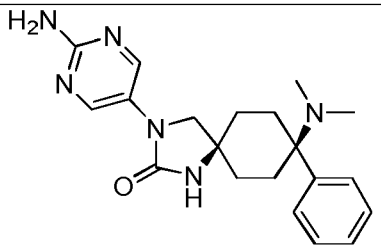
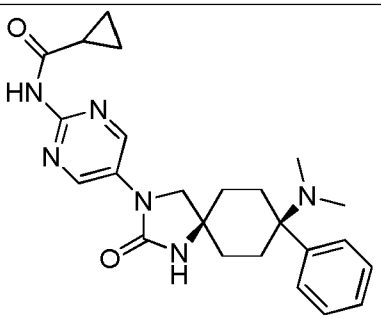
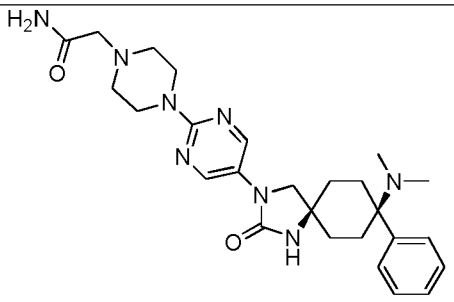
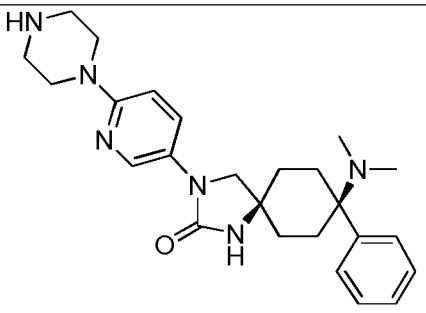
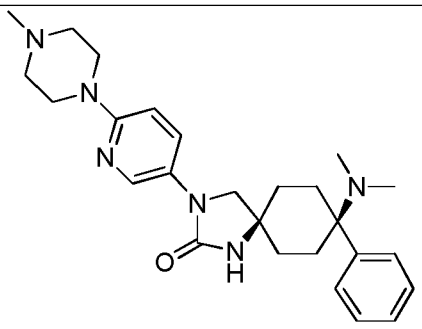
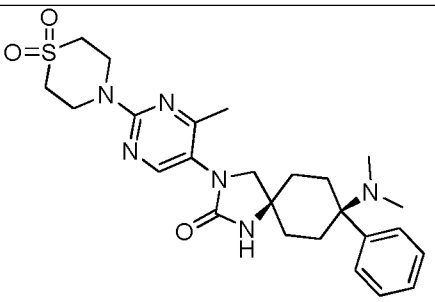
 SC_3183	 SC_3184
 SC_3185	 SC_3186
 SC_3187	 SC_3188
 SC_3189	 SC_3190
 SC_3191	 SC_3192

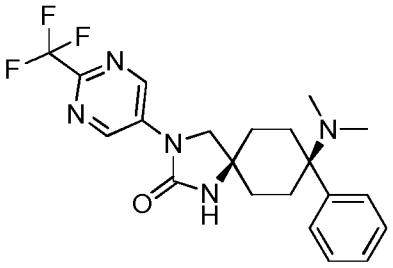
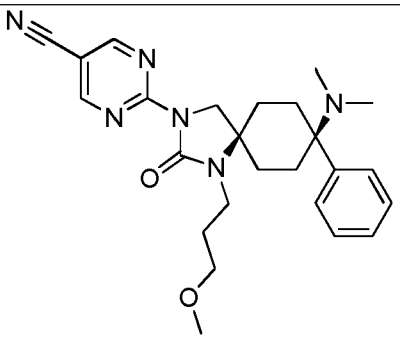
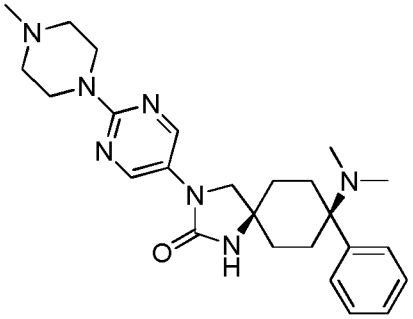
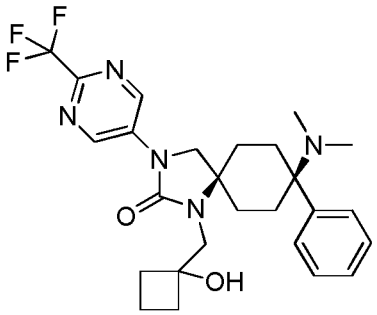
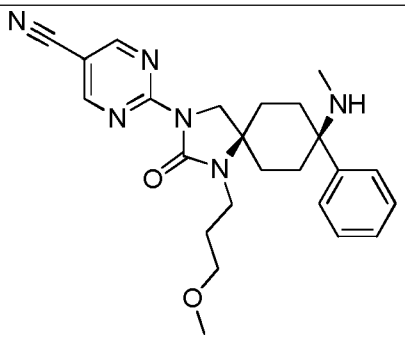
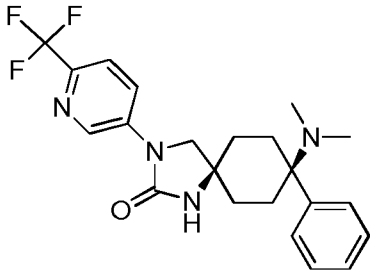
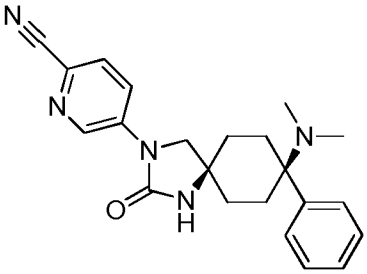
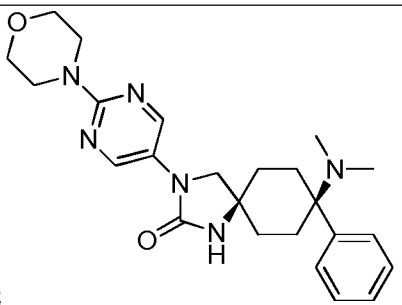
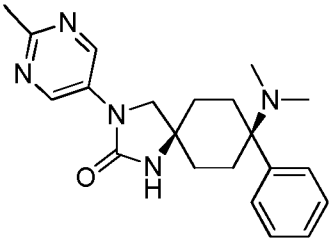
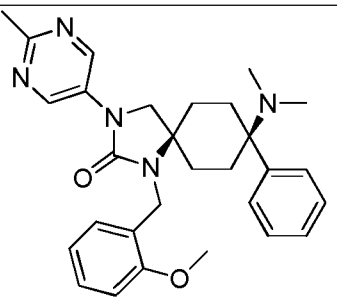
 SC_3193	 SC_3194
 SC_3195	 SC_3196
 SC_3197	 SC_3198
 SC_3199	 SC_3200
 SC_3201	 SC_3202
 SC_3203	 SC_3204

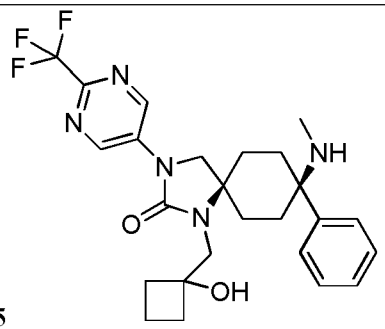
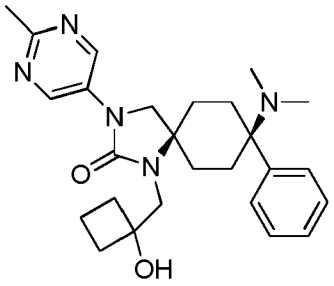
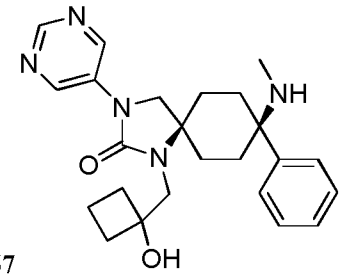
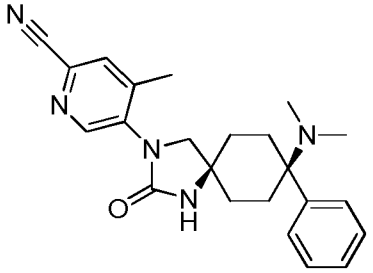
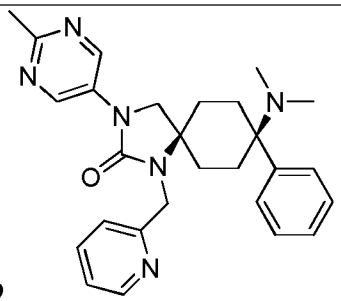
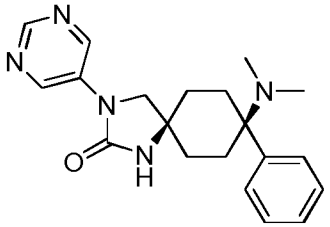
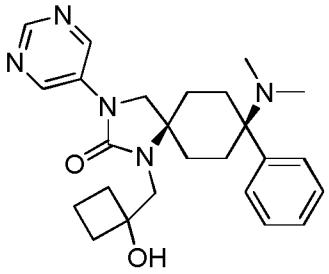
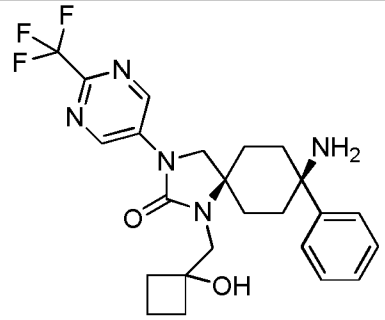
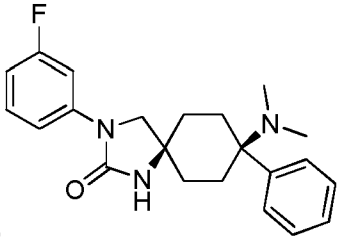
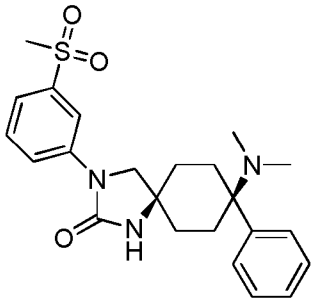
 SC_3205	 SC_3206
 SC_3207	 SC_3208
 SC_3209	 Enantiomer 1 SC_3210
 Enantiomer 2 SC_3211	 SC_3212
 SC_3213	 SC_3214

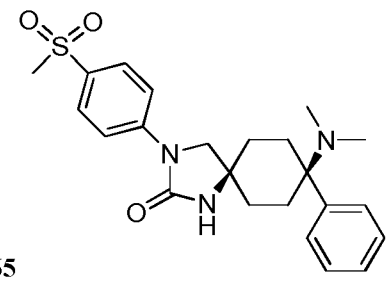
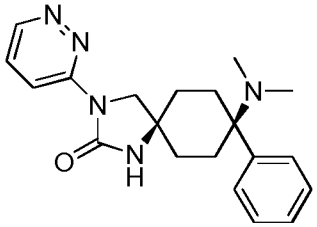
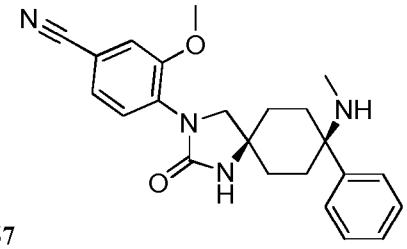
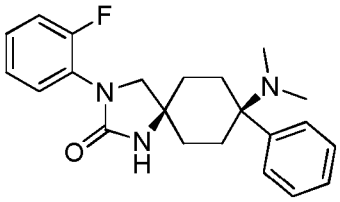
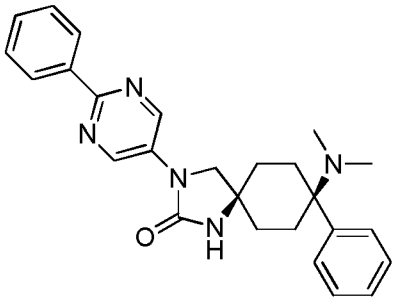
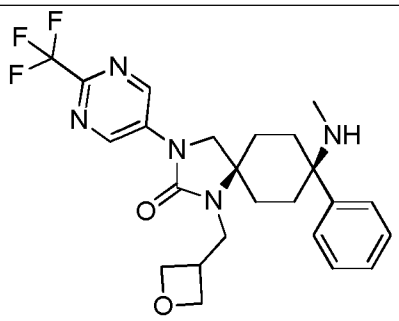
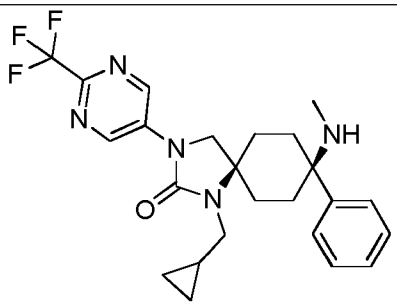
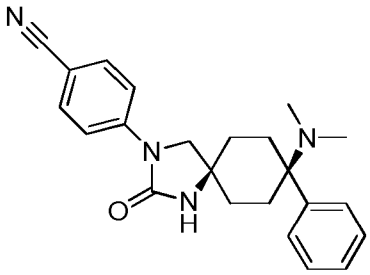
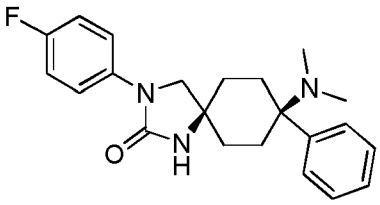
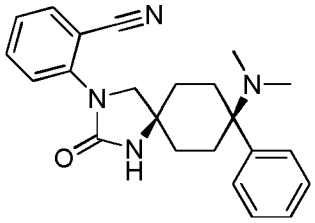
 SC_3215	 SC_3216
 SC_3217	 SC_3218
 SC_3219	 SC_3220
 SC_3221	 SC_3222
SC_3223 	 SC_3224

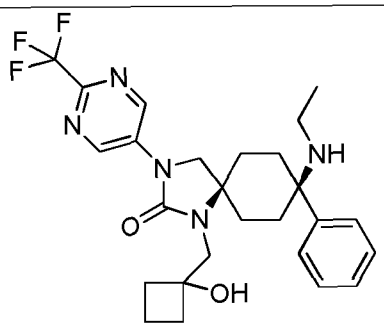
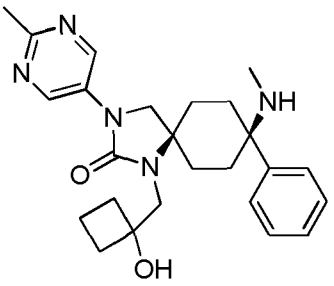
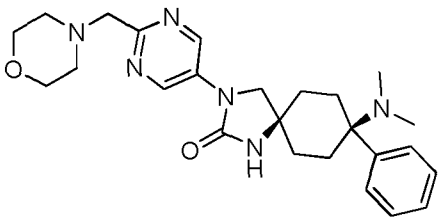
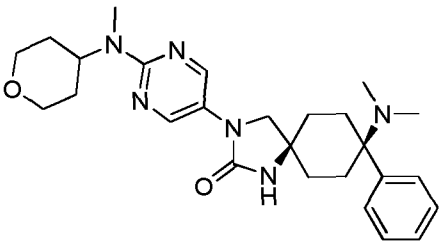
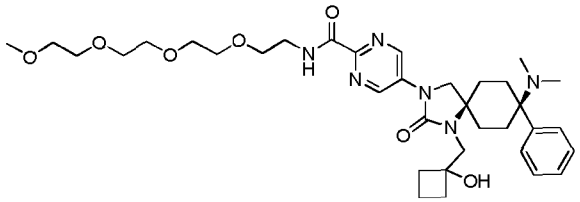
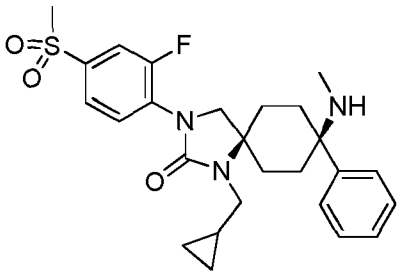
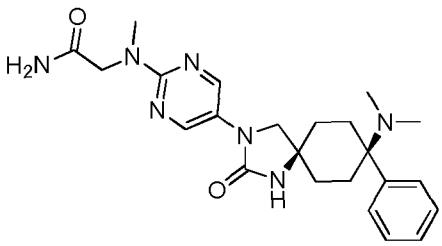
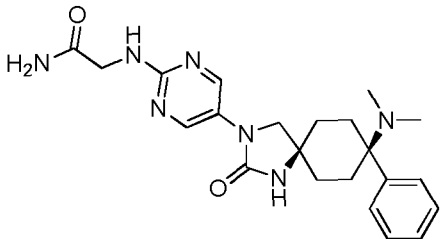
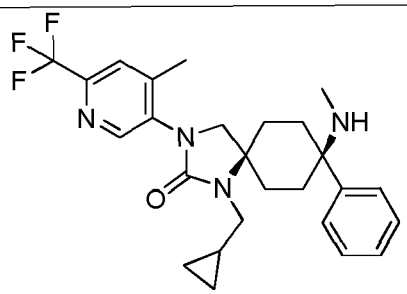
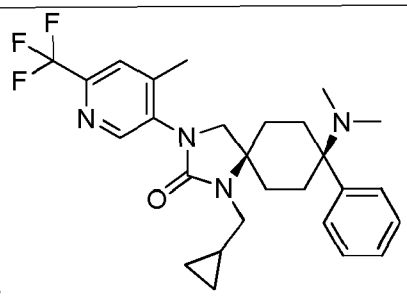
 SC_3225	 SC_3226
 SC_3227	 SC_3228
 SC_3229	 SC_3230
 SC_3231	 SC_3232
 SC_3233	 SC_3234

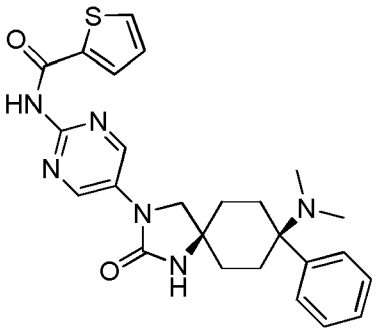
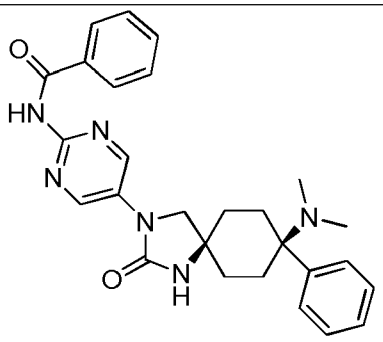
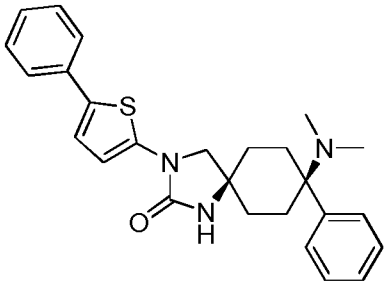
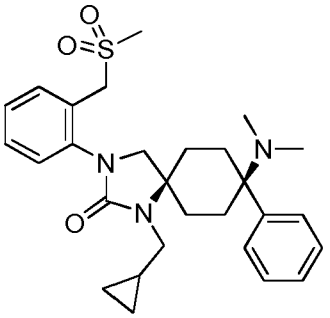
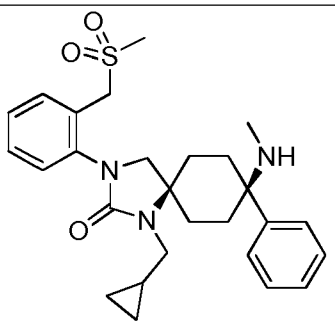
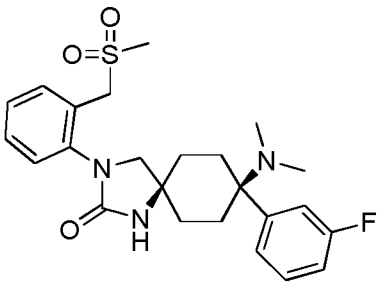
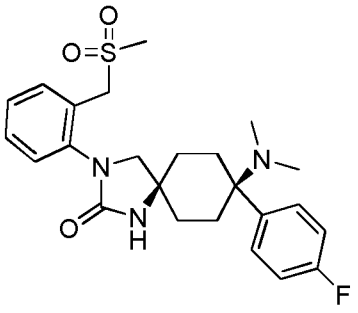
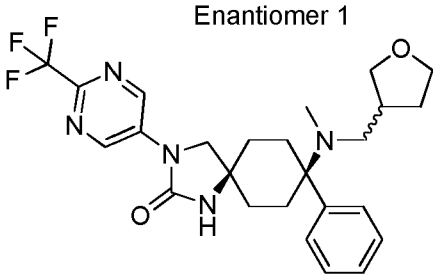
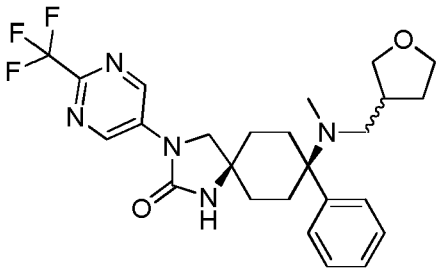
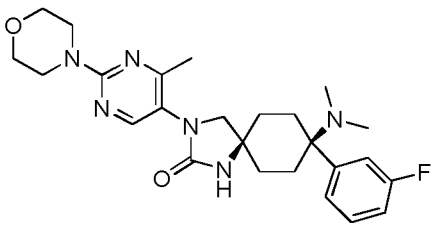
 SC_3235	 SC_3236
 SC_3237	 SC_3238
 SC_3239	 SC_3240
 SC_3241	 SC_3242
 SC_3243	 SC_3244

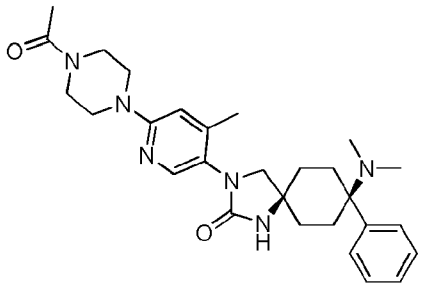
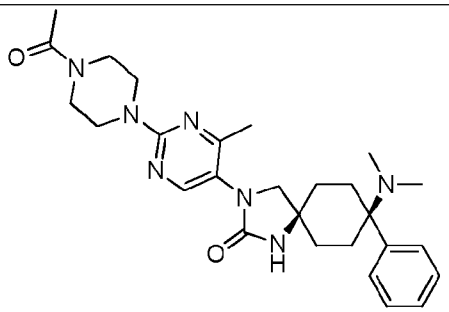
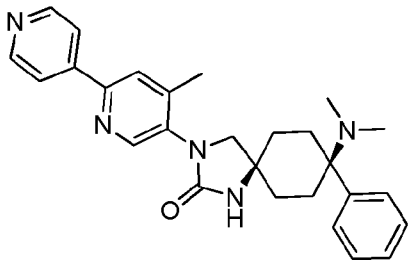
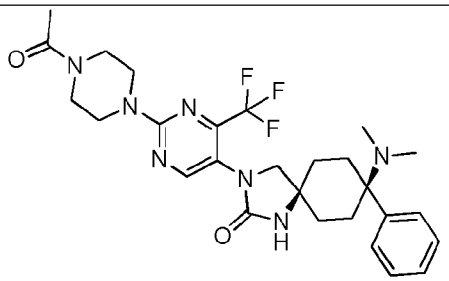
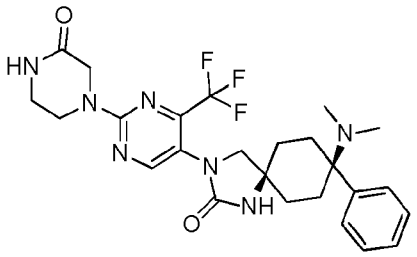
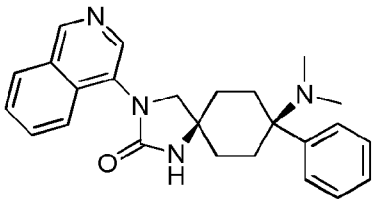
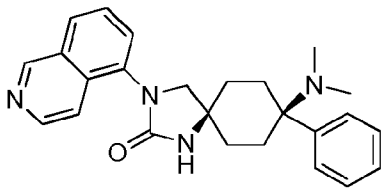
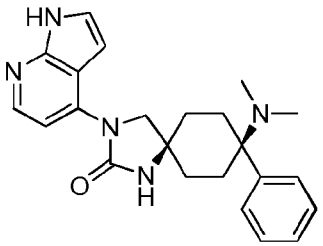
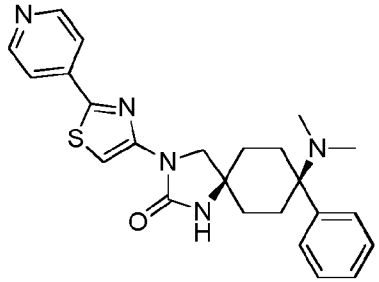
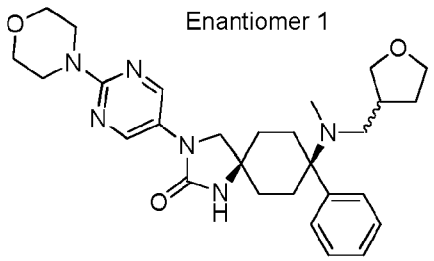
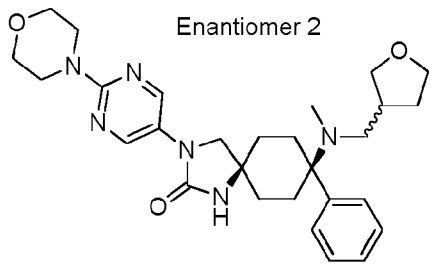
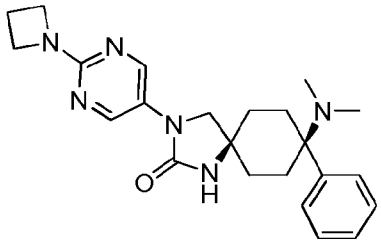
 **SC_3245**	 **SC_3246**
 **SC_3247**	 **SC_3248**
 **SC_3249**	 **SC_3250**
 **SC_3251**	 **SC_3252**
 **SC_3253**	 **SC_3254**

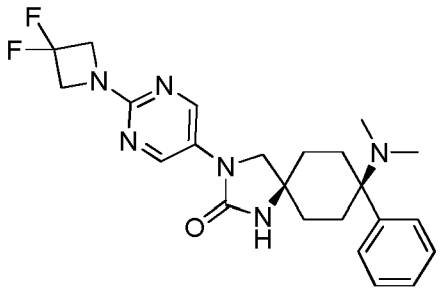
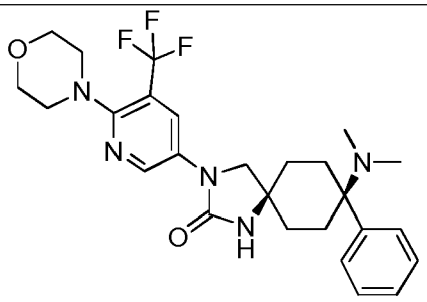
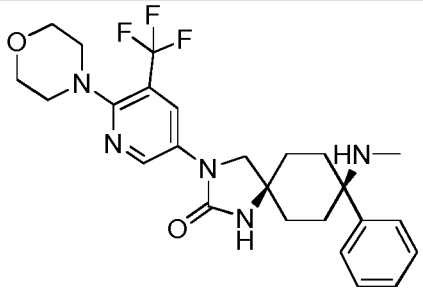
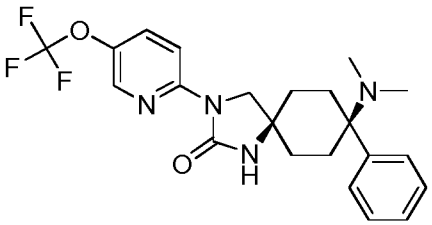
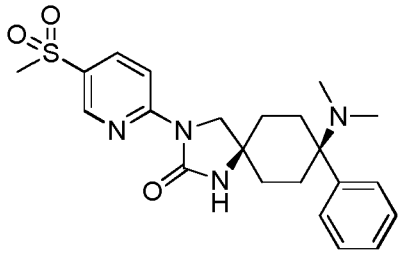
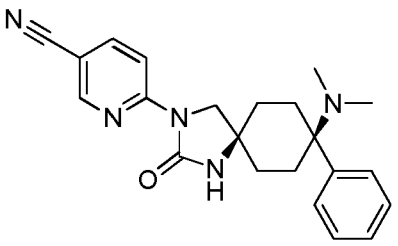
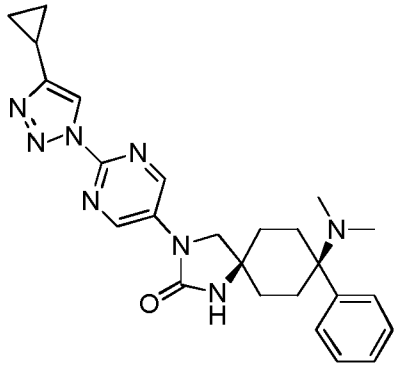
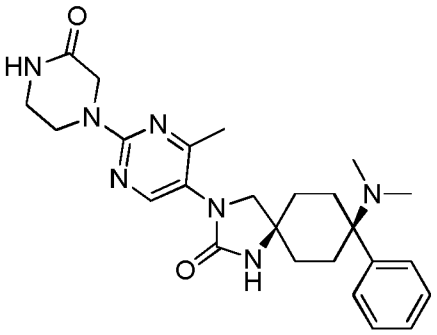
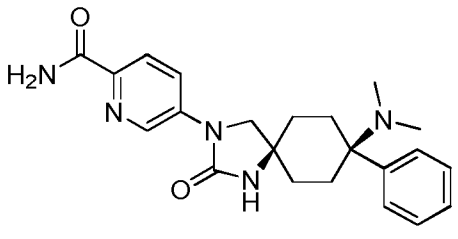
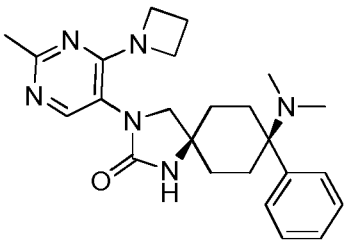
 SC_3255	 SC_3256
 SC_3257	 SC_3258
 SC_3259	 SC_3260
 SC_3261	 SC_3262
 SC_3263	 SC_3264

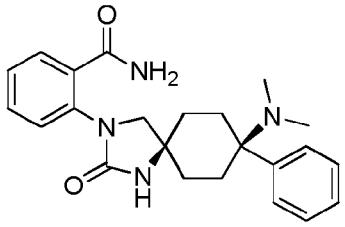
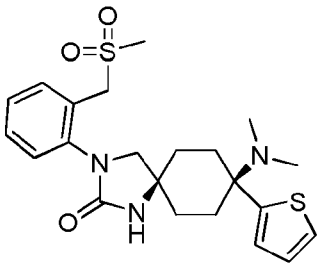
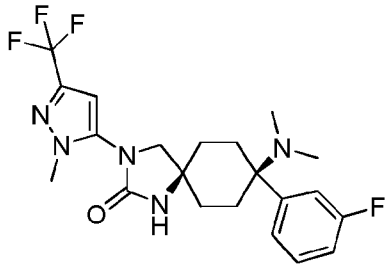
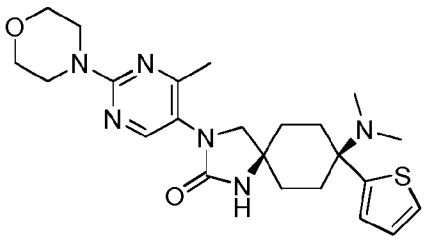
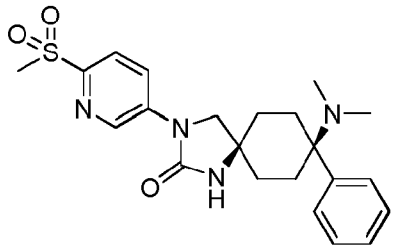
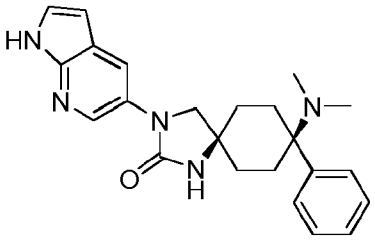
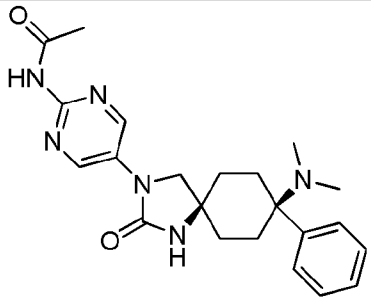
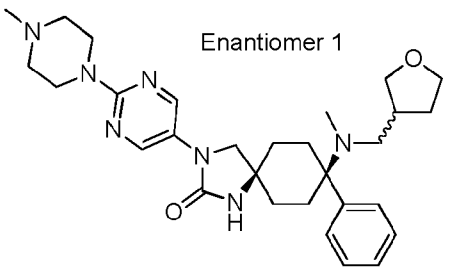
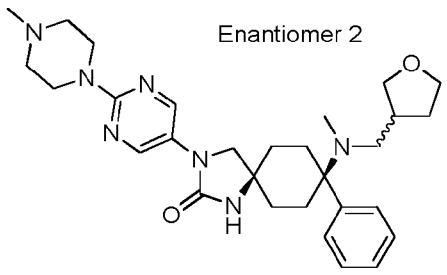
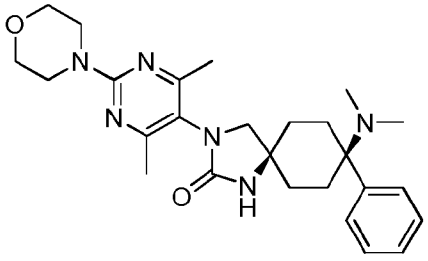
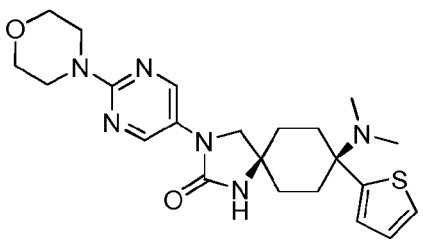
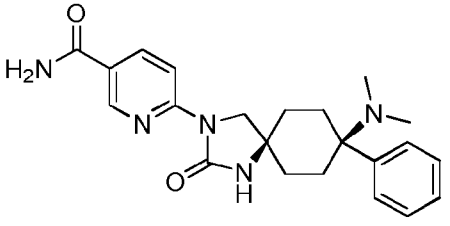
 SC_3265	 SC_3266
 SC_3267	 SC_3268
 SC_3269	 SC_3270
 SC_3271	 SC_3272
 SC_3273	 SC_3274

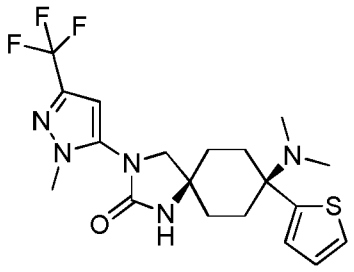
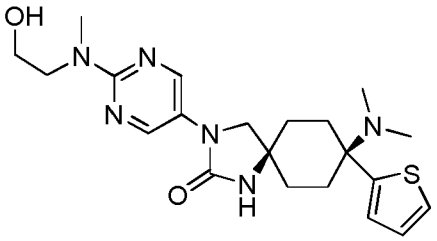
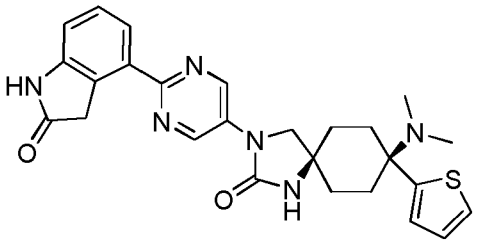
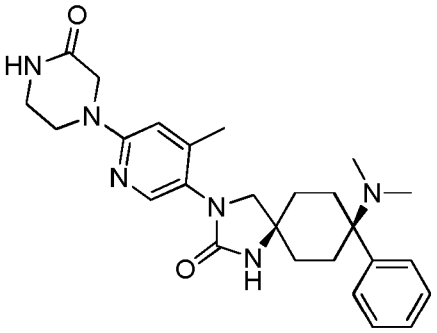
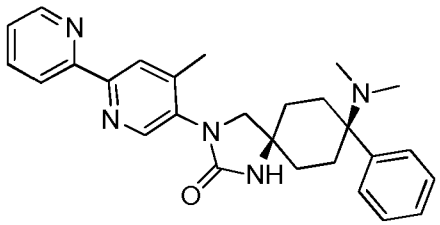
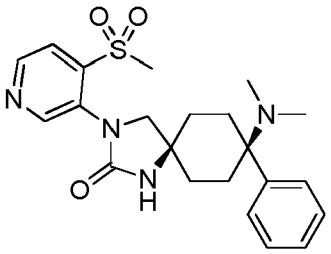
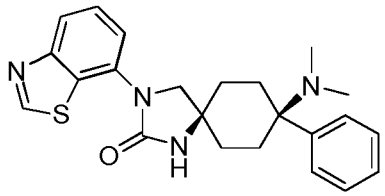
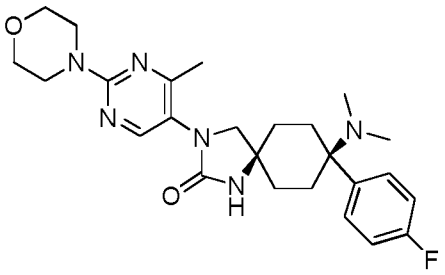
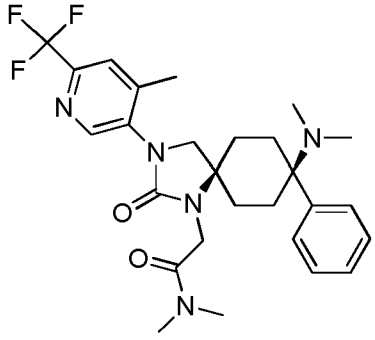
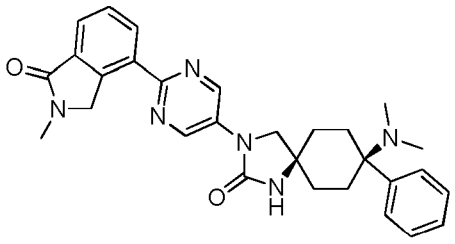
 SC_3275	 SC_3276
 SC_3277	 SC_3278
SC_3279 	 SC_3280
 SC_3281	 SC_3282
 SC_3283	 SC_3284

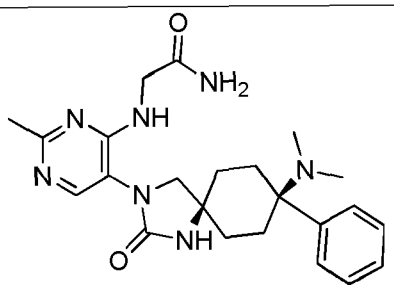
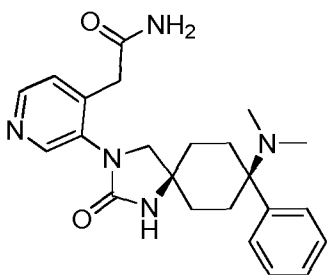
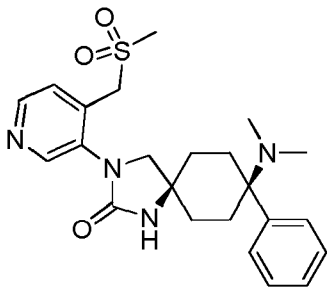
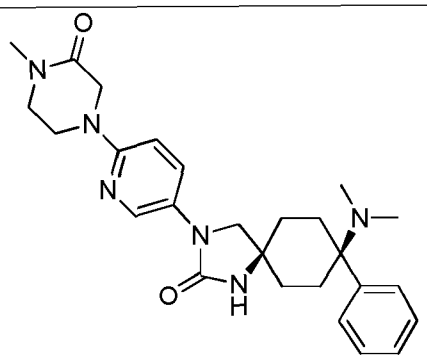
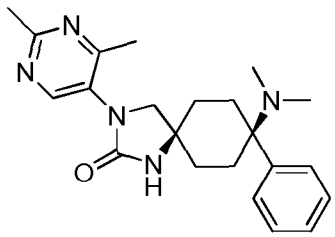
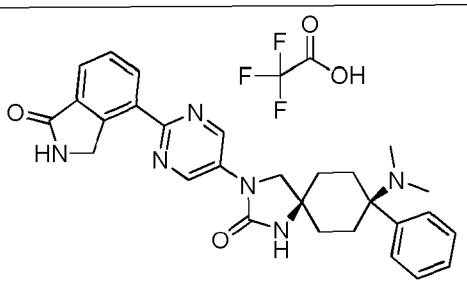
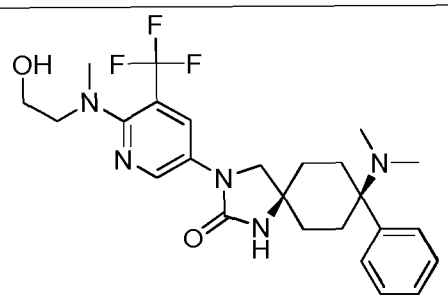
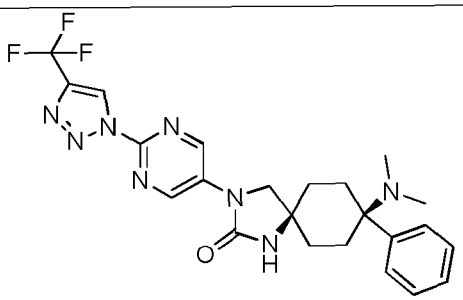
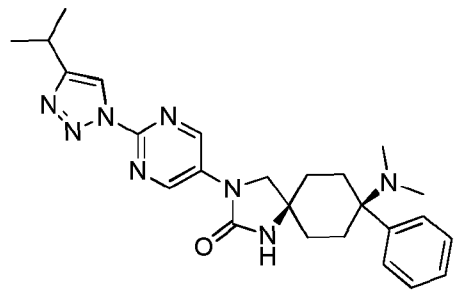
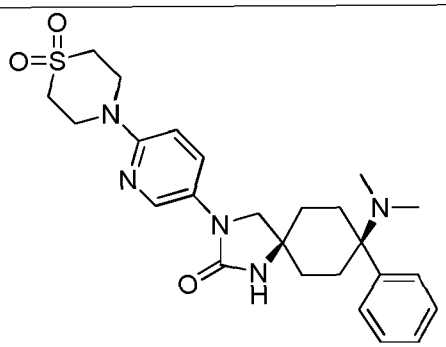
 SC_3285	 SC_3286
 SC_3287	 SC_3288
 SC_3289	 SC_3290
 SC_3291	Enantiomer 1  SC_3292
Enantiomer 2  SC_3293	 SC_3294

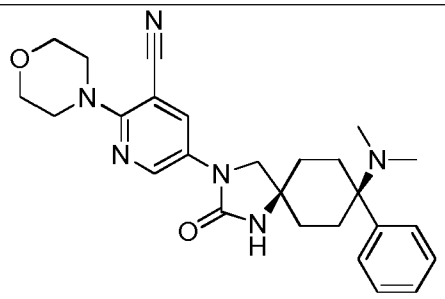
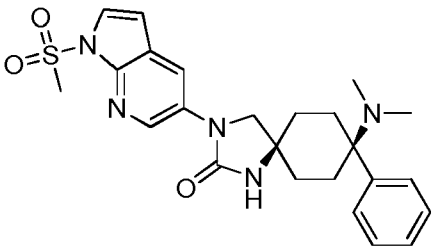
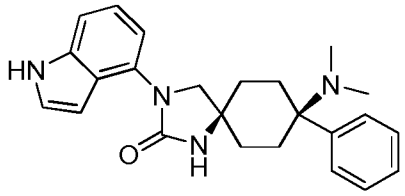
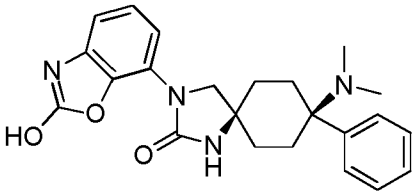
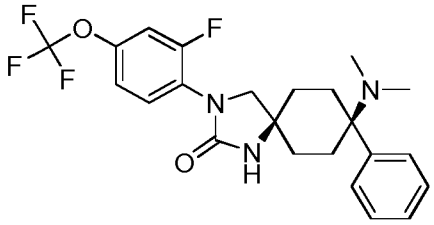
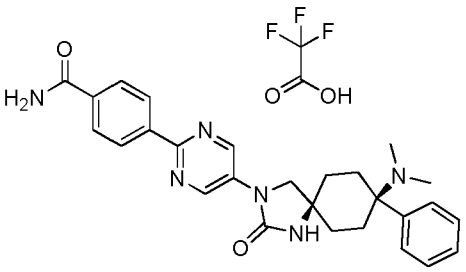
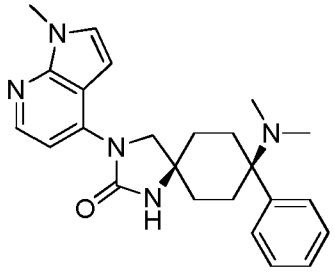
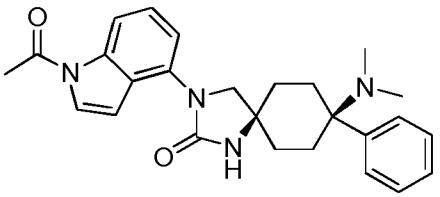
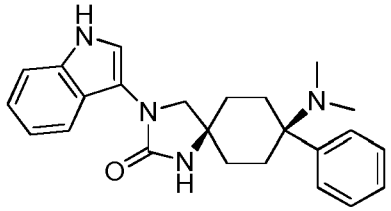
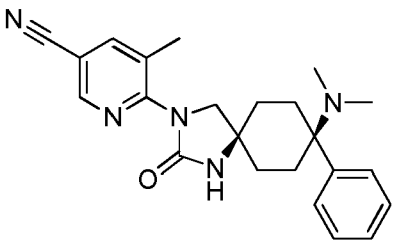
 SC_3295	 SC_3296
 SC_3297	 SC_3298
 SC_3299	 SC_3300
 SC_3301	 SC_3302
 SC_3303	 Enantiomer 1 SC_3304
 Enantiomer 2 SC_3305	 SC_3306

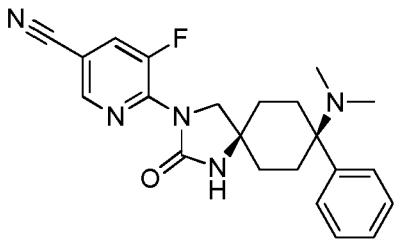
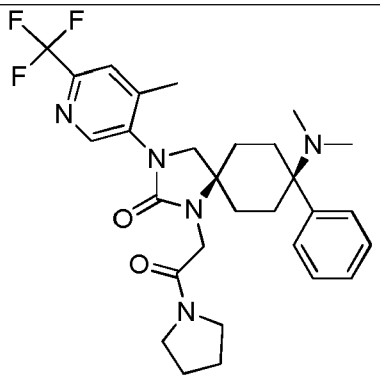
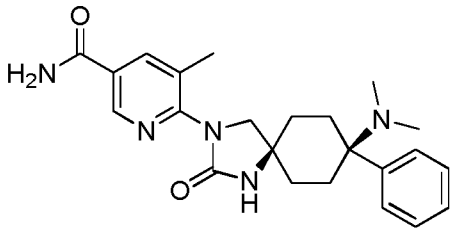
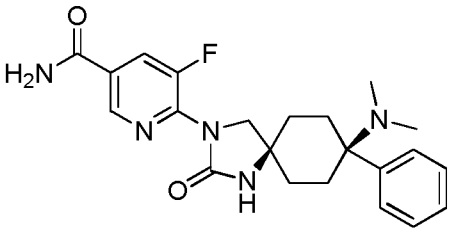
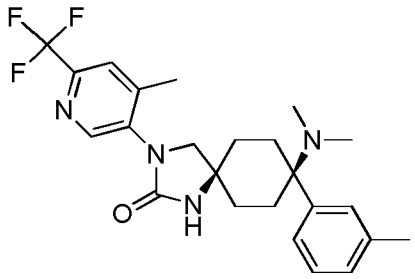
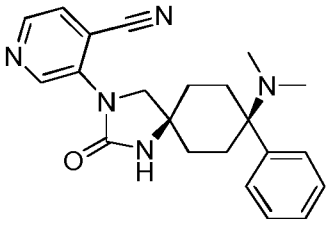
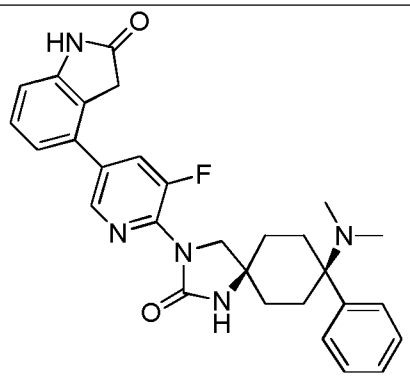
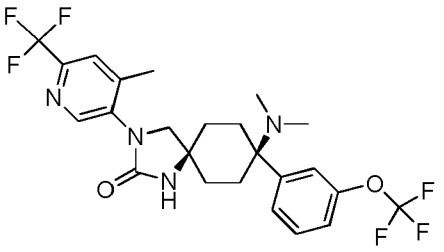
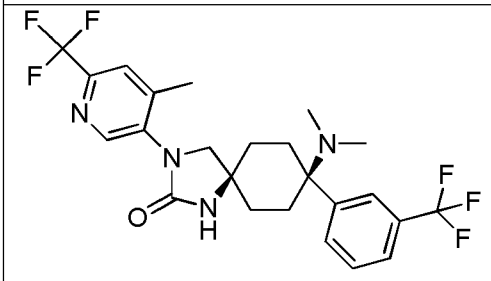
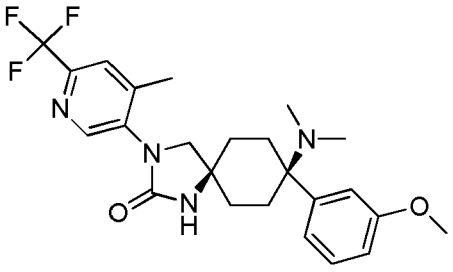
 SC_3307	 SC_3308
 SC_3309	 SC_3310
 SC_3311	 SC_3312
 SC_3313	 SC_3314
 SC_3315	 SC_3316

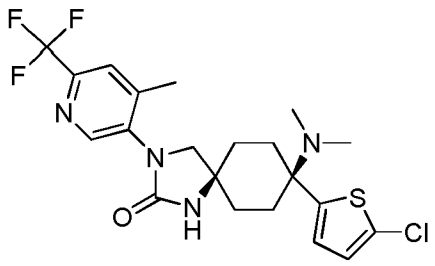
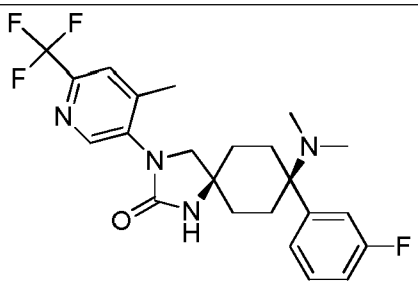
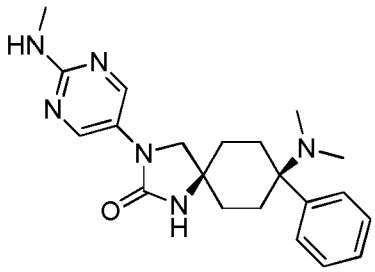
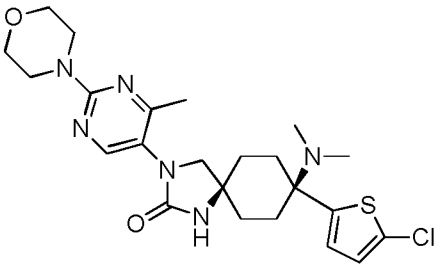
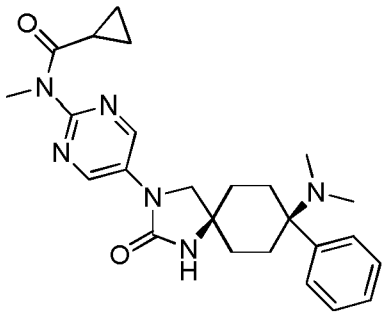
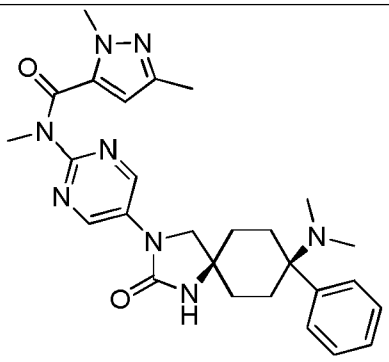
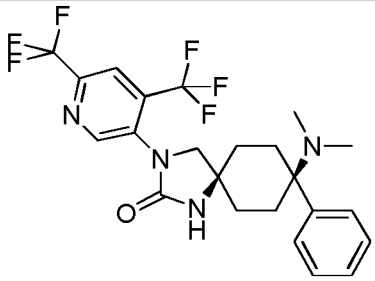
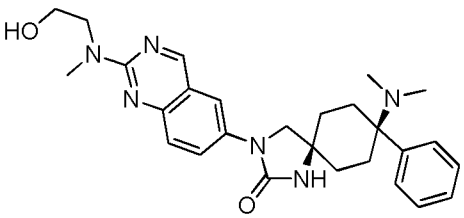
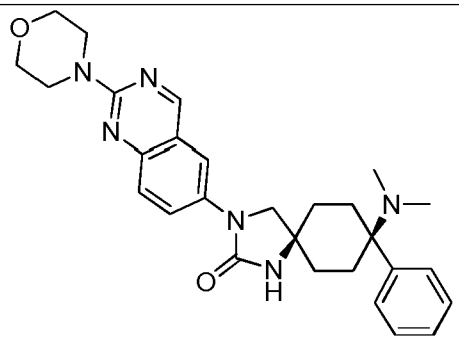
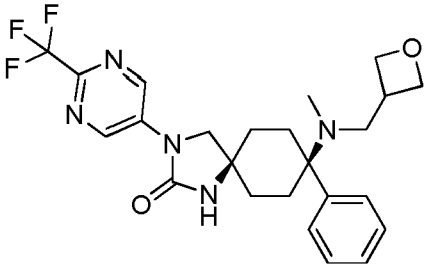
 SC_3317	 SC_3318
 SC_3319	 SC_3320
 SC_3321	 SC_3322
 SC_3323	 SC_3324
 SC_3325	 SC_3326
 SC_3327	 SC_3328

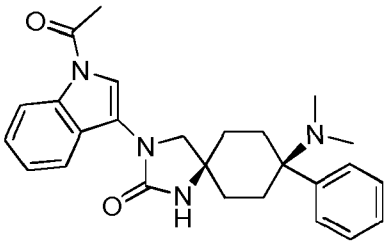
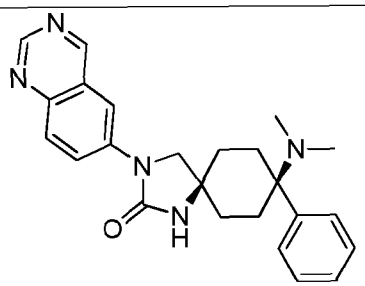
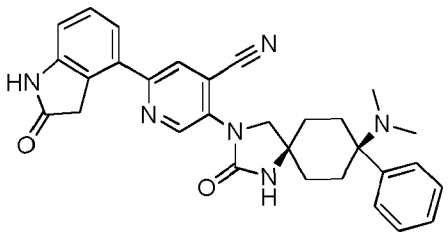
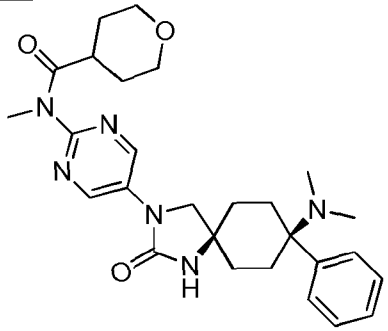
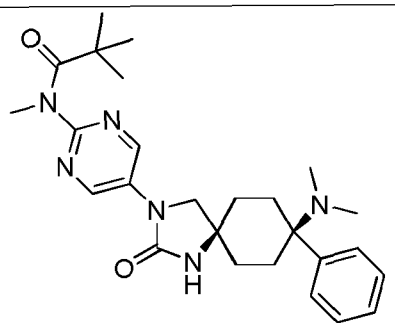
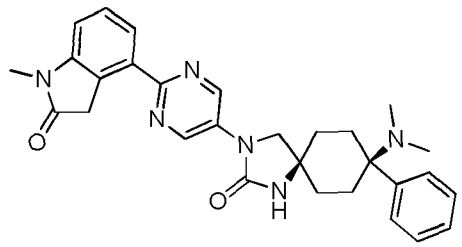
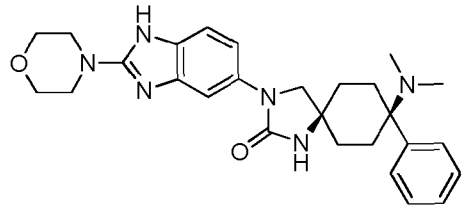
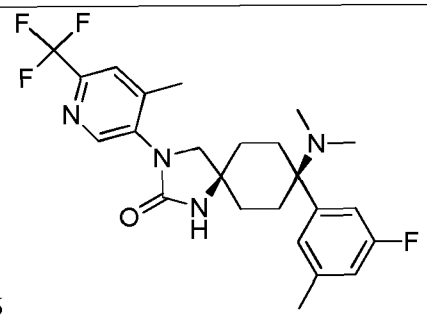
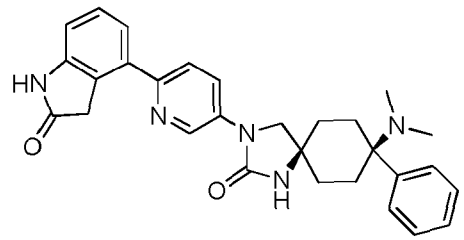
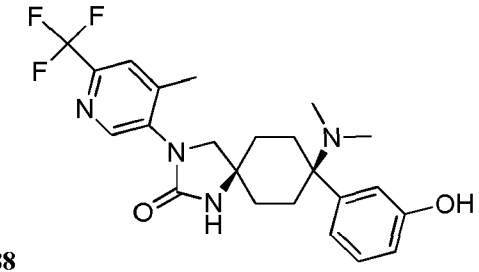
 SC_3329	 SC_3330
SC_3331 	 SC_3332
 SC_3333	 SC_3334
 SC_3335	 SC_3336
 SC_3337	 SC_3338

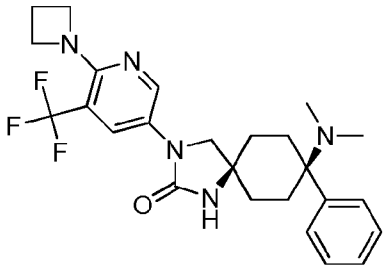
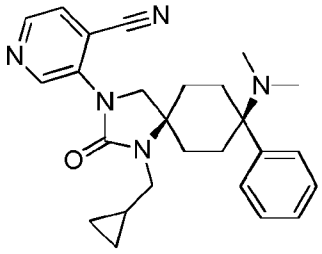
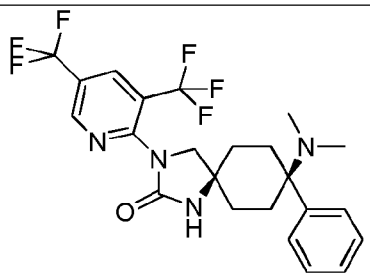
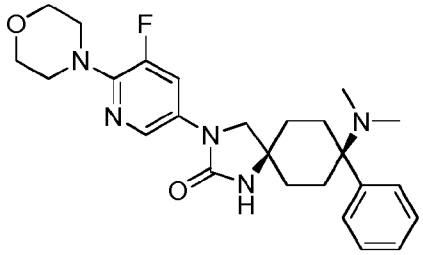
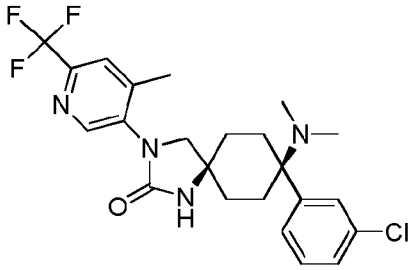
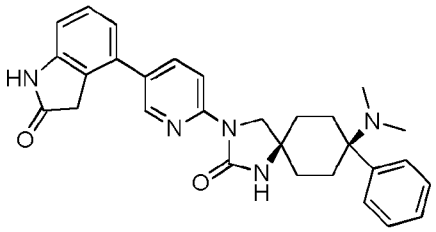
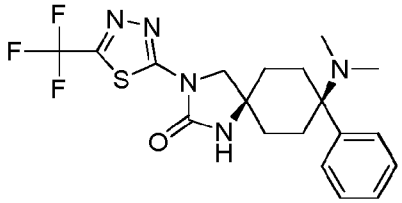
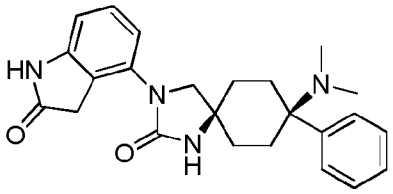
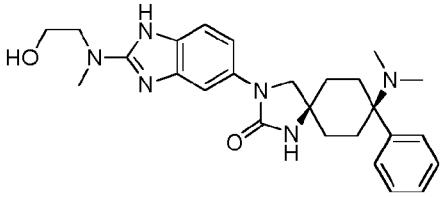
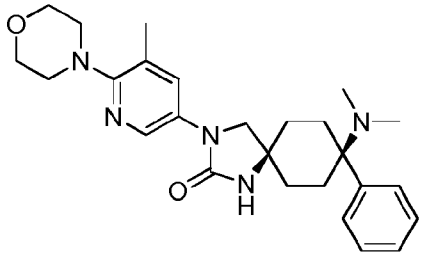
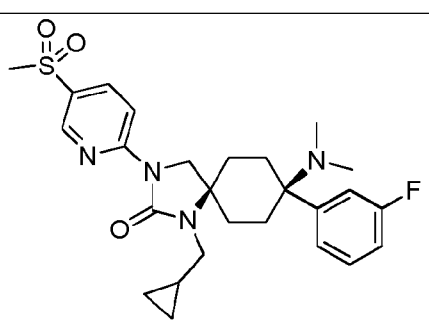
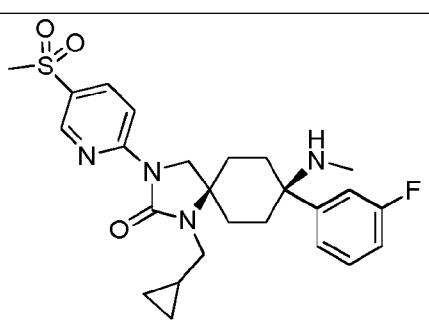
 SC_3339	 SC_3340
 SC_3341	 SC_3342
 SC_3343	 SC_3344
 SC_3345	 SC_3346
 SC_3347	 SC_3348

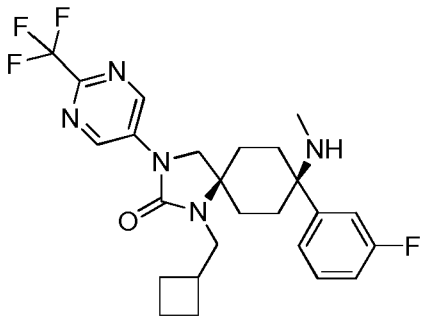
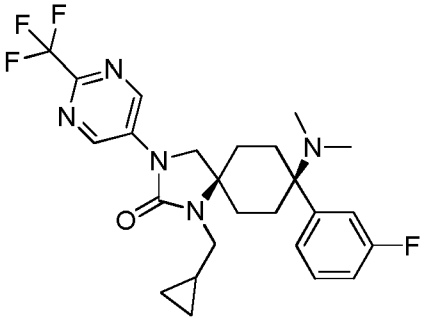
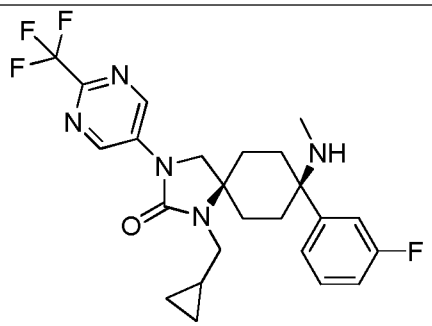
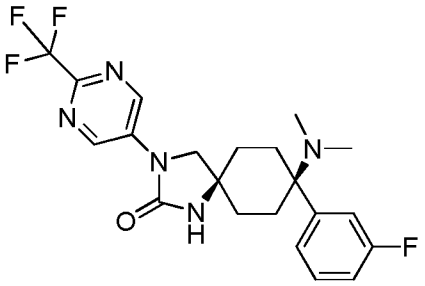
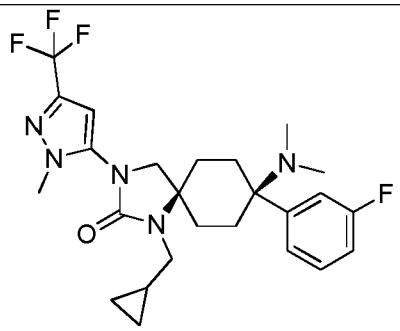
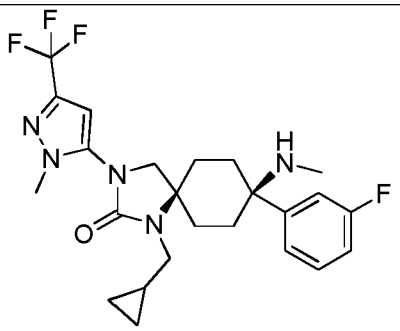
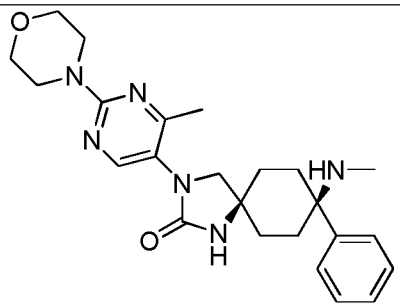
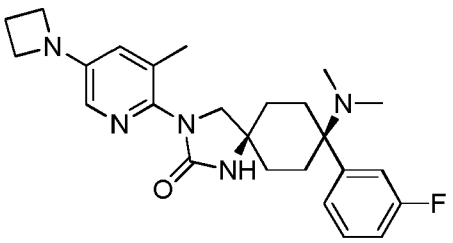
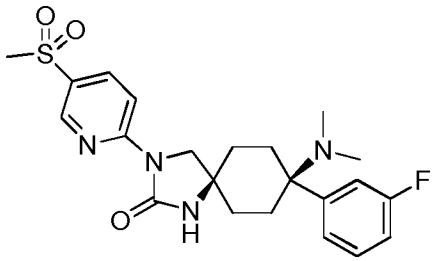
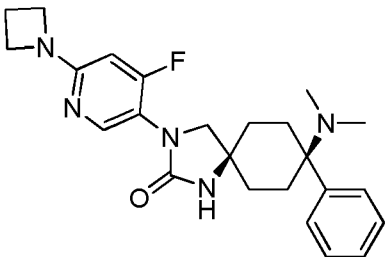
 SC_3349	 SC_3350
 SC_3351	 SC_3352
 SC_3353	 SC_3354
 SC_3355	 SC_3356
 SC_3357	 SC_3358

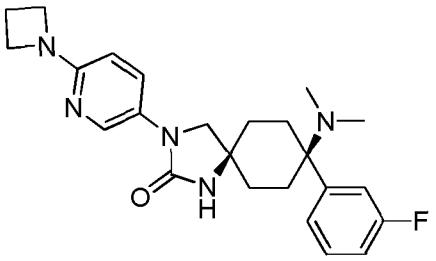
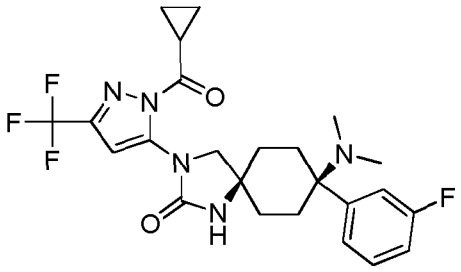
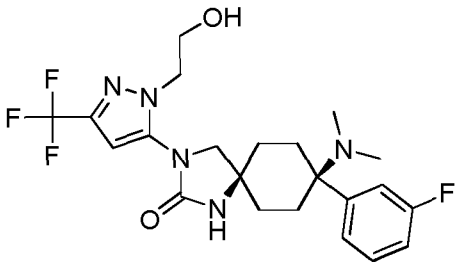
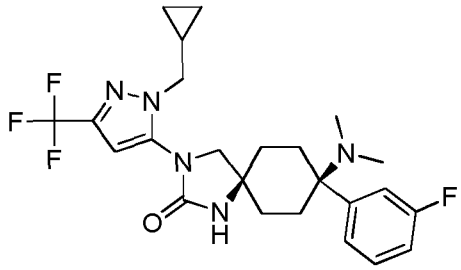
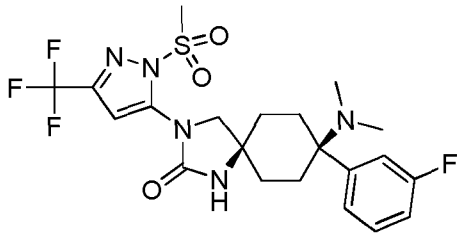
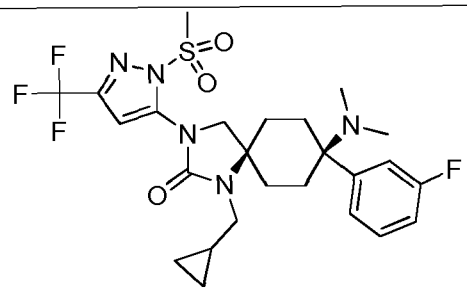
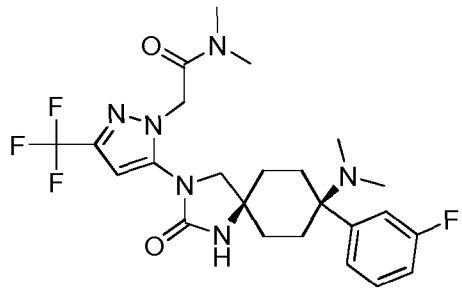
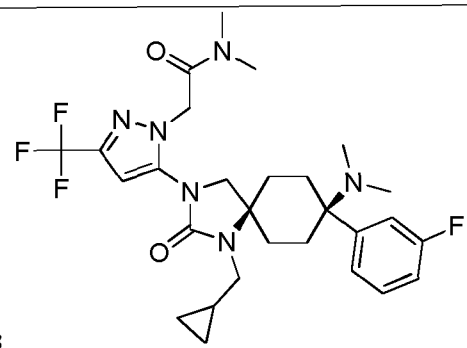
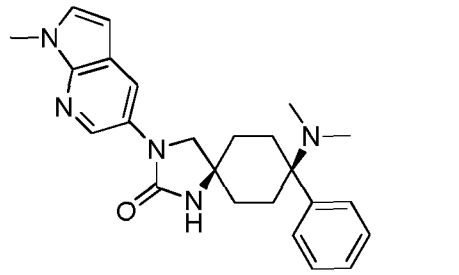
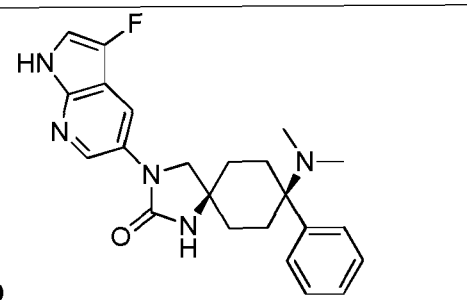
 SC_3359	 SC_3360
 SC_3361	 SC_3362
 SC_3363	 SC_3364
 SC_3365	 SC_3366
 SC_3367	 SC_3368

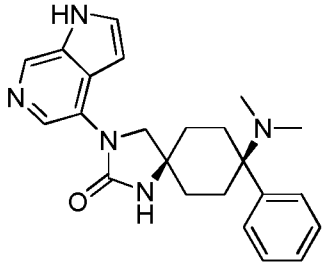
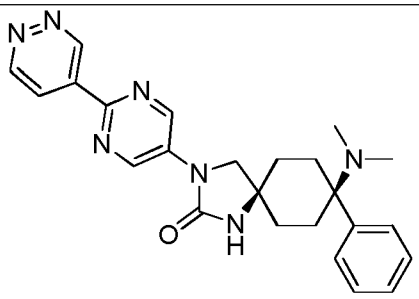
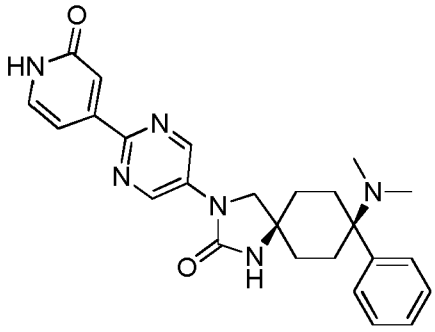
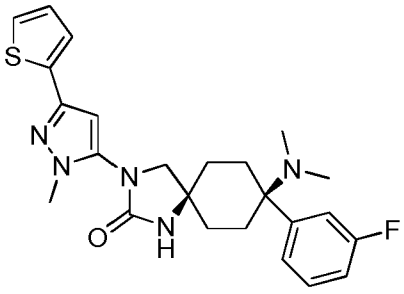
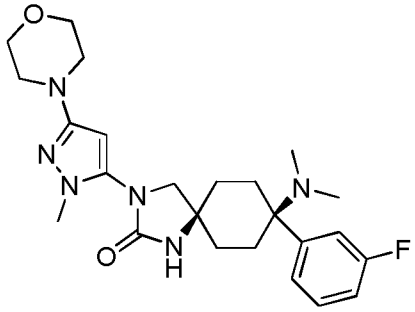
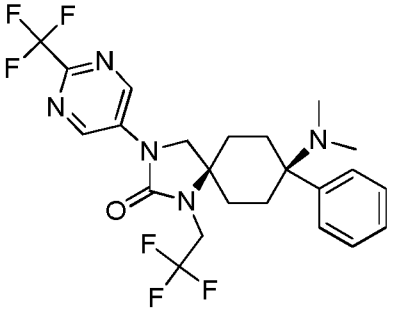
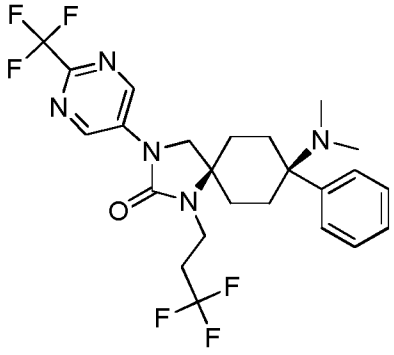
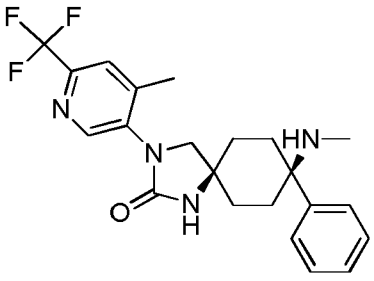
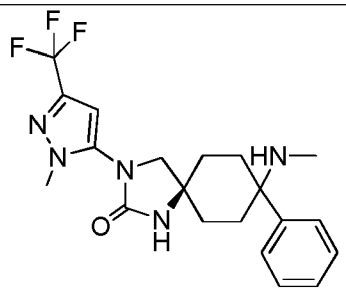
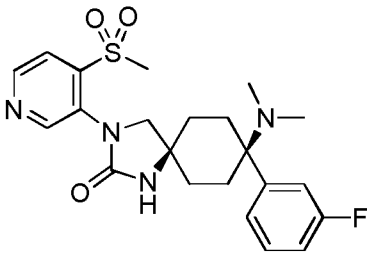
 SC_3369	 SC_3370
 SC_3371	 SC_3372
 SC_3373	 SC_3374
 SC_3375	 SC_3376
 SC_3377	 SC_3378

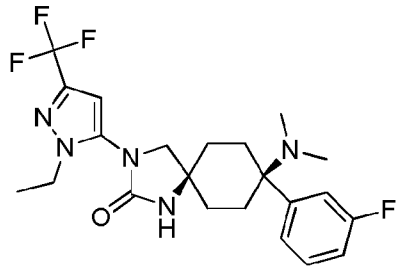
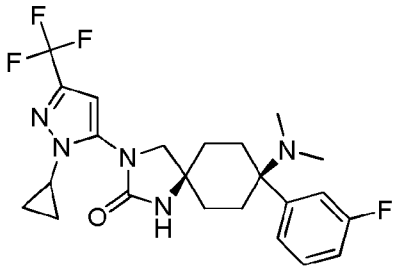
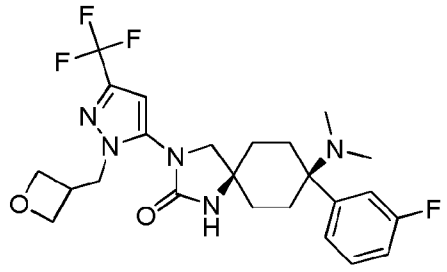
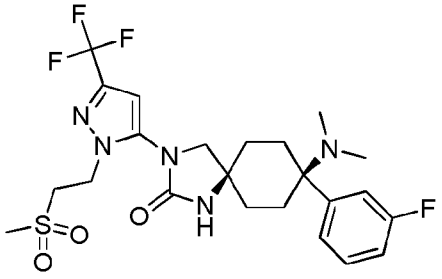
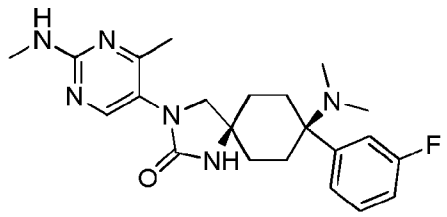
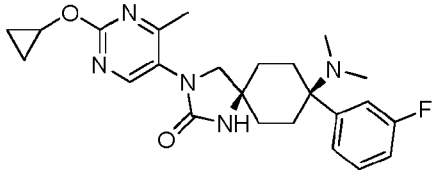
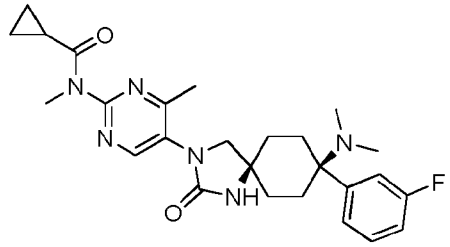
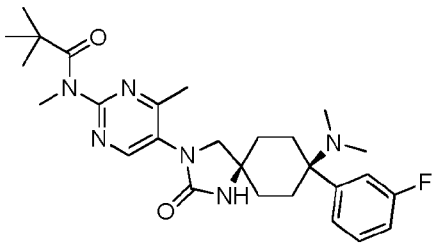
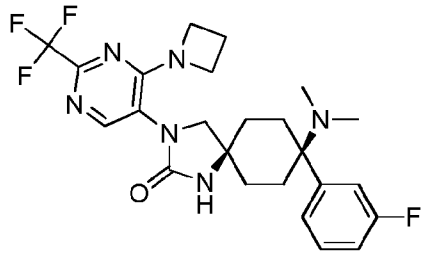
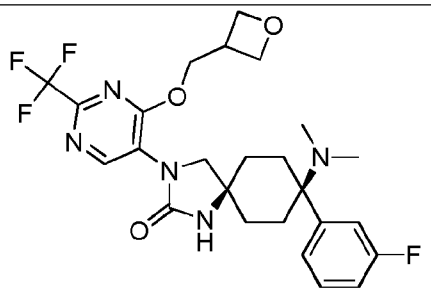
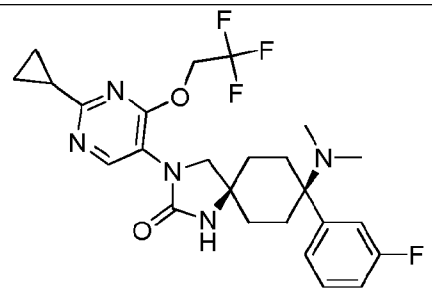
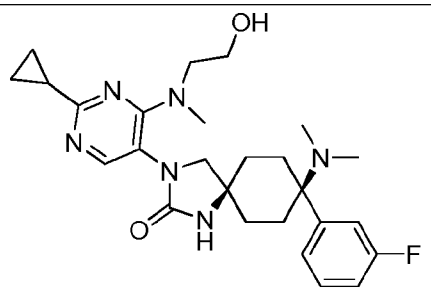
 SC_3379	 SC_3380
 SC_3381	 SC_3382
 SC_3383	 SC_3384
 SC_3385	 SC_3386
 SC_3387	 SC_3388

 SC_3389	 SC_3390
 SC_3391	 SC_3392
 SC_3393	 SC_3394
 SC_3395	 SC_3396
 SC_3397	 SC_3398
 SC_3399	 SC_3400

 SC_3401	 SC_3402
 SC_3403	 SC_3404
 SC_3405	 SC_3406
 SC_3407	 SC_3408
 SC_3409	 SC_3410

 SC_3411	 SC_3412
 SC_3413	 SC_3414
 SC_3415	 SC_3416
 SC_3417	 SC_3418
 SC_3419	 SC_3420

 SC_3421	 SC_3422
 SC_3423	 SC_3424
 SC_3425	 SC_3426
 SC_3427	 SC_3428
 SC_3429	 SC_3430

 SC_3431	 SC_3432
 SC_3433	 SC_3434
 SC_3435	 SC_3436
 SC_3437	 SC_3438
 SC_3439	 SC_3440
 SC_3441	 SC_3442

Pharmacological investigations

[0346] Functional investigation on the human mu-opioid receptor (hMOP), human kappa-opioid receptor (hKOP), human delta-opioid receptor (hDOP), and human nociceptin/orphanin FQ peptide receptor (hNOP)

Human mu-opioid peptide (HMOP) receptor binding assay

[0347] The hMOP receptor binding assay was performed as homogeneous SPA-assay (scintillation proximity assay) using the assay buffer 50 mM TRIS-HCl (pH 7.4) supplemented with 0.052 mg/ml bovine serum albumin (Sigma-Aldrich Co.. St. Louis. MO). The final assay volume (250 µl/well) included 1 nM of [N-allyl-2.3-^{3}H]naloxone as ligand (PerkinElmer Life Sciences. Inc. Boston. MA. USA). and either test compound in dilution series or 25 µM unlabelled naloxone for determination of unspecific binding. The test compound was diluted with 25 % DMSO in H_2O to yield a final 0.5 % DMSO concentration. which also served as a respective vehicle control. The assay was started by adding wheat germ agglutinin coated SPA beads (GE Healthcare UK Ltd.. Buckinghamshire. UK) which had been preloaded with hMOP receptor membranes (PerkinElmer Life Sciences. Inc. Boston. MA. USA). After incubation for 90 minutes at RT and centrifugation for 20 minutes at 500 rpm the signal rate was measured by means of a 1450 Microbeta Trilux β-counter (PerkinElmer Life Sciences/Wallac. Turku. Finland). Half-maximal inhibitory concentration (IC50) values reflecting 50% displacement of [^{3}H] naloxone-specific receptor binding were calculated by nonlinear regression analysis and Ki values were calculated by using the Cheng-Prusoff equation. (Cheng and Prusoff. 1973).

Human kappa-opioid peptide (HKOP) receptor binding assay

[0348] The hKOP receptor binding assay is run as homogeneous SPA-assay (scintillation proximity assay) using the assay buffer 50 mM TRIS-HCl (pH 7.4) supplemented with 0.076 mg BSA/ml. The final assay volume of 250 µl per well includes 2 nM of [^{3}H]U69,593 as ligand, and either test compound in dilution series or 100 µM unlabelled naloxone for determination of unspecific binding. The test compound is diluted with 25% DMSO in H_2O to yield a final 0.5% DMSO concentration which serves as respective vehicle control, as well. The assays are started by the addition of wheat germ agglutinin coated SPA beads (1 mg SPA beads/250 µl final assay volume per well) which has been preloaded for 15 minutes at room temperature with hKOP receptor membranes (14.8 µg/250 µl final assay volume per well). After short mixing on a mini-shaker, the microtiter plates are covered with a lid and the assay plates are incubated for 90 minutes at room temperature. After this incubation, the microtiter plates are sealed with a topseal and centrifuged for 20 minutes at 500 rpm. The signal rate is measured after a short delay of 5 minutes by means of a 1450 Microbeta Trilux β-counter (PerkinElmer Life Sciences/Wallac, Turku, Finland). Half-maximal inhibitory concentration (IC50) values reflecting 50% displacement of [^{3}H]U69.593-specific receptor binding are calculated by nonlinear regression analysis and K_i values are calculated by using the Cheng-Prusoff equation, (Cheng and Prusoff, 1973).

Human delta-opioid peptide (hDOP) receptor binding assay

[0349] The hDOP receptor binding assay is performed as homogeneous SPA-assay using the assay buffer 50 mM TRIS-HCl, 5 mM $MgCl_2$ (pH 7.4). The final assay volume (250 µl/well) includes 1 nM of [Tyrosyl-3,5-^{3}H]2-D-Ala-deltorphin II as ligand, and either test compound in dilution series or 10 µM unlabelled naloxone for determination of unspecific binding. The test compound is diluted with 25% DMSO in H_2O to yield a final 0.5% DMSO concentration which serves as respective vehicle control, as well. The assays are started by the addition of wheat germ agglutinin coated SPA beads (1 mg SPA beads/250 µl final assay volume per well) which has been preloaded for 15 minutes at room temperature with hDOP receptor membranes (15.2 µg/250 µl final assay volume per well). After short mixing on a mini-shaker, the microtiter plates are covered with a lid and the assay plates are incubated for 120 minutes at room temperature and centrifuged for 20 minutes at 500 rpm. The signal rate is measured by means of a 1450 Microbeta Trilux β-counter (PerkinElmer Life Sciences/Wallac, Turku, Finland). Half-maximal inhibitory concentration (IC50) values reflecting 50% displacement of [Tyrosyl-3,5-^{3}H]2-D-Ala-deltorphin II-specific receptor binding are calculated by nonlinear regression analysis and K_i values are calculated by using the Cheng-Prusoff equation, (Cheng and Prusoff, 1973).

Human nociceptin/orphanin FQ peptide (hNOP) receptor binding assay

[0350] The hNOP receptor binding assay was performed as homogeneous SPA-assay (scintillation proximity assay) using the assay buffer 50 mM TRIS-HCl. 10mM $MgCl_2$. 1 mM EDTA (pH 7.4). The final assay volume (250 µl/well) included 0.5 nM of [leucyl-^{3}H]nociceptin as ligand (PerkinElmer Life Sciences. Inc. Boston. MA. USA). and either test compound in dilution series or 1 µM unlabelled nociceptin for determination of unspecific binding. The test compound was diluted with 25 % DMSO in H_2O to yield a final 0.5 % DMSO concentration. which also served as a respective vehicle control. The assay

was started by adding wheat germ agglutinin coated SPA beads (GE Healthcare UK Ltd.. Buckinghamshire. UK) which had been preloaded with hMOP receptor membranes (PerkinElmer Life Sciences. Inc. Boston. MA. USA). After incubation for 60 minutes at RT and centrifugation for 20 minutes at 500 rpm the signal rate was measured by means of a 1450 Microbeta Trilux β-counter (PerkinElmer Life Sciences/Wallac. Turku. Finland). Half-maximal inhibitory concentration (IC50) values reflecting 50% displacement of [^{3}H]nociceptin-specific receptor binding were calculated by nonlinear regression analysis and Ki values were calculated by using the Cheng-Prusoff equation. (Cheng and Prusoff. 1973).

Example	hNOP Ki [nM] or % inhibition at 1μM	hMOP Ki [nM] or % inhibition at 1μM
SC_3001	0.3	120
SC_3002	1.3	250
SC_3003	0.4	350
SC_3004	19.5	515
SC_3005	0.7	12
SC_3006	1.1	46
SC_3007	85.8	705
SC_3008	0.6	23
SC_3009	1.1	41
SC_3010	2.7	18
SC_3011	4.4	4.4
SC_3012	2.2	120
SC_3013	1.4	39
SC_3014	0.8	29.5
SC_3015	2.6	32.5
SC_3016	4.2	45
SC_3017	2	30
SC_3018	5.2	101.5
SC_3019	10.2	135
SC_3020	10.8	290
SC_3021	1.8	14.5
SC_3022	0.4	37.2
SC_3023	7.7	36
SC_3024	1	145
SC_3025	236.7	1530
SC_3026	4.6	300
SC_3027	5	136
SC_3028	0.6	10.4
SC_3029	1.8	7.3
SC_3030	2.2	59
SC_3031	4.1	45.5
SC_3032	11	245
SC_3033	107	38%@10μM
SC_3034	12.2	730
SC_3035	6.6	1055

(continued)

Example	hNOP Ki [nM] or % inhibition at 1μM	hMOP Ki [nM] or % inhibition at 1μM
SC_3036	1.4	220
SC_3037	33.5	775
SC_3038	1	76
SC_3039	13	380
SC_3040	4	335
SC_3041	0.9	79.5
SC_3042	4.1	136.5
SC_3043	70	655
SC_3044	230	10920
SC_3045	55.5	520
SC_3046	13.9	63
SC_3047	10.1	2105
SC_3048	1	38.5
SC_3049	25	940
SC_3050	85	28
SC_3051	3.6	170
SC_3052	160	355
SC_3053	73.5	1200
SC_3054	16.5	29.5
SC_3055	94.5	215
SC_3056	9.8	49.5
SC_3057	955	245
SC_3058	5	7.8
SC_3059	11.4	320
SC_3060	3	65
SC_3061	4.7	54.5
SC_3063	0.7	38
SC_3064	119	365
SC_3065	6.2	1990
SC_3066	2.2	96
SC_3067	41.5	99.5
SC_3068	5.9	50.5
SC_3069	2.6	49
SC_3070	2.8	12.5
SC_3071	8.2	170
SC_3072	5.9	235
SC_3073	1	110
SC_3074	1.6	55
SC_3075	8.1	260

(continued)

Example	hNOP Ki [nM] or % inhibition at 1μM	hMOP Ki [nM] or % inhibition at 1μM
SC_3076	0.6	35.3
SC_3077	3.2	325
SC_3078	0.6	77.5
SC_3079	1.6	38.5
SC_3080	1.6	90.5
SC_3081	8	1320
SC_3082	39	1110
SC_3083	12	117.3
SC_3084	1.8	22
SC_3085	1.6	107
SC_3086	1.1	43.5
SC_3087	2.8	99
SC_3088	3.1	770
SC_3089	3.3	235
SC_3090	1.3	67
SC_3091	2.3	24
SC_3092	2.2	330
SC_3093	1.1	47
SC_3094	5.4	45.5
SC_3096	14	250
SC_3097	17	18
SC_3098	2	6
SC_3099	13	19
SC_3100	1	1
SC_3101	1	3
SC_3102	2	1
SC_3103	7	1
SC_3104	-	-
SC_3105	2	97
SC_3106	8	165
SC_3107	2	115
SC_3108	5	26
SC_3109	8	19
SC_3110	6	20
SC_3111	8	37
SC_3112	36	120
SC_3113	24	26
SC_3114	245	460
SC_3115	265	915

(continued)

Example	hNOP Ki [nM] or % inhibition at 1μM	hMOP Ki [nM] or % inhibition at 1μM
SC_3116	6	170
SC_3117	92	1380
SC_3118	80	5%
SC_3119	22%	10%
SC_3120	26	4950
SC_3121	44	30%
SC_3122	21	32%
SC_3123	82	2260
SC_3124	5	1090
SC_3125	3%@10μM	52%@10μM
SC_3126	0%	0%
SC_3127	0%	3945
SC_3128	0%	1%
SC_3129	6	2180
SC_3130	13	4530
SC_3131	4	3090
SC_3132	540	6%
SC_3133	19	6515
SC_3134	3%@10μM	40%@10μM
SC_3135	1%	1%
SC_3136	16	5840
SC_3137	5	4235
SC_3138	28	7%
SC_3139	59	1690
SC_3140	119	2355
SC_3141	34	7855
SC_3142	9	3750
SC_3143	0%	4%
SC_3144	0%	3590
SC_3145	46	1635
SC_3146	18	7675
SC_3147	27	3325
SC_3148	14	4575
SC_3149	18	6900
SC_3150	105	16%
SC_3151	115	3490
SC_3152	24	4775
SC_3153	77	2220
SC_3154	17	3575

(continued)

Example	hNOP Ki [nM] or % inhibition at 1μM	hMOP Ki [nM] or % inhibition at 1μM
SC_3155	34	3495
SC_3156	45	6375
SC_3157	35	5690
SC_3158	19	2540
SC_3159	13	19%
SC_3160	4%	5730
SC_3161	2%	13%
SC_3162	5	1325
SC_3163	28	2095
SC_3164	30	880
SC_3165	4%	17%
SC_3166	3%	1640
SC_3167	18	3745
SC_3168	11	5
SC_3169	635	3445
SC_3170	7	3610
SC_3171	15	2010
SC_3172	130	7%
SC_3173	10	2525
SC_3174	3%	1265
SC_3175	-	-
SC_3176	13	3740
SC_3177	8	4630
SC_3178	6	6700
SC_3179	15	3950
SC_3180	125	2250
SC_3181	22	5490
SC_3182	11	2990
SC_3183	165	1415
SC_3184	19	7645
SC_3185	335	15%
SC_3186	33	2210
SC_3187	87	2240
SC_3188	25	1060
SC_3189	57	3470
SC_3190	42	28%
SC_3191	27	20%
SC_3192	140	4270
SC_3193	100	2480

(continued)

Example	hNOP Ki [nM] or % inhibition at 1μM	hMOP Ki [nM] or % inhibition at 1μM
SC_3194	28	5120
SC_3195	15	1240
SC_3196	22	1595
SC_3197	44	1680
SC_3198	22	5885
SC_3199	19	4020
SC_3200	7	13%
SC_3201	115	3885
SC_3202	25	3210
SC_3203	68	1225
SC_3204	110	14%
SC_3205	20	2465
SC_3206	27	2445
SC_3207	39	1505
SC_3208	2	3285
SC_3209	-	-
SC_3210	-	-
SC_3211	-	-
SC_3212	9	2005
SC_3213	52	18%
SC_3214	7	19%
SC_3215	0%	14%
SC_3216	11	14
SC_3217	23	2155
SC_3218	83	15%
SC_3219	0%	1%
SC_3220	10%@10μM	24%@10μM
SC_3221	33	1935
SC_3222	6	1910
SC_3223	155	6150
SC_3224	10	1695
SC_3225	13	2520
SC_3226	-	-
SC_3227	16	3785
SC_3228	67	3135
SC_3229	105	3625
SC_3230	145	2485
SC_3231	120	2420
SC_3232	15	3475

(continued)

Example	hNOP Ki [nM] or % inhibition at 1μM	hMOP Ki [nM] or % inhibition at 1μM
SC_3233	38	1390
SC_3234	4	1350
SC_3235	30	1095
SC_3236	285	18%
SC_3237	20	17%
SC_3238	4	25%
SC_3239	35	2410
SC_3240	28	17%
SC_3241	8	4610
SC_3242	5	675
SC_3243	6	695
SC_3244	27	4265
SC_3245	67	-
SC_3246	11	1025
SC_3247	16	1220
SC_3248	4	41
SC_3249	740	855
SC_3250	52	-
SC_3251	185	4550
SC_3252	30	-
SC_3253	205	-
SC_3254	22	240
SC_3255	23	150
SC_3256	12	61
SC_3257	150	240
SC_3258	58	7125
SC_3259	45	180
SC_3260	570	nd
SC_3261	10	63
SC_3262	540	3060
SC_3263	66	800
SC_3264	145	130
SC_3265	38	2405
SC_3266	245	1055
SC_3267	460	-
SC_3268	41	1625
SC_3269	13	5580
SC_3270	305	31
SC_3271	34	245

(continued)

Example	hNOP Ki [nM] or % inhibition at 1μM	hMOP Ki [nM] or % inhibition at 1μM
SC_3272	115	4175
SC_3273	-	-
SC_3274	63	1880
SC_3275	155	124
SC_3276	24	130
SC_3277	37	13%
SC_3278	12	7035
SC_3279	17	78
SC_3280	6	300
SC_3281	19	2580
SC_3282	37	3510
SC_3283	12	1030
SC_3284	5	305
SC_3285	15	20%
SC_3286	18	5895
SC_3287	119	18%
SC_3288	15	115
SC_3289	84	430
SC_3290	16	6605
SC_3291	350	15%
SC_3292	4%	0%
SC_3293	3%	0%
SC_3294	9	12%
SC_3295	28	2975
SC_3296	10	4530
SC_3297	8	4270
SC_3298	20	17%
SC_3299	23	5705
SC_3300	22	565
SC_3301	33	2320
SC_3302	31	1025
SC_3303	450	21%
SC_3304	9%	4%
SC_3305	10%	0%
SC_3306	9	4555
SC_3307	13	5345
SC_3308	2	2575
SC_3309	17	6910
SC_3310	7	23%

(continued)

Example	hNOP Ki [nM] or % inhibition at 1μM	hMOP Ki [nM] or % inhibition at 1μM
SC_3311	14	27%
SC_3312	23	1830
SC_3313	10	2400
SC_3314	9	4090
SC_3315	14	5325
SC_3316	255	5430
SC_3317	56	6045
SC_3318	35	1235
SC_3319	4	15%
SC_3320	11	1955
SC_3321	13	5715
SC_3322	12	1150
SC_3323	27	5530
SC_3324	12%	5%
SC_3325	53%@10μM	20%@10μM
SC_3326	-	-
SC_3327	17	3360
SC_3328	31	3295
SC_3329	13	4285
SC_3330	14	1505
SC_3331	2	5265
SC_3332	19	2055
SC_3333	5	1580
SC_3334	17	4005
SC_3335	30	2305
SC_3336	240	13%
SC_3337	10	1970
SC_3338	36	7%
SC_3339	10	6830
SC_3340	150	5750
SC_3341	15	3460
SC_3342	21	3845
SC_3343	27	16%
SC_3344	1	13%
SC_3345	4	1800
SC_3346	12	2580
SC_3347	15	4845
SC_3348	25	4090
SC_3349	8	3980

(continued)

Example	hNOP Ki [nM] or % inhibition at 1μM	hMOP Ki [nM] or % inhibition at 1μM
SC_3350	7	1485
SC_3351	20	2205
SC_3352	37	2160
SC_3353	53	15%
SC_3354	2	23%
SC_3355	52	4785
SC_3356	9	4805
SC_3357	13	555
SC_3358	51	7020
SC_3359	66	3520
SC_3360	7	2870
SC_3361	27	5095
SC_3362	28	29%
SC_3363	33	8%
SC_3364	32	4685
SC_3365	2	1655
SC_3366	1285	14%
SC_3367	1220	8%
SC_3368	195	11%
SC_3369	51	3105
SC_3370	4	14%
SC_3371	350	9%
SC_3372	125	3535
SC_3373	19	18%
SC_3374	55	10%
SC_3375	13	12%
SC_3376	37	1720
SC_3377	22	980
SC_3379	11	635
SC_3380	102	5415
SC_3381	3	1235
SC_3382	29	13%
SC_3383	10	17%
SC_3384	6	11%
SC_3385	33	925
SC_3386	14	0%
SC_3387	2	1245
SC_3388	29	185
SC_3389	2	1970

(continued)

Example	hNOP Ki [nM] or % inhibition at 1μM	hMOP Ki [nM] or % inhibition at 1μM
SC_3390	18	465
SC_3391	53	10%
SC_3392	7	4490
SC_3393	88	13%
SC_3394	6	735
SC_3395	14	4990
SC_3396	44	1730
SC_3397	48	560
SC_3398	9	5640
SC_3399	5	45%
SC_3400	8	635
SC_3401	1	455
SC_3402	7	3630
SC_3403	9	1440
SC_3404	10	5%
SC_3405	12	925
SC_3406	24	805
SC_3407	77	13%
SC_3408	7	18%
SC_3409	11	25%

Protocol for [^{35}S]GTPγS functional NOP/MOP/KOP/DOP assays

[0351] Cell membrane preparations of CHO- K1 cells transfected with the human MOP receptor (Art.-No. RBHOMM) or the human DOP receptor (Art.-No.RBHODM), and HEK293 cells transfected with the human NOP receptor (Art.-No.RB-HORLM) or the human KOP receptor (Art.-No. 6110558) are available from PerkinElmer (Waltham, MA). Membranes from CHO-K1 cells transfected with the human nociceptin/orphanin FQ peptide (hNOP) receptor (Art.-No. 93-0264C2, DiscoveRx Corporation, Freemont, CA) are also used. [^{35}S]GTPγS (Art.-No. NEG030H; Lot-No. #0112, #0913, #1113 calibrated to 46.25 TBq/mmol) is available from PerkinElmer (Waltham, MA).

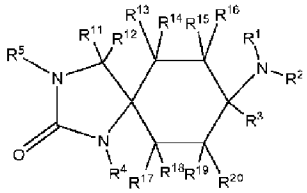
[0352] The [^{35}S]GTPγS assays are carried out essentially as described by Gillen et al (2000). They are run as homogeneous scintillation proximity (SPA) assays in microtiter luminescence plates, where each well contains 1.5 mg of WGA-coated SPA-beads. To test the agonistic activity of test compounds on recombinant hNOP, hMOP, hDOP, and hKOP receptor expressing cell membranes from CHO-K1 or HEK293 cells, 10 or 5 μg membrane protein per assay are incubated with 0.4 nM [^{35}S]GTPγS and serial concentrations of receptor-specific agonists in buffer containing 20 mM HEPES pH 7.4, 100 mM NaCl, 10 mM MgCl2, 1 mM EDTA, 1 mM dithiothreitol, 1.28 mM NaN_3, and 10 μM GDP for 45 min at room temperature. The microtiter plates are then centrifuged for 10 min at 830 to sediment the SPA beads. The microtiter plates are sealed and the bound radioactivity [cpm] is determined after a delay of 15 min by means of a 1450 Microbeta Trilux (PerkinElmer, Waltham, MA).

[0353] The unstimulated basal binding activity (UBS_{obs} [cpm]) is determined from 12 unstimulated incubates and is set as 100% basal binding. For determination of the potency and the efficacy, the arithmetic mean of the observed total [^{35}S]GTPγS binding (TB_{obs} [cpm]) of all incubates (duplicates) stimulated by the receptor-specific agonists (i.e. N/OFQ, SNC80, DAMGO, or U69,593) are transformed in percent total binding (TB_{obs} [%]) relative to the basal binding activity (i.e. 100% binding). The potency (EC_{50}) of the respective agonist and its maximal achievable total [^{35}S]GTPγS binding (TB_{calc} [%]) above its calculated basal binding (UBS_{calc} [%]) are determined from its transformed data (TB_{obs} [%]) by means of nonlinear regression analysis with XLfit for each individual concentration series. Then the difference between the calculated unstimulated [^{35}S]GTPγS binding (UBS_{calc} [%]) and the maximal achievable total [^{35}S]GTPγS binding (TB_{calc} [%]) by each tested agonist is determined (i.e. $B1_{calc}$ [%]). This difference ($B1_{calc}$ [%]) as a measure of the maximal

achievable enhancement of [^{35}S]GTPγS binding by a given agonist is used to calculate the relative efficacy of test compounds versus the maximal achievable enhancement by a receptor-specific full agonist, e.g. N/OFQ ($B1_{calc\text{-}N/OFQ}$ [%]) which is set as 100% relative efficacy for the hNOP receptor. Likewise, the percentage efficacies of test compounds at the hDOP, hMOP, or hKOP receptor are determined versus the calculated maximal enhancement of [^{35}S]GTPγS binding by the full agonists SNC80 ($B1_{calc\text{-}SNC80}$ [%]), DAMGO ($B1_{calc\text{-}DAMGO}$ [%]) and U69,593 ($B1_{calc\text{-}U69,593}$ [%]) which are set as 100% relative efficacy at each receptor, respectively.

Patentkrav

1. Forbindelse med den almene formel (I)



(I)

hvor

^{R}1 og ^{R}2 uafhængigt af hinanden betyder

-H;

--Ci-Ce-alkyl, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden er valgt fra gruppen bestående af -F, -Cl, -Br, -I, -OH, -OCH_3, -CN og -CO2CH3;

en 3-12-leddet cycloalkyldel, der er mættet eller umættet, usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden er valgt fra gruppen bestående af -F, -Cl, -Br, -I, -OH, -OCH_3, -CN og -CO_2CH_3; hvor den 3-12-leddede cycloalkyldel valgfrit er forbundet via - -Ci-Ce-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret; eller

en 3-12-leddet heterocycloalkyldel, der er mættet eller umættet, usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden er valgt fra gruppen bestående af -F, -Cl, -Br, -I, -OH, -OCH_3, -CN og -CO_2CH_3; hvor den 3-12-leddede heterocycloalkyldel valgfrit er forbundet via -C_1-C_6-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret;

eller

R^1 og **R^2** sammen med det nitrogenatom, hvortil de er bundet, danner en ring og betegner -$(CH_2)_{3-6}$-; - $(CH_2)_2$-O-$(CH_2)_2$-; eller -(CH_2)**2**-$N^R{}_A$-(CH_2)**2**-, hvor $^{R}{}_A$ betegner -H eller -C_1-C6-alkyl, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden er valgt fra gruppen bestående af -F, -Cl, -Br og -I;

^{R}3 betyder

-Ci-Ce-alkyl, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret;

en 3-12-leddet cycloalkyldel, der er mættet eller umættet, usubstitueret, mono- eller polysubstitueret; hvor den 3-12-leddede cycloalkyldel valgfrit er forbundet via -C_1-C_6-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret;

en 3-12-leddet heterocycloalkyldel, der er mættet eller umættet, usubstitueret, mono- eller polysubstitueret; hvor den 3-12-leddede heterocycloalkyldel valgfrit er forbundet via -C_1-C_6-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret;

en 6-14-leddet aryldel, der er usubstitueret, mono- eller polysubstitueret; hvor den 6-14-leddede aryldel valgfrit er forbundet via -C_1-C_6-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret; eller

en 5-14-leddet heteroaryldel, der er usubstitueret, mono- eller polysubstitueret; hvor den 5-14-leddede heteroaryldel valgfrit er forbundet via -C_1-C_6-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret;

R^4 betegner

-H;

-C_1-C_6-alkyl, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret; hvor -C_1-C_6-alkylen valgfrit er forbundet via -C(=O)-, -C(=O)O- eller -$S(=O)_2$-;

en 3-12-leddet cycloalkyldel, der er mættet eller umættet, usubstitueret, mono- eller polysubstitueret; hvor den 3-12-leddede cycloalkyldel valgfrit er forbundet via -C_1-C_6-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret; eller hvor den 3-12-leddede cycloalkyldel valgfrit er forbundet via -C(=O)-, -C(=O)O-, -C(=O)O-CH_2- eller - $S(=O)_2$-;

en 3-12-leddet heterocycloalkyldel, der er mættet eller umættet, usubstitueret, mono- eller polysubstitueret; hvor den 3-12-leddede heterocycloalkyldel valgfrit er forbundet via -C_1-C_6-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret; eller hvor den 3-12-leddede heterocycloalkyldel valgfrit er forbundet via -C(=O)-, - C(=O)O-, -C(=O)O-CH_2- eller -$S(=O)_2$-;

en 6-14-leddet aryldel, der er usubstitueret, mono- eller polysubstitueret; hvor den 6-14-leddede aryldel valgfrit er forbundet via -C_1-C_6-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret; eller hvor den 6-14-

leddede aryldel valgfrit er forbundet via -C(=O)-, -C(=O)O-, -C(=O)O-CH_2- eller -$S(=O)_2$-;
eller
en 5-14-leddet heteroaryldel, der er usubstitueret, mono- eller polysubstitueret; hvor den 5-14-leddede heteroaryldel valgfrit er forbundet via -C_1-C_6-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret; eller hvor den 5-14-leddede heteroaryldel valgfrit er forbundet via -C(=O)-, -C(=O)O-, -C(=O)O-CH_2- eller -$S(=O)_2$-;
R^5 betegner
en 6-14-leddet aryldel, der er usubstitueret, mono- eller polysubstitueret; eller
en 5-14-leddet heteroaryldel, der er usubstitueret, mono- eller polysubstitueret;
R11, R^{12}, **R13**, R^{14}, **R15**, R^{16}, **R17**, R^{18}, **R19** og **R20** uafhængigt af hinanden betegner -H, -F, -Cl, -Br, -I, -OH eller -**C1**-**C6**-alkyl, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret;
hvor "mono- eller polysubstitueret" betegner, at ét eller flere hydrogenatomer er udskiftet med en substituent, som uafhængigt af hinanden er valgt fra gruppen bestående af -F, -Cl, -Br, -I, -CN, **-R^{21}**, -C(=O)**R^{21}**, -C(=O)O**R^{21}**, -C(=O)N**$R^{21}R^{22}$**, -C(=O)NH-(CH_2CH_2-O)$_{1-30}$-CH_3, -O-(CH_2CH_2-O)$_{1-30}$-H, -O-(CH_2CH_2-O)$_{1-30}$-CH_3, =O, -O**R^{21}**, -OC(=O)**R21**, -OC(=O)O^R**21**, -OC(=O)N^R**21**^{R}**22**, -NO^2, -N_R**21**^{R}**22**, -N^R**21**-(CH**2**)$^{1-6}$-C(=O)$_{R22}$, -N**R^{21}**-(CH**2**)**1-6**-C(=O)O$^R{}_{22}$, -N_R**23**-(CH^2)**1-6**-C(=O)N$^R{}_{21R}$**22**, -N^R**21**C(=O)^R**22**, -N^R**21**C(=O)-O^R**22**, -N^R**23**C(=O)N^R**21**^{R}**22**, -N^R**21**S(=O)^2**R^{22}**, -S_R**21**, -S(=O)^R**21**, -S(=O)^2**R^{21}**, -$S(=O)_2$O**R^{21}** og -$S(=O)_2$N**$R^{21}{}_R$22**;
hvor
R^{21}, R^{22} og **R^{23}** uafhængigt af hinanden betegner
-H;
-C_1-C_6-alkyl, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden er valgt fra gruppen bestående af -F, -Cl, -Br, -I, -CN, -OH, -NH_2, -CO_2H, -C(=O)O-C_1-C_6-alkyl, -C(=O)NH_2, -C(=O)NHC_1-C_6-alkyl, -C(=O)N(C_1-C_6-alkyl)$_2$, -O-C_1-C_6-alkyl og -$S(=O)_2$-C_1-C_6-alkyl;
en 3-12-leddet cycloalkyldel, der er mættet eller umættet, usubstitueret, mono- eller polysubstitueret; hvor den 3-12-leddede cycloalkyldel valgfrit er forbundet via -C_1-C_6-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden er valgt fra gruppen bestående af -F, -Cl, -Br, -I, -CN, -OH, -NH_2, -C_1-C_6-alkyl og -O-C_1-C_6-alkyl;

en 3-12-leddet heterocycloalkyldel, der er mættet eller umættet, usubstitueret, mono- eller polysubstitueret; hvor den 3-12-leddede heterocycloalkyldel valgfrit er forbundet via -C_1-C_6-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden er valgt fra gruppen bestående af -F, -Cl, -Br, -I, -CN, -OH, -NH_2, -C_1-C_6-alkyl og -O-C_1-C_6-alkyl;

en 6-14-leddet aryldel, der er usubstitueret, mono- eller polysubstitueret; hvor den 6-14-leddede aryldel valgfrit er forbundet via -C_1-C_6-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden er valgt fra gruppen bestående af -F, -Cl, -Br, -I, -CN, -OH, -NH_2, -C_1-C_6-alkyl og -O-C_1-C_6-alkyl;

en 5-14-leddet heteroaryldel, der er usubstitueret, mono- eller polysubstitueret; hvor den 5-14-leddede heteroaryldel valgfrit er forbundet via -C_1-C_6-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden er valgt fra gruppen bestående af -F, -Cl, -Br, -I, -CN, -OH, -NH_2, -C_1-C_6-alkyl og -O-C_1-C_6-alkyl;

eller $\mathbf{R^{21}}$ og $\mathbf{R^{22}}$ i -C(=O)N$\mathbf{R^{21}R^{22}}$, -OC(=O)N$\mathbf{R^{21}R^{22}}$, -N$\mathbf{R^{21}R^{22}}$, -N$\mathbf{R^{23}}$-$(CH_2)_{1-6}$-C(=O)N$\mathbf{R^{21}R^{22}}$,-N^R**23**C(=O)N^R**21**$^R{}_{22}$ eller -S(=O)**2**N^R**21**$^R{}_{22}$ sammen med det nitrogenatom, hvortil de er bundet, danner en ring og betegner -$(CH_2)_{3-6}$-; -$(CH_2)_2$-O-$(CH_2)_2$-; -$(CH_2)_2$-S(=O)$_2$-$(CH_2)_2$- eller -(CH_2)**2**-N$^R{}_B$-(CH_2)**2**-, hvor $^R{}_B$ betegner -H, -C_1-C_6-alkyl, -C(=O)-C_1-C_6-alkyl eller -S(=O)$_2$-C_1-C_6-alkyl, hvor C_1-C_6-alkylen er ligekædet eller forgrenet, mættet eller umættet, usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden er valgt fra gruppen bestående af -F, -Cl, -Br, -I, -OH,-CO_2H, -C(=O)O-C_1-C_6-alkyl og -C(=O)NH_2; og hvor ringen er usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden er valgt fra gruppen bestående af -F, -Cl, -Br, -I, -CN, =O, -OH, -NH_2, -C_1-C_6-alkyl og -O-C_1-C6-alkyl;

eller et fysiologisk acceptabelt salt deraf.

til brug som lægemiddel.

2. **Forbindelse til anvendelse ifølge krav 1, hvor** R**11**, R^{12}, R**13**, R^{14}, R**15**, R^{16}, R**17**, R^{18}, R**19** og R**20** uafhængigt af hinanden betegner -H, -F, -OH eller -C**1**-C**6**-alkyl.

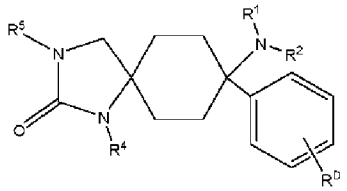
3. Forbindelse til anvendelse ifølge krav 1 eller 2, hvor **(i) R**[1] betegner -H; og **R**[2] betegner -C_1-C_6-alkyl, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret; eller **(ii) R**[1] betegner -CH_3; og **R**[2] betegner -C**1**-C[6]-alkyl, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret; eller (iii) R**1** betegner -H eller -CH[3]; og hvor $_{R2}$ betegner -CH_2-cycloalkyl, -CH_2-cyclobutyl,-CH_2-cyclopentyl, -CH**2**-oxetanyl eller -CH[2]-tetrahydrofuranyl; eller **(iv) R**[1] og $_{R2}$ sammen med det nitrogenatom, hvortil de er bundet, danner en ring og betegner -(CH2)3-6-.

4. Forbindelse til anvendelse ifølge et hvilket som helst af de foregående krav, hvor **(i) R**[3] betegner -C_1-C_6-alkyl, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret; eller (ii) **R**[3] betegner en 6-14-leddet aryldel, der er usubstitueret, mono- eller polysubstitueret; eller **(iii) R**[3] betegner en 5-14-leddet heteroaryldel, der er usubstitueret, mono- eller polysubstitueret.

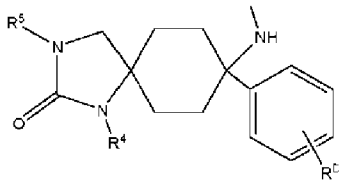
5. Forbindelse ifølge et hvilket som helst af de foregående krav, hvor **(i) R**[4] betegner -H; eller **(ii) R**[4] betegner -C**1**-C[6]-alkyl, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret; eller (iii) $_{R4}$ betegner en 3-12-leddet cycloalkyldel, der er mættet eller umættet, usubstitueret, mono- eller polysubstitueret; hvor den 3-12-leddede cycloalkyldel er forbundet via -C**1**-C[6]-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret; eller (iv) $_{R4}$ betegner en 3-12-leddet heterocycloalkyldel, der er mættet eller umættet, usubstitueret, mono- eller polysubstitueret; hvor den 3-12-leddede heterocycloalkyldel er forbundet via -C**1**-C[6]-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret; eller (v)R4 betegner en 6-14-leddet aryldel, der er usubstitueret, mono- eller polysubstitueret; hvor den 6-14-leddede aryldel er forbundet via -C**1**-C[6]-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret; eller (vi) $_{R4}$ betegner en 5-14-leddet heteroaryldel, der er usubstitueret, mono- eller polysubstitueret; hvor den 5-14-leddede heteroaryldel er forbundet via -C1-C6-alkylen-, der er ligekædet eller forgrenet, mættet eller umættet, usubstitueret, mono- eller polysubstitueret.

6. Forbindelse til anvendelse ifølge et hvilket som helst af de foregående krav, hvor **(i) R^5** betegner -phenyl, der er usubstitueret, mono- eller polysubstitueret; eller **(ii) R^5** betegner en monocyklisk 5-6-leddet heteroaryldel, der er usubstitueret, mono- eller polysubstitueret; eller **(iii) R^5** betegner en bicyklisk 9-10-leddet heteroaryldel, der er usubstitueret, mono- eller polysubstitueret; eller **(iv) R^5** med hensyn til **(ii)** eller (iii) fortrinsvis betegner -1,2-benzodioxol, -pyrazinyl, -pyridazinyl, -pyridinyl, -pyrimidinyl, -thienyl, -imidazolyl, -benzimidazolyl, -thiazolyl, -1,3,4-thiadiazolyl, -benzothiazolyl, -oxazolyl, -benzoxazolyl, -pyrazolyl, -quinolinyl, -isoquinolinyl, -quinazolinyl, -indolyl, -indolinyl, -benzo[c][1,2,5]oxadiazolyl, -imidazo[1,2-a]pyrazinyl eller -1H-pyrrolo[2,3-b]pyridinyl, der i hvert tilfælde er usubstitueret, mono- eller polysubstitueret.

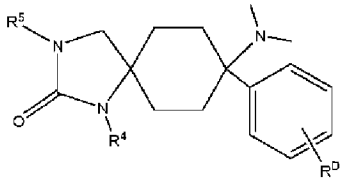
7. Forbindelse til anvendelse ifølge et hvilket som helst af de foregående krav, der har en struktur med en hvilken som helst af de almene formler (II-A) til (VIII-C):



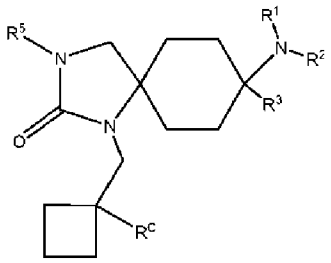
(II-A)



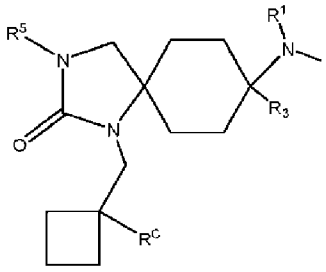
(II-B)



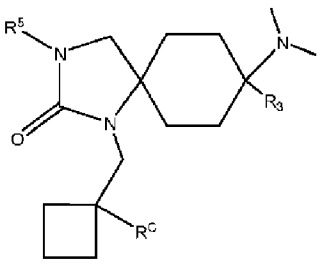
(II-C)



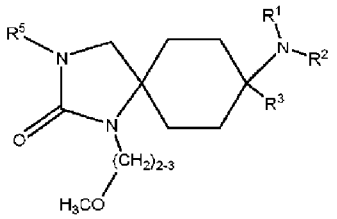
(III-A)



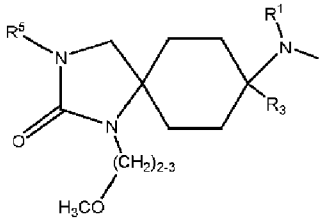
(III-B)



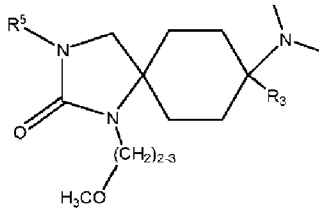
(III-C)



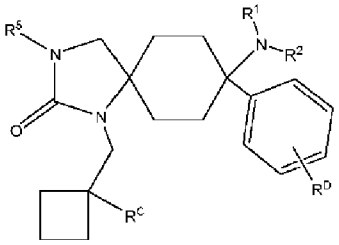
(IV-A)



(IV-B)



(IV-C)



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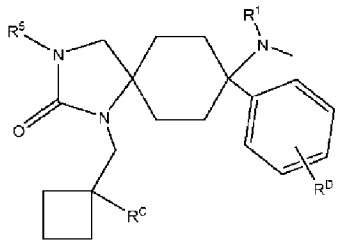

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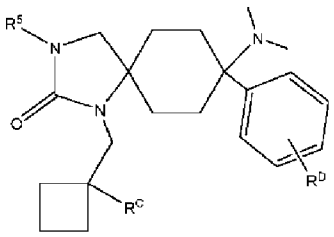

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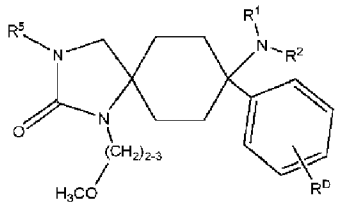

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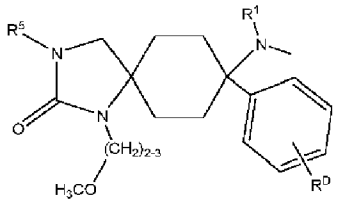
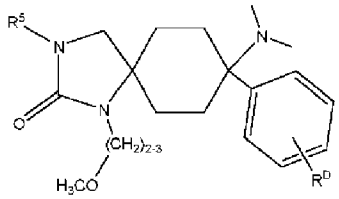


(VI-B)



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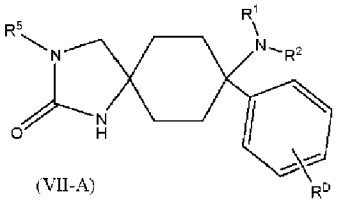

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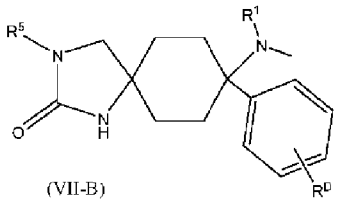

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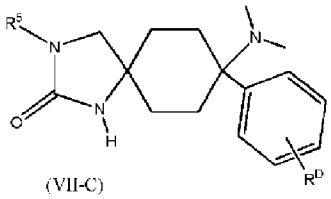
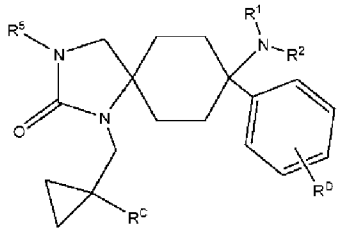


(VII-C)



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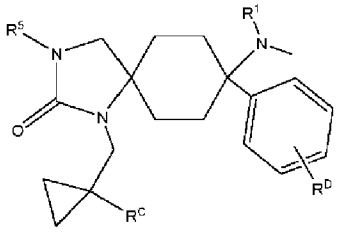
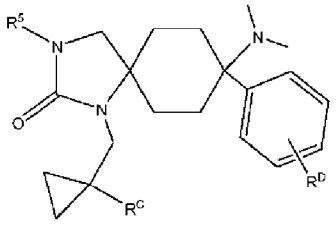


(VIII-B)



(VIII-C)

hvor, i hvert tilfælde,

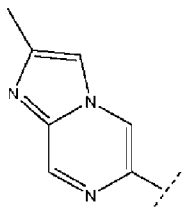
R^{1}, **R**^{2}, **R**^{3}, **R**^{4} og **R**^{5} er defineret som i et hvilket som helst af de foregående krav,

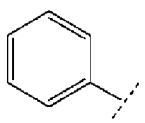
R^{C} betegner -H, -OH, -F, -CN eller -C_1-C_4-alkyl;

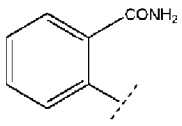
R^{D} betegner -H eller -F;

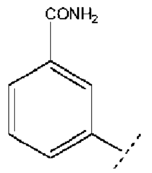
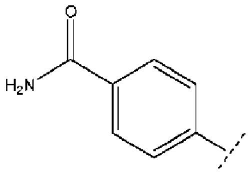
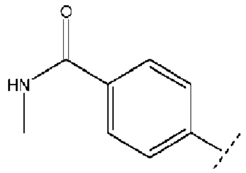
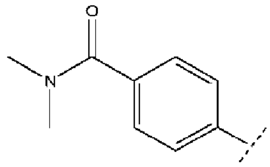
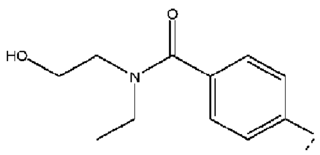
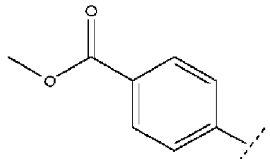
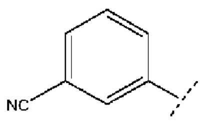
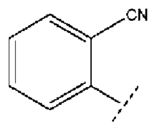
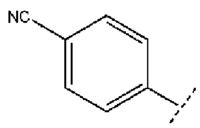
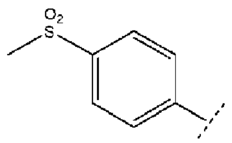
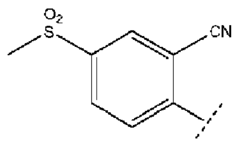
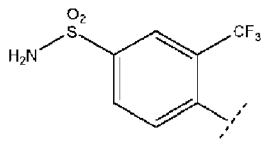
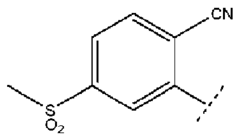
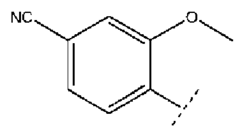
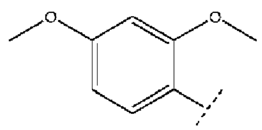
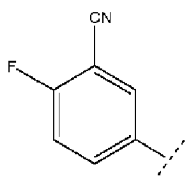
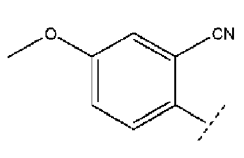
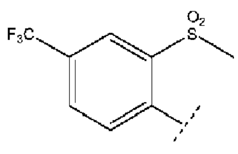
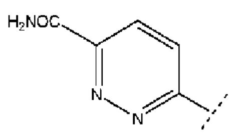
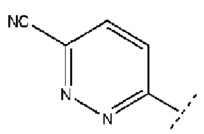
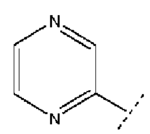
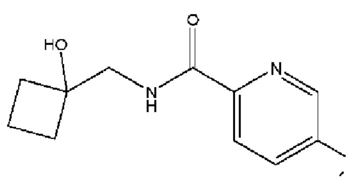
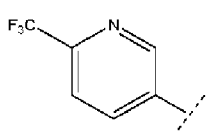
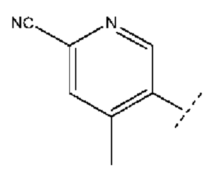
eller et fysiologisk acceptabelt salt deraf.

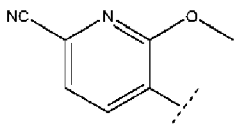
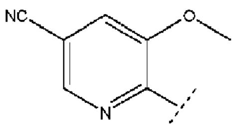
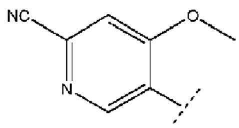
8. Forbindelse til anvendelse ifølge et hvilket som helst af de foregående krav, hvor **R**^{5} er valgt fra gruppen bestående af:

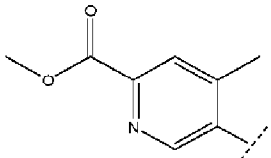
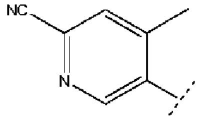
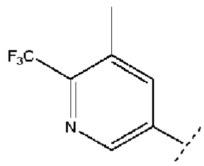


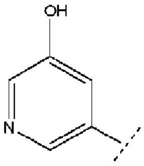
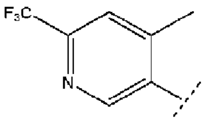
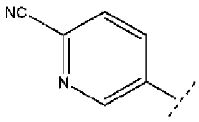


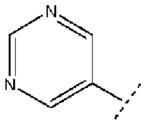
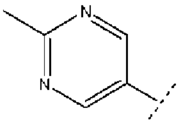
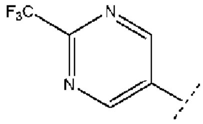


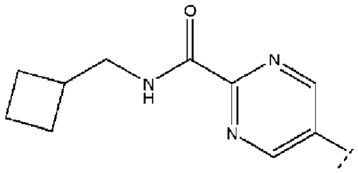
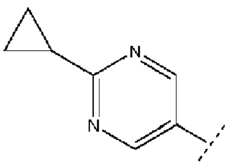
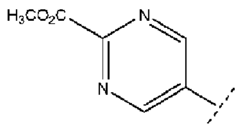

























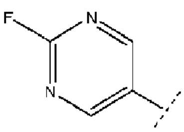
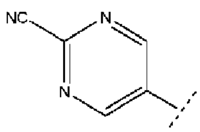
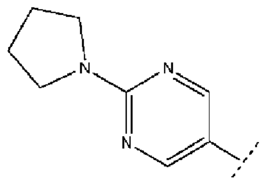
  

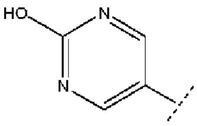
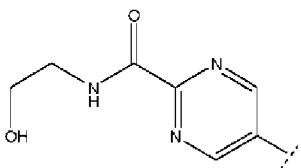
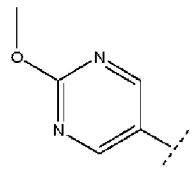
  

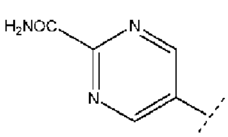
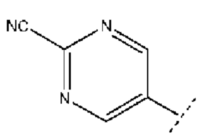
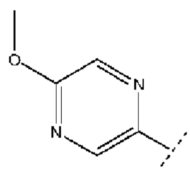
  

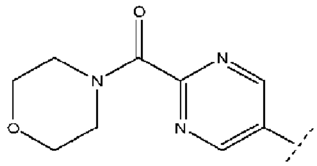
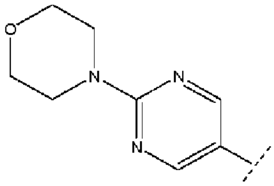
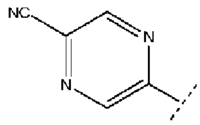
  

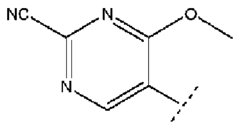
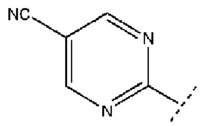
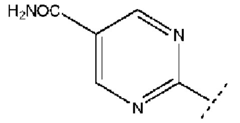
  

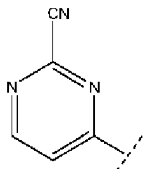
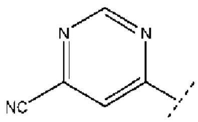
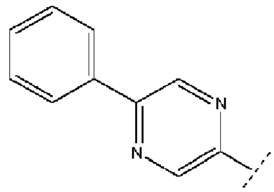
  

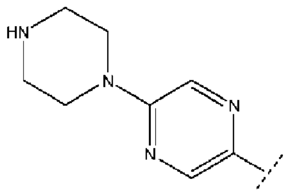
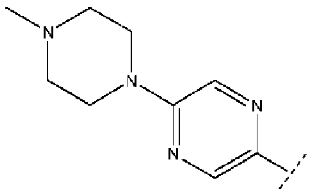
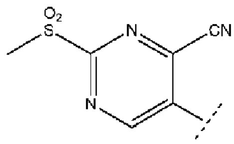
  

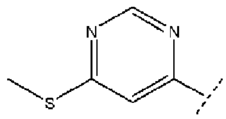
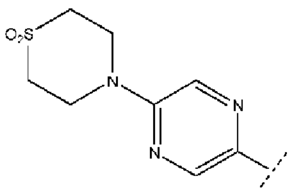
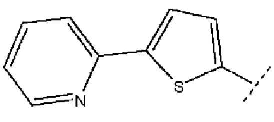
  

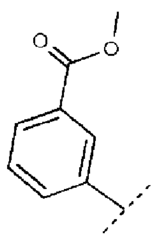
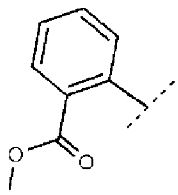
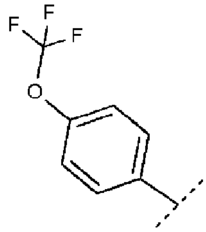




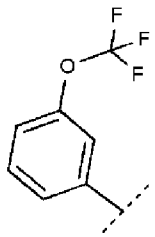
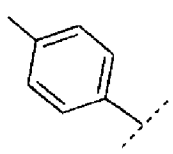
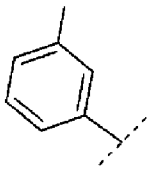
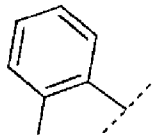
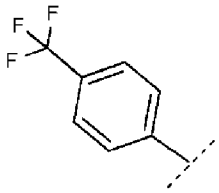
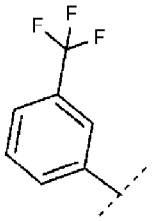
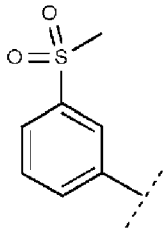
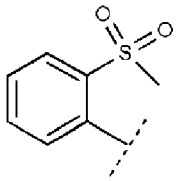
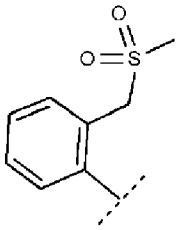
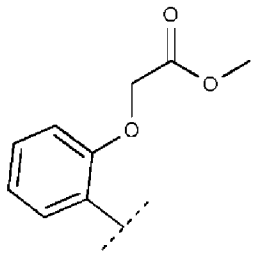
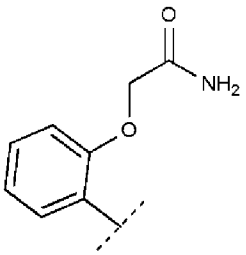
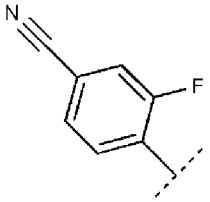
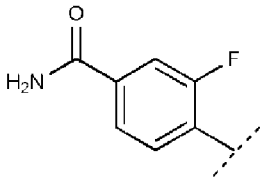
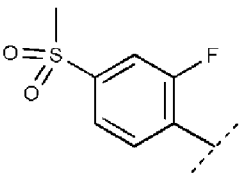
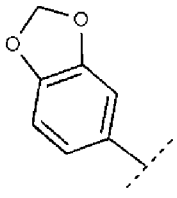
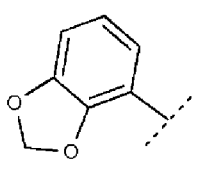
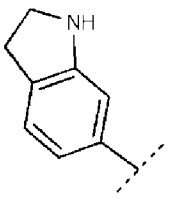
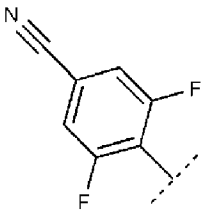




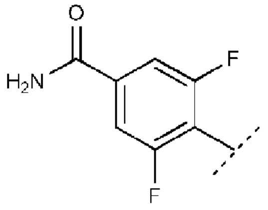
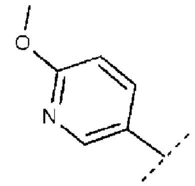
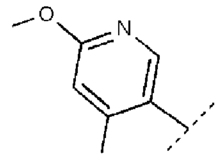
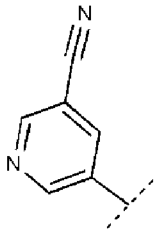
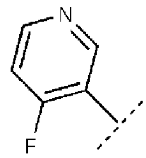
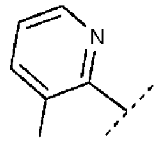
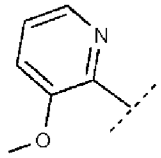
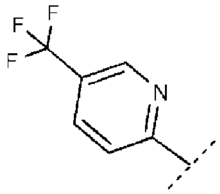
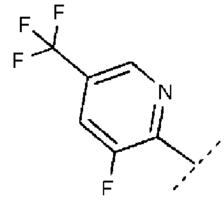
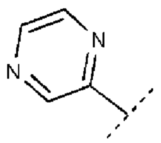
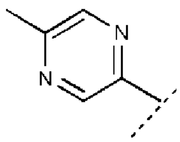
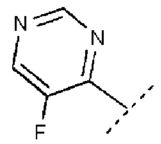
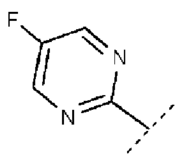
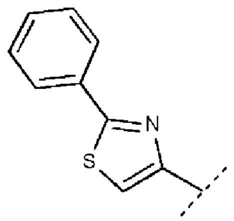
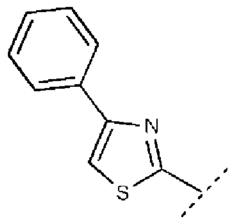
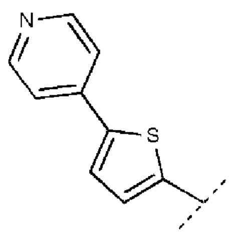
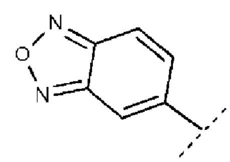
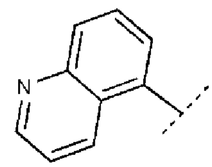




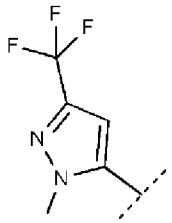




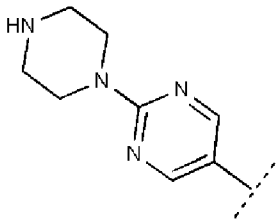




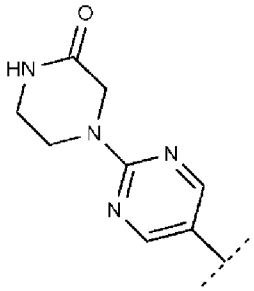




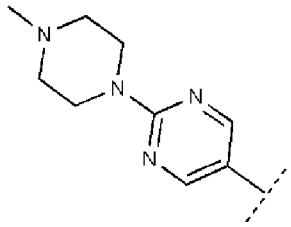



















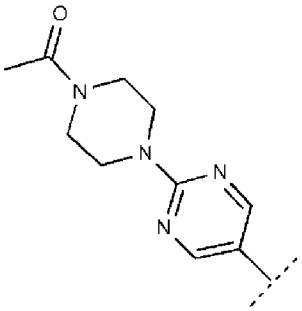



















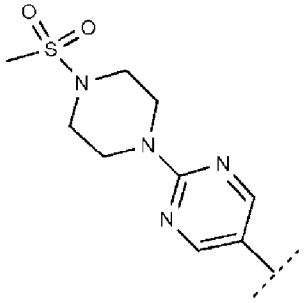


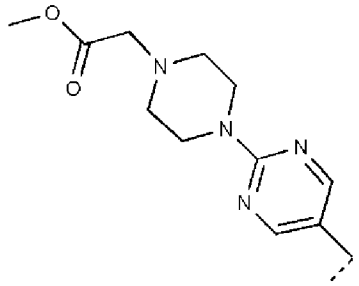


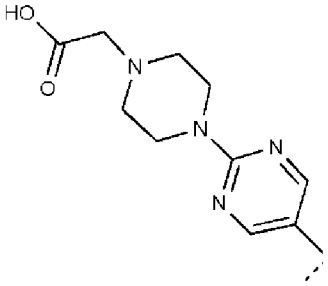


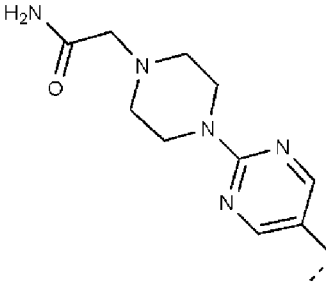


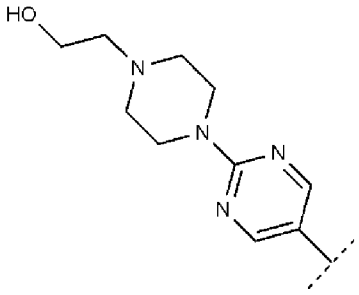


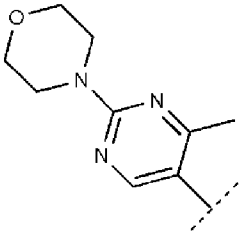


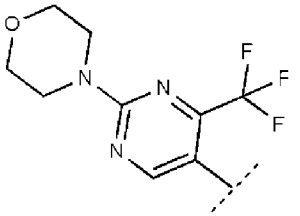


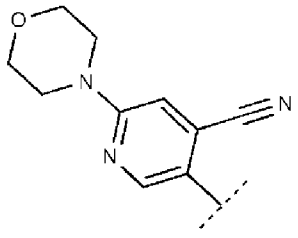


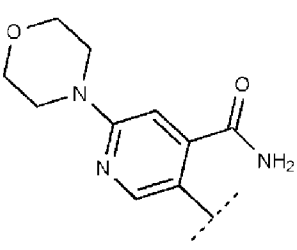


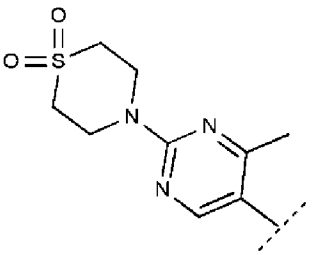


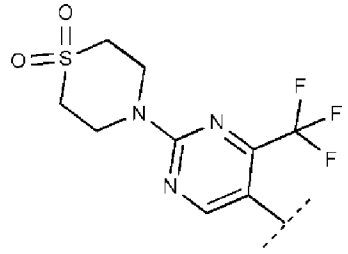
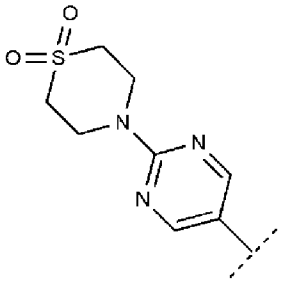
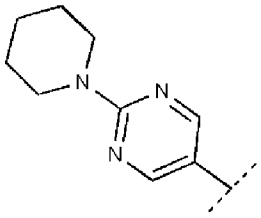
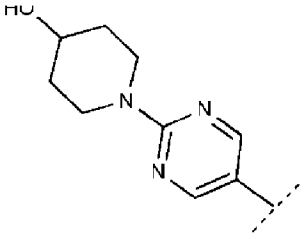
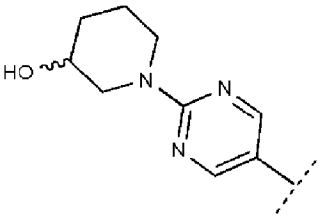
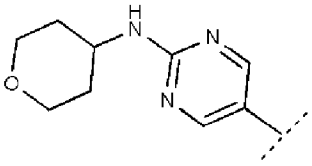
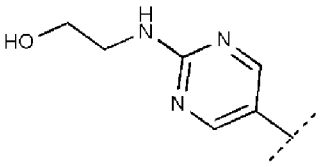
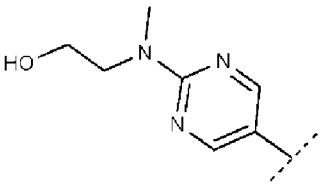
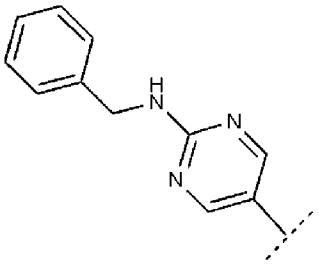
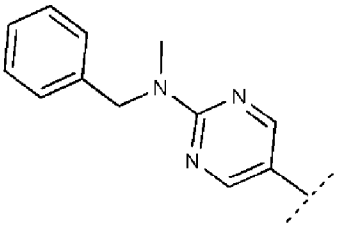
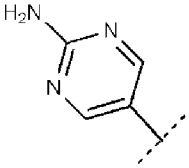
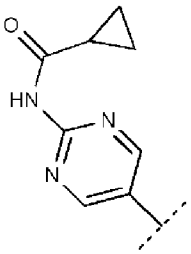
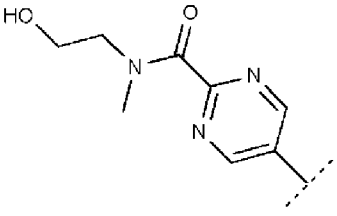
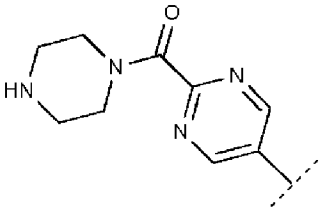
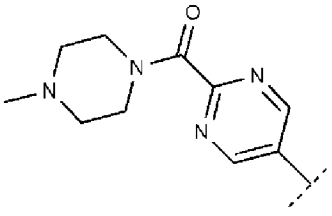


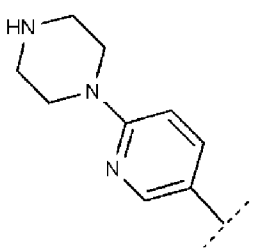
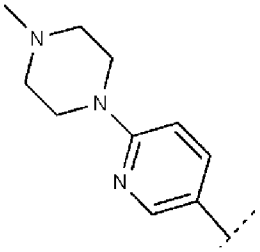
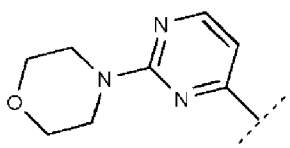
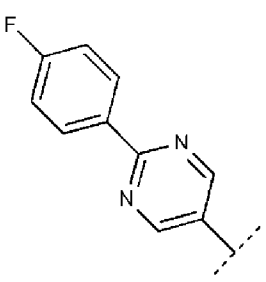
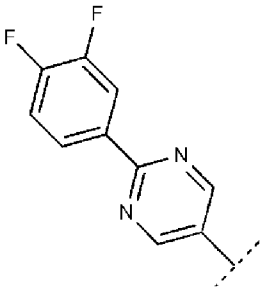
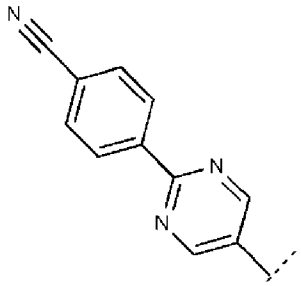
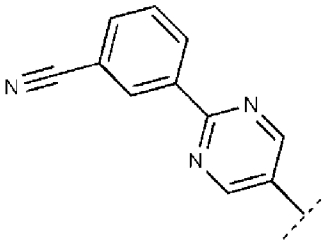
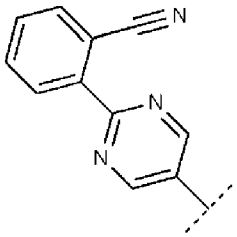
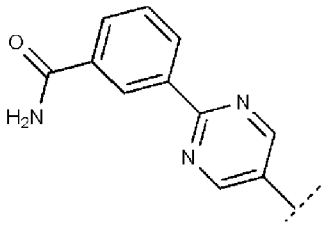
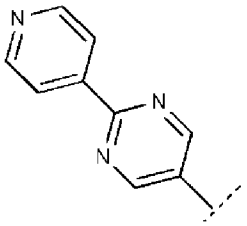
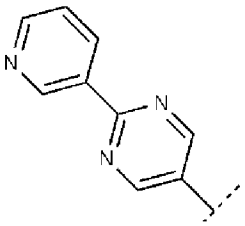
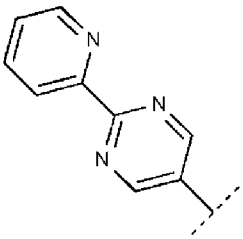
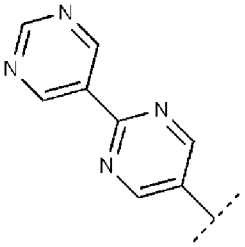
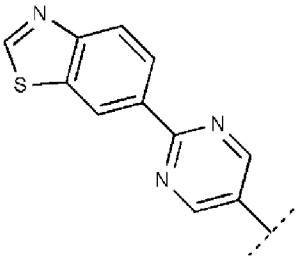


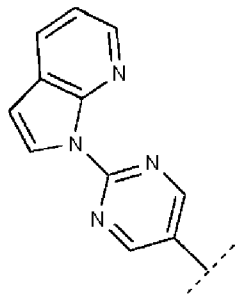
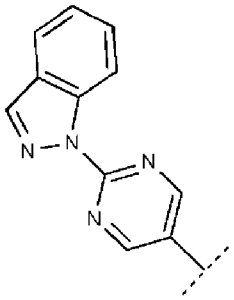
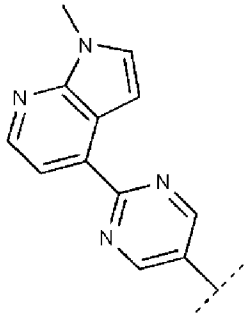
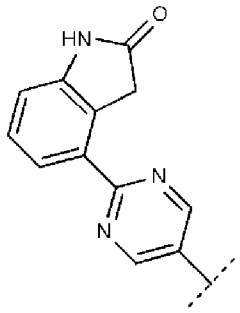
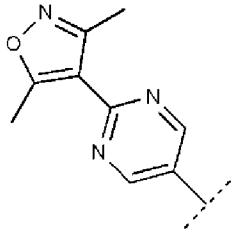
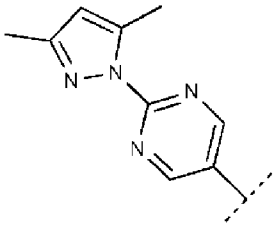
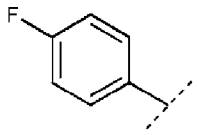
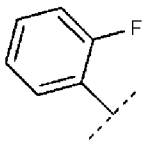
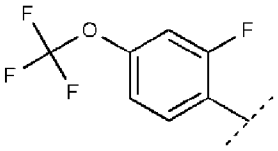
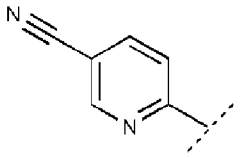
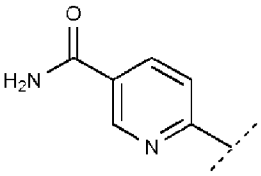
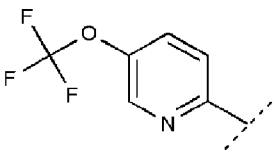
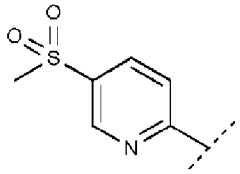
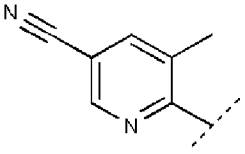
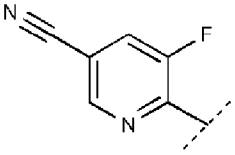
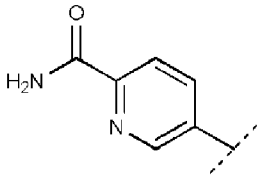
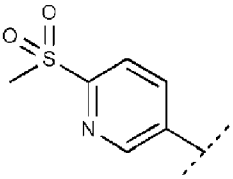
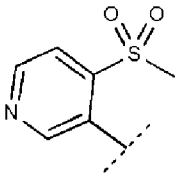


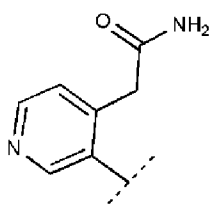
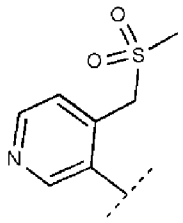
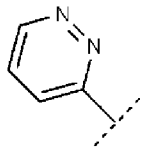
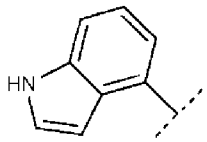
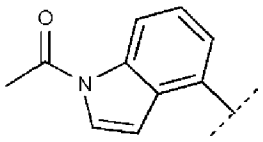
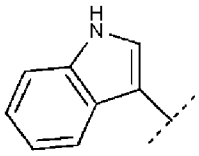
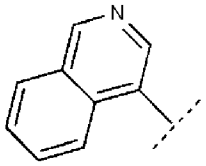
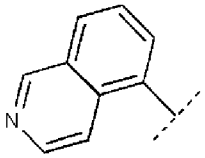
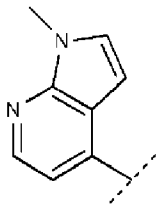
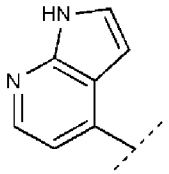
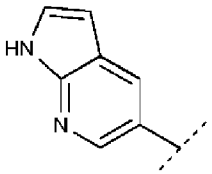
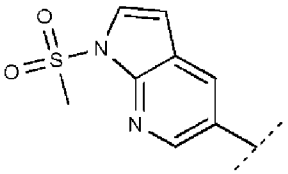
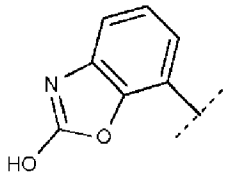
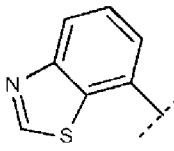
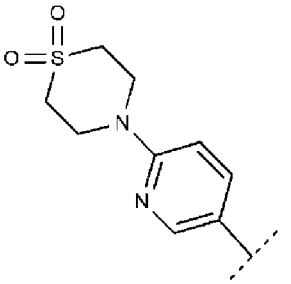
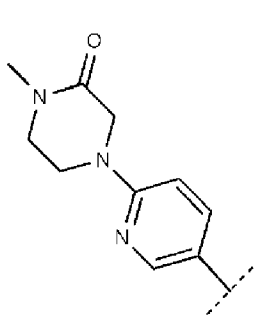
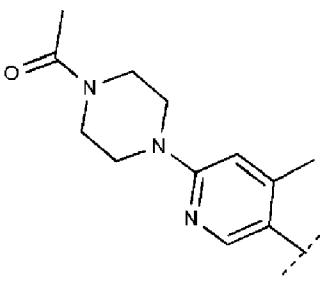
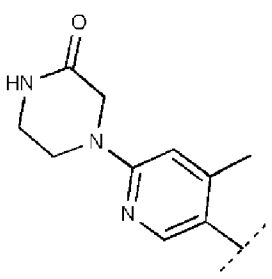


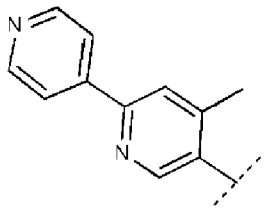


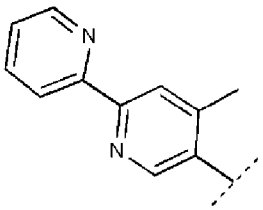
















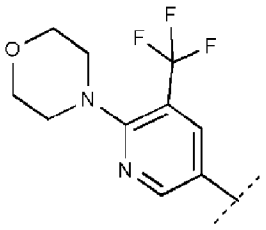















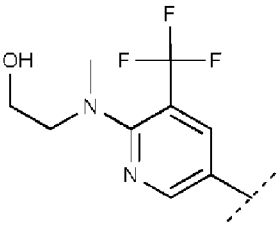



















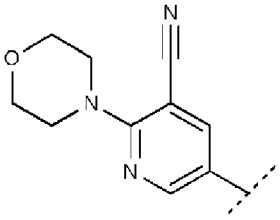



















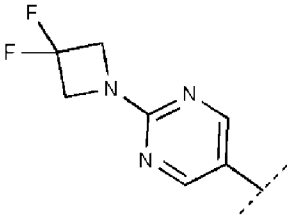


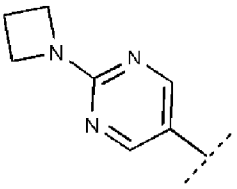


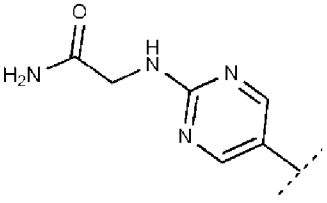


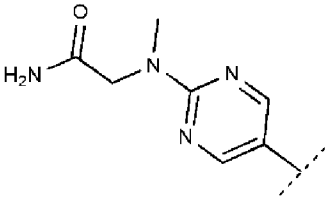


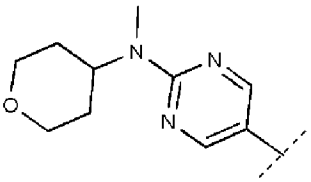


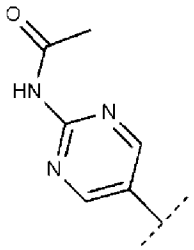


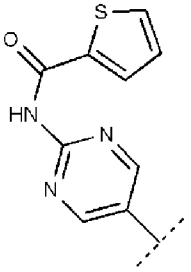


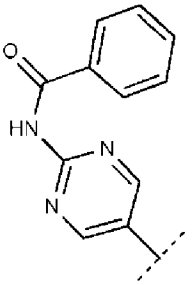


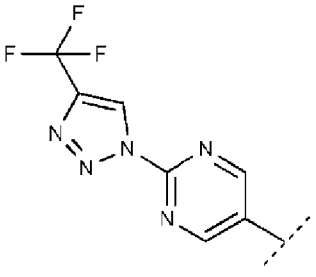


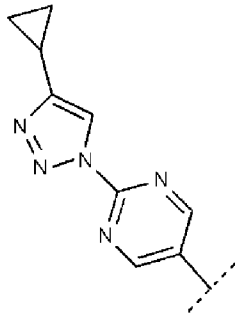
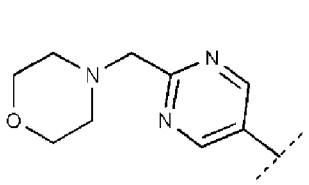
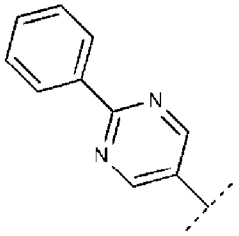
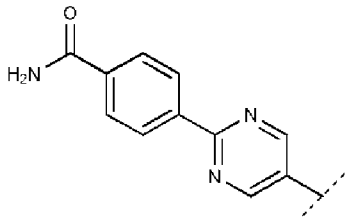
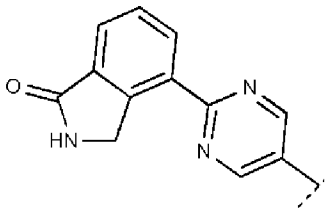
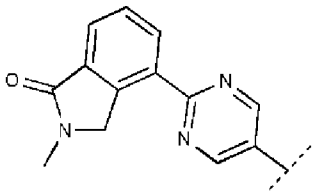
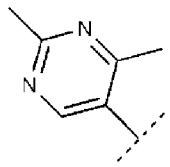
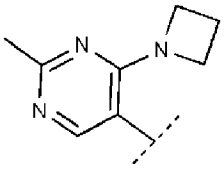
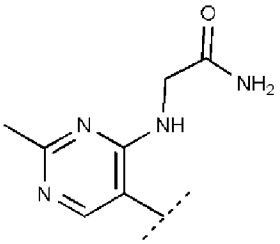
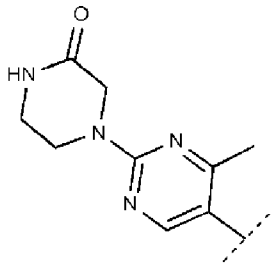
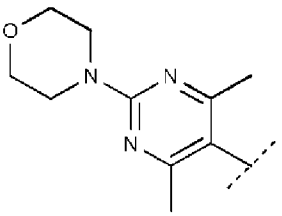
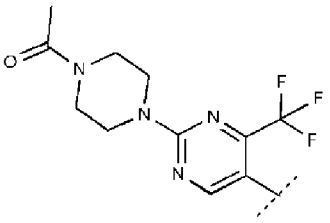
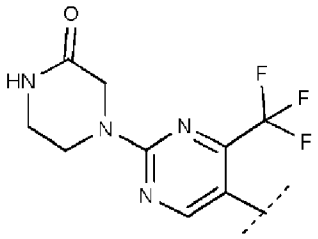
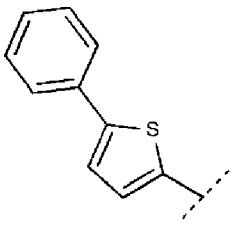
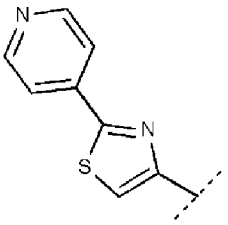
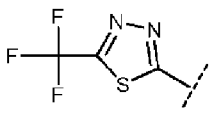
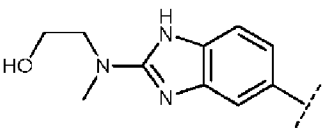
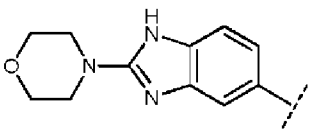


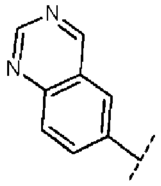
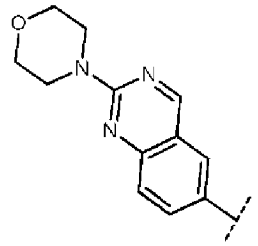
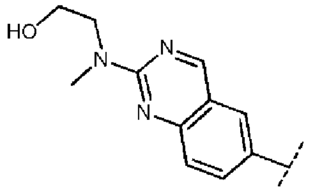
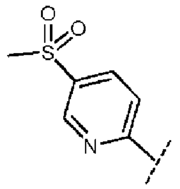
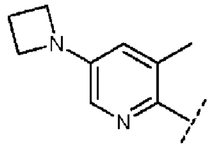
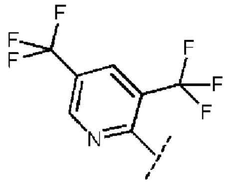
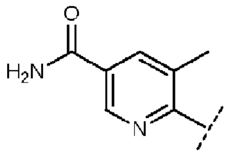
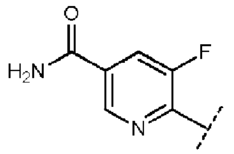
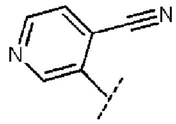
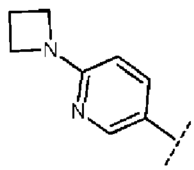
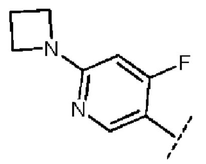
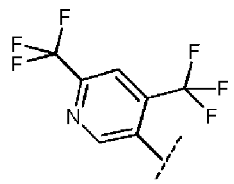
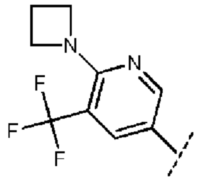
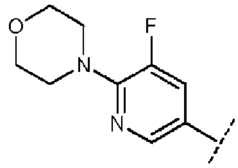
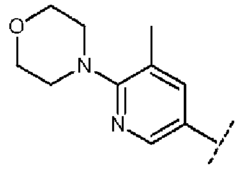
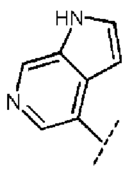
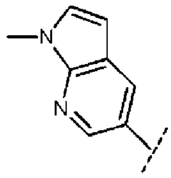
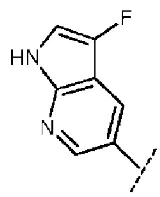
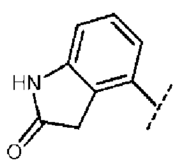
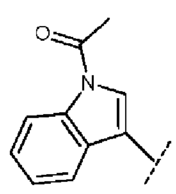
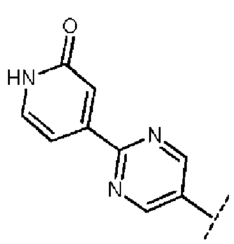


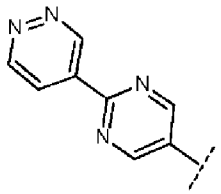
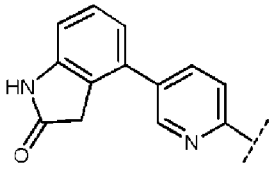
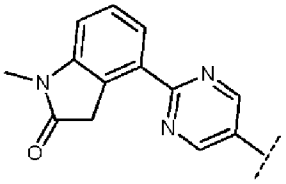
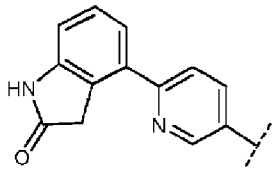
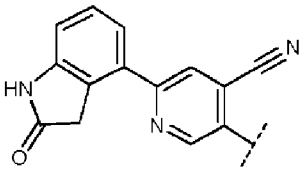
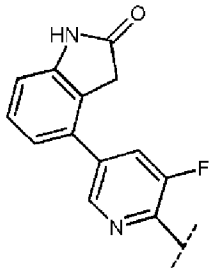
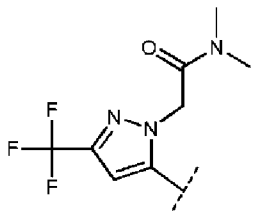
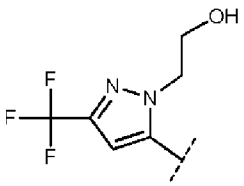
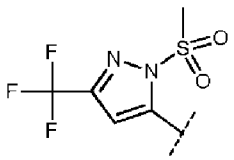
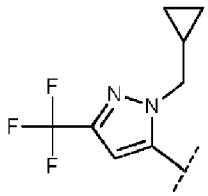
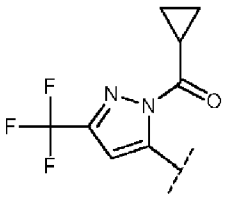
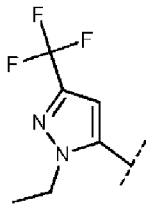
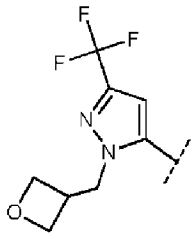
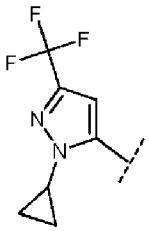
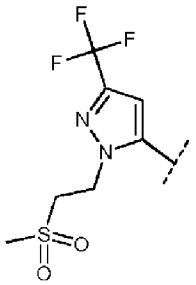
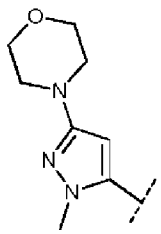
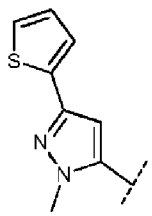
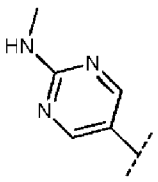


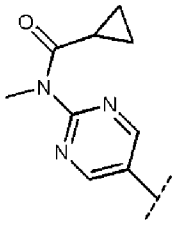
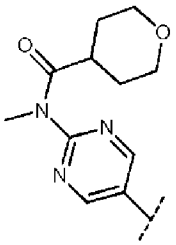
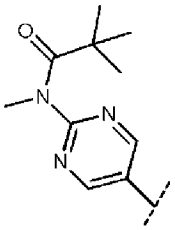
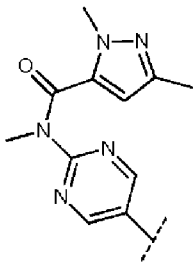
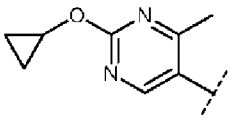
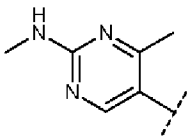
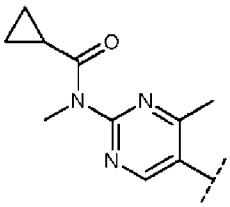
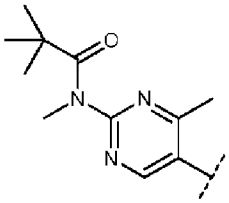
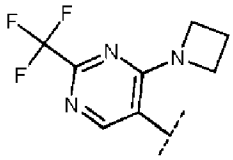
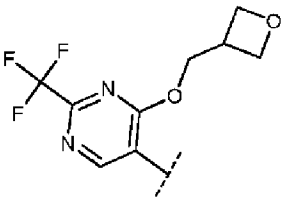
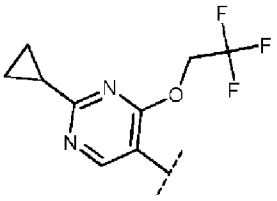
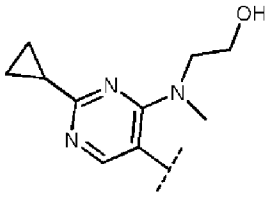
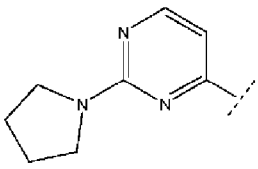
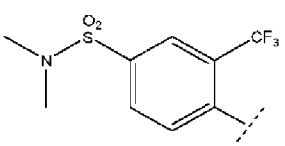
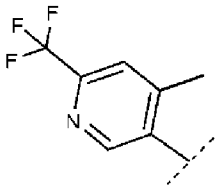
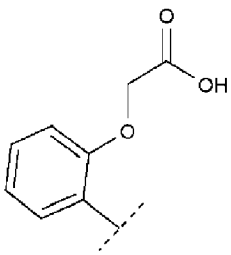
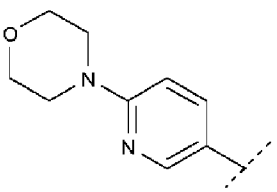
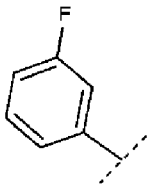


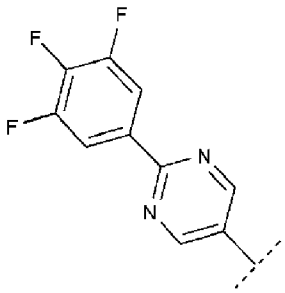
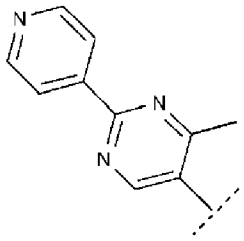
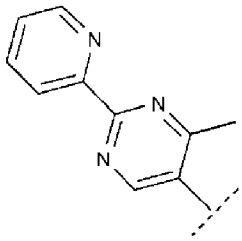
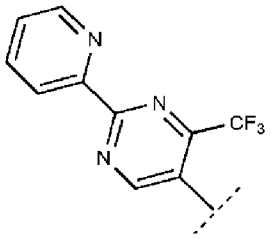
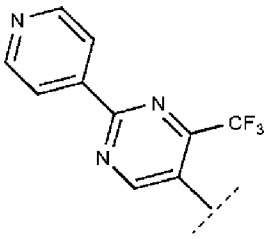
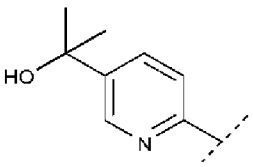
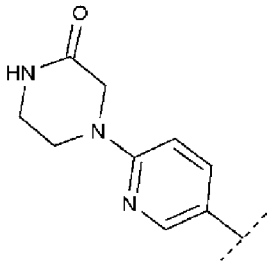
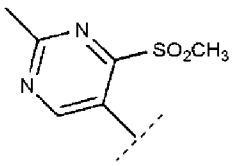
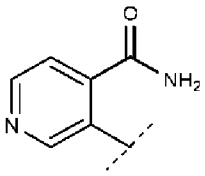
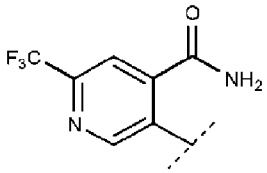
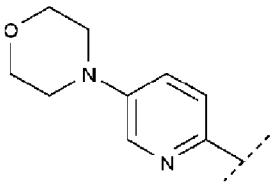
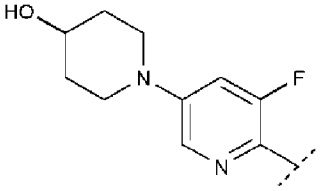
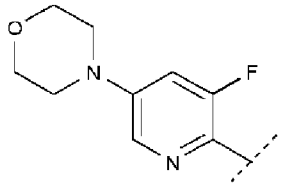
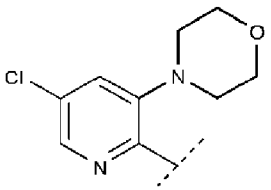
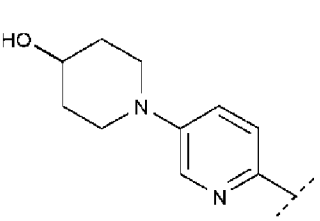


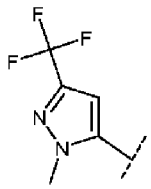
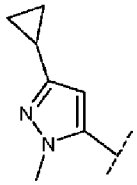
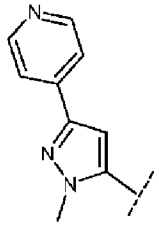
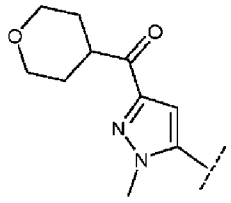
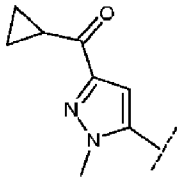
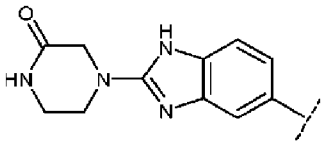
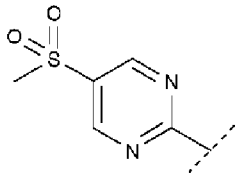
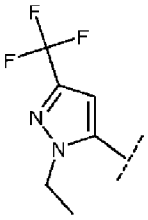
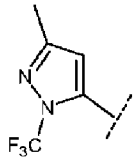
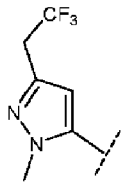
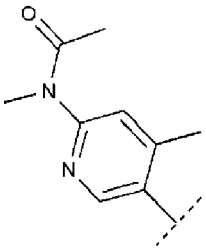
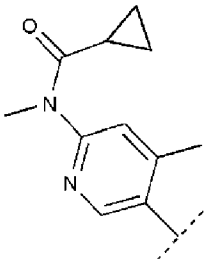
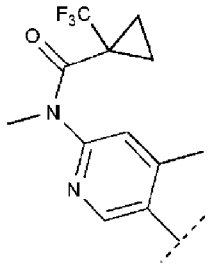
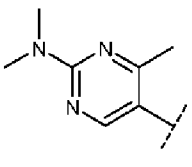
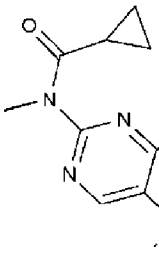
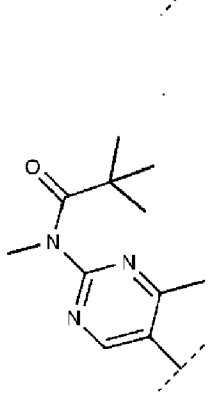



















9. Forbindelse til anvendelse ifølge et hvilket som helst af de foregående krav, hvor

R[1] betegner -H eller -CH_3;

R [2] betyder -C_1 -C_6 -alkyl, lineær eller forgrenet, mættet, usubstitueret; cyclopropyl forbundet gennem -CH_2 -; eller tetrahydropyranyl forbundet gennem -CH_2 -;

R[3] betegner -phenyl, benzyl, -thienyl eller -pyridinyl, der i hvert tilfælde er usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden valgt fra gruppen bestående af -F, -Cl, -CN, -CH_3, -CH_2CH_3, -CH_2F, -CHF_2, -CF_3, -OCF3, -OH, -OCH_3, -C(=O)NH_2, C(=O)$NHCH_3$, -C(=O)$N(CH_3)_2$, -NH_2, -$NHCH_3$, -$N(CH_3)_2$, -$NHC(=O)CH_3$, -CH_2OH, $SOCH_3$ og SO_2CH_3; eller

[R]4 betegner

-H;

-$_{C1}$-$_{C6}$-alkyl, der er ligekædet eller forgrenet, mættet, usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden valgt fra gruppen bestående af -F, -Cl, -Br, -I, -CN, -OH, =O, -S(=O)2-C1-$_{C4}$-alkyl og -O-$_{C1}$-C4-alkyl; C(=O)N(C_1-C_6-alkyl)$_2$ eller -C(=O)NRR' hvor R og R' sammen med nitrogenatomet, hvortil de er bundet, danner en ring og betegner -$(CH_2)_{3-5}$-;

3-6-leddet cycloalkyl, der er usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden er valgt fra gruppen bestående af -F, -Cl, -Br, -I, -CN, -OH og -O-C_1-C_4-alkyl, hvor den 3-6-leddede cycloalkyl er forbundet via -C_1-C_6-alkylen;

3-6-leddet heterocycloalkyl, der er usubstitueret eller substitueret med én, to, tre eller fire substituenter, som uafhængigt af hinanden er valgt fra gruppen bestående af -F, -Cl, -Br, -I, -CN, -OH og -O-C_1-C_4-alkyl, hvor den 3-6-leddede heterocycloalkyl er forbundet via -C_1-C_6-alkylen;

- phenyl, usubstitueret eller monosubstitueret med -OCH_3; hvor nevnte -phenyl er forbundet gennem -C_1 -C_6-alkylen-; eller

- pyridyl, usubstitueret, mono- eller polysubstitueret; hvor nevnte -pyridyl er forbundet gennem -C_1 -C_6 -alkylen-;

[R]5 **betegner**

- phenyl, -1,2-benzodioxol, -pyrazinyl, -pyridazinyl, -pyridinyl, -pyrimidinyl, -thienyl, -imidazolyl, - benzimidazolyl, -thiazolyl, -1,3,4-thiadiazolyl, -benzothiazolyl, -oxazolyl, -

benzoxazolyl, -pyrazolyl, - quinolinyl, -isoquinolinyl, -quinazolinyl, -indolyl, -indolinyl, -benzo[c][1,2,5]oxadiazolyl, -imidazo[1,2-a]pyrazinyl eller -1H-pyrrolo[2,3-b]pyridinyl, i hvert tilfælde usubstitueret eller substitueret med en, to, tre eller fire substituenter uafhængigt af hinanden valgt fra gruppen bestående af

-F; -Cl; -Br; -I;

-CN; -C_1-C_4-alkyl; -C_1-C_4-alkyl-OH; -CF_3; -C_1-C_4-alkyl-CF_3; -C_1-C_4-alkyl-C(=O)NH_2; -C_1-C_4-alkyl-C(=O)NHC_1-C_6-alkyl; -C_1-C_4-alkyl-C(=O)N(C_1-C_6-alkyl)$_2$; -C_1-C_4-alkyl-S(=O)$_2$-C_1-C_4-alkyl;

-C(=O)-C_1-C_4-alkyl; -C(=O)OH; -C(=O)O-C_1-C_4-alkyl; -C(=O)NH_2; -C(=O)NHC_1-C_4-alkyl;-C(=O)N(C_1-C_4-alkyl)$_2$; -C(=O)NH(C_1-C_4-alkyl-OH); -C(=O)N(C_1-C_4-alkyl)(C_1-C_4-alkyl-OH);-C(=O)NH-$(CH_2CH_2O)_{1-30}$-CH_3;

-NH_2; -NHC_1-C_4-alkyl; -N(C_1-C_4-alkyl)$_2$; -NHC_1-C_4-alkyl-OH; -N$CH_3$$C_1$-$C_4$-alkyl-OH; -NH-$C_1$-$C_4$-alkyl-C(=O)$NH_2$; -N$CH_3$-$C_1$-$C_4$-alkyl-C(=O)$NH_2$; -NHC(=O)-$C_1$-$C_4$-alkyl; -N$CH_3$C(=O)-$C_1$-$C_4$-alkyl;

-OH; -O-C_1-C_4-alkyl; -OCF_3; -O-C_1-C_4-alkyl-CO_2H; -O-C_1-C_4-alkyl-C(=O)O-C_1-C_4-alkyl; -O-C_1-C_4-alkyl-$CONH_2$;

-S-C_1-C_4-alkyl; -S(=O)C_1-C_4-alkyl; -S(=O)$_2$$C_1$-$C_4$-alkyl; og -S(=O)$_2$N($C_1$-$C_4$-alkyl)$_2$;

-3-12-leddet cycloalkyl, der er mættet eller umættet, usubstitueret, mono- eller polysubstitueret; hvor den 3-12-leddede cycloalkyl valgfrit er forbundet via -CH_2-, -O-, -NH-,-NCH_3-, -NH-$(CH_2)_{1-3}$-, -N$CH_3$$(CH_2)_{1-3}$-, -(C=O)-, -NHC(=O)-, -NCH_3C(=O)-, -C(=O)NH-$(CH_2)_{1-3}$-, -C(=O)NCH_3-$(CH_2)_{1-3}$-;

-3-12-leddet heterocycloalkyl, der er mættet eller umættet, usubstitueret, mono- eller polysubstitueret; hvor den 3-12-leddede heterocycloalkyl valgfrit er forbundet via -CH_2-, -O-,-NH-, -NCH_3-, -NH-$(CH_2)_{1-3}$-, -N$CH_3$$(CH_2)_{1-3}$-, -(C=O)-, -NHC(=O)-, -NCH_3C(=O)-, -C(=O)NH-$(CH_2)_{1-3}$-, -C(=O)NCH_3-$(CH_2)_{1-3}$-;

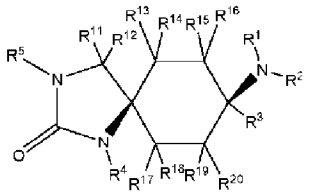
-6-14-leddet aryl, der er usubstitueret, mono- eller polysubstitueret; hvor den 6-14-leddede aryl valgfrit er forbundet via -CH_2-, -O-, -NH-, -NCH_3-, -NH-$(CH_2)_{1-3}$-, -N$CH_3$$(CH_2)_{1-3}$-,-(C=O)-, -NHC(=O)-, -N$CH_3$C(=O)-, -C(=O)NH-$(CH_2)_{1-3}$-, -C(=O)N$CH_3$-$(CH_2)_{1-3}$-; eller

-5-14-leddet heteroaryl, der er usubstitueret, mono- eller polysubstitueret; hvor den 5-14-leddede heteroaryl valgfrit er forbundet via -CH_2-, -O-, -NH-, -NCH_3-, -NH-$(CH_2)_{1-3}$-,-N$CH_3$$(CH_2)_{1-3}$-, -(C=O)-, -NHC(=O)-, -NCH_3C(=O)-, -C(=O)NH-$(CH_2)_{1-3}$-, -C(=O)NCH_3-$(CH_2)_{1-3}$-;

og

R^{11}, **R**^{12}, **R**^{13}, **R**^{14}, **R**^{15}, **R**^{16}, **R**^{17}, **R**^{18}, **R**^{19} og **R**^{20} betegner -H.

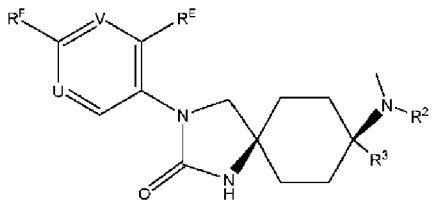
10.Forbindelse ifølge (I) til anvendelse i følge et hvilket som helst af de foregående krav, der har (i) en struktur ifølge den almene formel (I')



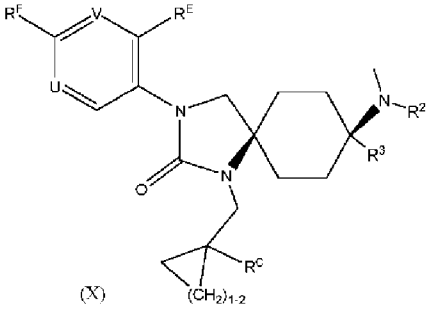
(I')

hvor **R**^{1} til **R**^{5}, **R**^{11} til R20 er defineret som i et hvilket som helst af de foregående krav, eller et fysiologisk acceptabelt salt deraf.

11. Forbindelse til anvendelse ifølge et hvilket som helst af de foregående krav, der har en struktur med den almene formel (IX) eller (X)



(IX)



(X)

hvor

R^{2} betegner -H eller -CH_3;

R^{3} betegner -phenyl eller -3-fluorphenyl;

R^{C} betegner -H eller -OH;

R^{E} betegner -H, -CH_3, -F, -CF_3, -cyclopropyl, -aziridinyl, -OH; -O-C_1-C_4-alkyl; -OCF_3; -O-C_1-C_4-alkyl-CO_2H; -O-C_1-C_4-alkyl-C(=O)O-C_1-C_4-alkyl; eller -O-C_1-C_4-alkyl-$CONH_2$;

R^{F} betegner

-CF_3, -cyclopropyl, -$S(=O)_2CH_3$,

-NH_2; -NHC_1-C_4-alkyl; -$N(C_1$-C_4-alkyl$)_2$; -NHC_1-C_4-alkyl-OH; -NCH_3C_1-C_4-alkyl-OH; -NH-C_1-C_4-alkyl-C(=O)NH_2; -NCH_3-C_1-C_4-alkyl-C(=O)NH_2; -NHC(=O)-C_1-C_4-alkyl; -NCH_3C(=O)-C_1-C_4-alkyl;

-6-14-leddet aryl, der er usubstitueret, mono- eller polysubstitueret; eller

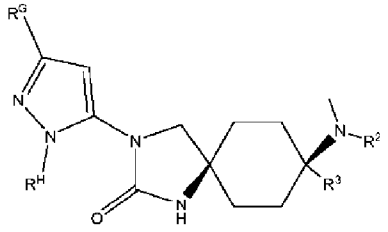
-5-14-leddet heteroaryl, der er usubstitueret, mono- eller polysubstitueret;

U betegner =CH- eller =N-; og

V betegner =CH- eller =N-;

eller et fysiologisk acceptabelt salt deraf

12. Forbindelse (1) til anvendelse ifølge et hvilket som helst af kravene 1 til 10, der har en struktur med den almene formel (XI)



(XI)

hvor

R^2 betegner -H eller -CH_3;

R^3 betegner -phenyl eller -3-fluorphenyl;

R^H betegner

-CN; -C_1-C_4-alkyl; -CF_3; -C_1-C_4-alkyl-C(=O)NH_2; -C_1-C_4-alkyl-S(=O)$_2$-C_1-C_4-alkyl; -C(=O)-C_1-C_4-alkyl; -C(=O)OH; -C(=O)O-C_1-C_4-alkyl; -C(=O)NH_2; -C(=O)NHC_1-C_4-alkyl; -C(=O)N(C_1-C_4-alkyl)$_2$;-C(=O)NH(C_1-C_4-alkyl-OH); -C(=O)N(C_1-C_4-alkyl)(C_1-C_4-alkyl-OH); -C(=O)NH-$(CH_2CH_2O)_{1-30}$-CH_3;

-3-12-leddet cycloalkyl, der er mættet eller umættet, usubstitueret, mono- eller polysubstitueret; hvor den 3-12-leddede cycloalkyl valgfrit er forbundet via -CH_2-, -NH-, -NCH_3-, -NH-$(CH_2)_{1-3}$-,-$NCH_3(CH_2)_{1-3}$-, -(C=O)-, -NHC(=O)-, -NCH_3C(=O)-, -C(=O)NH-$(CH_2)_{1-3}$-, -C(=O)NCH_3-$(CH_2)_{1-3}$-; eller

-3-12-leddet heterocycloalkyl, der er mættet eller umættet, usubstitueret, mono- eller polysubstitueret; 6-14-leddet aryl, der er usubstitueret, mono- eller polysubstitueret; hvor den 3-12-leddede heterocycloalkyl valgfrit er forbundet via -CH_2-, -NH-, -NCH_3-, -NH-$(CH_2)_{1-3}$-, -$NCH_3(CH_2)_{1-3}$-,-(C=O)-, -NHC(=O)-, -NCH_3C(=O)-, -C(=O)NH-$(CH_2)_{1-3}$-, -C(=O)NCH_3-$(CH_2)_{1-3}$-;

R^G betegner

$-CF_3$, $-S(=O)_2CH_3$;

$-NH_2$; $-NHC_1$-C_4-alkyl; $-N(C_1$-C_4-alkyl$)_2$; $-NHC_1$-C_4-alkyl-OH; $-NCH_3C_1$-C_4-alkyl-OH; $-NH$-C_1-C_4-alkyl-$C(=O)NH_2$; $-NCH_3$-C_1-C_4-alkyl-$C(=O)NH_2$; $-NHC(=O)$-C_1-C_4-alkyl; $-NCH_3C(=O)$-C_1-C_4-alkyl;

-3-12-leddet cycloalkyl, der er mættet eller umættet, usubstitueret, mono- eller polysubstitueret; hvor den 3-12-leddede cycloalkyl valgfrit er forbundet via $-CH_2$-, -NH-, $-NCH_3$-, $-NH-(CH_2)_{1-3}$-,$-NCH_3(CH_2)_{1-3}$-, -(C=O)-, $-NHC(=O)$-, $-NCH_3C(=O)$-, $-C(=O)NH-(CH_2)_{1-3}$-, $-C(=O)NCH_3-(CH_2)_{1-3}$-; eller

-3-12-leddet heterocycloalkyl, der er mættet eller umættet, usubstitueret, mono- eller polysubstitueret; 6-14-leddet aryl, der er usubstitueret, mono- eller polysubstitueret; hvor den 3-12-leddede heterocycloalkyl valgfrit er forbundet via $-CH_2$-, -NH-, $-NCH_3$-, $-NH-(CH_2)_{1-3}$-, $-NCH_3(CH_2)_{1-3}$-,-(C=O)-, $-NHC(=O)$-, $-NCH_3C(=O)$-, $-C(=O)NH-(CH_2)_{1-3}$-, $-C(=O)NCH_3-(CH_2)_{1-3}$-;

eller et fysiologisk acceptabelt salt deraf.

13. Forbindelse til anvendelse ifølge et hvilket som helst af de foregående krav, der er valgt fra gruppen bestående af

cis-5-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]--pyrimidin-2-carbonitril;;

cis-6-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrazin-2-carbonitril;

cis-5-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidin-2-carbonitril;

cis-5-[8-dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]--pyrimidin-2-carbonitril;

cis-5-[[2-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carboxylic acid amid;

cis-5-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-2-methylsulfonyl-pyrimidin-4-carbonitril;

cis-5-[1-(2-methoxy-ethyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carbonitril;

cis-2-[1-(cyclobutyl-methyl)-8-dimethylamino--2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-5-methylsulfonyl-benzonitril;

cis-2-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzamid;

cis-3-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzamid;

cis-5-[8-dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carboxylsyreamid;

cis-5-[1-(cyclobutyl-methyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidin-2-carbonitril;;

cis-5-[8-dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carbonitril;

cis-2-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-5-carbonitril;

cis-8-dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-methoxy-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-2-[[2-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-5-carboxylsyreamid;;

cis-4-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N-methyl-benzamid;

cis-5-(8-dimethylamino-2-oxo-8-phenyl-1-propyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-carbonitril;

cis-5-[8-dimethylamino-1-(3-methoxy-propyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carbonitri;

cis-5-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carbonitril;

cis-4-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-butyramid;

cis-1-(cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-hydroxy-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-5-[8-dimethylamino-1-(2-methyl-propyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carbonitril;

cis-5-(8-dimethylamino-1-(2-hydroxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carbonitril;

cis-5-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methyl-pyridin-2-carbonitril;

cis-1-(cyclobutyl-methyl)-3-(5-methoxy-pyrazin-2-yl)-8-methylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-4-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N,N-dimethyl-benzamid;

cis-4-[1-(cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N-ethyl-N-(2-hydroxy-ethyl)-benzamid

cis-2-[1-(cyclobutyl-methyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-5-methylsulfonyl-benzonitril;

cis-1-(cyclobutyl-methyl)-8-methylamino-3-(2-methylsulfonyl-4-(triflourmethyl)-phenyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-4-[1-(cyclobutyl-methyl)-8--methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N,N-dimethyl-3-(trifluormethyl)-benzensulfonsyreamid;

cis-4-[1-(cyclobutyl-methyl)-8-(ethyl-methyl-amino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzonitril;

cis-1-(cyclopropyl-methyl)-8-(ethyl-methyl-amino)-8-phenyl-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-6-[1-(cyclobutyl-methyl)-8-(ethyl-methyl-amino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carbonitril;

CIS-2-[8-dimethylamino-1-[(1-methyl-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N-pyrimidin-4-yl-acetamid;

cis-2-[3 -(2-Cyano-pyrimidin-5-yl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-1-yl]-N,N-dimethyl-acetamid;

cis-1-(Cyclobutyl-methyl)-8-methylamino-8-phenyl-3 -[2-(triflourmethyl)-pyrimidin-5-yl] -1,3-diazaspiro[4.5]decan-2-on;

cis-5-[8-Dimethylamino-8-(3-flourphenyl)-1-(4-methoxy-butyl)-2-oxo-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carbonitril;

cis-5-[8-Dimethylamino-1-(3-methoxy-propyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidin-2-carbonitril;

cis-5-[1-[(1-Cyano-cyclobutyl)-methyl]-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl] -pyrimidin-2-carbonitril;

cis-N-(Cyclobutyl-methyl)-5-[1-(cyclobutyl-methyl)-8-dimethylamino-8-(3-flourphenyl)-2-oxo-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carboxylsyreamid;

cis-5-[1-(3-Methoxy-propyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carbonitril;

cis-5-[8-Dimethylamino-8-(3-flourphenyl)-1-methyl-2-oxo-1,3-diazaspiro [4.5] decan-3-yl]-pyrimidin-2-carbonitril;

cis-4-Methoxy-5-[1-(3-methoxy-propyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carbonitril;

cis-4-[8-Dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carbonitril;

cis-5-[8-Dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidin-2-carbonitril;

cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidine-2-carbonitril;

cis-1 -(Cyclobutyl-methyl)-8-dimethylamino-3 -(6-methylsulfanyl-pyrimidin-4-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-2-[3-(2-Cyano-pyrimidin-4-yl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl]-N,N-dimethyl-acetamid;

cis-6-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-4-carbonitril;

cis-2-(8-dimethylamino-2-oxo-3,8-diphenyl-1,3-diazaspiro[4.5]decan-1-yl)-N,N-dimethylacetamid; cis-1-(cyclobutyl-methyl)-8-dimethylamino-3,8-diphenyl-1,3-diazaspiro[4.5]decan-2-on; cis-2-[8-dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-5-carbonitril;

cis-8-dimethylamino-1-(2-methoxy-ethyl)-3,8-diphenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-5-[8-dimethylamino-1-(2-methoxy-ethyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methyl-pyridin-2-carbonitril;

cis-N,N-dimethyl-2-(8-methylamino-2-oxo-3, 8-diphenyl-1,3-diazaspiro[4.5]decan-1-yl)-acetamid; cis-5-[1-[(1-Cyano-cyclobutyl)-methyl]-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carbonitril;
cis-5-[1-[(1-Cyano-cyclobutyl)-methyl]-8-(ethyl-methyl-amino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-2-carbonitril;
CIS-4-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzonitril;
cis-3-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzonitril;
cis-5-[1-[(1-Cyano-cyclobutyl)-methyl]-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl] -pyridin-2-carbonitril;
cis-2-[3-(2-Cyano-pyrimidin-5-yl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl]-N-propyl-acetamid;
cis-5-[1-(Cyclobutyl-methyl)-8-(ethyl-methyl-amino)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidin-2-carbonitril;
cis-4-[1-(Cyclobutyl-methyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-3-methoxy-benzonitril;
cis-5-[8-Dimethylamino-1-(3-methoxy-propyl)-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-6-methoxy-pyridin-2-carbonitril;
cis-4-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzamid;
cis-5-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl] -pyridin-2-carbonitril;
cis-5-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N-[(1-hydroxy-cyclobutyl)-methyl]-pyridin-2-c;
cis-2-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzonitril;
cis-3-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzonitril;
cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3 -[2-(triflourmethyl)-pyrimidin-5-yl] -1,3-diazaspiro[4.5]decan-2-on;

cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methylpyridin-2-carboxylsyremethylester;

cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3-(5-methoxy-pyrazin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3-(2-methoxy-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzonitril;

cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methylpyridin-2-carbonitril;

cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3-(5-flour-pyrimidin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-3-methoxy-benzonitril;

cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzoesyre-methylester;

cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3-(2-pyrrolidin-1-yl-pyrimidin-4-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3 -(5-pyridin-2-yl-thiophen-2-yl)-1,3 - diazaspiro[4.5]decan-2-on;

cis-1 -(Cyclobutyl-methyl)-8-dimethylamino-3 -[2-methylsulfonyl-4-(triflourmethyl)-phenyl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3 -[6-(triflourmethyl)-pyridin-3 -yl] -1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclobutyl-methyl)-3-(2,4-dimethoxy-phenyl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methylsulfonyl-benzonitril;

cis-5-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-2-flour-benzonitril;

cis-4-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N,N-dimethyl-3-(trifluormethyl)-benzensulfonsyreamid;

cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzonitril;

cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3-(2-methyl-imidazo[1,2-a]pyrazin-6-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-1 -(Cyclobutyl-methyl)-8-dimethylamino-3 -(4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-2-[1-(Cyclobutyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-5-methoxy-benzonitril;

cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3,8-diphenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclobutyl-methyl)-8-dimethylamino-8-phenyl-3 -pyrazin-2-yl-1,3 -diazaspiro [4.5]decan-2-on;

cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-1-[(1-hydroaxy-cyclobutyl)-methyl]-3-[2-(4-methyl-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-1-[(1-hydroaxy-cyclobutyl)-methyl]-8-phenyl-3-(2-piperazin-1-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-on hydrochlorid;

cis-1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-3-[2-(4-methyl-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-8-phenyl-3-(2-piperazin-1-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-on dihydrochlorid;

cis-1-(Cyclobutyl-methyl)-8-dimethylamino-3 -[4-methyl-6-(triflourmethyl)-pyridin-3 -yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclobutyl-methyl)-8-methylamino-3 -[4-methyl-6-(triflourmethyl)-pyridin-3 -yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-1 -(Cyclopropyl-methyl)-8-dimethylamino-3 -(4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on ;

cis-1 -(Cyclopropyl-methyl)-8-methylamino-3 -(4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclopropyl-methyl)-8-dimethylamino-3 -(2-flour-4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;
cis-2-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzamid; myresyre;
cis-2-[8-Dimethylamino-1-[2-(1-methoxy-cyclobutyl)-ethyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzamid;
cis-8-Dimethylamino-1-[2-(1-methoxy-cyclobutyl)-ethyl]-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;
cis-5-[1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl] -pyrimidin-2-carbonitril;
cis-2-[1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzonitril;
cis-4-[1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl] -3 -methoxy-benzonitril;
cis-4-[8-Ethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-3 -methoxy-benzonitril;
cis-2-[8-Ethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-benzonitril;
cis-5-[1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-4-methoxy-pyrimidin-2-carbonitril;
cis-2-[8-Dimethylamino-1-(oxetan-3-yl-methyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl]-benzamid;
cis-4-Methoxy-5-(8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-carbonitril;
cis-2-(8-Methylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-benzamid;
cis-8-Dimethylamino-3-[2-(3-oxo-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;
cis-3-(2-Cyclopropyl-pyrimidin-5-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on cis-8-Dimethylamino-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;
cis-8-Dimethylamino-3-(2-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-(2-piperazin-1-yl-pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-on;

trans-2-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzamid;

cis-2-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzamid;

cis-2-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzonitril;

cis-2-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzonitril;

cis-3-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-benzonitril;

cis-8-Dimethylamino-3-[2-(4-methylsulfonyl-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-3-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-benzamid

cis-8-[(Cyclopropyl-methyl)-methyl-amino] -8-phenyl-3 -[2-(triflourmethyl)-pyrimidin-5-yl] -1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-(4-methyl-piperazine-1-carbonyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

trans-4-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3-methoxy-benzonitril;

cis-4-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-3-methoxy-benzonitril;

cis-3-[2-(4-Acetyl-piperazin-1-yl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-(2-pyridin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-8-phenyl-3 -(2-pyridin-3-yl-pyrimidin-5-yl)-1,3 -diazaspiro [4.5]decan-2-on;

cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-N-(2-hydroxy-ethyl)-pyrimidin-2-carboxylsyreamid;

cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-carboxylsyreamid;

cis-8-Dimethylamino-3-[2-morpholin-4-yl-4-(triflourmethyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-4-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-benzonitril;

cis-5-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-4-methoxy-pyrimidin-2-carbonitril;

trans-5-(8-Ethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-4-methoxy-pyrimidin-2-carbonitril;

cis-8-Dimethylamino-3-[2-(morpholine-4-carbonyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-2-[4-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-piperazin-1-yl]-eddikesyremethylester;

cis-8-Dimethylamino-3-[2-(methylsulfonyl-methyl)-phenyl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-3-[2-(1,1-dioxo-[1,4]thiazinan-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(4-flour-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-N-(2-hydroxy-ethyl)-N-methylpyrimidin-2-carboxylsyreamid;

cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-2-morpholin-4-yl-isonicotinonitril;

cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-benzamid;

cis-8-Dimethylamino-3-(2-flour-4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-3-fluor-benzonitril;

cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-3, 5-difluor-benzonitril;

cis-8-Dimethylamino-3-(2-methoxy-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-3-[2-(Benzylamino)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-(4-fluorphenyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

trans-8-Benzyl-8-dimethylamino-3-(2-morpholin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Benzyl-8-dimethylamino-3-(2-morpholin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-(2-pyridin-2-yl-pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-on;

cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-3, 5-difluor-benzamid;

cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro [4.5]decan-3 -yl)-3 -fluor-benzamid;

cis-8-Benzyl-8-dimethylamino-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro [4.5] decan-2-on;

trans-8-Benzyl-8-dimethylamino-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-thiophen-2-yl-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

trans-8-Dimethylamino-8-thiophen-2-yl-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-2-[2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-phenoxy]-eddikesyre;

cis-8-Dimethylamino-8-phenyl-3-(2-piperidin-1-yl-pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-(2-pyrrolidin-1-yl-pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-(2-pyrimidin-5-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-[2-(piperazine-1-carbonyl)-pyrimidin-5-yl]-1,3-diazaspiro [4.5] decan-2-on;

trans-8-Benzyl-8-dimethylamino-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-1,3-diazaspiro [4.5] decan-2-on;

cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-2-morpholin-4-yl-pyridin-4-carboxylsyreamid;

cis-8-Dimethylamino-3-[2-(3,5-dimethyl-isoxazol-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-3-[2-(Benzothiazol-6-yl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-fluor-4-(trifluormethyl)-phenyl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-3-(6-morpholin-4-yl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-(2-phenyl-thiazol-4-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-[2-(tetrahydro-pyran-4-ylamino)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-(4-hydroxy-piperidin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-(4-phenyl-thiazol-2-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-[2-(1H-pyrrolo[2,3-b]pyridin-1-yl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-dimethylamino-8-phenyl-3-[2-(3,4,5-trifluorphenyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-o-tolyl-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-m-tolyl-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-p-tolyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-[4-(trifluormethyl)-phenyl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-[3-(trifluormethyloxy)-phenyl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-[4-(trifluormethyloxy)-phenyl]-1,3-diazaspiro[4.5]decan-2-on;

cis-2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzoesyre-methylester;

cis-3-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzoesyre-methylester;

cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzoesyre-methylester;

cis-3-(1,3-Benzodioxol-5-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-quinolin-5-yl-1,3-diazaspiro [4.5] decan-2-on;

CIS-3-acetyl-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-4-methyl-pyridin-2-carboxylsyremethylester;

cis-8-Dimethylamino-3-(6-methoxy-4-methyl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-3-[2-methyl-5-(trifluormethyl)-2H-pyrazol-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3 -(3 -methoxy-pyridin-2-yl)-8-phenyl-1,3 -diazaspiro [4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-[5-(trifluormethyl)-pyridin-2-yl]-1,3-diazaspiro [4.5] decan-2-on;

cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-nicotinonitril;

cis-8-Dimethylamino-3-(3-methyl-pyridin-2-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-3-(6-methoxy-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-[3-(trifluormethyl)phenyl]-1,3-diazaspiro[4.5]decan-2-on;

cis-3-(1,3-Benzodioxol-4-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-(2-oxo-1,3-dihydro-indol-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-(3,5-dimethyl-1H-pyrazol-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-(3-hydroxy-piperidin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-(3-hydroxy-piperidin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-[4-(2-hydroxy-ethyl)-piperazin-1-yl]-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-2-[4-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-piperazin-1-yl]-eddikesyre;

cis-8-Dimethylamino-3-[2-(1-methyl-1H-pyrrolo[2,3-b]pyridin-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Benzyl-8-dimethylamino-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-on;

trans-8-Dimethylamino-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-dimethylamino-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-(1,1-dioxo-[1,4]thiazinan-4-yl)-4-(trifluormethyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-(1-methyl-1H-benzoimidazol-2-yl)-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-(1-methyl-1H-benzoimidazol-2-yl)-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-(2-hydroxy-ethylamino)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-3-[2-(Benzyl-methyl-amino)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-N-[2-[2-[2-(2-methoxy-ethoxy)-ethoxy]-ethoxy]-ethyl]-pyrimidin-2-carboxylsyreamid;

cis-8-Dimethylamino-3-[2-(1H-indazol-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-[(2-hydroxy-ethyl)-methyl-amino]-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-3-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzamid;

cis-8-Dimethylamino-3-[3-fluor-5-(trifluormethyl)-pyridin-2-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(5-methyl-pyrazin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(5-fluor-pyrimidin-4-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-3-(5-fluor-pyrimidin-2-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-pyrazin-2-yl-1,3-diazaspiro[4.5]decan-2-on;

cis-3-([2,1,3]Benzoxadiazol-5-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-2-[2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-phenoxy]-acetamid;

cis-8-Dimethylamino-8-phenyl-3-(5-pyridin-4-yl-thiophen-2-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-2-[2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-phenoxy]-eddikesyre-methylester;

cis-8-Dimethylamino-3-(2-morpholin-4-yl-pyrimidin-4-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-3-[2-(3,4-Difluor-phenyl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-2-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-benzonitril;

cis-3-(2-Amino-pyrimidin-5-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl)-pyrimidin-2-yl]-cyclopropan-carboxylsyreamid;;

cis-2-[4-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-piperazin-1-yl]-acetamid;

cis-8-Dimethylamino-8-phenyl-3-(6-piperazin-1-yl-pyridin-3-yl)-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-3-[6-(4-methyl-piperazin-1-yl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-3-[2-(1,1-dioxo-[1,4]thiazinan-4-yl)-4-methyl-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro [4.5] decan-2-on;

cis-2-[8-Dimethylamino-1-(3-methoxy-propyl)-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl]-pyrimidine-5-carbonitril;

cis-8-Dimethylamino-3-[2-(4-methyl-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-8-phenyl-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-2-[1-(3-Methoxy-propyl)-8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-pyrimidin-5-carbonitril;

cis-8-Dimethylamino-8-phenyl-3-[6-(trifluormethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyridin-2-carbonitril;

cis-8-Dimethylamino-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-1-[(2-methoxyphenyl)-methyl]-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-8-phenyl-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-8-phenyl-3-pyrimidin-5-yl-1,3-diazaspiro[4.5]decan-2-on;

cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-4-methyl-pyridine-2-carbonitril;

cis-8-Dimethylamino-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1-(pyridin-2-yl-methyl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-pyrimidin-5-yl-1,3-diazaspiro [4.5] decan-2-on;
cis-8-Dimethylamino-1 - [(1 -hydro xy-cy clobutyl)-methyl] -8-phenyl-3 -pyrimidin-5 -yl-1,3-diazaspiro[4.5]decan-2-on;
cis-8-Amino-1-[(1-hydroxy-cyclobutyl)-methyl]-8-phenyl-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;
cis-8-Dimethylamino-3-(3-fluorphenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;
cis-8-Dimethylamino-3-(3-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;
cis-8-Dimethylamino-3-(4-methylsulfonyl-phenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;
cis-8-Dimethylamino-8-phenyl-3-pyridazin-3-yl-1,3-diazaspiro [4.5] decan-2-on;
cis-3-Methoxy-4-(8-methylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzonitril;
cis-8-Dimethylamino-3-(2-fluorphenyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;
cis-8-Dimethylamino-8-phenyl-3-(2-phenyl-pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-on;
cis-8-Methylamino-1-(oxetan-3-yl-methyl)-8-phenyl-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;
cis-1-(Cyclopropyl-methyl)-8-methylamino-8-phenyl-3 -[2-(trifluormethyl)-pyrimidin-5-yl] -1,3-diazaspiro[4.5]decan-2-on;
cis-4-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-benzonitril;
cis-8-Dimethylamino-3-(4-fluorpheny)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;
cis-2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzonitril;
cis-8-Ethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-8-phenyl-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;
cis-1-[(1-Hydroxy-cyclobutyl)-methyl]-8-methylamino-3-(2-methyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;
cis-8-Dimethylamino-3-[2-(morpholin-4-yl-methyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;
cis-8-Dimethylamino-3-[2-(methyl-tetrahydro-pyran-4-yl-amino)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-5-[8-Dimethylamino-1-[(1-hydroxy-cyclobutyl)-methyl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-N-[2-[2-[2-(2-methoxy-ethoxy)-ethoxy]-ethoxy]-ethyl]-pyrimidin-2-carboxylsyreamid;;

cis-1-(Cyclopropyl-methyl)-3 -(2-fluor-4-methylsulfonyl-phenyl)-8-methylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-2-[[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-methyl-amino] -acetamid;

cis-2-[[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]amino]-acetamid;

cis-1-(Cyclopropyl-methyl)-8-methylamino-3 -[4-methyl-6-(trifluormethyl)-pyridin-3 -yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclopropyl-methyl)-8-dimethylamino-3 -[4-methyl-6-(trifluormethyl)-pyridin-3 -yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-thiophene-2-carboxylsyreamid;

cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl)-pyrimidin-2-yl]-benzamid; cis-8-Dimethylamino-8-phenyl-3-(5-phenyl-thiophen-2-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclopropyl-methyl)-8-dimethylamino-3 -[2-(methylsulfonyl-methyl)-phenyl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclopropyl-methyl)-8-methylamino-3 -[2-(methylsulfonyl-methyl)-phenyl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-(3-fluorphenyl)-3-[2-(methylsulfonyl-methyl)-phenyl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-(4-fluorphenyl)-3-[2-(methylsulfonyl-methyl)-phenyl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-[Methyl-(tetrahydro-furan-3-yl-methyl)-amino]-8-phenyl-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on (enantiomer 1);

cis-8-[Methyl-(tetrahydro-furan-3-yl-methyl)-amino]-8-phenyl-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on (enantiomer 2);

cis-8-Dimethylamino-8-(3 -fluophenyl)-3 -(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-1,3 - diazaspiro[4.5]decan-2-on;

cis-3-[6-(4-Acetyl-piperazin-1-yl)-4-methyl-pyridin-3-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-3-[2-(4-Acetyl-piperazin-1-yl)-4-methyl-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(4-methyl-6-pyridin-4-yl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-3-[2-(4-Acetyl-piperazin-1-yl)-4-(trifluormethyl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-(3-oxo-piperazin-1-yl)-4-(trifluormethyl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-isoquinolin-4-yl-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-3-isoquinolin-5-yl-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-(1H-pyrrolo[2,3-b]pyridin-4-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-(2-pyridin-4-yl-thiazol-4-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-[Methyl-(tetrahydro-furan-3-yl-methyl)-amino]-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on (enantiomer 1);

cis-8-[Methyl-(tetrahydro-furan-3-yl-methyl)-amino]-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on (enantiomer 2);

cis-3-[2-(Azetidin-1-yl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-3-[2-(3,3-Difluor-azetidin-1-yl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[6-morpholin-4-yl-5-(trifluormethyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Methylamino-3-[6-morpholin-4-yl-5-(trifluormethyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-[5-(trifluormethyloxy)-pyridin-2-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(5-methylsulfonyl-pyridin-2-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-nicotinonitril;
cis-3-[2-(4-Cyclopropyl-1H-[1,2,3]triazol-1-yl)-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;
cis-8-Dimethylamino-3-[4-methyl-2-(3-oxo-piperazin-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;
cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyridine-2-carboxylsyreamid;
cis-3-[4-(Azetidin-1-yl)-2-methyl-pyrimidin-5-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;
cis-2-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-benzamid;
cis-8-Dimethylamino-3-[2-(methylsulfonyl-methyl)-phenyl]-8-thiophen-2-yl-1,3-diazaspiro [4.5] decan-2-on;
cis-8-Dimethylamino-8-(3-fluorphenyl)-3-[2-methyl-5-(trifluormethyl)-2H-pyrazol-3-yl]-1,3-diazaspiro[4.5]decan-2-on;
cis-8-Dimethylamino-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-on;
cis-8-Dimethylamino-3-(6-methylsulfonyl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;
cis-8-Dimethylamino-8-phenyl-3-(1H-pyrrolo[2,3-b]pyridin-5-yl)-1,3-diazaspiro[4.5]decan-2-on;
cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-acetamid;
cis-3-[2-(4-Methyl-piperazin-1-yl)-pyrimidin-5-yl]-8-[methyl-(tetrahydro-furan-3-yl-methyl)-amino]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on (enantiomer 1);
cis-3-[2-(4-Methyl-piperazin-1-yl)-pyrimidin-5-yl]-8-[methyl-(tetrahydro-furan-3-yl-methyl)-amino]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on (enantiomer 2);
cis-8-Dimethylamino-3-(4,6-dimethyl-2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;
cis-8-Dimethylamino-3-(2-morpholin-4-yl-pyrimidin-5-yl)-8-thiophen-2-yl-1,3-diazaspiro [4.5] decan-2-on;
cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro [4.5]decan-3 -yl)-pyridin-3 -carboxylsyreamid;;

cis-8-Dimethylamino-3-[2-methyl-5-(trifluormethyl)-2H-pyrazol-3-yl]-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-[(2-hydroxy-ethyl)-methyl-amino]-pyrimidin-5-yl]-8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3 -[2-(2-oxo-1,3 -dihydro-indol-4-yl)-pyrimidin-5-yl] -8-thiophen-2-yl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[4-methyl-6-(3-oxo-piperazin-1-yl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(4-methyl-6-pyridin-2-yl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-3-(4-methylsulfonyl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-3-(Benzothiazol-7-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-(4-fluorphenyl)-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-2-[8-Dimethylamino-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-1-yl]-N,N-dimethyl-acetamid;

cis-8-Dimethylamino-3-[2-(2-methyl-1-oxo-2,3-dihydro-isoindol-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-2-[[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-2-methyl-pyrimidin-4-yl]amino]-acetamid;

cis-2-[3-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyridin-4-yl]-acetamid;

cis-8-Dimethylamino-3-[4-(methylsulfonyl-methyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-3-[6-(4-methyl-3-oxo-piperazin-1-yl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(2,4-dimethyl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-(1-oxo-2,3-dihydro-isoindol-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on; 2,2,2-trifluoreddikesyre;

cis-8-Dimethylamino-3-[6-[(2-hydroxy-ethyl)-methyl-amino]-5-(trifluormethyl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-[2-[4-(trifluormethyl)-1H-[1,2,3]triazol-1-yl]-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-(4-isopropyl-1H-[1,2,3]triazol-1-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[6-(1,1-dioxo-[1,4]thiazinan-4-yl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-2-morpholin-4-yl-nicotinonitril;

cis-8-Dimethylamino-3-(1-methylsulfonyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(1H-indol-4-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(2-hydroxy-benzooxazol-7-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-fluor-4-(trifluormethyloxy)-phenyl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-4-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-pyrimidin-2-yl]-benzamid; 2,2,2-trifluoreddikesyre;

cis-8-Dimethylamino-3-(1-methyl-1H-pyrrolo[2,3-b]pyridin-4-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-3-(1-Acetyl-1H-indol-4-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(1H-indol-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-5-methyl-nicotinonitril;

cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-5-fluor-nicotinonitril;

cis-8-Dimethylamino-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-1-(2-oxo-2-pyrrolidin-1-yl-ethyl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-5-methyl-pyridin-3-carboxylsyreamid;

cis-6-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-5-fluor-pyridin-3-carboxylsyreamid;

cis-8-Dimethylamino-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-8-m-tolyl-1,3-diazaspiro [4.5] decan-2-on;

cis-3 -(8-Dimethylamino-2-oxo-8-phenyl-1,3 -diazaspiro [4.5]decan-3 -yl)-isonicotinonitril;

cis-8-Dimethylamino-3-[3-fluor-5-(2-oxo-1,3-dihydro-indol-4-yl)-pyridin-2-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-8-[3-(trifluormethyloxy)-phenyl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-8-[3-(trifluormethyl)phenyl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-(3-methoxyphenyl)-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(5-Chloro-thiophen-2-yl)-8-dimethylamino-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-(3-fluorphenyl)-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-1,3-diazaspiro [4.5]decan-2-on;

cis-8-Dimethylamino-3-(2-methylamino-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(5-Chloro-thiophen-2-yl)-8-dimethylamino-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-N-methyl-cyclopropan-carboxylsyreamid;

cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl)-pyrimidin-2-yl]-N,2, 5-trimethyl-2H-pyrazol-3-carboxylsyreamid;

cis-3-[4,6-Bis(trifluormethyl)-pyridin-3-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-3 -[2-[(2-hydro xy-ethyl)-methyl-amino] -quinazolin-6-yl] -8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(2-morpholin-4-yl-quinazolin-6-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-[Methyl-(oxetan-3-yl-methyl)-amino]-8-phenyl-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-3-(1-Acetyl-1H-indol-3-yl)-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-phenyl-3-quinazolin-6-yl-1,3-diazaspiro [4.5] decan-2-on;

cis-5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3-yl)-2-(2-oxo-1,3-dihydro-indol-4-yl)-isonicotinonitril;

cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl)-pyrimidin-2-yl]-N-methyl-tetrahydro-pyran-4-carboxylsyreamid;

cis-N-[5-(8-Dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro [4.5] decan-3 -yl)-pyrimidin-2-yl]-N,2,2-trimethyl-propionamid;

cis-8-dimethylamino-3-[2-(1-methyl-2-oxo-1,3-dihydro-indol-4-yl)-pyrimidin-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(2-morpholin-4-yl-1H-benzoimidazol-5-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-8-Dimethylamino-8-(3-fluor-5-methyl-phenyl)-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[6-(2-oxo-1,3-dihydro-indol-4-yl)-pyridin-3-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-(3-hydroxyphenyl)-3-[4-methyl-6-(trifluormethyl)-pyridin-3-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-3-[6-(Azetidin-1-yl)-5-(trifluormethyl)-pyridin-3-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-3-[1-(Cyclopropyl-methyl)-8-dimethylamino-2-oxo-8-phenyl-1,3-diazaspiro[4.5]decan-3-yl]-isonicotinonitril;

cis-3-[3,5-Bis(trifluormethyl)-pyridin-2-yl]-8-dimethylamino-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(5-fluor-6-morpholin-4-yl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(3 -Chlorophenyl)-8-dimethylamino-3 -[4-methyl-6-(trifluormethyl)-pyridin-3 -yl] -1,3-diazaspiro[4.5]decan-2-on;

cis-8-dimethylamino-3-[5-(2-oxo-1,3-dihydro-indol-4-yl)-pyridin-2-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-dimethylamino-8-phenyl-3-[5-(trifluormethyl)-[1,3,4]thiadiazol-2-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(2-oxo-1,3-dihydro-indol-4-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-[2-[(2-hydroxy-ethyl)-methyl-amino]-1H-benzoimidazol-5-yl]-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-3-(5-methyl-6-morpholin-4-yl-pyridin-3-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-1-(Cyclopropyl-methyl)-8-dimethylamino-8-(3-fluorphenyl)-3-(5-methylsulfonyl-pyridin-2-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclopropyl-methyl)-8-(3-fluorphenyl)-8-methylamino-3-(5-methylsulfonyl-pyridin-2-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclobutyl-methyl)-8-(3-fluorphenyl)-8-methylamino-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclopropyl-methyl)-8-dimethylamino-8-(3-fluorphenyl)-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-1 -(Cyclopropyl-methyl)-8-(3 -fluorphenyl)-8-methylamino-3 -[2-(trifluormethyl)-pyrimidin-5-yl] - 1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-(3-fluorphenyl)-3-[2-(trifluormethyl)-pyrimidin-5-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclopropyl-methyl)-8-dimethylamino-8-(3-fluorphenyl)-3-[2-methyl-5-(trifluormethyl)-2H-pyrazol-3-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(Cyclopropyl-methyl)-8-(3-fluorphenyl)-8-methylamino-3-[2-methyl-5-(trifluormethyl)-2H-pyrazol-3-yl]-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Methylamino-3-(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro [4.5] decan-2-on;

cis-3-[5-(Azetidin-1-yl)-3-methyl-pyridin-2-yl]-8-dimethylamino-8-(3-fluorphenyl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-(3-fluorphenyl)-3-(5-methylsulfonyl-pyridin-2-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-3-(6-(azetidin-1-yl)-4-fluorpyridin-3-yl)-8-(dimethylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-3-(6-(azetidin-1-yl)pyridin-3-yl)-8-(dimethylamino)-8-(3-fluorphenyl)-1,3-diazaspiro[4.5]decan-2-on;

cis-3-(1-(cyclopropanecarbonyl)-3-(trifluormethyl)-1H-pyrazol-5-yl)-8-(dimethylamino)-8-(3-fluorphenyl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(dimethylamino)-8-(3-fluorphenyl)-3-(1-(2-hydroxyethyl)-3-(trifluormethyl)-1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-3-(1-(cyclopropylmethyl)-3-(trifluormethyl)-1H-pyrazol-5-yl)-8-(dimethylamino)-8-(3-fluorphenyl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(dimethylamino)-8-(3-fluorphenyl)-3-(1-(methylsulfonyl)-3-(trifluormethyl)-1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-1-(cyclopropylmethyl)-8-(dimethylamino)-8-(3-fluorphenyl)-3-(1-(methylsulfonyl)-3-(trifluormethyl)-1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-2-(5-(8-(dimethylamino)-8-(3 -fluorphenyl)-2-oxo-1,3 -diazaspiro [4.5]decan-3 -yl)-3 -(trifluormethyl)-1H-pyrazol-1-yl)-N,N-dimethylacetamid;

cis-2-(5-(1-(cyclopropylmethyl)-8-(dimethylamino)-8-(3-fluorphenyl)-2-oxo-1,3-diazaspiro[4.5]decan-3-yl)-3-(trifluormethyl)-1H-pyrazol-1-yl)-N,N-dimethylacetamid;

cis-8-(dimethylamino)-3-(1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(dimethylamino)-3-(3-fluor-1H-pyrrolo[2,3-b]pyridin-5-yl)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(dimethylamino)-8-phenyl-3-(1H-pyrrolo[2,3-c]pyridin-4-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(dimethylamino)-8-phenyl-3-(2-(pyridazin-4-yl)pyrimidin-5-yl)-1,3-diazaspiro [4.5] decan-2-on;

cis-8-(dimethylamino)-3 -(2-(2-oxo-1,2-dihydropyridin-4-yl)pyrimidin-5-yl)-8-phenyl-1,3-diazaspiro [4.5]decan-2-on;

cis-8-(dimethylamino)-8-(3-fluorphenyl)-3-(1-methyl-3-(thiophen-2-yl)-1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(dimethylamino)-8-(3-fluorphenyl)-3-(1-methyl-3-morpholino-1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(dimethylamino)-8-phenyl-1-(2,2,2-trifluorethyl)-3-(2-(trifluormethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(dimethylamino)-8-phenyl-3-(2-(trifluormethyl)pyrimidin-5-yl)-1-(3,3,3-trifluorpropyl)-1,3-diazaspiro[4.5]decan-2-on;

cis-3-(4-methyl-6-(trifluormethyl)pyridin-3-yl)-8-(methylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-3-(1-methyl-3-(trifluormethyl)-1H-pyrazol-5-yl)-8-(methylamino)-8-phenyl-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(dimethylamino)-8-(3-fluorphenyl)-3-(4-(methylsulfonyl)pyridin-3-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(dimethylamino)-3-(1-ethyl-3-(trifluormethyl)-1H-pyrazol-5-yl)-8-(3-fluorphenyl)-1,3-diazaspiro[4.5]decan-2-on;

cis-3-(1-cyclopropyl-3-(trifluormethyl)-1H-pyrazol-5-yl)-8-(dimethylamino)-8-(3-fluorphenyl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(dimethylamino)-8-(3-fluorphenyl)-3-(1-(oxetan-3-ylmethyl)-3-(trifluormethyl)-1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(dimethylamino)-8-(3-fluorphenyl)-3-(1-(2-(methylsulfonyl)ethyl)-3-(trifluormethyl)-1H-pyrazol-5-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-Dimethylamino-8-(3 -fluophenyl)-3 -(4-methyl-2-morpholin-4-yl-pyrimidin-5-yl)-1,3 - diazaspiro[4.5]decan-2-on;

cis-3-(2-cyclopropoxy-4-methylpyrimidin-5-yl)-8-(dimethylamino)-8-(3-fluorphenyl)-1,3-diazaspiro[4.5]decan-2-on;

cis-N-(5-(8-(dimethylamino)-8-(3-fluorphenyl)-2-oxo-1,3-diazaspiro[4.5]decan-3-yl)-4-methylpyrimidin-2-yl)-N-methylcyclopropancarboxamid;

cis-N-(5-(8-(dimethylamino)-8-(3-fluorphenyl)-2-oxo-1,3-diazaspiro[4.5]decan-3-yl)-4-methylpyrimidin-2-yl)-N-methylpivalamid;

cis-3-(4-(azetidin-1-yl)-2-(trifluormethyl)pyrimidin-5-yl)-8-(dimethylamino)-8-(3-fluorphenyl)-1,3-diazaspiro[4.5]decan-2-on;

cis-8-(dimethylamino)-8-(3-fluorphenyl)-3-(4-(oxetan-3-ylmethoxy)-2-(trifluormethyl)pyrimidin-5-yl)-1,3-diazaspiro[4.5]decan-2-on;

cis-3-(2-cyclopropyl-4-(2,2,2-trifluorethoxy)pyrimidin-5-yl)-8-(dimethylamino)-8-(3-fluorphenyl)-1,3-diazaspiro [4.5]decan-2-on;

cis-3-(2-cyclopropyl-4-((2-hydroxyethyl)(methyl)amino)pyrimidin-5-yl)-8-(dimethylamino)-8-(3-fluorophenyl)-1,3-diazaspiro[4.5]decan-2-on
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