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(54) Title: PYRAZOLO[1,5-a]PYRIDINE DERIVATIVES FOR TREATING TRPM3-MEDIATED DISORDERS

(57) Abstract: The invention relates to compounds that are useful for the prevention or treatment of TRPM3 mediated disorders, more in particular disorders selected from pain and inflammatory hypersensitivity. The invention also relates to a method for the prevention or treatment of said TRPM3 mediated disorders.

WO 2023/230542 A2

PYRAZOLO[1,5-a]PYRIDINE DERIVATIVES FOR TREATING TRPM3-MEDIATED DISORDERS

TECHNICAL FIELD

[0001] The invention relates to compounds that are useful for the prevention or treatment of TRPM3 mediated disorders, more in particular disorders selected from pain, inflammatory hypersensitivity and epilepsy. The invention also relates to a method for the prevention or treatment of said TRPM3 mediated disorders.

BACKGROUND

[0002] The TRP superfamily consists of proteins with six transmembrane domains (6TM) that assemble as homo- or heterotetramers to form cation-permeable ion channels. The name TRP originates from the Drosophila trp (transient receptor potential) mutant, which is characterized by a transient receptor potential in the fly photoreceptors in the response to sustained light. In the last 15 years, trp-related channels have been identified in yeast, worms, insects, fish and mammals, including 27 TRPs in humans. Based on sequence homology, TRP channels can be divided into seven subfamilies: TRPC, TRPV, TRPM, TRPA, TRPP, TRPML and TRPN.

[0003] Members of the TRP superfamily are expressed in probably all mammalian organs and cell types, and in recent years great progress has been made in the understanding of their physiological role. The tailored selectivity of certain TRP channels enables them to play key roles in the cellular uptake and/or transepithelial transport of Ca^{2+}, Mg^{2+} and trace metal ions. Moreover, the sensitivity of TRP channels to a broad array of chemical and physical stimuli, allows them to function as dedicated biological sensors involved in processes ranging from vision to taste, and tactile sensation. In particular, several members of the TRP superfamily exhibit a very high sensitivity to temperature. These so-called thermoTRPs are highly expressed in sensory neurons and/or skin keratinocytes, where they act as primary thermosensors for the detection of innocuous and noxious (painful) temperatures.

[0004] It is becoming increasingly clear that TRP channel dysfunction is directly involved in the etiology of various inherited and acquired diseases. Indeed, both loss-of-function and gain-of-function mutations in the TRP channel genes have been identified as the direct cause of inherited diseases, including brachyolmia, hypomagnesemia with secondary hypocalcemia, polycystic kidney disease, mucolipidosis type IV and familial focal segmental glomerulosclerosis. Moreover, TRP channel function/dysfunction has been directly linked to a wide range of pathological conditions, including chronic pain, hypertension, cancer and neurodegenerative disorders.

[0005] TRPM3 (Transient receptor potential melastatin 3) represents a promising

pharmacological target. TRPM3 is expressed in a large subset of small-diameter sensory neurons from dorsal root and trigeminal ganglia, and is involved in heat sensing. The neurosteroid pregnenolone sulfate is a potent known activator of TRPM3 (Wagner et al., 2008). The neurosteroid pregnenolone sulfate evoked pain in wild type mice but not in knock-out TRPM3 mice. It was also recently shown that CFA induced inflammation and inflammatory pain are eliminated in TRPM3 knock-out mice. Therefore, TRPM3 antagonists could be used as analgesic drugs to counteract pain, such as inflammatory pain (Vriens J. et al. Neuron, May 2011). A relationship between TRPM3 and epilepsy has also been established (see e.g. Eur J Hum Genet. 2019 Oct; 27(10): 1611–1618; Elife 2020 May 19;9:e57190. doi: 10.7554/eLife.57190. DOI: 10.7554/eLife.57190; Channels (Austin). 2021; 15(1): 386–397. TRPM3 is therefore also a potential target for the treatment of epilepsy.

[0006] A few TRPM3 antagonists are known, but none of them points towards the compounds of the current invention (Straub I et al. Mol Pharmacol, November 2013). For instance, Liquiritigenin, a postulated TRPM3 blocker has been described to decrease mechanical and cold hyperalgesia in a rat pain model (Chen L et al. Scientific reports, July 2014). There is still a great medical need for novel, alternative and/or better therapeutics for the prevention or treatment of TRPM3 mediated disorders, more in particular for pain such as inflammatory pain and epilepsy. Therapeutics with good potency on a certain type of pain, low level or no side-effects (such as no possibilities for addiction as with opiates, no toxicity) and/or good or better pharmacokinetic or -dynamic properties are highly needed.

[0007] The invention provides a class of novel compounds which are antagonists of TRPM3 and can be used as modulators of TRPM3 mediated disorders.

SUMMARY

[0008] The invention provides pyrazolo[1,5-a]pyridine derivatives and pharmaceutical compositions comprising such pyrazolo[1,5-a]pyridine derivatives. The invention also provides pyrazolo[1,5-a]pyridine derivatives for use as a medicament, more in particular for use in the prevention and/or treatment of TRPM3 mediated disorders, especially for use in the prevention and/or treatment of pain and/or inflammatory hypersensitivity and/or epilepsy; and/or for counteracting pain and/or inflammatory hypersensitivity and/or for counteracting epilepsy.

[0009] The invention also provides the use of pyrazolo[1,5-a]pyridine derivatives for the manufacture of pharmaceutical compositions or medicaments for the prevention and/or treatment of TRPM3 mediated disorders, especially for the prevention and/or treatment of pain and/or inflammatory hypersensitivity and/or epilepsy; and/or for counteracting pain and/or inflammatory hypersensitivity and/or epilepsy.

[0010] The invention also provides a method for the prevention or treatment of a TRPM3 mediated disorder by administering the pyrazolo[1,5-a]pyridine derivatives according to the

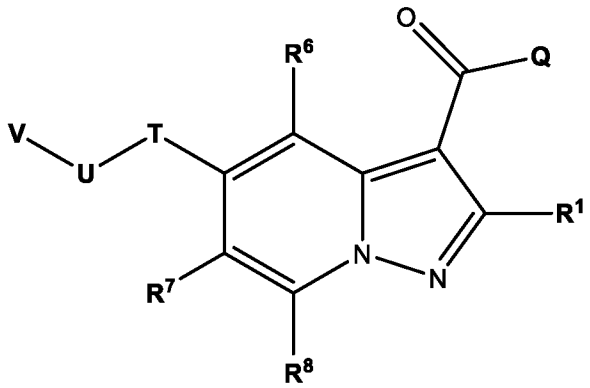
invention to a subject in need thereof. More in particular, the invention relates to such method for the prevention and/or treatment of pain and/or inflammatory hypersensitivity and/or epilepsy; and/or for counteracting pain and/or inflammatory hypersensitivity and/or epilepsy.

[0011] The invention further provides a method for the preparation of the pyrazolo[1,5-a]pyridine derivatives of the invention.

DETAILED DESCRIPTION OF THE INVENTION

[0012] The invention will be further described and in some instances with respect to particular embodiments, but the invention is not limited thereto.

[0013] The first aspect of the invention is the provision of a compound of formula (I), a stereo-isomeric form, a physiologically acceptable salt, solvate and/or polymorph thereof



(I)

optionally for use in the treatment of pain or epilepsy or methods of treating pain or epilepsy; wherein

$\mathbf{R^1}$ represents -F, -Cl, -Br, -I, -CN, -$\mathbf{R^W}$, -O$\mathbf{R^W}$, -OC(=O)$\mathbf{R^W}$, -N$\mathbf{R^W R^X}$, -N$\mathbf{R^W}$C(=O)$\mathbf{R^X}$, -S$\mathbf{R^W}$, -S(=O)$\mathbf{R^W}$, -S(=O)$_2\mathbf{R^W}$, -C(=O)$\mathbf{R^W}$, -C(=O)O$\mathbf{R^W}$, or -C(=O)N$\mathbf{R^W R^X}$;

Q represents -O$\mathbf{R^2}$ or -N$\mathbf{R^3 R^4}$;

$\mathbf{R^2}$ represents -$\mathbf{R^Y}$;

$\mathbf{R^3}$ represents -OH or -$\mathbf{R^Y}$;

$\mathbf{R^4}$ represents -$\mathbf{R^Y}$ or -S(=O)$_2\mathbf{R^Y}$;

or $\mathbf{R^3}$ and $\mathbf{R^4}$ together form a 4, 5, 6, 7 or 8 membered heterocycle containing 1 to 3 heteroatoms selected from N, O and S, saturated or unsaturated, unsubstituted or mono- or polysubstituted;

T represents -O- and **U** represents -C$\mathbf{R^5 R^{5'}}$-; or **T** represents -C$\mathbf{R^5 R^{5'}}$- and **U** represents -O-;

$\mathbf{R^5}$ and $\mathbf{R^{5'}}$ independently of one another represent -$\mathbf{R^Y}$;

$\mathbf{R^6}$, $\mathbf{R^7}$ and $\mathbf{R^8}$ independently of one another represent -F, -Cl, -Br, -I, -CN, -NO_2, -SF_5, -$\mathbf{R^W}$, -O$\mathbf{R^W}$, -OC(=O)$\mathbf{R^W}$, -N$\mathbf{R^W R^X}$, -N$\mathbf{R^W}$C(=O)$\mathbf{R^X}$, -S$\mathbf{R^W}$, -S(=O)$\mathbf{R^W}$, -S(=O)$_2\mathbf{R^W}$, -C(=O)$\mathbf{R^W}$, -

C(=O)O$\mathbf{R^W}$, or -C(=O)N$\mathbf{R^W R^X}$;

V represents 3-14-membered heterocycloalkyl, saturated or unsaturated; 3-14-membered cycloalkyl, saturated or unsaturated; 5-14-membered aryl; -C_1-C_6 alkyl, -C_1-C_6 heteroalkyl; or 5-14-membered heteroaryl; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, -CF_3, -CF_2H, C_1-C_6 alkyl, -CN, -NO, -NO_2, =O, =S, -SF_5, -$\mathbf{R^Y}$, -O$\mathbf{R^Y}$, -OC(=O)$\mathbf{R^Y}$, -N$\mathbf{R^Y R^Z}$, -N$\mathbf{R^Y}$C(=O)$\mathbf{R^Z}$, -S$\mathbf{R^Y}$, -S(=O)$\mathbf{R^Y}$, -$S(=O)_2\mathbf{R^Y}$, -C(=O)$\mathbf{R^Y}$, -C(=O)O$\mathbf{R^Y}$, or -C(=O)N$\mathbf{R^Y R^Z}$;

wherein

$\mathbf{R^W}$ and $\mathbf{R^X}$ independently of one another and in each case independently represent

-H;

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

-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted; or

3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$\mathbf{R^Y}$ and $\mathbf{R^Z}$ independently of one another and in each case independently represent

-H;

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

-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

6-14-membered aryl, unsubstituted, mono- or poly-substituted; wherein said 6-14-membered aryl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted; or

5-14-membered heteroaryl, unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-

heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

or R^Y and R^Z together form a 4, 5, 6, 7 or 8 membered heterocycle containing 1 to 3 heteroatoms selected from N, O and S, saturated or unsaturated, unsubstituted or mono- or polysubstituted;

and wherein "mono- or polysubstituted" in each case independently means substituted with one or more, e.g. 1, 2, 3, 4, or more substituents independently of one another selected from -F, -Cl, -Br, -I, -CN, -C_{1-6}-alkyl, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-O-CF_3, -C_{1-6}-alkylene-O-CF_2H, -C_{1-6}-alkylene-O-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C_{1-6}-alkylene-C(=O)-OH, -C(=O)-OC_{1-6}-alkyl, -C_{1-6}-alkylene-C(=O)-OC_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)-NH_2, -C_{1-6}-alkylene-C(=O)-NH_2, -C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-C(=O)-NH(C_{1-6}-alkyl), -C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-C(=O)-N(C_{1-6}-alkyl)$_2$, -C(=O)-NH(OH), -C_{1-6}-alkylene-C(=O)-NH(OH), -OH, -C_{1-6}-alkylene-OH, =O, -OCF_3, -OCF_2H, -$OCFH_2$, -OCF_2Cl, -$OCFCl_2$, -O-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -O-C_{1-6}-alkylene-O-C_{1-6}-alkyl, -O-C_{1-6}-alkylene-NH_2, -O-C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -O-C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -O-C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C(=O)-C_{1-6}-alkyl, -O-C(=O)-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C(=O)-O-C_{1-6}-alkyl, -O-C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-O-C(=O)-NH(C_{1-6}-alkyl), -O-C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-O-C(=O)-N(C_{1-6}-alkyl)$_2$, -O-S(=O)$_2$-NH_2, -C_{1-6}-alkylene-O-S(=O)$_2$-NH_2, -O-S(=O)$_2$-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-O-S(=O)$_2$-NH(C_{1-6}-alkyl), -O-S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-O-S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, -NH_2, -NO, -NO_2, -C_{1-6}-alkylene-NH_2, -NH(C_{1-6}-alkyl), -N(3-14-membered cycloalkyl)(C_{1-6}-alkyl), -N(C_{1-6}-alkyl)-C_{1-6}-alkylene-OH, -N(H)-C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-NH(C_{1-6}-alkyl), -N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -NH-C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH-C(=O)-C_{1-6}-alkyl, -NH-C(=O)-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH-C(=O)-O-C_{1-6}-alkyl, -NH-C(=O)-NH_2, -C_{1-6}-alkylene-NH-C(=O)-NH_2, -NH-C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-NH-C(=O)-NH(C_{1-6}-alkyl), -NH-C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH-C(=O)-N(C_{1-6}-alkyl)$_2$, -N(C_{1-6}-alkyl)-C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)-C(=O)-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)-C(=O)-NH_2, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-NH_2, -N(C_{1-6}-alkyl)-C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-NH(C_{1-6}-alkyl), -N(C_{1-6}-alkyl)-C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-N(C_{1-6}-alkyl)$_2$, -NH-S(=O)$_2$OH, -C_{1-6}-alkylene-NH-S(=O)$_2$OH, -NH-S(=O)$_2$-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH-S(=O)$_2$-C_{1-6}-alkyl, -NH-S(=O)$_2$-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH-S(=O)$_2$-O-C_{1-6}-alkyl, -NH-S(=O)$_2$-NH_2, -C_{1-6}-alkylene-NH-S(=O)$_2$-NH_2, -NH-S(=O)$_2$-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-NH-S(=O)$_2$-NH(C_{1-6}-alkyl), -NH-S(=O)$_2$N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH-S(=O)$_2$N(C_{1-6}-alkyl)$_2$, -N(C_{1-6}-alkyl)-S(=O)$_2$-OH, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-S(=O)$_2$-OH, -N(C_{1-6}-alkyl)-S(=O)$_2$-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-S(=O)$_2$-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)-S(=O)$_2$-

O-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-S(=O)$_2$-O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)-S(=O)$_2$-NH_2, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-S(=O)$_2$-NH_2, -N(C_{1-6}-alkyl)-S(=O)$_2$-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-S(=O)$_2$-NH(C_{1-6}-alkyl), -N(C_{1-6}-alkyl)-S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, -SH, =S, -SF_5, -SCF_3, -SCF_2H, -$SCFH_2$, -S-C_{1-6}-alkyl, -C_{1-6}-alkylene-S-C_{1-6}-alkyl, -S(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-S(=O)-C_{1-6}-alkyl, -S(=O)$_2$-C_{1-6}-alkyl, -C_{1-6}-alkylene-S(=O)$_2$-C_{1-6}-alkyl, -S(=O)$_2$-OH, -C_{1-6}-alkylene-S(=O)$_2$-OH, -S(=O)$_2$-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-S(=O)$_2$-O-C_{1-6}-alkyl, -S(=O)$_2$-NH_2, -C_{1-6}-alkylene-S(=O)$_2$-NH_2, -S(=O)$_2$-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-S(=O)$_2$-NH(C_{1-6}-alkyl), -S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, 3-14-membered cycloalkyl, -C_{1-6}-alkylene-(3-14-membered cycloalkyl), 3 to 14-membered heterocycloalkyl, -C_{1-6}-alkylene-(3 to 14-membered heterocycloalkyl), -phenyl, -C_{1-6}-alkylene-phenyl, 5 to 14-membered heteroaryl, -C_{1-6}-alkylene-(5 to 14-membered heteroaryl), -O-(3-14-membered cycloalkyl), -O-(3 to 14-membered heterocycloalkyl), -O-phenyl, -O-(5 to 14-membered heteroaryl), -C(=O)-(3-14-membered cycloalkyl), -C(=O)-(3 to 14-membered heterocycloalkyl), -C(=O)-phenyl, -C(=O)-(5 to 14-membered heteroaryl), -S(=O)$_2$-(3-14-membered cycloalkyl), -S(=O)$_2$-(3 to 14-membered heterocycloalkyl), -S(=O)$_2$-phenyl, -S(=O)$_2$-(5 to 14-membered heteroaryl).

[0014] In some embodiments of the pyrazolo[1,5-a]pyridine derivatives according to the invention

(a-1) **Q** represents -N**R**^{3}**R**^{4}; **R**^{1} represents **R**^{W} ; and **R**^{W} represents -C_1-C_6-alkyl - and/or

(a-2) **Q** represents -N**R**^{3}**R**^{4}; and at least one of **R**^{5} and **R**$^{5'}$ represents -H; and/or

(a-3) **Q** represents -N**R**^{3}**R**^{4} ; and **R**^{6} represents -H; and/or

(a-4) **Q** represents -N**R**^{3}**R**^{4} ; and **R**^{8} represents -H;

or

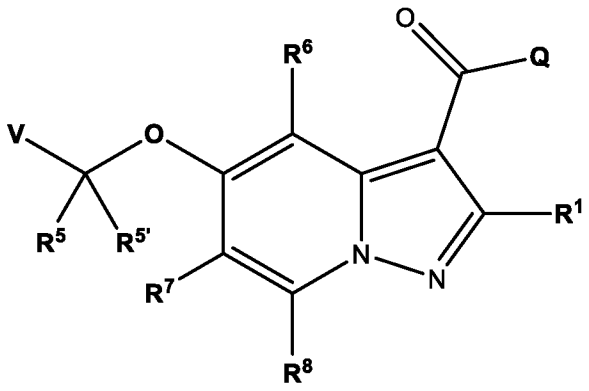
(b-1)

(b-1) Q represents -N**R**^{3}**R**^{4}; and **R**^{1} represents -CH_2F, -CHF_2, -CF_3, -CN, -methyl, -ethyl, -propyl or -cyclopropyl; and/or

(b-2) Q represents -N**R**^{3}**R**^{4}; and at least one of **R**^{5} and **R**$^{5'}$ does not represent -H; and/or

(b-3) Q represents -N**R**^{3}**R**^{4}; and **R**^{3} represents -H.

[0015] In an embodiment of the pyrazolo[1,5-a]pyridine derivatives according to the invention **T** represents -O- and **U** represents -C**R**^{5}**R**$^{5'}$-. According to this embodiment, the pyrazolo[1,5-a]pyridine derivative according to the invention is a compound of formula (II), a stereo-isomeric form, a physiologically acceptable salt, solvate and/or polymorph thereof



(II).

[0016] In another embodiment of the pyrazolo[1,5-a]pyridine derivatives according to Formula I, **T** represents -C**R**^{5}**R**$^{5'}$- and **U** represents -O-.

[0017] In an embodiment of the pyrazolo[1,5-a]pyridine derivatives according to Formulas I or II, **R**^{1} is methyl, ethyl, or other C_1-C_6 alkyl. In another preferred embodiment, **R**^{1} is methyl.

[0018] In an embodiment of the pyrazolo[1,5-a]pyridine derivatives according to the invention **Q** represents -N**R**^{3}**R**^{4}.

[0019] In an embodiment of the pyrazolo[1,5-a]pyridine derivatives according to the invention **Q** represents -O**R**^{2}.

[0020] In some embodiments of the pyrazolo[1,5-a]pyridine derivatives according to the invention **V** represents 3-14-membered cycloalkyl, saturated or unsaturated; 3-14-membered heterocycloalkyl, saturated or unsaturated 5-14-membered aryl; C_1-C_6 alkyl; or 5-14-membered heteroaryl; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, -CF_3, -CF_2H, C_1-C_6 alkyl, -CN, -NO, -NO_2, =O, =S, -SF_5, -**R**^{Y}, -O**R**^{Y}, -OC(=O)**R**^{Y}, -N**R**^{Y}**R**^{Z}, -N**R**^{Y}C(=O)**R**^{Z}, -S**R**^{Y}, -S(=O)**R**^{Y}, -S(=O)$_2$**R**^{Y}, -C(=O)**R**^{Y}, -C(=O)O**R**^{Y}, or -C(=O)N**R**^{Y}**R**^{Z}.

[0021] .

[0022] In some embodiments, the 5-14-membered heteroaryl within the definition of **V** is selected from benzimidazole, benzisoxazole, benzoazole, benzodioxole, benzofuran, benzothiadiazole, benzothiazole, benzothiophene, carbazole, cinnoline, dibenzofuran, furane, furazane, imidazole, imidazopyridine, pyrazolo[1,5-a]pyridine, indole, indolizine, isobenzofuran, isoindole, isoquinoline, isothiazole, isoxazole, naphthyridine, oxadiazole, oxazole, oxindole, phthalazine, purine, pyrazine, pyrazole, pyridazine, pyridine, pyrimidine, pyrrole, quinazoline, quinoline, quinoxaline, tetrazole, thiadiazole, thiazole, thiophene, triazine, triazole, and [1,2,4]triazolo[4,3-a]pyrimidine; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, -CF_3, -CF_2H, C_1-C_6 alkyl, -CN, -NO, -NO_2, =O, =S, -SF_5, -**R**^{Y}, -O**R**^{Y}, -OC(=O)**R**^{Y}, -N**R**^{Y}**R**^{Z}, -N**R**^{Y}C(=O)**R**^{Z}, -S**R**^{Y}, -S(=O)**R**^{Y}, -S(=O)$_2$**R**^{Y}, -C(=O)**R**^{Y}, -C(=O)O**R**^{Y}, or -C(=O)N**R**^{Y}**R**^{Z}.

[0023] Preferably, the 5-14-membered heteroaryl within the definition of **V** is selected from the

group consisting of furane, thiophene, imidazole, pyrazole, oxazole, isoxazole, thiazole, triazole, pyridine, isoquinoline, benzothiazole, pyridazine, pyrimidine, imidazopyridine; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

[0024] Preferably, the 5-14-membered heteroaryl within the definition of **V** is selected from the group consisting of furan-2-yl, furan-3-yl, thiophen-2-yl, thiophen-3-yl, pyrazol-3-yl, pyrazol-4-yl, pyrazol-5-yl, oxazol-5-yl, isoxazol-4-yl, thiazol-2-yl, thiazol-4-yl, thiazol-5-yl, 1,2,4-triazol-3-yl, 1,2,3-triazol-4-yl, pyridin-2-yl, pyridin-3-yl, pyridin-4-yl, isoquinolin-1-yl, isoquinolin-5-yl, benzo[d]thiazol-2-yl, pyridazin-3-yl, pyrimidin-5-yl, and imidazo[1,2-a]pyridin-6-yl; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, , CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

[0025] In some embodiments, the 5-14-membered heteroaryl within the definition of **V** is selected form the group consisting of pyrazol-3-yl, pyrazol-4-yl, thiazol-4-yl, thiazol-5-yl, pyridin-2-yl, pyridin-3-yl, and pyridine-4-yl; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, , CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

[0026] In an embodiment, the 3-14-membered cycloalkyl, saturated or unsaturated within the definition of **V** is cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, cyclooctyl, cyclononyl, or cyclodecyl including unfused or unbridged, fused, or bridged cycloalkyls; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, , CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

[0027] In an embodiment, the 5-14-membered aryl within the definition of **V** is phenyl or another 5-14-membered aryl, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

[0028] In further embodiments of the pyrazolo[1,5-a]pyridine derivatives according to the invention **V** represents 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$,

-OC(=O)$\mathbf{R^Y}$, -N$\mathbf{R^Y R^Z}$, -N$\mathbf{R^Y}$C(=O)$\mathbf{R^Z}$, -S$\mathbf{R^Y}$, -S(=O)$\mathbf{R^Y}$, -S(=O)$_2\mathbf{R^Y}$, -C(=O)$\mathbf{R^Y}$, -C(=O)O$\mathbf{R^Y}$, or -C(=O)N$\mathbf{R^Y R^Z}$.

[0029] In some embodiments, the 3-14-membered heterocycloalkyl within the definition of **V** is selected from azepane, 1,4-oxazepane, azetane, azetidine, aziridine, azocane, diazepane, dioxane, dioxolane, dithiane, dithiolane, imidazolidine, isothiazolidine, isoxalidine, morpholine, oxazolidine, oxane, oxepane, oxetane, oxirane, piperazine, piperidine, pyrazolidine, pyrrolidine, quinuclidine, tetrahydrofurane, tetrahydropyrane, tetrahydrothiopyrane, thiazolidine, thietane, thiirane, thiolane, thiomorpholine, indoline, dihydrobenzofuran, dihydrobenzo-thiophene, 1,1-dioxothia-cyclohexane, 2-azaspiro[3.3]heptane, 2-oxaspiro[3.3]heptane, 7-azaspiro[3.5]nonane, 8-azabicyclo[3.2.1]octane, 9-azabicyclo[3.3.1]nonane, hexahydro-1H-pyrrolizine, hexa-hydro-cyclopenta[c]pyrrole, octahydro-cyclopenta[c]pyrrole, and octahydropyrrolo[1,2-a]pyrazine; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, -CF_2H, C_1-C_6 alkyl, -CN, -NO, -NO_2, =O, =S, -SF_5, -$\mathbf{R^Y}$, -O$\mathbf{R^Y}$, -OC(=O)$\mathbf{R^Y}$, -N$\mathbf{R^Y R^Z}$, -N$\mathbf{R^Y}$C(=O)$\mathbf{R^Z}$, -S$\mathbf{R^Y}$, -S(=O)$\mathbf{R^Y}$, -S(=O)$_2\mathbf{R^Y}$, -C(=O)$\mathbf{R^Y}$, -C(=O)O$\mathbf{R^Y}$, or -C(=O)N$\mathbf{R^Y R^Z}$.

[0030] In some embodiments, the 3-14-membered heterocycloalkyl within the definition of **V** is oxane, oxan-4-yl, oxetane, or oxetan-3-yl; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, -CF_2H, C_1-C_6 alkyl, -CN, -NO, -NO_2, =O, =S, -SF_5, -$\mathbf{R^Y}$, -O$\mathbf{R^Y}$, -OC(=O)$\mathbf{R^Y}$, -N$\mathbf{R^Y R^Z}$, -N$\mathbf{R^Y}$C(=O)$\mathbf{R^Z}$, -S$\mathbf{R^Y}$, -S(=O)$\mathbf{R^Y}$, -S(=O)$_2\mathbf{R^Y}$, -C(=O)$\mathbf{R^Y}$, -C(=O)O$\mathbf{R^Y}$, or -C(=O)N$\mathbf{R^Y R^Z}$.

[0031] In another preferred embodiment of the pyrazolo[1,5-a]pyridine derivatives according to the invention **V** represents C_1-C_6 alkyl or C_1-C_6 heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, -CF_2H, C_1-C_6 alkyl, -CN, -NO, -NO_2, =O, =S, -SF_5, -$\mathbf{R^Y}$, -O$\mathbf{R^Y}$, -OC(=O)$\mathbf{R^Y}$, -N$\mathbf{R^Y R^Z}$, -N$\mathbf{R^Y}$C(=O)$\mathbf{R^Z}$, -S$\mathbf{R^Y}$, -S(=O)$\mathbf{R^Y}$, -S(=O)$_2\mathbf{R^Y}$, -C(=O)$\mathbf{R^Y}$, -C(=O)O$\mathbf{R^Y}$, or -C(=O)N$\mathbf{R^Y R^Z}$.

[0032] In some embodiments of the pyrazolo[1,5-a]pyridine derivative according to the invention **V** is unsubstituted, mono- or polysubstituted with substituents independently of one another selected from

-F, -Cl, -Br, -I, -CN, -C(=O)OH, -NH_2, -NO_2, -OH, =O, -SF_5;

-$C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-C(=O)O-$C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-NH$C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-N($C_{1\text{-}6}$-alkyl)$_2$, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-O-$C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-S(=O)$_2$-$C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted; or

3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted.

[0033] In some embodiments, **V** is unsubstituted, mono- or polysubstituted with substituents independently of one another selected from

-OH, -F, -Cl, -Br, -I, -SH, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -CN, -NO_2, -C(=O)OH, -NH_2, or -$N(CH_3)_2$;

-C_{1-6}-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another , selected from the group consisting of -F, -Cl, -Br, -I, -C_{1-6}-alkyl, C_{2-6}-alkenyl, -C_{2-6}-alkynyl, -OH, =O, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, C(=O)CHF_2, and -C(=O)NH_2;

-C_{1-6}-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another , selected from the group consisting of -F, -Cl, -Br, -I, -C_{1-6}-alkyl, C_{2-6}-alkenyl, -C_{2-6}-alkynyl, -OH, =O, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, C(=O)CHF_2, and -C(=O)NH_2;

-OC_{1-6}-alkyl, unsubstituted, mono- or polysubstituted with substituents independently of one another, selected from the group consisting of -F, -Cl, -Br, -I, -C_{1-6}-alkyl, C_{2-6}-alkenyl, -C_{2-6}-alkynyl, -OH, =O, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, C(=O)CHF_2, and -C(=O)NH_2;

-O(C=O)C_{1-6}-alkyl, unsubstituted, mono- or polysubstituted with substituents independently of one another , selected from the group consisting of -F, -Cl, -Br, -I, -C_{1-6}-alkyl, C_{2-6}-alkenyl, -C_{2-6}-alkynyl, -OH, =O, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, C(=O)CHF_2, and -C(=O)NH_2;

-C(=O)OC_{1-6}-alkyl, unsubstituted, mono- or polysubstituted with substituents independently of one another , selected from the group consisting of -F, -Cl, -Br, -I, -C_{1-6}-alkyl, C_{2-6}-alkenyl, -C_{2-6}-alkynyl, -OH, =O, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, C(=O)CHF_2, and -C(=O)NH_2;

3-14-membered cycloalkyl selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl and cycloheptyl; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another , selected from the group consisting of -F, -Cl, -Br, -I, -C_{1-6}-alkyl, C_{2-6}-alkenyl, -C_{2-6}-alkynyl, -OH, =O, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, C(=O)CHF_2, and -C(=O)NH_2;

3-14-membered heterocycloalkyl selected from the group consisting of azepane, 1,4-oxazepane, azetane, azetidine, aziridine, azocane, diazepane, dioxane, dioxolane, dithiane, dithiolane, imidazolidine, isothiazolidine, isoxalidine, morpholine, oxazolidine, oxepane, oxetane, oxirane, piperazine, piperidine, pyrazolidine, pyrrolidine, quinuclidine, tetrahydrofuran, tetrahydropyran, tetrahydrothiopyran, thiazolidine, thietane, thiirane, thiolane, thiomorpholine, indoline, dihydrobenzofuran, dihydrobenzothiophene, 1,1-dioxothiacyclohexane, 2-azaspiro[3.3]heptane, 2-oxaspiro[3.3]heptane, 7-azaspiro[3.5]nonane, 8-azabicyclo[3.2.1]octane, 9-azabicyclo[3.3.1]nonane, hexahydro-1H-pyrrolizine, hexahydrocyclopenta[c]pyrrole, octahydrocyclopenta[c]pyrrole, and octahydropyrrolo[1,2-a]pyrazine, in each case unsubstituted, mono- or polysubstituted with substituents independently of one another , selected from the group consisting of -F, -Cl, -Br, -I, -C_{1-6}-alkyl, C_{2-6}-alkenyl, -C_{2-6}-alkynyl, -OH, =O, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, C(=O)CHF_2, and -C(=O)NH_2.

[0034] In some embodiments, **V** is unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -CN, -OH, =O, -C_{1-6}-alkyl, methyl, ethyl, -CHF_2, -CF_3, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-NHC(=O)-O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)$_2$, -OC_{1-6}-alkyl, -OCF_3, -O-C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -S(=O)$_2$-C_{1-6}-alkyl, -azetidine, -C_{1-6}-alkylene-O-tetrahydropyran, or -piperazine substituted with -C_{1-6}-alkyl.

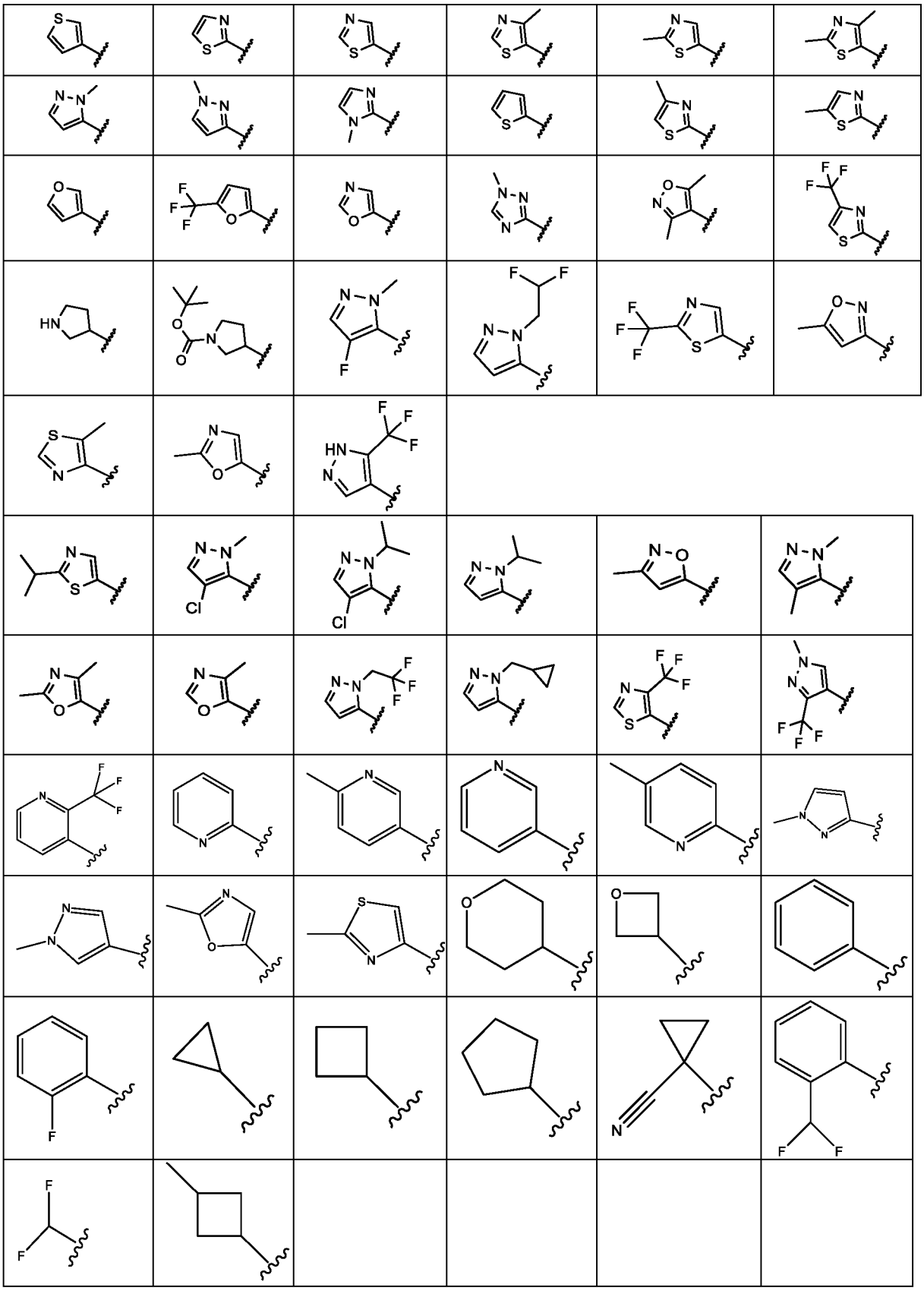
[0035] In some embodiments of the pyrazolo[1,5-a]pyridine derivative according to the invention **V** is

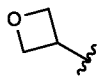
(i) unsubstituted;
(ii) monosubstituted;
(iii) disubstituted;
(iv) trisubstituted; or
(v) tetrasubstituted.

[0036] In some embodiments of the pyrazolo[1,5-a]pyridine derivatives according to the invention **V** is

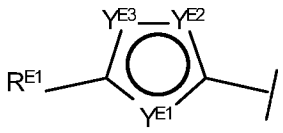
(i) unsubstituted;
(ii) monosubstituted; or
(iii) disubstituted.

[0037] In some embodiments, **V** represents a 3-14-membered heterocycloalkyl (preferably 3-5-membered heterocycloalkyl), saturated or unsaturated; 5-14-membered heteroaryl (preferably 5-6-membered heteroaryl); 3-14-membered cycloalkyl, saturated or unsaturated; 5-14-membered aryl; or C_1-C_6 alkyl; in each case unsubstituted, mono- or polysubstituted; preferably a residue selected from the group consisting of:



[0038] In an embodiment, **V** represents -oxetanyl, unsubstituted, mono- or polysubstituted; preferably .

[0039] In some embodiments, **V** represents a residue according to general formula (E)



(E)

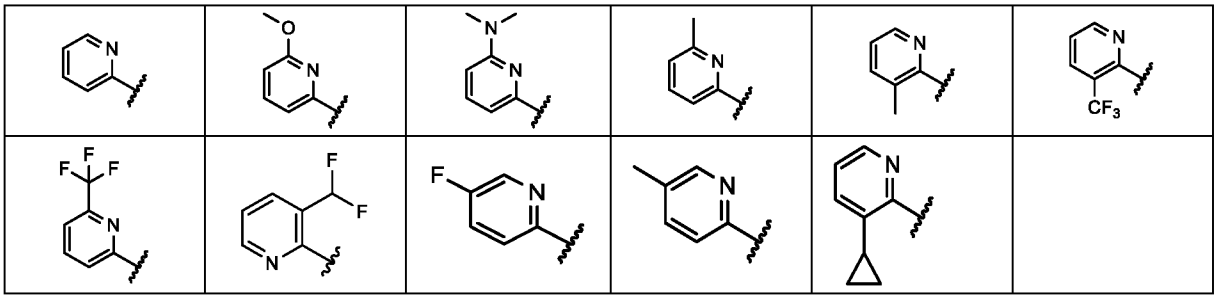
wherein

$\mathbf{Y^{E1}}$ represents -N=, -N$\mathbf{R^{E2}}$-, S, O, or -C$\mathbf{R^{E3}}$=; $\mathbf{Y^{E2}}$ represents -N=, -N$\mathbf{R^{E3}}$-, S, O, or -C$\mathbf{R^{E4}}$=; and $\mathbf{Y^{E3}}$ represent -N=, -N$\mathbf{R^{E4}}$-, S, O, or -C$\mathbf{R^{E5}}$=; with the proviso that at least one of $\mathbf{Y^{E1}}$, $\mathbf{Y^{E2}}$, and $\mathbf{Y^{E3}}$ is not -C$\mathbf{R^{E3}}$=, -C$\mathbf{R^{E4}}$=, and -C$\mathbf{R^{E5}}$=, respectively. In another preferred embodiment, V represents a residue according to general formula (E)

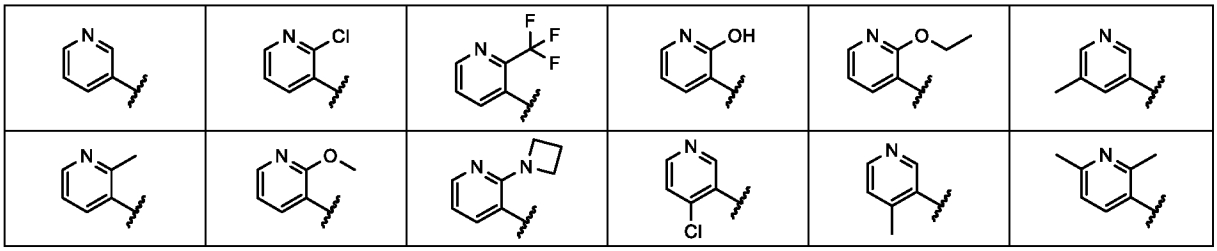
wherein YE1 represents -N=, -NRE2-, S, or -CRE3=; YE2 represents -N=, -NRE3-, S, or -CRE4=; and YE3 represent -N=, -NRE4-, S, or -CRE5=; with the proviso that at least one of YE1, YE2, and YE3 is not -CRE3=, -CRE4=, and -CRE5=, respectively.

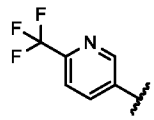
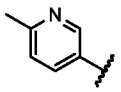
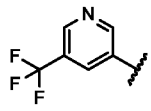
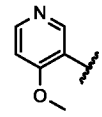
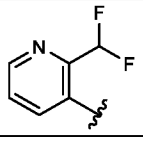
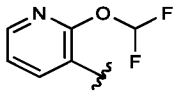
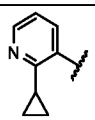
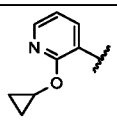
$\mathbf{R^{E1}}$, $\mathbf{R^{E2}}$, $\mathbf{R^{E3}}$, and $\mathbf{R^{E4}}$ independently of one another represent -H, -CH_3,-CH_2-cyclopropyl, -CH_2CF_3, -CH_2CHF_2 or -CF_3; more in particular $\mathbf{R^{E1}}$, $\mathbf{R^{E2}}$, $\mathbf{R^{E3}}$, and $\mathbf{R^{E4}}$ independently of one another represent -H, -CH_3, or -CF_3; preferably with the proviso that only one of $\mathbf{R^{E1}}$, $\mathbf{R^{E2}}$, $\mathbf{R^{E3}}$, and $\mathbf{R^{E4}}$ represents a residue that is not -H.

[0040] In some embodiments, **V** represents 2-pyridine, unsubstituted, mono- or polysubstituted. In some embodiments, **V** represents a residue selected from the group consisting of:

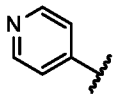


[0041] In some embodiments, **V** represents 3-pyridine, unsubstituted, mono- or polysubstituted. In preferred embodiments, **V** represents a residue selected from the group consisting of:

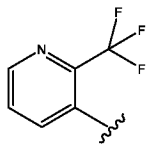
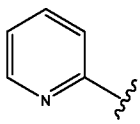
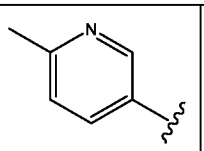
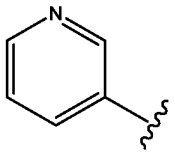
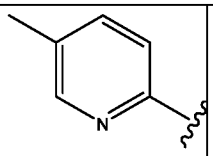
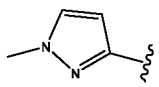
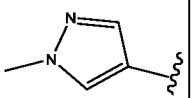
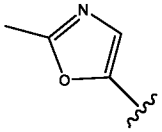
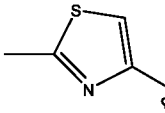
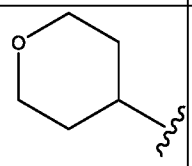
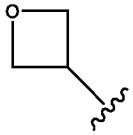
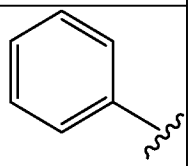
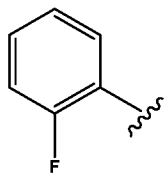
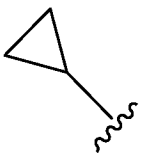
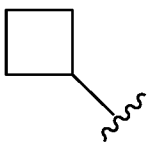
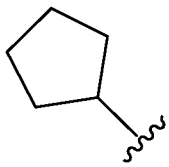
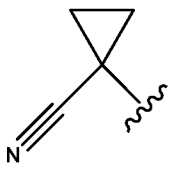
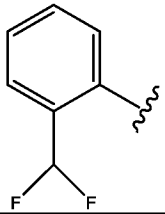
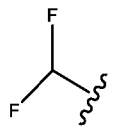
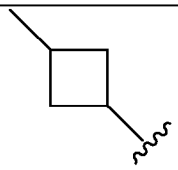
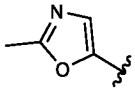
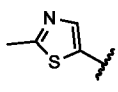
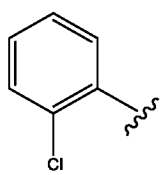
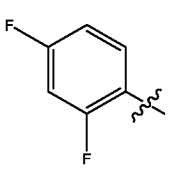
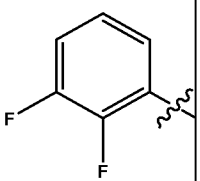
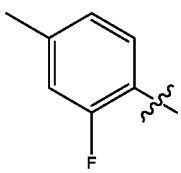
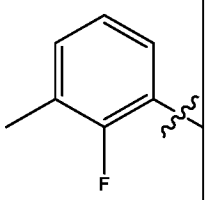
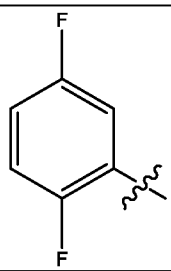
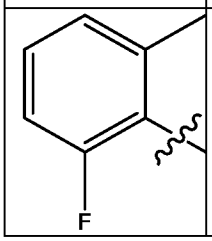


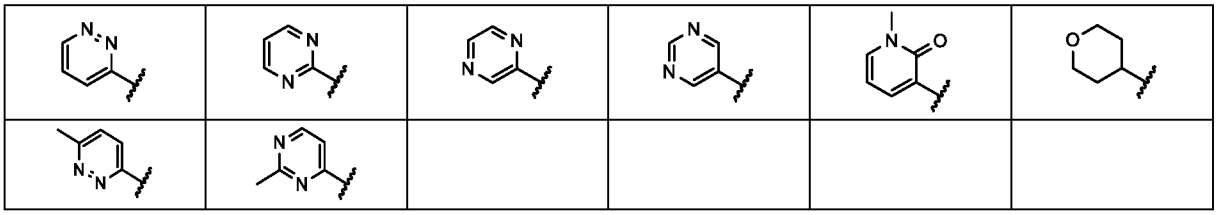
[0042] In some embodiments, **V** represents 4-pyridine, unsubstituted, mono- or polysubstituted. In preferred embodiments, **V** represents a residue selected from the group consisting of:

.

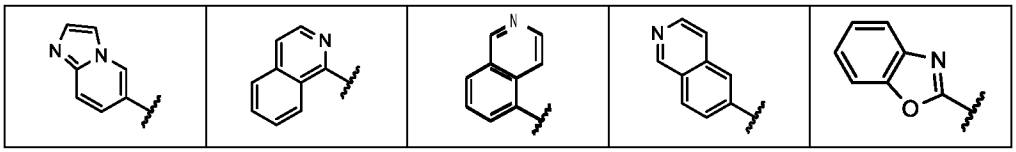
[0043] In some embodiments, optionally where **U** – CH_2, **V** represents a residue selected from the group consisting of:

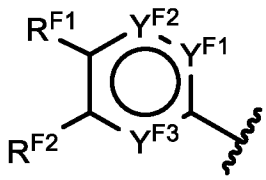
[0044] In alternative embodiments, **V** represents a residue selected from the group consisting of:



[0045] In some embodiments, **V** represents a bicyclic heteroaryl, unsubstituted, mono- or polysubstituted, preferably selected from the group consisting of:



[0046] In some embodiments, **V** represents a residue according to general formula (F')



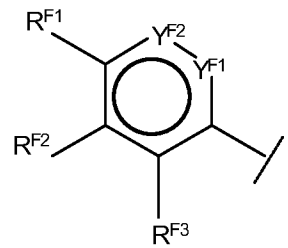
(F')

wherein

$\mathbf{Y^{F1}}$ represents -N= or -C$\mathbf{R^{F4}}$=; and $\mathbf{Y^{F2}}$ represents -N= or -C$\mathbf{R^{F5}}$=; and Y^{F3} represents -N= or -C$\mathbf{R^{F3}}$=; with the proviso that at least one of $\mathbf{Y^{F1}}$ and $\mathbf{Y^{F2}}$ is not -C$\mathbf{R^{F4}}$= and -C$\mathbf{R^{F5}}$=, respectively;

$\mathbf{R^{F1}}$, $\mathbf{R^{F2}}$, $\mathbf{R^{F3}}$, $\mathbf{R^{F4}}$, and $\mathbf{R^{F5}}$ independently of one another represent -H, -CH_3, -CF_3,-OH, -OCH_3, -OCH_2CH_3, -Cl, or -azetidinyl; preferably with the proviso that only one of $\mathbf{R^{F1}}$, $\mathbf{R^{F2}}$, $\mathbf{R^{F3}}$, $\mathbf{R^{F4}}$, and $\mathbf{R^{F5}}$ represents a residue that is not -H.

In another embodiment, **V** represents a residue according to general formula (F)



(F)

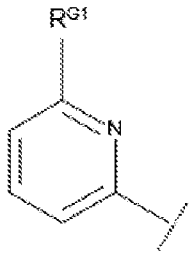
wherein

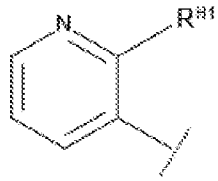
$\mathbf{Y^{F1}}$ represents -N= or -C$\mathbf{R^{F4}}$=; and $\mathbf{Y^{F2}}$ represents -N= or -C$\mathbf{R^{F5}}$=; with the proviso that at least one of $\mathbf{Y^{F1}}$ and $\mathbf{Y^{F2}}$ is not -C$\mathbf{R^{F4}}$= and -C$\mathbf{R^{F5}}$=, respectively;

$\mathbf{R^{F1}}$, $\mathbf{R^{F2}}$, $\mathbf{R^{F3}}$, $\mathbf{R^{F4}}$, and $\mathbf{R^{F5}}$ independently of one another represent -H, -CH_3, -CF_3,-OH, -OCH_3, -OCH_2CH_3, -Cl, or -azetidinyl; preferably with the proviso that only one of $\mathbf{R^{F1}}$, $\mathbf{R^{F2}}$, $\mathbf{R^{F3}}$, $\mathbf{R^{F4}}$,

and $\mathbf{R^{F5}}$ represents a residue that is not -H.

[0047] In some embodiments, **V** represents a residue according to general formula (G) or (H)

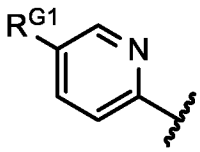


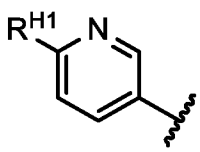


(G) (H)

wherein $\mathbf{R^{G1}}$ and $\mathbf{R^{H1}}$ are selected from the group consisting of -H, $-CH_3$, $-CF_3$, -OH, $-OCH_3$, $-OCH_2CH_3$, -Cl, azetidinyl, -cyclopropyl, -O-cyclopropyl, and $-CHF_2$; or wherein $\mathbf{R^{G1}}$ and $\mathbf{R^{H1}}$ are selected from the group consisting of -H, $-CH_3$, $-CF_3$, -OH, $-OCH_3$, $-OCH_2CH_3$, -Cl, and azetidinyl.

In other embodiments, **V** represents a residue according to general formula (G') or (H')





(G') (H')

wherein $\mathbf{R^{G1}}$ and $\mathbf{R^{H1}}$ are selected from the group consisting of -H, $-CH_3$, $-CF_3$, -OH, $-OCH_3$, $-OCH_2CH_3$, -Cl, azetidinyl, -cyclopropyl, -O-cyclopropyl, and $-CHF_2$; or wherein $\mathbf{R^{G1}}$ and $\mathbf{R^{H1}}$ are selected from the group consisting of -H, $-CH_3$, $-CF_3$, -OH, $-OCH_3$, $-OCH_2CH_3$, -Cl, and azetidinyl;

[0048] In an embodiment of the pyrazolo[1,5-a]pyridine derivatives according to the invention $\mathbf{R^1}$ represents

-H, -F, -Cl, -Br, -I, -CN;

$-C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; $-O-C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$-C(=O)C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$-C(=O)OC_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$-C(=O)NHC_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$-C(=O)N(C_{1\text{-}6}\text{-alkyl})_2$, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$-S(=O)C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$-S(=O)_2-C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$-C_1-C_6$-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted.

[0049] In some embodiments, **R^1** represents -H, -F, -Cl, -Br, -I, -C_{1-6}-alkyl, -O-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3, -C(=O)C_{1-6}-alkyl, -C(=O)OC_{1-6}-alkyl, -C(=O)NH_2, -C(=O)NHC_{1-6}-alkyl, -C(=O)N(C_{1-6}-alkyl)$_2$, -S(=O)-C_{1-6}-alkyl, -S(=O)$_2$-C_{1-6}-alkyl, -O-C_{1-6}-alkyl, -cyclopropyl unsubstituted, cyclobutyl unsubstituted, cyclopentyl unsubstituted or cyclohexyl unsubstituted.

[0050] In some embodiments, **R^1** represents -H, -C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -CH_2F, -CHF_2, -CF_3, -cyclopentyl, unsubstituted, or -cyclopropyl. Preferably, **R^1** represents -H, -C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -CH_2F, -CHF_2, -CF_3, -cyclopentyl, or unsubstituted. In some embodiments, **R^1** represents -CH_3.

[0051] In some embodiments, **R^1** represents -CH_2F, -CHF_2, -CH_3, or -cyclopropyl. Preferably, **R^1** represents -CH_2F, -CHF_2, or -CH_3. In some embodiments, **R^1** represents -C(=O)NH_2, or -CHF_2.

[0052] In some embodiments, **R^1** represents -H, -C_{1-3}-alkyl, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -C_{1-3}-alkylene-CF_3, -C_{1-3}-alkylene-CF_2H, -C_{1-3}-alkylene-CFH_2, or -cyclopropyl; preferably, **R^1** represents -H, -C_{1-3}-alkyl, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -C_{1-3}-alkylene-CF_3, -C_{1-3}-alkylene-CF_2H, or -C_{1-3}-alkylene-CFH_2; for example -CH_3.

[0053] In some embodiments of the pyrazolo[1,5-a]pyridine derivative according to the invention **R^2** represents

-H;

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

-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted; or

3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted.

[0054] In some embodiments, **R^2** represents -H, -C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-

CF_3, or -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3.

[0055] In some embodiments, **R^2** represents -H or -C_{1-6}-alkyl.

[0056] In an embodiment of the pyrazolo[1,5-a]pyridine derivative according to the invention **R^3** represents

-H;

-OH;

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

-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted.

[0057] In some embodiments, **R^3** represents -H, -OH, -C_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, or -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3.

[0058] In some embodiments, **R^3** represents -H, -OH, or -C_{1-6}-alkyl, saturated, unsubstituted or monosubstituted with -OH. Preferably, **R^3** represents -H.

[0059] In some embodiments, **R^3** represents -H and **R^4** represents a residue other than -H.

[0060] In an embodiment of the pyrazolo[1,5-a]pyridine derivatives according to the invention **R^4** represents

-H;

-S(=O)C_{1-6}-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-S(=O)$_2$-C_{1-6}-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

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

-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

6-14-membered aryl, unsubstituted, mono- or polysubstituted; wherein said 6-14-membered aryl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted; or

5-14-membered heteroaryl, unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or

polysubstituted.

[0061] In some embodiments, **R^4** represents

$-S(=O)_2C_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -Cl, $-C_{1-6}$-alkyl, $-C_{1-6}$-alkylene-CF_3, -OH, =O, $-OC_{1-6}$-alkyl, $-C_{1-6}$-alkylene-OH, $-C_{1-6}$-alkylene-O-C_{1-6}-alkyl, $-NH_2$, $-NHC_{1-6}$-alkyl, $-N(C_{1-6}$-alkyl$)_2$, $-NHC(=O)O-C_{1-6}$-alkyl, $-N(C_{1-6}$-alkyl$)C(=O)O-C_{1-6}$-alkyl, $-C_{1-6}$-alkylene-$NHC(=O)O-C_{1-6}$-alkyl, $-C_{1-6}$-alkylene-NH_2, $-C_{1-6}$-alkylene-NH-C_{1-6}-alkyl, $-C_{1-6}$-alkylene-$N(C_{1-6}$-alkyl$)_2$, $-C_{1-6}$-alkylene-NH-C_{1-6}-alkylene-CF_3, $-C(=O)-C_{1-6}$-alkyl, -C(=O)OH, $-C(=O)O-C_{1-6}$-alkyl, $-C(=O)O-C_{1-6}$-alkylene-CF_3, $-C(=O)NH_2$, $-C(=O)NH(C_{1-6}$-alkyl), $-C(=O)N(C_{1-6}$-alkyl$)_2$, $-S(=O)_2C_{1-6}$-alkyl, -phenyl, $-C_{1-6}$-alkylene-phenyl, 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted; and 5-14-membered heteroaryl, unsubstituted;

$-S(=O)_2$(3-14-membered cycloalkyl), wherein said 3-14-membered cycloalkyl is selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, and cycloheptyl, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -Cl, $-C_{1-6}$-alkyl, $-C_{1-6}$-alkylene-CF_3, -OH, =O, $-OC_{1-6}$-alkyl, $-C_{1-6}$-alkylene-OH, $-C_{1-6}$-alkylene-O-C_{1-6}-alkyl, $-NH_2$, $-NHC_{1-6}$-alkyl, $-N(C_{1-6}$-alkyl$)_2$, $-NHC(=O)O-C_{1-6}$-alkyl, $-N(C_{1-6}$-alkyl$)C(=O)O-C_{1-6}$-alkyl, $-C_{1-6}$-alkylene-$NHC(=O)O-C_{1-6}$-alkyl, $-C_{1-6}$-alkylene-NH_2, $-C_{1-6}$-alkylene-NH-C_{1-6}-alkyl, $-C_{1-6}$-alkylene-$N(C_{1-6}$-alkyl$)_2$, $-C_{1-6}$-alkylene-NH-C_{1-6}-alkylene-CF_3, $-C(=O)-C_{1-6}$-alkyl, -C(=O)OH, $-C(=O)O-C_{1-6}$-alkyl, $-C(=O)O-C_{1-6}$-alkylene-CF_3, $-C(=O)NH_2$, $-C(=O)NH(C_{1-6}$-alkyl), $-C(=O)N(C_{1-6}$-alkyl$)_2$, $-S(=O)_2C_{1-6}$-alkyl, -phenyl, $-C_{1-6}$-alkylene-phenyl, 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted; and 5-14-membered heteroaryl, unsubstituted;

$-C_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -Cl, $-C_{1-6}$-alkyl, $-C_{1-6}$-alkylene-CF_3, -OH, =O, $-OC_{1-6}$-alkyl, $-C_{1-6}$-alkylene-OH, $-C_{1-6}$-alkylene-O-C_{1-6}-alkyl, $-NH_2$, $-NHC_{1-6}$-alkyl, $-N(C_{1-6}$-alkyl$)_2$, $-NHC(=O)O-C_{1-6}$-alkyl, $-N(C_{1-6}$-alkyl$)C(=O)O-C_{1-6}$-alkyl, $-C_{1-6}$-alkylene-$NHC(=O)O-C_{1-6}$-alkyl, $-C_{1-6}$-alkylene-NH_2, $-C_{1-6}$-alkylene-NH-C_{1-6}-alkyl, $-C_{1-6}$-alkylene-$N(C_{1-6}$-alkyl$)_2$, $-C_{1-6}$-alkylene-NH-C_{1-6}-alkylene-CF_3, $-C(=O)-C_{1-6}$-alkyl, -C(=O)OH, $-C(=O)O-C_{1-6}$-alkyl, $-C(=O)O-C_{1-6}$-alkylene-CF_3, $-C(=O)NH_2$, $-C(=O)NH(C_{1-6}$-alkyl), $-C(=O)N(C_{1-6}$-alkyl$)_2$, $-S(=O)_2C_{1-6}$-alkyl, -phenyl, $-C_{1-6}$-alkylene-phenyl, 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted; and 5-14-membered heteroaryl, unsubstituted;

3-14-membered cycloalkyl or $-C_{1-6}$-alkylene-(3-14-membered cycloalkyl), wherein $-C_{1-6}$-alkylene- is unsubstituted or monosubstituted with -OH, wherein said 3-14-membered cycloalkyl is selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, and cycloheptyl, in each case saturated or unsaturated, in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -Cl, $-C_{1-6}$-alkyl, $-C_{1-6}$-alkylene-CF_3, -OH, =O, $-OC_{1-6}$-

alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -NH_2, -NHC_{1-6}-alkyl, -$N(C_{1-6}$-alkyl$)_2$, -NHC(=O)O-C_{1-6}-alkyl, -$N(C_{1-6}$-alkyl)C(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -C_{1-6}-alkylene-$N(C_{1-6}$-alkyl$)_2$, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C(=O)O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)NH_2, -C(=O)NH(C_{1-6}-alkyl), -C(=O)$N(C_{1-6}$-alkyl$)_2$, -$S(=O)_2C_{1-6}$-alkyl, -phenyl, -C_{1-6}-alkylene-phenyl, 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted; and 5-14-membered heteroaryl, unsubstituted;

3-14-membered heterocycloalkyl or -C_{1-6}-alkylene-(3-14-membered heterocycloalkyl), wherein -C_{1-6}-alkylene- is unsubstituted or monosubstituted with -OH, wherein said 3-14-membered heterocycloalkyl in each case is selected from the group consisting of azepane, 1,4-oxazepane, azetane, azetidine, aziridine, azocane, diazepane, dioxane, dioxolane, dithiane, dithiolane, imidazolidine, isothiazolidine, isoxalidine, morpholine, oxazolidine, oxepane, oxetane, oxirane, piperazine, piperidine, pyrazolidine, pyrrolidine, quinuclidine, tetrahydrofuran, tetrahydropyran, tetrahydrothiopyran, thiazolidine, thietane, thiirane, thiolane, thiomorpholine, indoline, dihydrobenzofuran, dihydrobenzothiophene, 1,1-dioxothiacyclohexane, 2-azaspiro[3.3]heptane, 2-oxaspiro[3.3]heptane, 7-azaspiro[3.5]nonane, 8-azabicyclo[3.2.1]octane, 9-azabicyclo[3.3.1]nonane, hexahydro-1H-pyrrolizine, hexahydrocyclopenta[c]pyrrole, octahydrocyclopenta[c]pyrrole, and octahydropyrrolo[1,2-a]pyrazine; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -Cl, -C_{1-6}-alkyl, -C_{1-6}-alkylene-CF_3, -OH, =O, -OC_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -NH_2, -NHC_{1-6}-alkyl, -$N(C_{1-6}$-alkyl$)_2$, -NHC(=O)O-C_{1-6}-alkyl, -$N(C_{1-6}$-alkyl)C(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -C_{1-6}-alkylene-$N(C_{1-6}$-alkyl$)_2$, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C(=O)O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)NH_2, -C(=O)NH(C_{1-6}-alkyl), -C(=O)$N(C_{1-6}$-alkyl$)_2$, -$S(=O)_2C_{1-6}$-alkyl, -phenyl, -C_{1-6}-alkylene-phenyl, 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted; and 5-14-membered heteroaryl, unsubstituted;

-phenyl unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -Cl, -CN, -C_{1-6}-alkyl, -C_{1-6}-alkylene-CF_3, -OH, =O, -OC_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -NH_2, -NHC_{1-6}-alkyl, -$N(C_{1-6}$-alkyl$)_2$, -NHC(=O)O-C_{1-6}-alkyl, -$N(C_{1-6}$-alkyl)C(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -C_{1-6}-alkylene-$N(C_{1-6}$-alkyl$)_2$, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C(=O)O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)NH_2, -C(=O)NH(C_{1-6}-alkyl), -C(=O)$N(C_{1-6}$-alkyl$)_2$, -$S(=O)_2C_{1-6}$-alkyl, -phenyl, -C_{1-6}-alkylene-phenyl, 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted; and 5-14-membered heteroaryl, unsubstituted;

5-14-membered heteroaryl or -C_{1-6}-alkylene-(5-14-membered heteroaryl), wherein -C_{1-6}-

alkylene- is unsubstituted or monosubstituted with -OH, wherein said 5-14-membered heteroaryl in each case is selected from the group consisting of benzimidazole, benzisoxazole, benzoazole, benzodioxole, benzofuran, benzothiadiazole, benzothiazole, benzothiophene, carbazole, cinnoline, dibenzofuran, furane, furazane, imidazole, imidazopyridine, pyrazolo[1,5-a]pyridine, indole, indolizine, isobenzofuran, isoindole, isoquinoline, isothiazole, isoxazole, naphthyridine, oxadiazole, oxazole, oxindole, phthalazine, purine, pyrazine, pyrazole, pyridazine, pyridine, pyrimidine, pyrrole, quinazoline, quinoline, quinoxaline, tetrazole, thiadiazole, thiazole, thiophene, triazine, triazole, and [1,2,4]triazolo[4,3-a]pyrimidine; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -Cl, -CN, -C_{1-6}-alkyl, -C_{1-6}-alkylene-CF_3, -OH, =O, -OC_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -NH_2, -NHC_{1-6}-alkyl, -$N(C_{1-6}$-alkyl$)_2$, -NHC(=O)O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)C(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -C_{1-6}-alkylene-$N(C_{1-6}$-alkyl$)_2$, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C(=O)O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)NH_2, -C(=O)NH(C_{1-6}-alkyl), -C(=O)N(C_{1-6}-alkyl$)_2$, -$S(=O)_2C_{1-6}$-alkyl, -phenyl, -C_{1-6}-alkylene-phenyl, 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted; and 5-14-membered heteroaryl, unsubstituted.

[0062] In some embodiments, **R^4** represents

-H;

-$S(=O)_2C_{1-6}$-alkyl, saturated, unsubstituted, monosubstituted or polysubstituted with -F;

-$S(=O)_2$(3-14-membered cycloalkyl), saturated, unsubstituted;

-C_{1-6}-alkyl, saturated, unsubstituted, monosubstituted or disubstituted with substituents independently of one another selected from the group consisting of -OH, =O, -NH_2, -NHC_{1-6}-alkyl, -$N(C_{1-6}$-alkyl$)_2$, -OC_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -C(=O)NH_2, -C(=O)-NH-C_{1-3}-alkyl, -C(=O)-N(C_{1-3}-alkyl$)_2$, -phenyl unsubstituted;

3-14-membered cycloalkyl or -C_{1-6}-alkylene-(3-14-membered cycloalkyl), wherein -C_{1-6}-alkylene- is unsubstituted or monosubstituted with -OH, wherein said 3-14-membered cycloalkyl is saturated, unsubstituted, monosubstituted or disubstituted with substituents independently of one another selected from the group consisting of -C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -OH, -OC_{1-6}-alkyl, -NH_2, -$N(C_{1-6}$-alkyl$)_2$, -NHC(=O)O-C_{1-6}-alkyl;

3-14-membered heterocycloalkyl or -C_{1-6}-alkylene-(3-14-membered heterocycloalkyl), wherein -C_{1-6}-alkylene- is unsubstituted or monosubstituted with -OH, wherein said 3-14-membered heterocycloalkyl in each case is selected from azetane, 1,4-oxazepane, pyrrolidine, piperidine, azepane, diazepane, tetrahydrofuran, tetrahydropyran, oxetane, morpholine, piperazine, hexahydrocyclopenta[c]pyrrole, octahydrocyclopenta[c]pyrrole, octahydropyrrolo[1,2-a]pyrazine, 8-azabicyclo[3.2.1]octane, 9-azabicyclo[3.3.1]nonane, quinuclidine, hexahydro-

1H-pyrrolizine, 2-oxaspiro[3.3]heptane, 2-azaspiro[3.3]heptane, 7-azaspiro[3.5]nonane, 1,1-dioxothiacyclohexane, in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -OH, =O, -C_{1-6}-alkyl, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -NH_2, -N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C(=O)O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)NH_2, -C(=O)NH(C_{1-6}-alkyl), -$S(=O)_2C_{1-6}$-alkyl, oxetanyl, pyrimidinyl, -C_{1-6}-alkylene-phenyl;

-phenyl unsubstituted;

5-14-membered heteroaryl or -C_{1-6}-alkylene-(5-14-membered heteroaryl), wherein -C_{1-6}-alkylene- is unsubstituted or monosubstituted with -OH, wherein said 5-14-membered heteroaryl in each case is selected from the group consisting of pyridine, pyridazine, pyrazine, pyrazole, isoxazole, triazole, and [1,2,4]triazolo[4,3-a]pyrimidine, in each case unsubstituted, monosubstituted or disubstituted with substituents independently of one another selected from the group consisting of -C_{1-6}-alkyl, -OH.

[0063] In an embodiment of the pyrazolo[1,5-a]pyridine derivative according to the invention **R^3** and **R^4** together form a 5- or 6-membered heterocycle containing 1 or 2 heteroatoms selected from N, O and S, saturated or unsaturated, unsubstituted or mono- or polysubstituted.

[0064] In some embodiments, **R^3** and **R^4** together form a heterocycle selected from the group consisting of pyrrolidine, piperidine, morpholine, and piperazine, in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -C_{1-6}-alkyl, -NH_2, -$NHCH_3$, -N(CH_3)$_2$, -C(=O)NH-C_{1-6}-alkyl, -C(=O)N(C_{1-6}-alkyl)$_2$, -C(=O)O-C_{1-6}-alkyl, -NHC(=O)O-C_{1-6}-alkyl, -pyridyl unsubstituted, and 1,2,4-oxadiazole unsubstituted or monosubstituted with -C_{1-6}-alkyl. In an embodiment, **R^3** and **R^4** together do not form morpholine unsubstituted, mono- or polysubstituted.

[0065] In some embodiments, **R^3** and **R^4** together form a

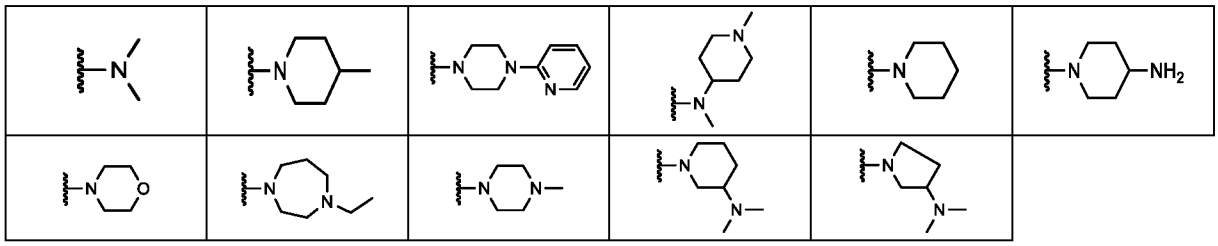
pyrrolidine ring, unsubstituted or monosubstituted with -N(CH_3)$_2$;

piperidine ring, unsubstituted or monosubstituted with a substituent selected from the group consisting of -C_{1-6}-alkyl, -NH_2, -N(CH_3)$_2$, -C(=O)NH-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkyl, -NHC(=O)O-C_{1-6}-alkyl, and 1,2,4-oxadiazole unsubstituted or monosubstituted with -C_{1-6}-alkyl;

morpholine ring, unsubstituted; or

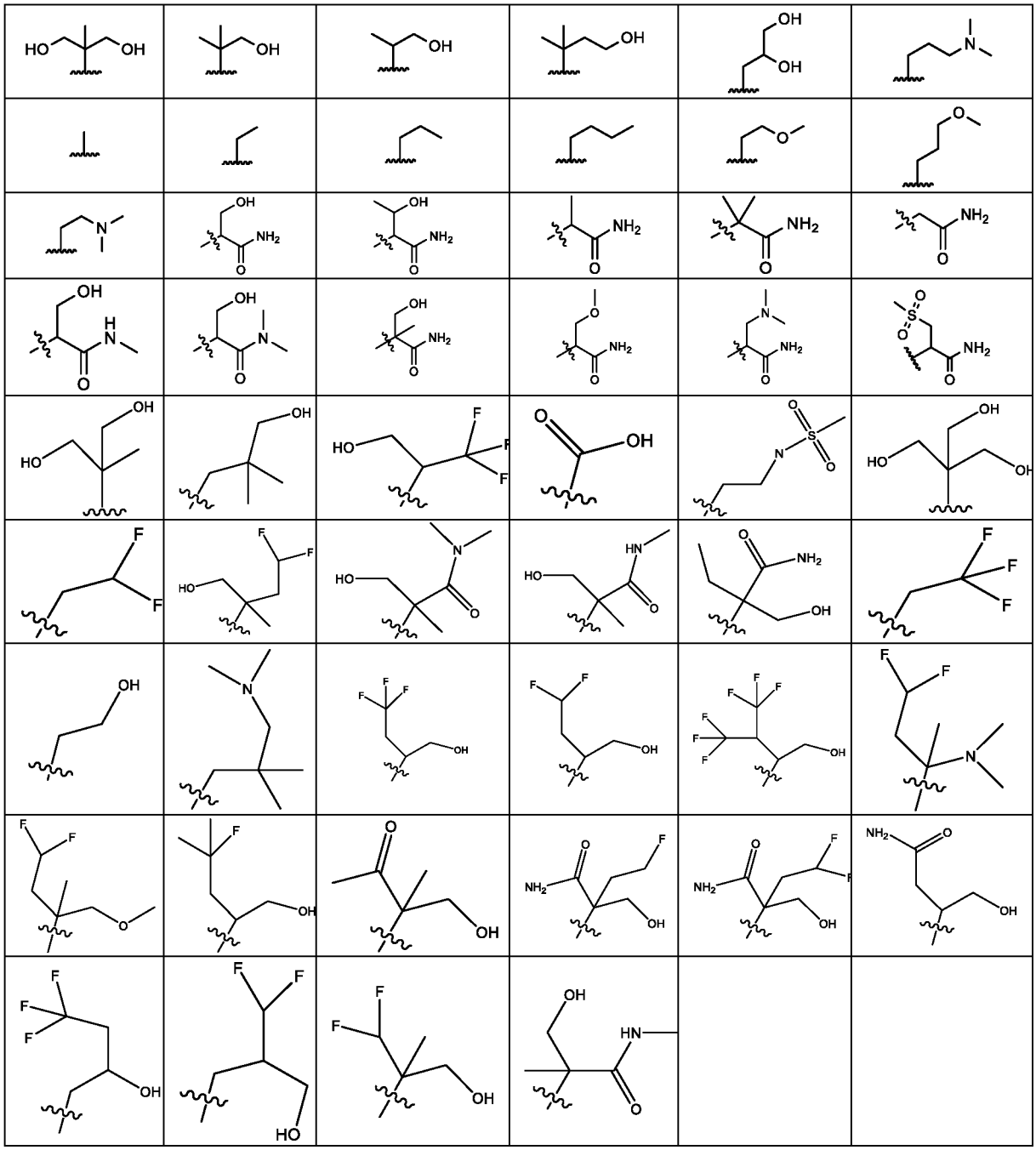
piperazine ring, unsubstituted or N-substituted with a substituent selected from the group consisting of -C_{1-6}-alkyl and -pyridyl unsubstituted.

[0066] In some embodiments, **R^3** and **R^4** both do not represent -H. In some embodiments, **R^3** and **R^4** together with the nitrogen atom to which they are attached form a residue selected from the group consisting of:



[0067] In other embodiments, **R**^{3} represents -H and **R**^{4} does not represent -H.

[0068] In some embodiments, **R**^{3} represents -H and **R**^{4} represents -C_1-C_6-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted. In some embodiments, **R**^{3} represents -H and **R**^{4} represents a residue selected from the group consisting of:

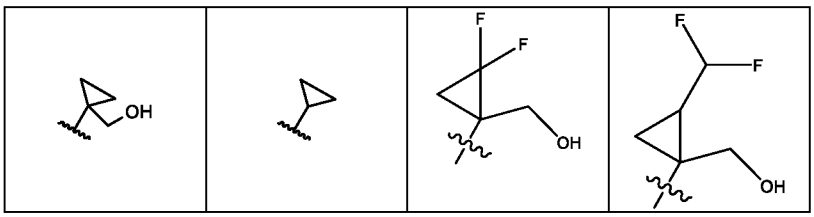


[0069] In further embodiments, **R**^{3} represents -H and **R**^{4} represents a residue -C**R'R''**-$(CH_2)_m$-

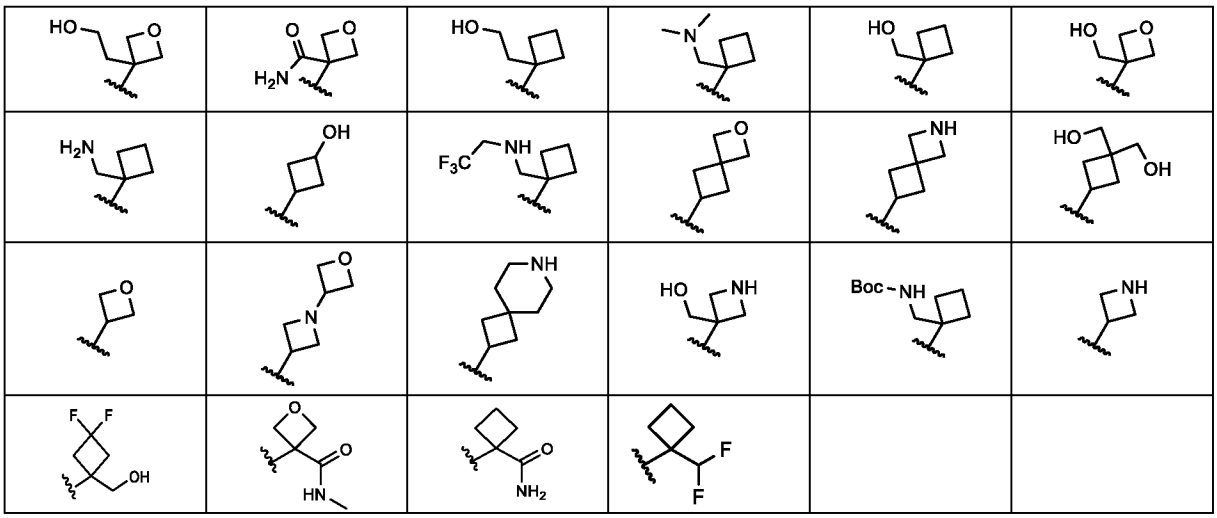
OH, wherein **m** is an integer of from 1 to 6, preferably from 1 to 3; and wherein **R'** and **R"** independently of one another represent -H, -C_{1-3}-alkyl, -CF_3, -CF_2H, -CFH_2, -C_{1-3}-alkylene-CF_3, -C_{1-3}-alkylene-CF_2H, -C_{1-3}-alkylene-CFH_2, -C_{1-3}-alkylene-O-C_{1-3}-alkyl, -C_{1-3}-alkylene-OH, -C(=O)-NH_2, or C(=O)-NH-C_{1-3}-alkyl; preferably -H, -CH_3, -C_{1-3}-alkylene-OH, -C(=O)-NH_2, or C(=O)-NH-C_{1-3}-alkyl. In an embodiment, at least **R'** or **R"** does not represent -H. In alternative embodiments, neither **R'** nor **R"** represents -H.

[0070] In further embodiments, $\mathbf{R^3}$ represents -H and $\mathbf{R^4}$ represents a 3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted.

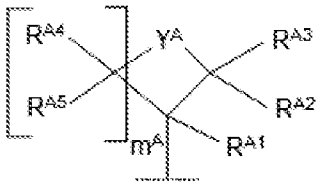
[0071] In further embodiments, $\mathbf{R^3}$ represents -H and $\mathbf{R^4}$ represents a 3-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 3-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted. In some embodiments, $\mathbf{R^3}$ represents -H and $\mathbf{R^4}$ represents a residue selected from the group consisting of:



[0072] In some embodiments, $\mathbf{R^3}$ represents -H and $\mathbf{R^4}$ represents a 4-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 3-14-membered heterocycloalkyl (preferably a 4-membered heterocycloalkyl), saturated or unsaturated, unsubstituted, mono- or polysubstituted. In some embodiments, $\mathbf{R^3}$ represents -H and $\mathbf{R^4}$ represents a residue selected from the group consisting of:



[0073] In some embodiments, $\mathbf{R^3}$ represents -H and $\mathbf{R^4}$ represents a residue according to general formula (A),



(A)

wherein

m^A is 0 or 1;

Y^A is selected from -O-, -NR^{A6}- and -$CR^{A7}R^{A8}$-; and

R^{A1}, R^{A2}, R^{A3}, R^{A4}, R^{A5}, R^{A6}, R^{A7}, and R^{A8} independently of one another represent -H, F, -C_{1-3}-alkyl, -C_{1-3}-alkylene-OH, -C_{1-3}-alkylene-NH_2, -C_{1-3}-alkylene-NH(C_{1-3}-alkyl), -C_{1-3}-alkylene-N(C_{1-3}-alkyl)$_2$, -C_{1-3}-alkylene-NH(C_{1-3}-alkylene-CF_3), -C_{1-3}-alkylene-C(=O)NH_2, -C_{1-3}-alkylene-NH-C(=O)OC_{1-4}-alkyl, -C(=O)NH_2, -C(=O)-NH-C_{1-3}-alkyl, -C(=O)-N(C_{1-3}-alkyl)$_2$, -3-oxetanyl, or -CHF_2; preferably, R^{A1}, R^{A2}, R^{A3}, R^{A4}, R^{A5}, R^{A6}, R^{A7}, and R^{A8} independently of one another represent -H, F, -C_{1-3}-alkyl, -C_{1-3}-alkylene-OH, -C_{1-3}-alkylene-NH_2, -C_{1-3}-alkylene-NH(C_{1-3}-alkyl), -C_{1-3}-alkylene-N(C_{1-3}-alkyl)$_2$, -C_{1-3}-alkylene-NH(C_{1-3}-alkylene-CF_3), -C_{1-3}-alkylene-C(=O)NH_2, -C_{1-3}-alkylene-NH-C(=O)OC_{1-4}-alkyl, -C(=O)NH_2, -C(=O)-NH-C_{1-3}-alkyl, -C(=O)-N(C_{1-3}-alkyl)$_2$, or -3-oxetanyl; or R^{A7} and R^{A8} together with the carbon atom to which they are attached form a ring and represent -CH_2OCH_2-, -$CH_2OCH_2CH_2$- or -$CH_2CH_2OCH_2CH_2$-, -CH_2NHCH_2-, -$CH_2NHCH_2CH_2$- or -$CH_2CH_2NHCH_2CH_2$-.

[0074] In some embodiments, R^3 represents -H and R^4 represents a residue according to general formula (A) as defined above, wherein

m^A is 0 or 1;

Y^A is selected from -O- and -$CR^{A7}R^{A8}$-; and

R^{A1}, R^{A2}, R^{A3}, R^{A4}, R^{A5}, R^{A7}, and R^{A8} independently of one another represent -H, -C_{1-3}-alkylene-OH, -C_{1-3}-alkylene-N(C_{1-3}-alkyl)$_2$, -C(=O)NH_2, or -CHF_2; preferably R^{A1}, R^{A2}, R^{A3}, R^{A4}, R^{A5}, R^{A7}, and R^{A8} independently of one another represent -H, -C_{1-3}-alkylene-OH, -C_{1-3}-alkylene-N(C_{1-3}-alkyl)$_2$, or -C(=O)NH_2; preferably with the proviso that only one of R^{A1}, R^{A2}, R^{A3}, R^{A4}, R^{A5}, R^{A7}, and R^{A8} represents a residue that is not -H.

[0075] In some embodiments, R^3 represents -H and R^4 represents a residue according to general formula (A) as defined above, wherein

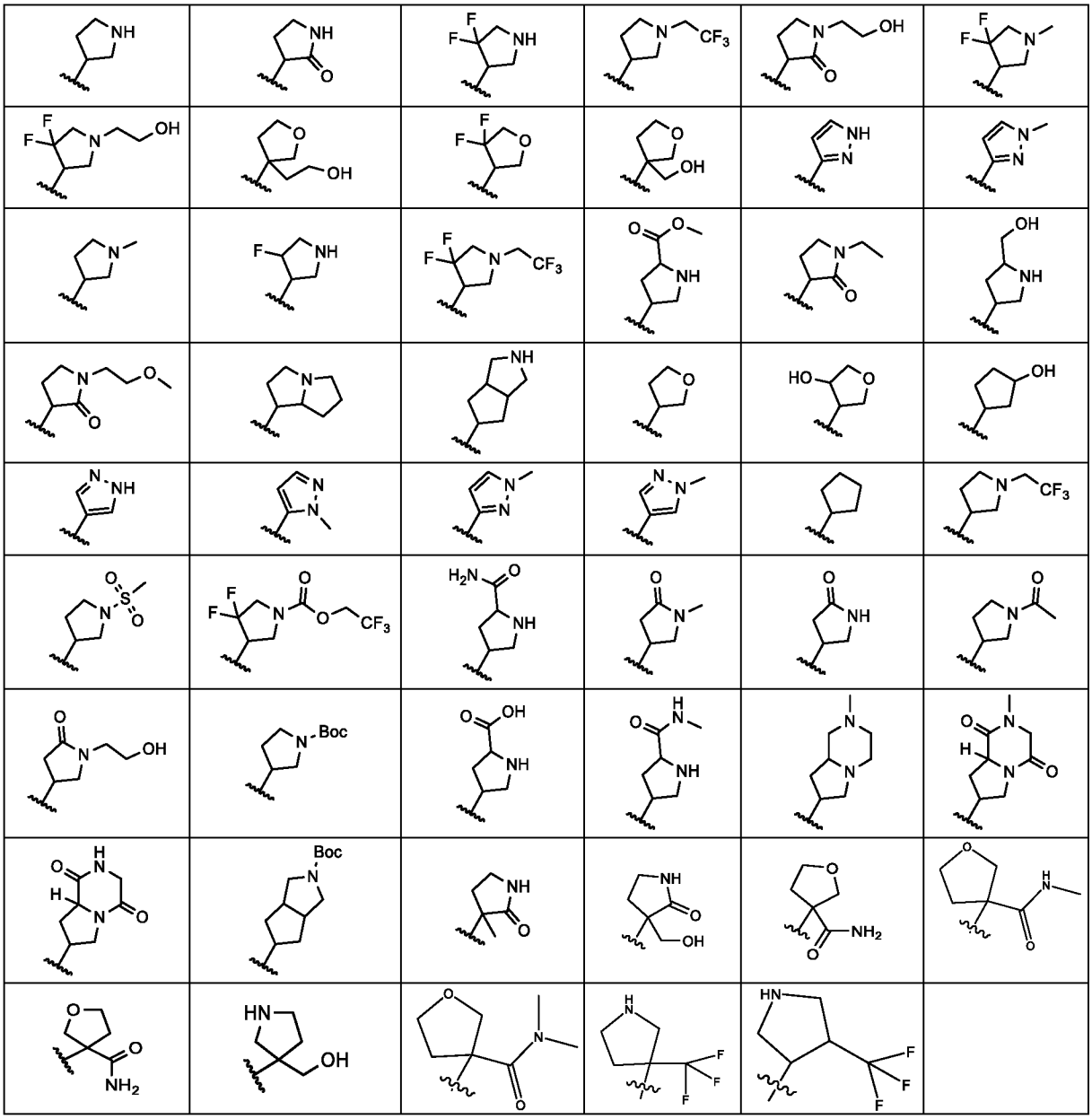
m^A is 0 or 1;

Y^A is selected from -O- and -$CR^{A7}R^{A8}$-; and

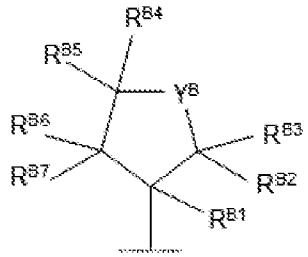
R^{A1} represents -C_{1-3}-alkylene-OH, -C_{1-3}-alkylene-N(C_{1-3}-alkyl)$_2$, -C(=O)NH_2, or -CHF_2; preferably R^{A1} represents -C_{1-3}-alkylene-OH, -C_{1-3}-alkylene-N(C_{1-3}-alkyl)$_2$, or -C(=O)NH_2; and R^{A2}, R^{A3}, R^{A4}, R^{A5}, R^{A7}, and R^{A8} represent -H.

[0076] In some embodiments, R^3 represents -H and R^4 represents a 3-14-membered

cycloalkyl (preferably a 5-membered cycloalkyl), saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 3-14-membered heterocycloalkyl (preferably a 5-membered heterocycloalkyl), saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 5-14-membered heteroaryl (preferably a 5-membered heteroaryl), unsubstituted, mono- or polysubstituted. In preferred embodiments, $\mathbf{R^3}$ represents -H and $\mathbf{R^4}$ represents a residue selected from the group consisting of:



[0077] In some embodiments, $\mathbf{R^3}$ represents -H and $\mathbf{R^4}$ represents a residue according to general formula (B),



(B)

wherein

Y^B is selected from -O-, -NR^{B8}- and -C$R^{B9}R^{B10}$-; and

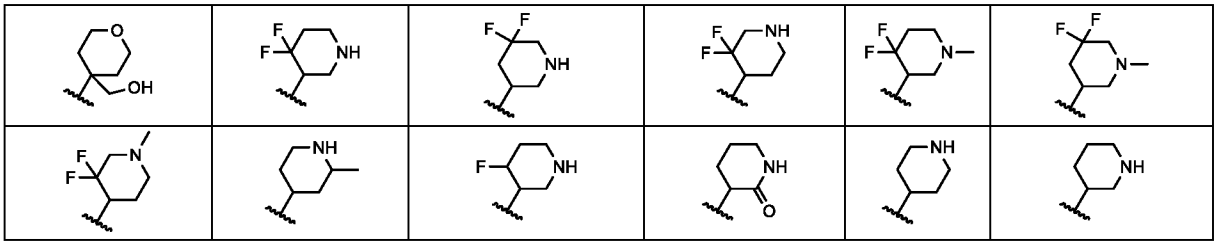
R^{B1}, R^{B2}, R^{B3}, R^{B4}, R^{B5}, R^{B6}, R^{B7}, R^{B8}, R^{B9} and R^{B10} independently of one another represent -H, -F, -OH, -C_{1-3}-alkyl, -C_{1-3}-alkylene-OH, -C_{1-3}-alkylene-O-C_{1-3}-alkyl, -C_{1-3}-alkylene-CF_3, -C_{1-3}-alkylene-CO_2H, -C_{1-3}-alkylene-C(=O)O-C_{1-3}-alkyl, -C(=O)NH_2, -C(=O)NH-C_{1-3}-alkyl, or -C(=O)N(C_{1-3}-alkyl)$_2$; or R^{B2} and R^{B3} together represent =O; or R^{B4} and R^{B5} together represent =O.

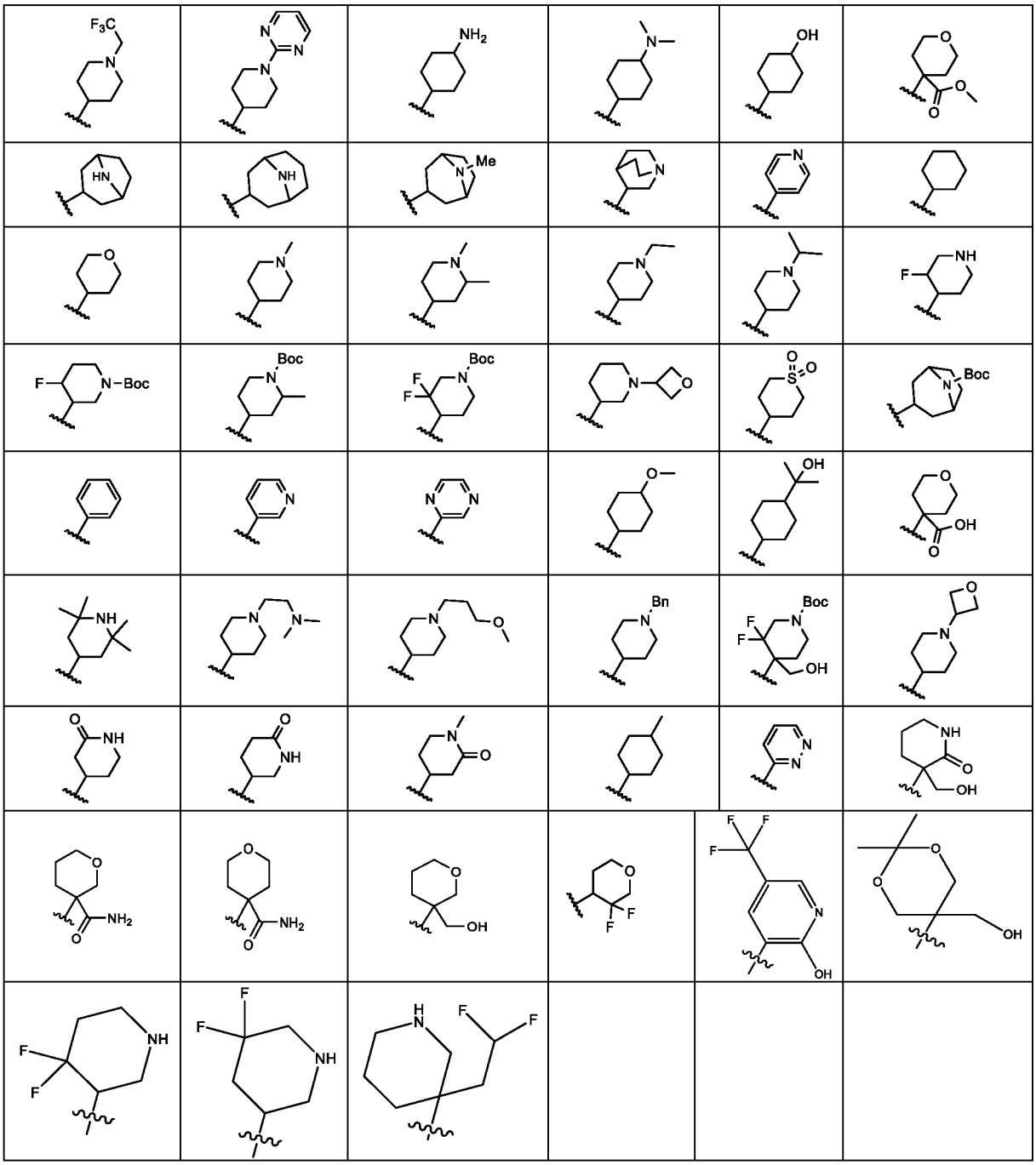
[0078] In some embodiments, R^3 represents -H and R^4 represents a residue according to general formula (B) as defined above, wherein

Y^B is selected from -O- and -NR^{B8}-; and

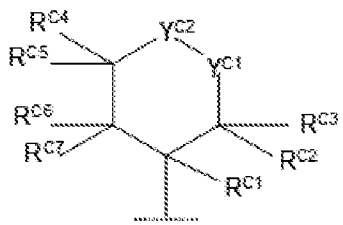
R^{B1}, R^{B2}, R^{B3}, R^{B4}, R^{B5}, R^{B6}, R^{B7}, R^{B8} independently of one another represent -H, -F, -C_{1-3}-alkyl, -C_{1-3}-alkylene-OH, -C_{1-3}-alkylene-CF_3 or -C(=O)NH_2; or R^{B2} and R^{B3} together represent =O; or R^{B4} and R^{B5} together represent =O; preferably with the proviso that only 1, 2 or 3 of R^{A1}, R^{A2}, R^{A3}, R^{A4}, R^{A5}, R^{A7}, and R^{A8} represent a residue that is not -H; preferably with the proviso that at least one of R^{A1}, R^{A2}, R^{A3}, R^{A4}, R^{A5}, R^{A7}, and R^{A8} represent a residue that is not -H.

[0079] In some embodiments, R^3 represents -H and R^4 represents a 3-14-membered cycloalkyl (preferably a 6-membered cycloalkyl), saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 3-14-membered heterocycloalkyl (preferably a 6-membered heterocycloalkyl), saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 6-14-membered aryl (preferably a 6-membered aryl), unsubstituted, mono- or polysubstituted; or a 5-14-membered heteroaryl (preferably a 6-membered heteroaryl), unsubstituted, mono- or polysubstituted. In preferred embodiments, R^3 represents -H and R^4 represents a residue selected from the group consisting of:





[0080] In some embodiments, $\mathbf{R^3}$ represents -H and $\mathbf{R^4}$ represents a residue according to general formula (C),



(C)

wherein

Y^{C1} is selected from -O-, -S(=O)$_2$-, -NR^{C8}- and -C$R^{C9}R^{C10}$- and Y^{C2} represents -C$R^{C11}R^{C12}$-; or Y^{C1} represents -C$R^{C9}R^{C10}$- and Y^{C2} is selected from -O-, -S(=O)$_2$-, and -NR^{C8}-;

R^{C1}, R^{C2}, R^{C3}, R^{C4}, R^{C5}, R^{C6}, R^{C7}, R^{C8} ,R^{C9}, R^{C10}, R^{C11} and R^{C12} independently of one another represent

-H, -F, -OH, -C(=O)OC$_{1-3}$-alkyl, -NH$_2$, -NH(C$_{1-3}$-alkyl), -N(C$_{1-3}$-alkyl)$_2$, -C$_{1-3}$-alkyl, -C$_{1-3}$-alkylene-OH, -C$_{1-3}$-alkylene-, -C(=O)NH$_2$, -C(=O)NH-C$_{1-3}$-alkyl, or -C(=O)N(C$_{1-3}$-alkyl)$_2$: or R^{C2} and R^{C3} together represent =O; or R^{C4} and R^{C5} together represent =O; or R^{C9} and R^{C10} together represent =O; or R^{C11} and R^{C12} together represent =O.

[0081] In some embodiments, R^3 represents -H and R^4 represents a residue according to general formula (C) as defined above, wherein

Y^{C1} is selected from -O- or -NR^{C8}- and Y^{C2} represents -C$R^{C11}R^{C12}$-; or Y^{C1} represents -C$R^{C9}R^{C10}$- and Y^{C2} is selected from -O-, and -NR^{C8}-;

R^{C1}, R^{C2}, R^{C3}, R^{C4}, R^{C5}, R^{C6}, R^{C7}, R^{C8} ,R^{C9}, R^{C10}, R^{C11} and R^{C12} independently of one another represent -H, -F , -C$_{1-3}$-alkyl, -C$_{1-3}$-alkylene-OH, or -C(=O)NH$_2$; preferably with the proviso that only 1, 2 or 3 of R^{C1}, R^{C2}, R^{C3}, R^{C4}, R^{C5}, R^{C6}, R^{C7}, R^{C8} ,R^{C9}, R^{C10}, R^{C11} and R^{C12} represent a residue that is not -H; preferably with the proviso that at least one of R^{C1}, R^{C2}, R^{C3}, R^{C4}, R^{C5}, R^{C6}, R^{C7}, R^{C8} ,R^{C9}, R^{C10}, R^{C11} and R^{C12} represent a residue that is not -H.

[0082] In some embodiments, R^3 represents -H and R^4 represents a 7-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 7-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted. In some embodiments, R^3 represents -H and R^4 represents a residue:



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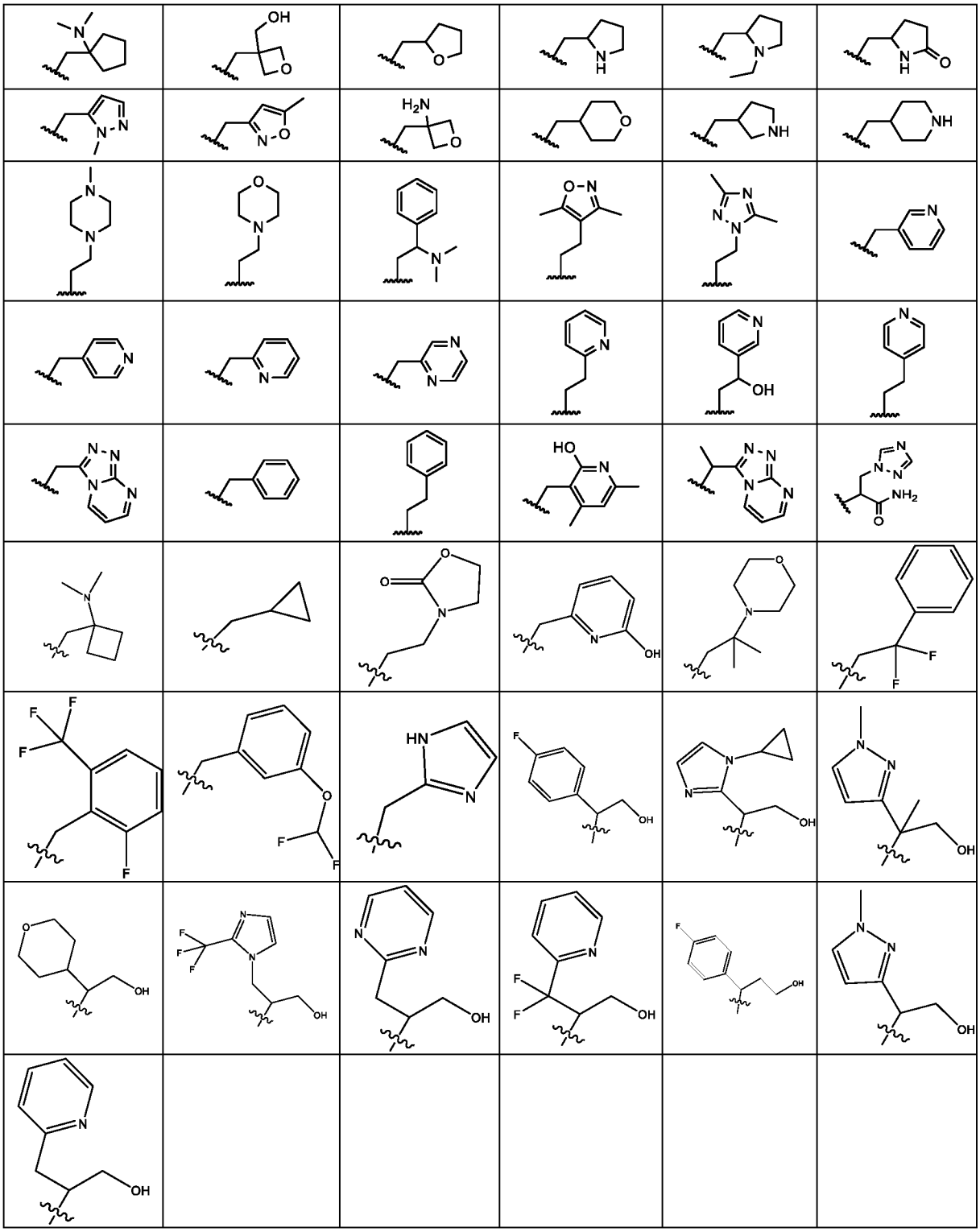
[0083] In some embodiments, R^3 represents -H and R^4 represents a 3-14-membered cycloalkyl (preferably a 3, 4, 5 or 6-membered cycloalkyl), saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is connected through -C$_1$-C$_6$-alkylene-, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 3-14-membered heterocycloalkyl (preferably a 4, 5 or 6-membered heterocycloalkyl), saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is connected through -C$_1$-C$_6$-alkylene-, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 6-14-membered aryl (preferably a 6-membered aryl), unsubstituted, mono- or polysubstituted; wherein said 6-14-membered aryl is connected through -C$_1$-C$_6$-alkylene-, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 5-14-membered heteroaryl (preferably a 5 or 6-membered heteroaryl), unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl is connected through -C$_1$-C$_6$-alkylene-, saturated or unsaturated, unsubstituted, mono- or polysubstituted. In preferred embodiments, R^3 represents -H and R^4 represents a residue selected from the group

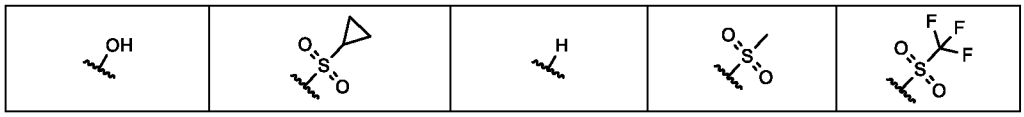
consisting of:



[0084] In some embodiments, R^3 represents -H and R^4 represents a 5-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 5-membered heterocycloalkyl is connected through -C_1-C_6-alkylene-, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 5-membered heteroaryl, unsubstituted, mono- or polysubstituted; wherein said 5-membered heteroaryl is connected

through -C_1-C_6-alkylene-, saturated or unsaturated, unsubstituted, mono- or polysubstituted.

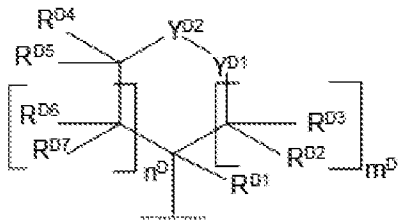
[0085] In some embodiments, $\mathbf{R^3}$ represents -H and $\mathbf{R^4}$ represents a residue selected from the group consisting of:



[0086] In some embodiments, $\mathbf{R^3}$ represents -H and $\mathbf{R^4}$ represents

(i) a residue -C**R'R''**-$(CH_2)_m$-OH, wherein **m** is an integer of from 1 to 6, preferably from 1 to 3; and wherein **R'** and **R''** independently of one another represent -H, -C_{1-3}-alkyl, -CF_3, -CF_2H, -CFH_2, -C_{1-3}-alkylene-CF_3, -C_{1-3}-alkylene-CF_2H, -C_{1-3}-alkylene-CFH_2, -C_{1-3}-alkylene-O-C_{1-3}-alkyl, or -C_{1-3}-alkylene-OH; preferably -H, -CH_3, or -C_{1-3}-alkylene-OH. In an embodiment, at least **R'** or **R''** does not represent -H. In an embodiment, neither **R'** nor **R''** represents -H; or

(ii) a residue according to general formula (D),



(D)

wherein

$\mathbf{m^D}$ and $\mathbf{n^D}$ independently of one another are 0, 1, 2, or 3; preferably with the proviso that $\mathbf{m^D} + \mathbf{n^D} \leq 3$;

$\mathbf{Y^{D1}}$ is selected from -O-, -S(=O)$_2$-, -S(=O)(=NH)-, -N$\mathbf{R^{D8}}$- and -C$\mathbf{R^{D9}R^{D10}}$- and $\mathbf{Y^{D2}}$ represents -C$\mathbf{R^{D11}R^{D12}}$-; **or** $\mathbf{Y^{D1}}$ is selected from -O-, -S(=O)$_2$-, -N$\mathbf{R^{D8}}$- and -C$\mathbf{R^{D9}R^{D10}}$- and $\mathbf{Y^{D2}}$ represents -C$\mathbf{R^{D11}R^{D12}}$-; or $\mathbf{Y^{D1}}$ represents -C$\mathbf{R^{D9}R^{D10}}$- and $\mathbf{Y^{D2}}$ is selected from -O-, -S(=O)$_2$-, and -N$\mathbf{R^{D8}}$-;

$\mathbf{R^{D1}}$, $\mathbf{R^{D2}}$, $\mathbf{R^{D3}}$, $\mathbf{R^{D4}}$, $\mathbf{R^{D5}}$, $\mathbf{R^{D6}}$, $\mathbf{R^{D7}}$, $\mathbf{R^{D8}}$,$\mathbf{R^{D9}}$, $\mathbf{R^{D10}}$, $\mathbf{R^{D11}}$ and $\mathbf{R^{D12}}$ independently of one another represent -H, -F , -OH, -C_{1-3}-alkylene-OH, -C(=O)NH_2, -C_{1-3}-alkylene-C(O)NH_2, -C(=O)O-C_{1-3}-alkyl, -NH_2 , -C_{1-3}-alkylene-NH_2, -NH(C_{1-3}-alkyl), -N(C_{1-3}-alkyl)$_2$, -NH(C_{1-3}-alkylene-CF_3), -C_{1-3}-alkylene-OCH_3, -C_{1-3}-alkyl, -C_{1-3}-alkylene-CF_3: or $\mathbf{R^{D2}}$ and $\mathbf{R^{D3}}$ together represent =O; or $\mathbf{R^{D4}}$ and $\mathbf{R^{D5}}$ together represent =O; or $\mathbf{R^{D9}}$ and $\mathbf{R^{D10}}$ together represent =O; or $\mathbf{R^{D11}}$ and $\mathbf{R^{D12}}$ together represent =O;

preferably wherein

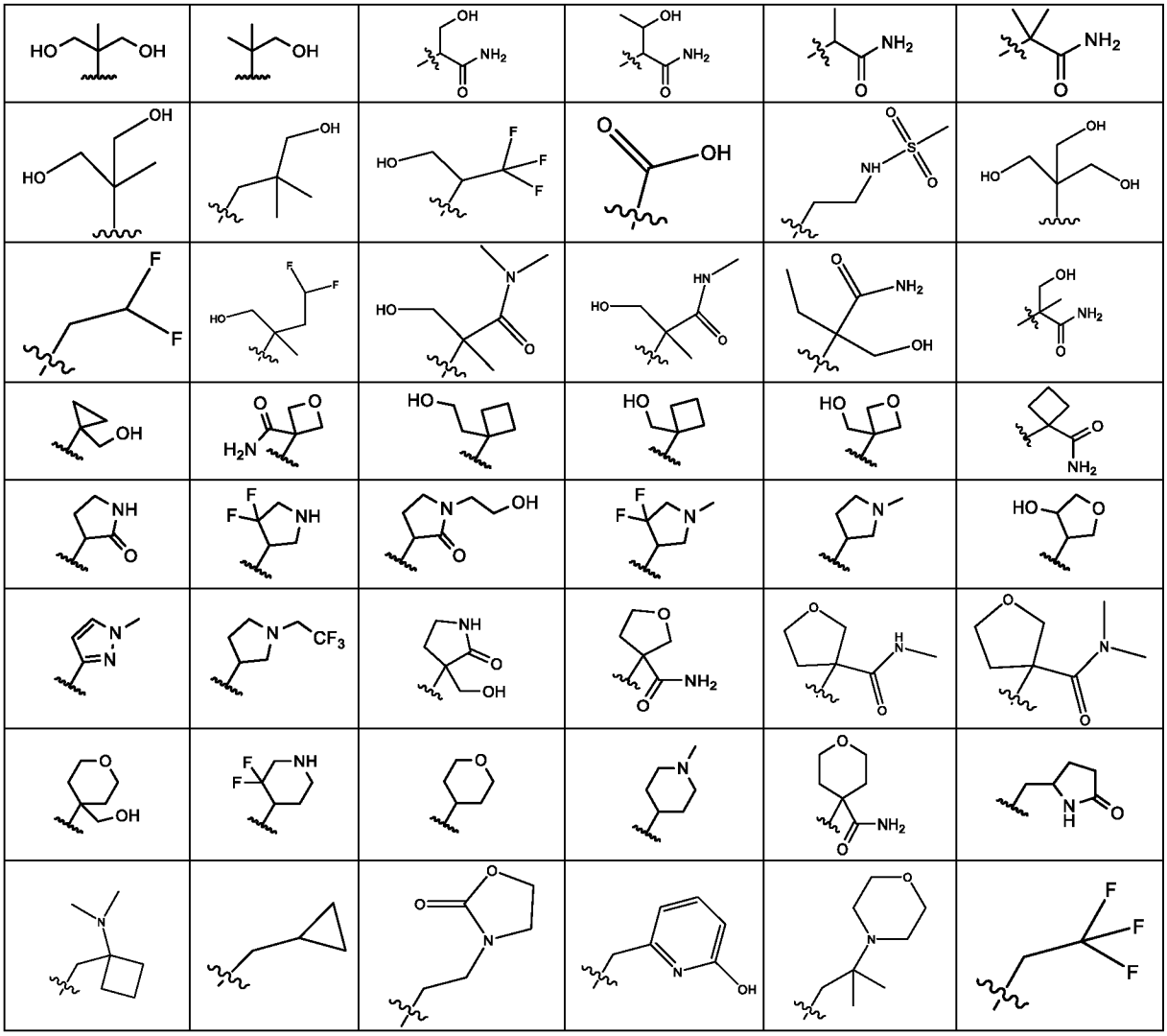
$\mathbf{m^D}$ and $\mathbf{n^D}$ independently of one another are 0, 1, 2 or 3; preferably with the proviso that $\mathbf{m^D} + \mathbf{n^D} \leq 3$;

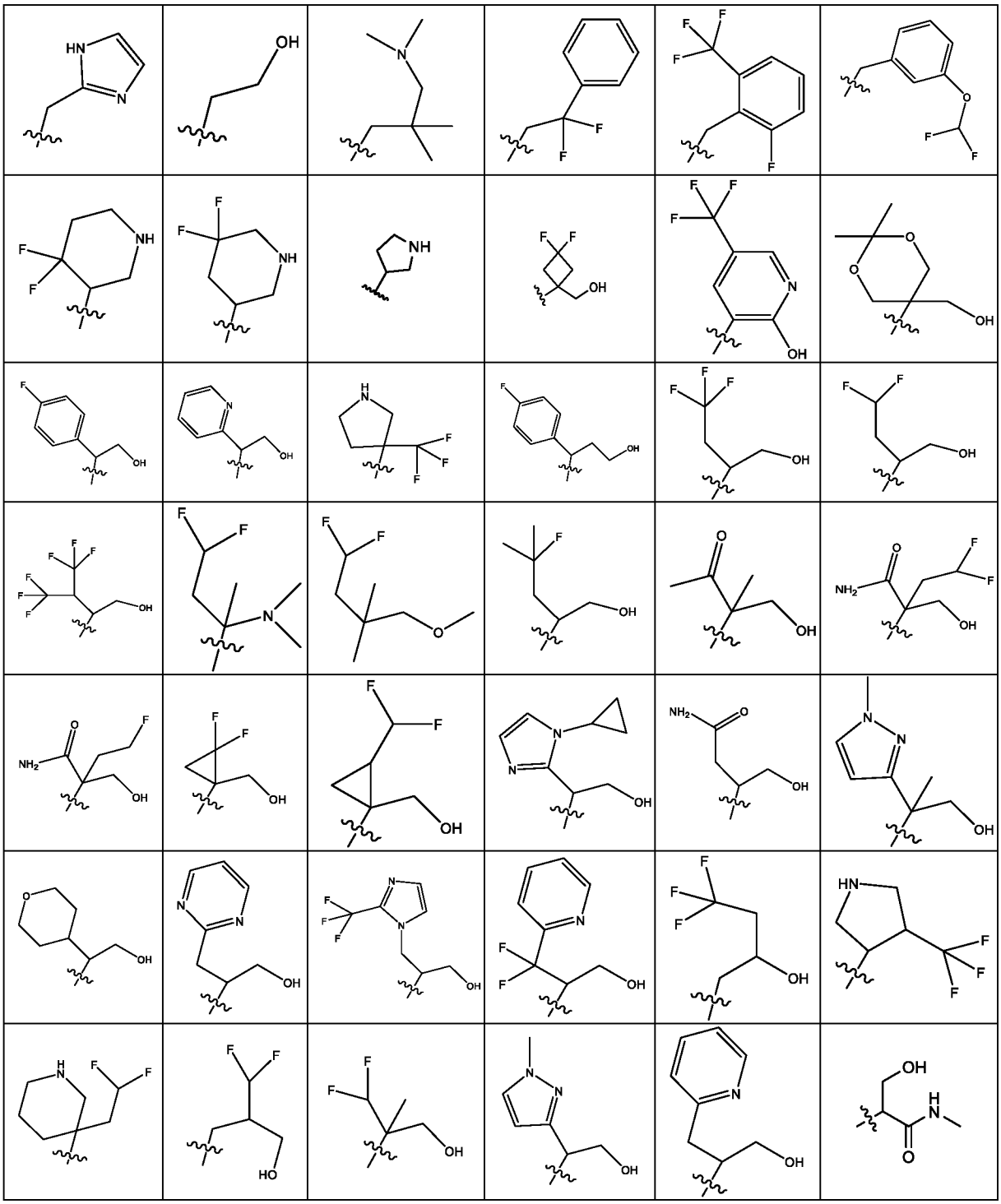
$\mathbf{Y^{D1}}$ is selected from -O-, -N$\mathbf{R^{D8}}$- and -C$\mathbf{R^{D9}R^{D10}}$- and $\mathbf{Y^{D2}}$ represents -C$\mathbf{R^{D11}R^{D12}}$-; or $\mathbf{Y^{D1}}$

represents -C$R^{D9}R^{D10}$- and Y^{D2} is selected from -O- and -NR^{D8}-;

R^{D1}, R^{D2}, R^{D3}, R^{D4}, R^{D5}, R^{D6}, R^{D7}, R^{D8} ,R^{D9}, R^{D10}, R^{D11} and R^{D12} independently of one another represent -H, -F , -OH, -C_{1-3}-alkylene-OH, -C(=O)NH_2, -CH_2NH_2, -$CH_2N(CH_3)_2$, -$NHCH_2CF_3$, -CH_3, or -CH_2CF_3: or R^{D2} and R^{D3} together represent =O; or R^{D4} and R^{D5} together represent =O; or R^{D9} and R^{D10} together represent =O; or R^{D11} and R^{D12} together represent =O; preferably with the proviso that only 1, 2 or 3 of R^{D1}, R^{D2}, R^{D3}, R^{D4}, R^{D5}, R^{D6}, R^{D7}, R^{D8} ,R^{D9}, R^{D10}, R^{D11} and R^{D12} represent a residue that is not -H; preferably with the proviso that at least one of R^{D1}, R^{D2}, R^{D3}, R^{D4}, R^{D5}, R^{D6}, R^{D7}, R^{D8} ,R^{D9}, R^{D10}, R^{D11} and R^{D12} represent a residue that is not -H.

[0087] In some embodiments, R^3 represents -H and R^4 represents a residue selected from the group consisting of:





[0088] In some embodiments of the pyrazolo[1,5-a]pyridine derivative according to the invention **R^5** and **R$^{5'}$** independently of one another represent

-H;

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

-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

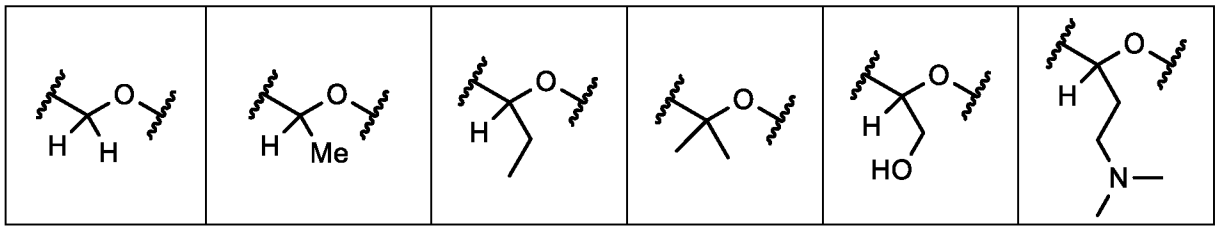
wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted.

[0089] In some embodiments, $\mathbf{R^5}$ and $\mathbf{R^{5'}}$ independently of one another represent -H, -C_1-C_6-alkyl, or -C_1-C_6-alkylene-N(C_1-C_6-alkyl)$_2$.

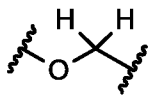
[0090] In some embodiments of the pyrazolo[1,5-a]pyridine derivatives according to the invention, at least one of $\mathbf{R^5}$ and $\mathbf{R^{5'}}$ is not -H.

[0091] In some embodiments of the pyrazolo[1,5-a]pyridine derivatives according to the invention, $\mathbf{R^5}$ and $\mathbf{R^{5'}}$ are both -H.

[0092] In some embodiments, **T** represents -O- and **U** represents -C$\mathbf{R^5R^{5'}}$- and the resultant moiety -O-C$\mathbf{R^5R^{5'}}$- represents a residue selected from the group consisting of:



[0093] In some embodiments, **T** represents -C$\mathbf{R^5R^{5'}}$- and **U** represents -O- and the resultant moiety -C$\mathbf{R^5R^{5'}}$-O- represents a residue:



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[0094] In some embodiments, $\mathbf{R^5}$ represents -H and $\mathbf{R^{5'}}$ represents a residue selected from the group consisting of -H, -$C_{1\text{-}3}$-alkyl, -CF_3, -CF_2H, -CFH_2, -$C_{1\text{-}3}$-alkylene-CF_3, -$C_{1\text{-}3}$-alkylene-CF_2H, -$C_{1\text{-}3}$-alkylene-CFH_2, and -$C_{1\text{-}3}$-alkylene-OH; preferably -H or $C_{1\text{-}3}$-alkyl.

[0095] In some embodiments of the pyrazolo[1,5-a]pyridine derivatives according to the invention $\mathbf{R^6}$, $\mathbf{R^7}$ and $\mathbf{R^8}$ independently of one another represent

-H;

-F, -Cl, -Br, -I, -OH, -SH, -SF_5, -CN, -NO_2, -C(=O)OH, -NH_2;

-$C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-O-$C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-NH$C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-N($C_{1\text{-}6}$-alkyl)$_2$, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-C(=O)O$C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-OC(=O)$C_{1\text{-}6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-$C_{1\text{-}6}$-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted.

[0096] In some embodiments, $\mathbf{R^6}$, $\mathbf{R^7}$ and $\mathbf{R^8}$ independently of one another represent

-H, -F, -Cl, -Br, -I, -OH, -SH, -SF_5, -CN, -NO_2, -C(=O)OH, -NH_2,

-C_{1-6}-alkyl, -CF_3, -CHF_2, -CH_2F,
-O-C_{1-6}-alkyl, -OCF_3, -$OCHF_2$, -OCH_2F,
-NHC_{1-6}-alkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;
-$N(C_{1-6}$-alkyl$)_2$ unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;
-C(=O)OC_{1-6}-alkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;
-O(C=O)C_{1-6}-alkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2; or
-C_{1-6}-heteroalkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2.

[0097] In some embodiments, $\mathbf{R^6}$, $\mathbf{R^7}$ and $\mathbf{R^8}$ independently of one another represents a residue selected from the group consisting of -H, -F, -Cl, -Br, -I, -CN, C_{1-3}-alkyl, -CF_3, -CF_2H, and -CFH_2; preferably -H or -F.

[0098] In some embodiments of the pyrazolo[1,5-a]pyridine derivatives according to the invention $\mathbf{R^6}$ represents -H, -F, -Cl, -CN, or -C_1-C_6-alkyl.

[0099] In some embodiments of the pyrazolo[1,5-a]pyridine derivatives according to the invention, $\mathbf{R^6}$ does not represent -H.

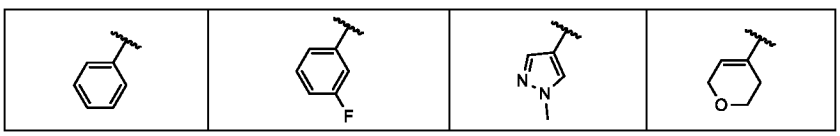
[0100] In some embodiments, $\mathbf{R^6}$ represents a residue selected from the group consisting of -H, -F, -Cl, -CN or -CH_3; preferably -H, -F, -CN or -CH_3.

[0101] In some embodiments of the pyrazolo[1,5-a]pyridine derivatives according to the invention $\mathbf{R^7}$ represents -H, -F, -Cl, -CN, or -C_1-C_6-alkyl.

[0102] In some embodiments of the pyrazolo[1,5-a]pyridine derivatives according to the invention $\mathbf{R^7}$ does not represent -H.

[0103] In some embodiments, especially when Q represents -$N\mathbf{R^3R^4}$, $\mathbf{R^7}$ represents a residue selected from the group consisting of -H, -F, -Cl, -CN or CH_3.

[0104] In some embodiments, especially when Q represents -$O\mathbf{R^2}$, $\mathbf{R^7}$ represents a residue selected from the group consisting of -H or



[0105] In some embodiments of the pyrazolo[1,5-a]pyridine derivatives according to the invention **R**^{8} represents -H, -F, -Cl, -CN, or -C_1-C_6-alkyl.

[0106] In some embodiments of the pyrazolo[1,5-a]pyridine derivatives according to the invention **R**^{8} does not represent -H.

[0107] In some embodiments, **R**^{8} represents a residue selected from the group consisting of -H, -F, -Cl, -CN or CH_3; preferably -F.

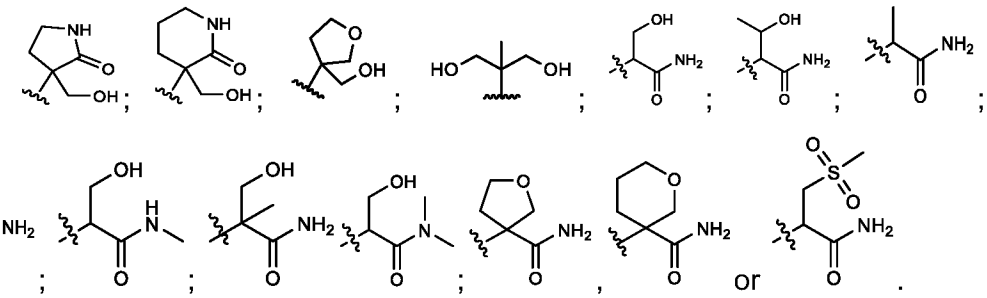
[0108] In some embodiments of the pyrazolo[1,5-a]pyridine derivatives according to the invention

(i) **R**^{6}, **R**^{7} and **R**^{8} each represent -H; or

(ii) two of **R**^{6}, **R**^{7} and **R**^{8} represent -H and the other of **R**^{6}, **R**^{7} and **R**^{8} represents -F, -Cl, -CN, or -CH_3; or

(iii) one of **R**^{6}, **R**^{7} and **R**^{8} represents -H and the other of **R**^{6}, **R**^{7} and **R**^{8} independently of one another represent -F, -Cl, -CN, or -CH_3.

[0109] In some embodiments, the compound is according to general formula (I), wherein

- **R**^{1} represents -CH_3; and/or
- **R**^{6}, **R**^{7} and **R**^{8} each represent -H; and/or
- **T** represents -O-; and/or
- **U** represents -CH_2-; and/or
- **V** represents thiazolyl, pyridyl, or pyrazolyl; wherein said thiazolyl, pyridyl, and pyrazolyl each independently from one another can be unsubstituted, monosubstituted or disubstituted with a substituent selected from the group consisting of -CH_3; -F; -CH_2CHF_2; and -CF_3; and/or
- **Q** represents N**R**^{3}**R**^{4}; and/or
- **R**^{3} represents H; and/or
- **R**^{4} represents 

[0110] In exemplary embodiments of the invention, the pyrazolo[1,5-a]pyridine derivative is selected from the group consisting of:

Cpd 001 - 2-({5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-2-(hydroxymethyl)butanamide ;

Cpd 002 - N-(1,3-dihydroxy-2-methylpropan-2-yl)-5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridine-3-carboxamide;

Cpd 003 - (2S)-2-({5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxypropanamide;
Cpd 004 - 2-({5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-2-methylpropanamide;
Cpd 005 - 5-[(2-fluorophenyl)methoxy]-N-(2-methanesulfonamidoethyl)-2-methylpyrazolo[1,5-a]pyridine-3-carboxamide;
Cpd 006 - N-(2,2-difluoroethyl)-5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridine-3-carboxamide;
Cpd 007 - (2S,3R)-2-({5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxybutanamide;
Cpd 008 - N-(1,3-dihydroxy-2-methylpropan-2-yl)-2-methyl-5-[(4-methyl-1,3-thiazol-5-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide;
Cpd 009 - 2-({5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-N-methylpropanamide;
Cpd 010 - (2S)-3-hydroxy-2-({2-methyl-5-[(4-methyl-1,3-thiazol-5-yl)methoxy]pyrazolo[1,5-a]pyridin-3-yl}formamido)propanamide;
Cpd 011 - 2-({5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-N,2-dimethylpropanamide;
Cpd 012 - (2S)-2-({5-[(2-chlorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxypropanamide;
Cpd 013 - 2-({5-[(2-chlorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-2-methylpropanamide;
Cpd 014 - 5-[(2-chlorophenyl)methoxy]-N-(1,3-dihydroxy-2-methylpropan-2-yl)-2-methylpyrazolo[1,5-a]pyridine-3-carboxamide;
Cpd 015 - 2-{[5-(2,2-difluoroethoxy)-2-methylpyrazolo[1,5-a]pyridin-3-yl]formamido}-3-hydroxy-2-methylpropanamide;
Cpd 016 - 2-{[5-(benzyloxy)-2-methylpyrazolo[1,5-a]pyridin-3-yl]formamido}-3-hydroxy-2-methylpropanamide;
Cpd 017 - 2-({5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-N,N,2-trimethylpropanamide;
Cpd 018 - 5-[(2-fluorophenyl)methoxy]-N-[3-(hydroxymethyl)-2-oxopyrrolidin-3-yl]-2-methylpyrazolo[1,5-a]pyridine-3-carboxamide;
Cpd 019 - 2-({5-[(2-chlorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-2-methylpropanamide;
Cpd 020 - 2-({5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-2-methylpropanamide;

Cpd 021 - 3-hydroxy-2-methyl-2-({2-methyl-5-[(6-methylpyridin-3-yl)methoxy]pyrazolo[1,5-a]pyridin-3-yl}formamido)propanamide;
Cpd 022 - 2-{[5-(cyclopropylmethoxy)-2-methylpyrazolo[1,5-a]pyridin-3-yl]formamido}-3-hydroxy-2-methylpropanamide;
Cpd 023 - 2-[(5-{[2-(difluoromethyl)phenyl]methoxy}-2-methylpyrazolo[1,5-a]pyridin-3-yl)formamido]-3-hydroxy-2-methylpropanamide;
Cpd 024 - 2-(1-{5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}-N-methylformamido)-3-hydroxy-2-methylpropanamide;
Cpd 025 - N-(4,4-difluoro-1-hydroxy-2-methylbutan-2-yl)-5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridine-3-carboxamide;
Cpd 026 - 2-({5-[(2,4-difluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-2-methylpropanamide;
Cpd 027 - 2-({5-[(2,3-difluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-2-methylpropanamide;
Cpd 028 - 2-({5-[(2-fluoro-4-methylphenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-2-methylpropanamide;
Cpd 029 - 2-({5-[(2-fluoro-3-methylphenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-2-methylpropanamide;
Cpd 030 - 2-({5-[(2,5-difluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-2-methylpropanamide;
Cpd 031 - 2-({5-[(2-fluoro-6-methylphenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-2-methylpropanamide;
Cpd 032 - 2-({5-[(2,6-difluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-2-methylpropanamide;
Cpd 033 - 5-(benzyloxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxylic acid;
Cpd 034 - 5-(cyclopropylmethoxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxylic acid;
Cpd 035 - 5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridine-3-carboxylic acid;
Cpd 036 - 5-[(2-chlorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridine-3-carboxylic acid;
Cpd 037 - N-(4,4-difluoro-1-hydroxy-2-methylbutan-2-yl)-2-methyl-5-[(4-methyl-1,3-thiazol-5-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 038 - N-(4,4-difluoro-1-hydroxy-2-methylbutan-2-yl)-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 042 - 2-methyl-5-[(pyridin-2-yl)methoxy]-N-(2,2,2-trifluoroethyl)pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 043 - N-(2-hydroxyethyl)-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,

Cpd 044 - N-[(1H-imidazol-2-yl)methyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 045 - N-[3-(dimethylamino)-2,2-dimethylpropyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 046 - N-(2,2-difluoro-2-phenylethyl)-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 047 - N-{[2-fluoro-6-(trifluoromethyl)phenyl]methyl}-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 048 - N-{[3-(difluoromethoxy)phenyl]methyl}-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 049 - N-(4,4-difluoropiperidin-3-yl)-2-methyl-5-[(4-methyl-1,3-thiazol-5-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 050 - N-(4,4-difluoropiperidin-3-yl)-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 051 - N-(5,5-difluoropiperidin-3-yl)-2-methyl-5-[(4-methyl-1,3-thiazol-5-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 052 - N-(5,5-difluoropiperidin-3-yl)-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 053 - 2-methyl-5-[(4-methyl-1,3-thiazol-5-yl)methoxy]-N-(pyrrolidin-3-yl)pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 054 - 2-methyl-5-[(pyridin-2-yl)methoxy]-N-(pyrrolidin-3-yl)pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 055 - N-[3,3-difluoro-1-(hydroxymethyl)cyclobutyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 056 - N-[2-hydroxy-5-(trifluoromethyl)pyridin-3-yl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 057 - N-[5-(hydroxymethyl)-2,2-dimethyl-1,3-dioxan-5-yl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 058 - N-[1-(4-fluorophenyl)-2-hydroxyethyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 059 - N-[2-hydroxy-1-(pyridin-2-yl)ethyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 061 - N-[1-(4-fluorophenyl)-3-hydroxypropyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 062 - 2-methyl-5-[(pyridin-2-yl)methoxy]-N-(4,4,4-trifluoro-1-hydroxybutan-2-yl)pyrazolo[1,5-a]pyridine-3-carboxamide,

Cpd 063 - 2-methyl-5-[(pyridin-2-yl)methoxy]-N-[4,4,4-trifluoro-1-hydroxy-3-(trifluoromethyl)butan-2-yl]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 064 - N-(4,4-difluoro-1-hydroxybutan-2-yl)-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 066 - N-(4,4-difluoro-1-methoxy-2-methylbutan-2-yl)-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 068 - N-(1-hydroxy-2-methyl-3-oxobutan-2-yl)-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 071 - N-[2,2-difluoro-1-(hydroxymethyl)cyclopropyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 071A - N-[cis-2,2-difluoro-1-(hydroxymethyl)cyclopropyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 071B - N-[trans-2,2-difluoro-1-(hydroxymethyl)cyclopropyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 072 - N-[cis-2-(difluoromethyl)-1-(hydroxymethyl)cyclopropyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 074 - N-[1-(1-cyclopropyl-1H-imidazol-2-yl)-2-hydroxyethyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 075 - N-[1-hydroxy-2-(1-methyl-1H-pyrazol-3-yl)propan-2-yl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 076 - (R)-4-hydroxy-3-({2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridin-3-yl}formamido)butanamide,
Cpd 077 - N-[2-hydroxy-1-(oxan-4-yl)ethyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 079 - N-[1-hydroxy-3-(pyrimidin-2-yl)propan-2-yl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 079A - (R)-N-[1-hydroxy-3-(pyrimidin-2-yl)propan-2-yl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 079B - (S)-N-[1-hydroxy-3-(pyrimidin-2-yl)propan-2-yl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 081 - 2-methyl-5-[(pyridin-2-yl)methoxy]-N-(4,4,4-trifluoro-2-hydroxybutyl)pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 082 - 2-methyl-5-[(pyridin-2-yl)methoxy]-N-[4-(trifluoromethyl)pyrrolidin-3-yl]pyrazolo[1,5-a]pyridine-3-carboxamide,
Cpd 082A - 2-methyl-5-[(pyridin-2-yl)methoxy]-N-[cis-4-(trifluoromethyl)pyrrolidin-3-yl]pyrazolo[1,5-a]pyridine-3-carboxamide,

Cpd 082B - 2-methyl-5-[(pyridin-2-yl)methoxy]-N-[trans-4-(trifluoromethyl)pyrrolidin-3-yl]pyrazolo[1,5-a]pyridine-3-carboxamide,

Cpd 084 - N-[3-(2,2-difluoroethyl)piperidin-3-yl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,

Cpd 087 - N-[2-hydroxy-1-(1-methyl-1H-pyrazol-3-yl)ethyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,

Cpd 088 - N-[1-hydroxy-3-(pyridin-2-yl)propan-2-yl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,

Cpd 089 - 3-hydroxy-2-methyl-2-({2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridin-3-yl}formamido)propanamide,

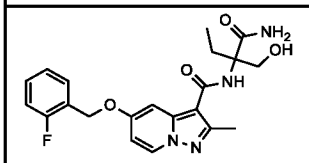
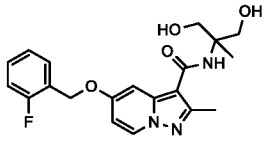
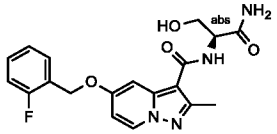
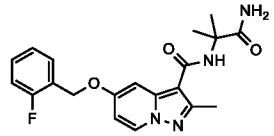
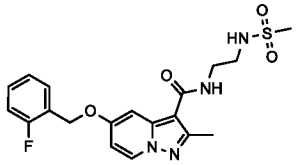
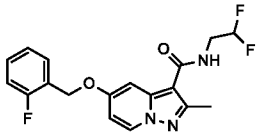
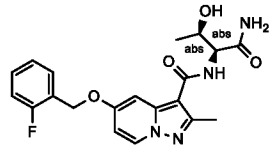
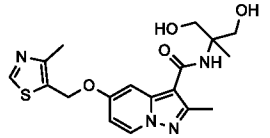
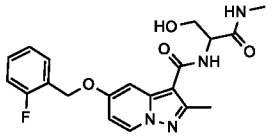
Cpd 090 - 2-methyl-5-[(pyridin-2-yl)methoxy]-N-(1,1,1-trifluoro-3-hydroxypropan-2-yl)pyrazolo[1,5-a]pyridine-3-carboxamide,

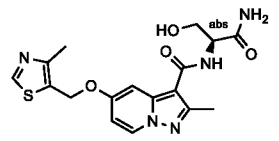
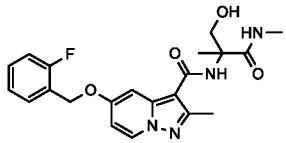
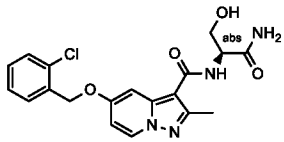
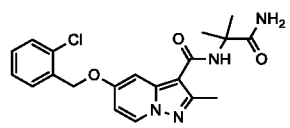
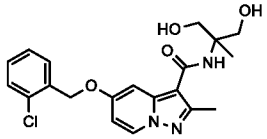
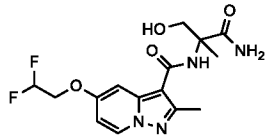
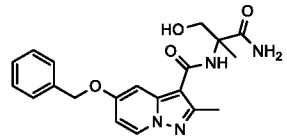
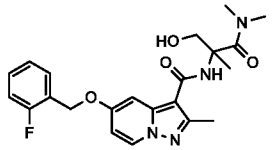
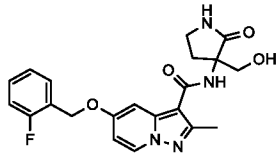
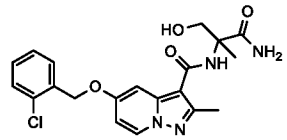
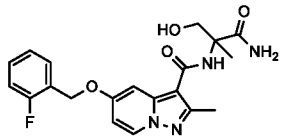
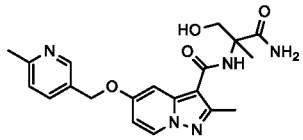
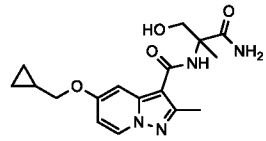
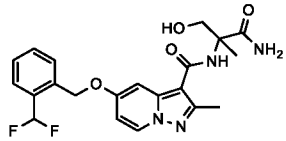
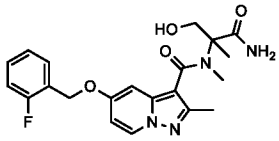
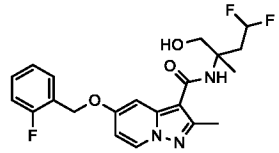
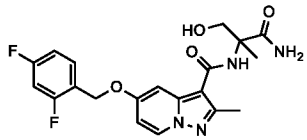
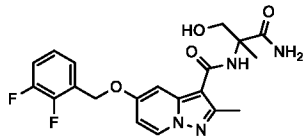
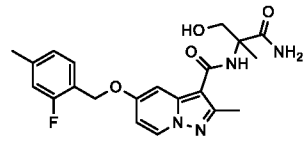
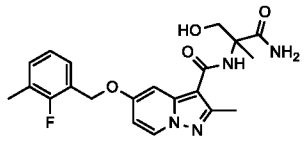
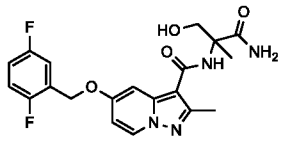
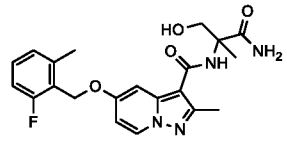
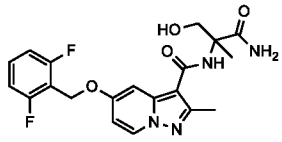
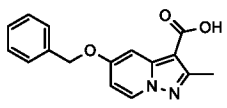
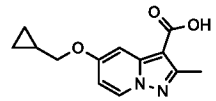
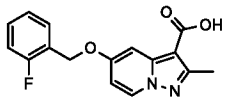
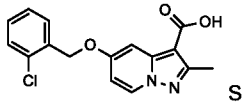
Cpd 091 - N-[3-(hydroxymethyl)-2-oxopyrrolidin-3-yl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide,

[0111] The pyrazolo[1,5-a]pyridine derivatives according to the invention is for use in the treatment of pain which is preferably selected from nociceptive pain, inflammatory pain, and neuropathic pain. More preferably, the pain is post-operative pain. The pyrazolo[1,5-a]pyridine derivatives according to the invention is for use in the treatment of epilepsy.

[0112] In some embodiments, the pyrazolo[1,5-a]pyridine derivatives are selected from the group consisting of compounds 001 – 091 shown in table 1 below, including stereoisomers and pharmaceutically acceptable salts thereof:

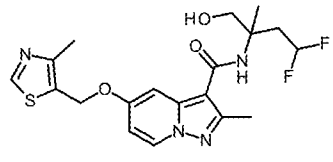
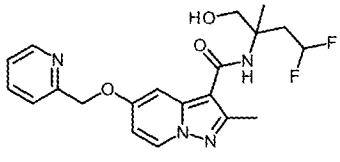
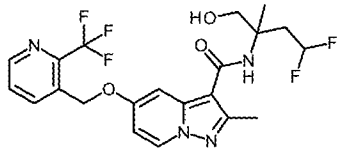
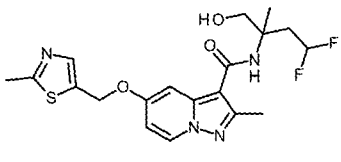
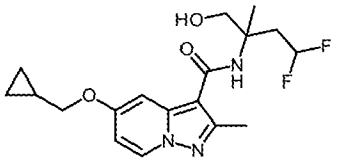
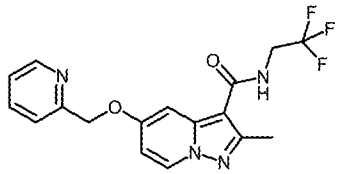
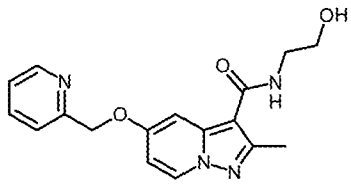
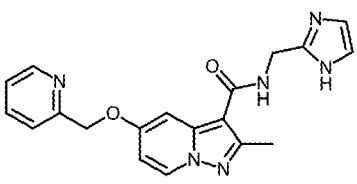
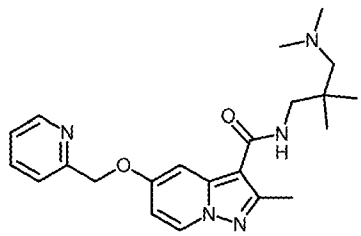
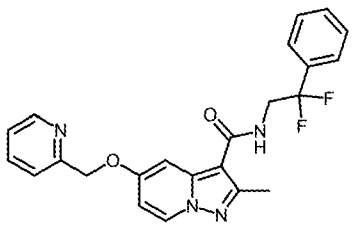
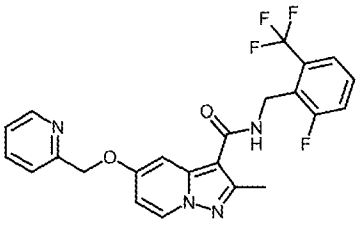
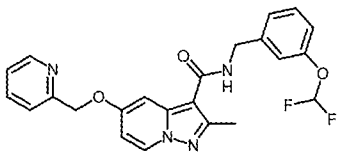
Table 1: Exemplary pyrazolo[1,5-a]pyridine derivatives

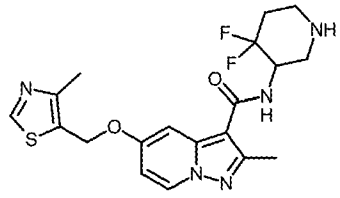
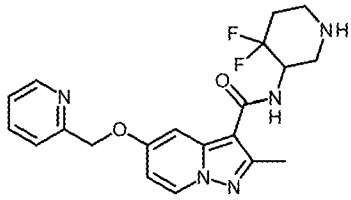
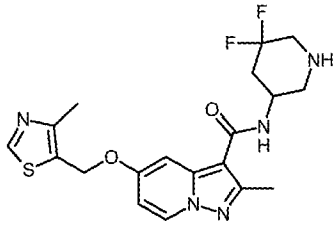
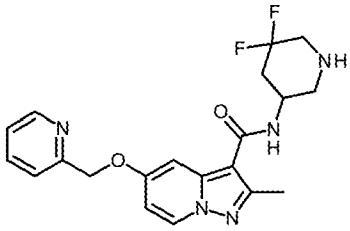
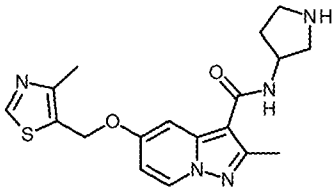
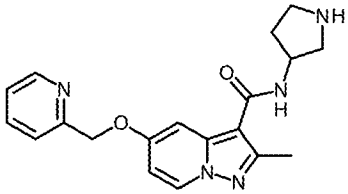
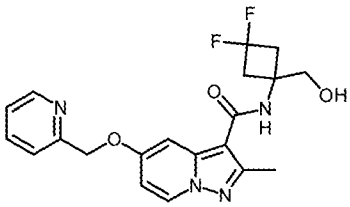
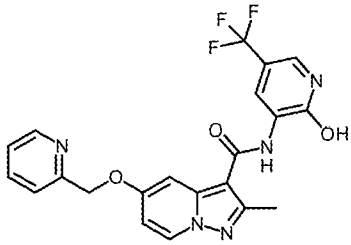
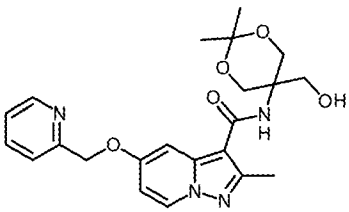
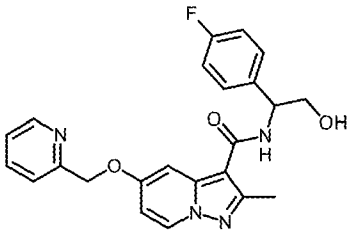
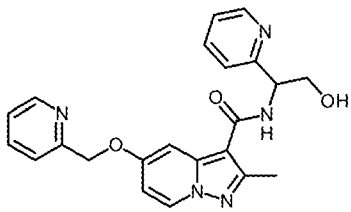
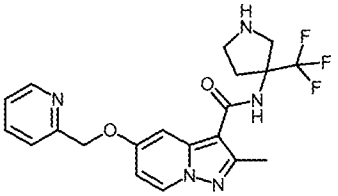
Structure and **Compound CODE**	Structure and **Compound CODE**	Structure and **Compound CODE**
 **Cpd 001**	 **Cpd 002**	 **Cpd 003**
 **Cpd 004**	 **Cpd 005**	 **Cpd 006**
 **Cpd 007**	 **Cpd 008**	 **Cpd 009**

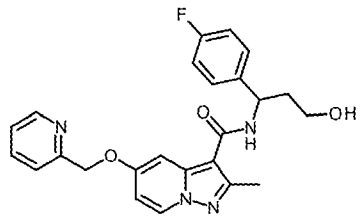
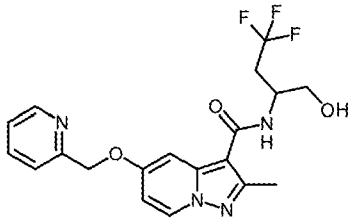
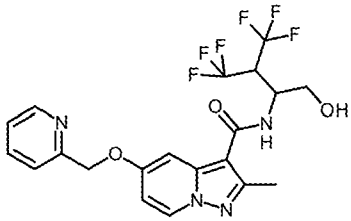
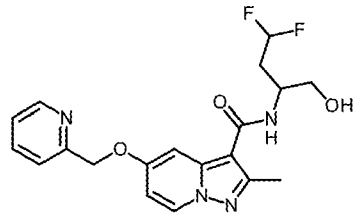
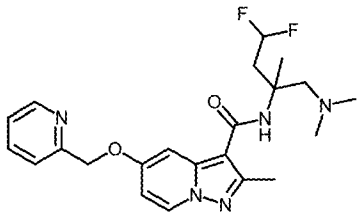
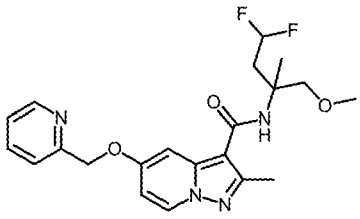
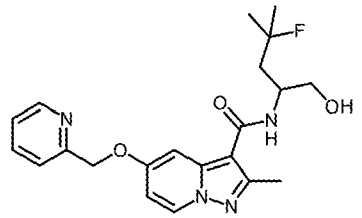
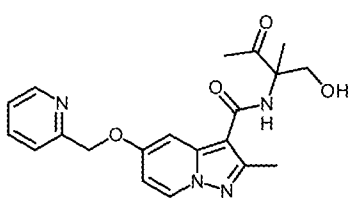
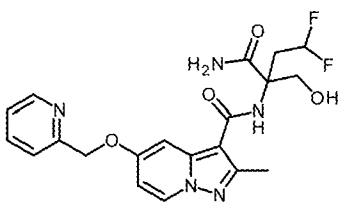
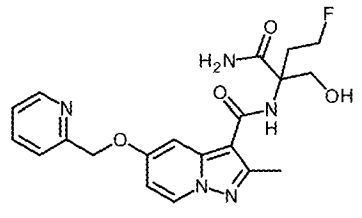
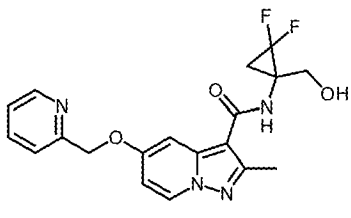
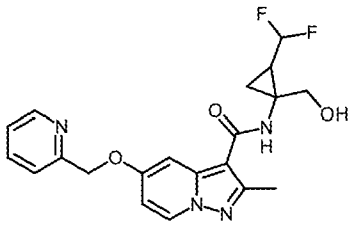
 Cpd 010	 Cpd 011	 Cpd 012
 Cpd 013	 Cpd 014	 Cpd 015
 Cpd 016	 Cpd 017	 Cpd 018
 Cpd 019	 Cpd 020	 Cpd 021
 Cpd 022	 Cpd 023	 Cpd 024
 Cpd 025	 Cpd 026	 Cpd 027
 Cpd 028	 Cpd 029	 Cpd 030
 Cpd 031	 Cpd 032	 Cpd 033
 Cpd 034	 Cpd 035	 Cpd 036

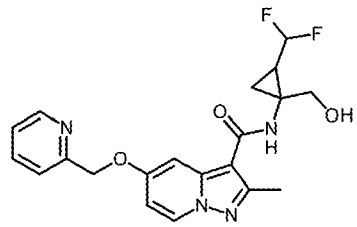
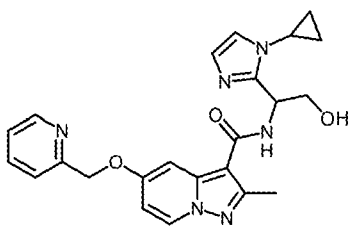
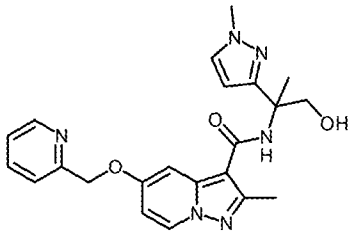
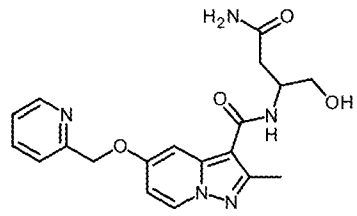
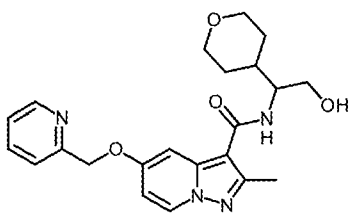
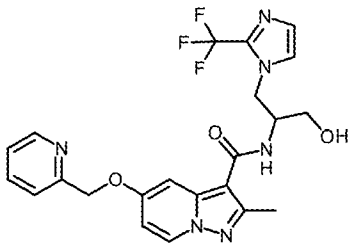
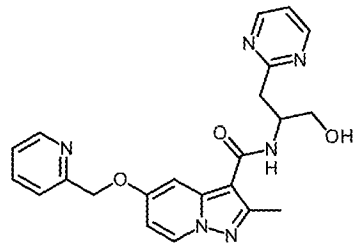
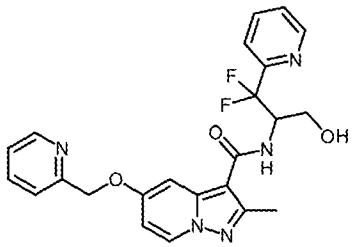
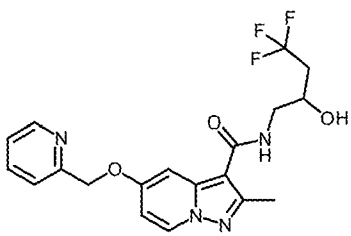
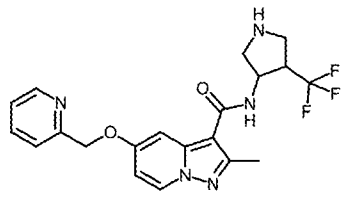
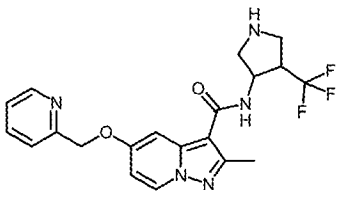
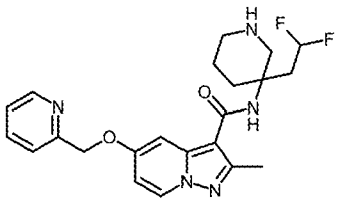
[0113] In some embodiments, the pyrazolo[1,5-a]pyridine derivatives are selected from the group consisting of compounds 037 – 088 shown in table 2 below, including stereoisomers and pharmaceutically acceptable salts thereof:

Table 2: Exemplary Pyrazolo[1,5-a]pyridine derivatives

Structure and **Compound CODE**	Structure and **Compound CODE**	Structure and **Compound CODE**
 **Cpd 037**	 **Cpd 038**	 **Cpd 039**
 **Cpd 040**	 **Cpd 041**	 **Cpd 042**
 **Cpd 043**	 **Cpd 044**	 **Cpd 045**
 **Cpd 046**	 **Cpd 047**	 **Cpd 048**

 Cpd 049	 Cpd 050	 Cpd 051
 Cpd 052	 Cpd 053	 Cpd 054
 Cpd 055	 Cpd 056	 Cpd 057
 Cpd 058	 Cpd 059	 Cpd 060

 Cpd 061	 Cpd 062	 Cpd 063
 Cpd 064	 Cpd 065	 Cpd 066
 Cpd 067	 Cpd 068	 Cpd 069
 Cpd 070	 Cpd 071	 Cpd 072

 Cpd 073	 Cpd 074	 Cpd 075
 Cpd 076	 Cpd 077	 Cpd 078
 Cpd 079	 Cpd 080	 Cpd 081
		

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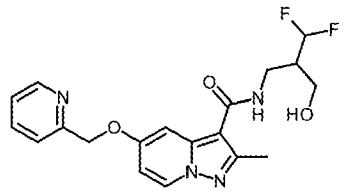	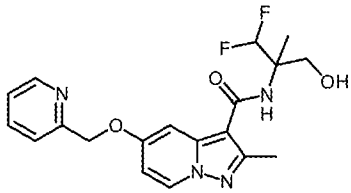	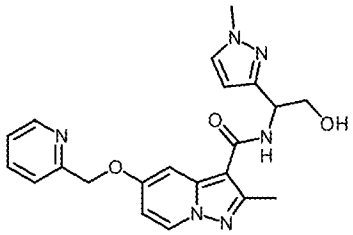
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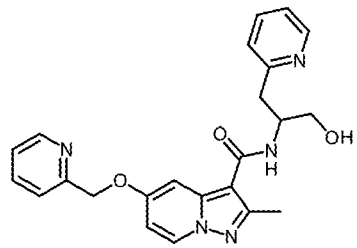	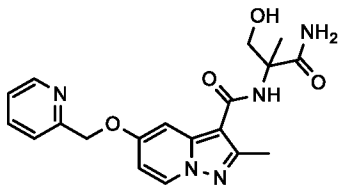	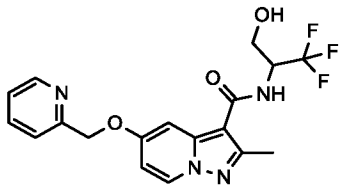
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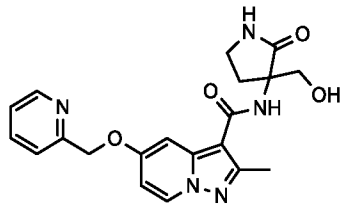
		
Cpd 091		

[0114] All definitions, embodiments and meanings of **Q**, **T**, **U**, **V**, R^1, R^2, R^3, R^4, R^5, $R^{5'}$, R^6, R^7, and R^8 including the disclosed substituents also analogously apply the pyrazolo[1,5-a]pyridine derivatives according to the invention, including but not limited to (a-1), (a-2), (a-3), (b-1), (b-2), and (b-3), which are not necessarily restricted for use in the treatment of pain. Thus, this aspect of the invention relates to the pyrazolo[1,5-a]pyridine derivatives as such, compositions comprising the pyrazolo[1,5-a]pyridine derivatives, medicaments comprising the pyrazolo[1,5-a]pyridine derivatives, and the pyrazolo[1,5-a]pyridine derivatives for use in the prevention and/or treatment of TRPM3 mediated disorders such as pain and/or inflammatory hypersensitivity and/or epilepsy; and/or for counteracting pain and/or inflammatory hypersensitivity and/or epilepsy. Preferably, the pain is selected from nociceptive pain,

inflammatory pain, and neuropathic pain. More preferably, the pain is post-operative pain.

[0115] In some embodiments of the invention, the pyrazolo[1,5-a]pyridine derivative is selected from the group consisting of cpd 001 to cpd 036 as mentioned above and the physiologically acceptable salts thereof.

[0116] In some embodiments of the invention, the pyrazolo[1,5-a]pyridine derivative is selected from the group consisting of cpd 037 to cpd 091 as mentioned above and the physiologically acceptable salts thereof.

[0117] Another aspect of the invention relates to a pharmaceutical composition or a medicament comprising a compound according to the invention as described above.

[0118] Reference throughout this specification to "one embodiment" or "an embodiment" means that a particular feature, structure or characteristic described in connection with the embodiment is included in at least one embodiment of the invention. Thus, appearances of the phrases "in one embodiment" or "in an embodiment" in various places throughout this specification are not necessarily all referring to the same embodiment, but may. Furthermore, the particular features, structures or characteristics may be combined in any suitable manner, as would be apparent to one of ordinary skill in the art from this disclosure, in one or more embodiments. Also, embodiments described for an aspect of the invention may be used for another aspect of the invention and can be combined. Where an indefinite or definite article is used when referring to a singular noun e.g., "a" or "an", "the", this includes a plural of that noun unless something else is specifically stated.

[0119] Similarly, it should be appreciated that in the description of exemplary embodiments of the invention, various features of the invention are sometimes grouped together in a single embodiment, figure, or description thereof for the purpose of streamlining the disclosure and aiding in the understanding of one or more of the various inventive aspects.

[0120] In each of the following definitions, the number of carbon atoms represents the maximum number of carbon atoms generally optimally present in the substituent or linker; it is understood that where otherwise indicated in the present application, the number of carbon atoms represents the optimal maximum number of carbon atoms for that particular substituent or linker.

[0121] The term “leaving group” or “LG” as used herein means a chemical group which is susceptible to be displaced by a nucleophile or cleaved off or hydrolyzed in basic or acidic conditions. In a particular embodiment, a leaving group is selected from a halogen atom (e.g., Cl, Br, I) or a sulfonate (e.g., mesylate, tosylate, triflate).

[0122] The term "protecting group" refers to a moiety of a compound that masks or alters the properties of a functional group or the properties of the compound as a whole. The chemical substructure of a protecting group varies widely. One function of a protecting group is to serve

as intermediates in the synthesis of the parental drug substance. Chemical protecting groups and strategies for protection/deprotection are well known in the art. See: "Protective Groups in Organic Chemistry", Theodora W. Greene (John Wiley & Sons, Inc., New York, 1991. Protecting groups are often utilized to mask the reactivity of certain functional groups, to assist in the efficiency of desired chemical reactions, e.g., making and breaking chemical bonds in an ordered and planned fashion. Protection of functional groups of a compound alters other physical properties besides the reactivity of the protected functional group, such as the polarity, lipophilicity (hydrophobicity), and other properties which can be measured by common analytical tools. Chemically protected intermediates may themselves be biologically active or inactive.

[0123] Protected compounds may also exhibit altered, and in some cases, optimized properties in vitro and in vivo, such as passage through cellular membranes and resistance to enzymatic degradation or sequestration. In this role, protected compounds with intended therapeutic effects may be referred to as prodrugs. Another function of a protecting group is to convert the parental drug into a prodrug, whereby the parental drug is released upon conversion of the prodrug in vivo. Because active prodrugs may be absorbed more effectively than the parental drug, prodrugs may possess greater potency in vivo than the parental drug. Protecting groups are removed either in vitro, in the instance of chemical intermediates, or in vivo, in the case of prodrugs. With chemical intermediates, it is not particularly important that the resulting products after deprotection, e.g., alcohols, be physiologically acceptable, although in general it is more desirable if the products are pharmacologically innocuous.

[0124] The term “heteroatom(s)” as used herein means an atom selected from nitrogen, which can be quaternized or present as an oxide; oxygen; and sulfur, including oxidized sulfurs including, sulfoxide and sulfone, and in some cases sulfonate. In certain instances, the compounds and/or synthetic intermediates may include heteroatoms such as boron, phosphorous, and silicon.

[0125] The term “alkyl, saturated or unsaturated” as used herein encompasses saturated alkyl as well as unsaturated alkyl such as alkenyl, alkynyl, and the like. The term “alkyl” as used herein means normal, secondary, or tertiary, linear or branched hydrocarbon with no site of unsaturation. Examples are methyl, ethyl, 1-propyl (n-propyl), 2-propyl (iPr), 1-butyl, 2-methyl-1-propyl(i-Bu), 2-butyl (s-Bu), 2-dimethyl-2-propyl (t-Bu), 1-pentyl (n-pentyl), 2-pentyl, 3-pentyl, 2-methyl-2-butyl, 3-methyl-2-butyl, 3-methyl-1-butyl, 2-methyl-1-butyl, 1-hexyl, 2-hexyl, 3-hexyl, 2-methyl-2-pentyl, 3-methyl-2-pentyl, 4-methyl-2-pentyl, 3-methyl-3-pentyl, 2-methyl-3-pentyl, 2,3-dimethyl-2-butyl, and 3,3-dimethyl-2-butyl. The term “alkenyl” as used herein means normal, secondary or tertiary, linear or branched hydrocarbon with at least one site (usually 1 to 3, preferably 1) of unsaturation, namely a carbon-carbon, sp2 double bond. Examples include, but are not limited to: ethylene or vinyl (-CH=CH_2), allyl (-CH_2CH=CH_2), and

5-hexenyl (-$CH_2CH_2CH_2CH_2CH=CH_2$). The double bond may be in the cis or trans configuration. The term “alkynyl” as used herein means normal, secondary, tertiary, linear or branched hydrocarbon with at least one site (usually 1 to 3, preferably 1) of unsaturation, namely a carbon-carbon, sp triple bond. Examples include, but are not limited to: ethynyl (-C≡CH), and 1-propynyl (propargyl, -CH_2C≡CH).

[0126] The term “alkylene, saturated or unsaturated” as used herein encompasses saturated alkylene as well as unsaturated alkylene such as alkenylene, alkynylene, alkenynylene and the like. The term "alkylene" as used herein means saturated, linear or branched chain hydrocarbon radical having two monovalent radical centers derived by the removal of two hydrogen atoms from the same or two different carbon atoms of a parent alkane. Typical alkylene radicals include, but are not limited to: methylene (-CH_2-), 1,2-ethyl (-CH_2CH_2-), 1,3-propyl (-$CH_2CH_2CH_2$-), 1,4-butyl (-$CH_2CH_2CH_2CH_2$-), and the like. The term "alkenylene" as used herein means linear or branched chain hydrocarbon radical with at least one site (usually 1 to 3, preferably 1) of unsaturation, namely a carbon-carbon, sp2 double bond, and having two monovalent radical centers derived by the removal of two hydrogen atoms from the same or two different carbon atoms of a parent alkene. The term "alkynylene" as used herein means linear or branched chain hydrocarbon radical with at least one site (usually 1 to 3, preferably 1) of unsaturation, namely a carbon-carbon, sp triple bond, and having two monovalent radical centers derived by the removal of two hydrogen atoms from the same or two different carbon atoms of a parent alkyne.

[0127] The term “heteroalkyl, saturated or unsaturated” as used herein encompasses saturated heteroalkyl as well as unsaturated heteroalkyl such as heteroalkenyl, heteroalkynyl, heteroalkenynyl and the like. The term “heteroalkyl” as used herein means linear or branched chain alkyl wherein one or more carbon atoms (usually 1, 2 or 3) are replaced by a heteroatom, i.e., an oxygen, nitrogen or sulfur atom, with the proviso that said chain may not contain two adjacent O atoms or two adjacent S atoms. This means that one or more -CH_3 of said alkyl can be replaced by -NH_2 and/or that one or more -CH_2- of said alkyl can be replaced by -NH-, -O- or -S-. The S atoms in said chains may be optionally oxidized with one or two oxygen atoms, to afford sulfoxides and sulfones, respectively. Furthermore, the heteroalkyl groups in the pyrazolo[1,5-a]pyridine derivatives of the invention can contain an oxo or thio group at any carbon or heteroatom that will result in a stable compound. Exemplary heteroalkyl groups include, but are not limited to, alcohols, alkyl ethers (such as for example -methoxy, -ethoxy, -butoxy…), primary, secondary, and tertiary alkyl amines, amides, ketones, esters, alkyl sulfides, and alkyl sulfones. The term “heteroalkenyl” means linear or branched chain alkenyl wherein one or more carbon atoms (usually 1, 2 or 3) are replaced by an oxygen, nitrogen or sulfur atom, with the proviso that said chain may not contain two adjacent O atoms or two adjacent S atoms. The term heteroalkenyl thus comprises imines, -O-alkenyl, -NH-alkenyl, -

$N(alkenyl)_2$, -N(alkyl)(alkenyl), and -S-alkenyl. The term "heteroalkynyl" as used herein means linear or branched chain alkynyl wherein one or more carbon atoms (usually 1, 2 or 3) are replaced by an oxygen, nitrogen or sulfur atom, with the proviso that said chain may not contain two adjacent O atoms or two adjacent S atoms. The term heteroalkynyl thus comprises -cyano, -O-alkynyl, -NH-alkynyl, $-N(alkynyl)_2$, -N(alkyl)(alkynyl), -N(alkenyl)(alkynyl), and -S-alkynyl.

[0128] The term "heteroalkylene, saturated or unsaturated" as used herein encompasses saturated heteroalkylene as well as unsaturated heteroalkylene such as heteroalkenylene, heteroalkynylene, heteroalkenynylene and the like. The term "heteroalkylene" as used herein means linear or branched chain alkylene wherein one or more carbon atoms (usually 1, 2 or 3) are replaced by a heteroatom, i.e., an oxygen, nitrogen or sulfur atom, with the proviso that said chain may not contain two adjacent O atoms or two adjacent S atoms. The term "heteroalkenylene" as used herein means linear or branched chain alkenylene wherein one or more carbon atoms (usually 1, 2 or 3) are replaced by an oxygen, nitrogen or sulfur atom, with the proviso that said chain may not contain two adjacent O atoms or two adjacent S atoms. The term "heteroalkynylene" as used herein means linear or branched chain alkynylene wherein one or more carbon atoms (usually 1, 2 or 3) are replaced by an oxygen, nitrogen or sulfur atom, with the proviso that said chain may not contain two adjacent O atoms or two adjacent S atoms.

[0129] The term "cycloalkyl, saturated or unsaturated" as used herein encompasses saturated cycloalkyl as well as unsaturated cycloalkyl such as cycloalkenyl, cycloalkynyl and the like. The term "cycloalkyl" as used herein and unless otherwise stated means a saturated cyclic hydrocarbon radical, such as for instance cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, cyclooctyl, norbornyl, fenchyl, decalinyl, adamantyl and the like. The term "cycloalkenyl" as used herein means a non-aromatic cyclic hydrocarbon radical with at least one site (usually 1 to 3, preferably 1) of unsaturation, namely a carbon-carbon, sp2 double bond. Examples include, but are not limited to cyclopentenyl and cyclohexenyl. The double bond may be in the cis or trans configuration. The term "cycloalkynyl" as used herein means a non-aromatic cyclic hydrocarbon radical with at least one site (usually 1 to 3, preferably 1) of unsaturation, namely a carbon-carbon, sp triple. An example is cyclohept-1-yne. Fused systems of a cycloalkyl ring with a heterocycloalkyl ring are considered as heterocycloalkyl irrespective of the ring that is bound to the core structure. Fused systems of a cycloalkyl ring with an aryl ring are considered as aryl irrespective of the ring that is bound to the core structure. Fused systems of a cycloalkyl ring with a heteroaryl ring are considered as heteroaryl irrespective of the ring that is bound to the core structure.

[0130] The term "heterocycloalkyl, saturated or unsaturated" as used herein encompasses saturated heterocycloalkyl as well as unsaturated non-aromatic heterocycloalkyl including at least one heteroatom, i.e., an N, O, or S as ring member. The term "heterocycloalkyl" as used

herein and unless otherwise stated means "cycloalkyl" wherein one or more carbon atoms (usually 1, 2 or 3) are replaced by an oxygen, nitrogen or sulfur atom, with the proviso that said chain may not contain two adjacent O atoms or two adjacent S atoms. The term “heterocycloalkenyl” as used herein and unless otherwise stated means "cycloalkenyl" wherein one or more carbon atoms (usually 1, 2 or 3) are replaced by an oxygen, nitrogen or sulfur atom, with the proviso that said chain may not contain two adjacent O atoms or two adjacent S atoms. The term “heterocycloalkynyl” as used herein and unless otherwise stated means "cycloalkynyl" wherein one or more carbon atoms (usually 1, 2 or 3) are replaced by an oxygen, nitrogen or sulfur atom, with the proviso that said chain may not contain two adjacent O atoms or two adjacent S atoms. Examples of saturated and unsaturated heterocycloalkyl include but are not limited to azepane, 1,4-oxazepane, azetane, azetidine, aziridine, azocane, diazepane, dioxane, dioxolane, dithiane, dithiolane, imidazolidine, isothiazolidine, isoxalidine, morpholine, oxazolidine, oxepane, oxetane, oxirane, piperazine, piperidine, pyrazolidine, pyrrolidine, quinuclidine, tetrahydrofuran, tetrahydropyran, tetrahydrothiopyran, thiazolidine, thietane, thiirane, thiolane, thiomorpholine, indoline, dihydrobenzofuran, dihydrobenzothiophene, 1,1-dioxothiacyclohexane, 2-azaspiro[3.3]heptane, 2-oxaspiro[3.3]heptane, 7-azaspiro[3.5]nonane, 8-azabicyclo[3.2.1]octane, 9-azabicyclo[3.3.1]nonane, hexahydro-1H-pyrrolizine, hexahydrocyclopenta[c]pyrrole, octahydrocyclopenta[c]pyrrole, and octahydropyrrolo[1,2-a]pyrazine. Further heterocycloalkyls in the meaning of the invention are described in Paquette, Leo A. "Principles of Modern Heterocyclic Chemistry" (W.A. Benjamin, New York, 1968), particularly Chapters 1, 3, 4, 6, 7, and 9; "The Chemistry of Heterocyclic Compounds, A series of Monographs" (John Wiley & Sons, New York, 1950 to present), in particular Volumes 13, 14, 16, 19, and 28; Katritzky, Alan R., Rees, C.W. and Scriven, E. "Comprehensive Heterocyclic Chemistry" (Pergamon Press, 1996); and J. Am. Chem. Soc. (1960) 82:5566. When the heterocycloalkyl contains no nitrogen as ring member, it is typically bonded through carbon. When the heterocycloalkyl contains nitrogen as ring member, it may be bonded through nitrogen or carbon. Fused systems of heterocycloalkyl ring with a cycloalkyl ring are considered as heterocycloalkyl irrespective of the ring that is bound to the core structure. Fused systems of a heterocycloalkyl ring with an aryl ring are considered as heterocycloalkyl irrespective of the ring that is bound to the core structure. Fused systems of a heterocycloalkyl ring with a heteroaryl ring are considered as heteroaryl irrespective of the ring that is bound to the core structure.

[0131] The term "aryl" as used herein means an aromatic hydrocarbon. Typical aryl groups include, but are not limited to 1 ring, or 2 or 3 rings fused together, radicals derived from benzene, naphthalene, anthracene, biphenyl, and the like. Fused systems of an aryl ring with a cycloalkyl ring are considered as aryl irrespective of the ring that is bound to the core structure. Fused systems of an aryl ring with a heterocycloalkyl ring are considered as

heterocycloalkyl irrespective of the ring that is bound to the core structure. Thus, indoline, dihydrobenzofuran, dihydrobenzothiophene and the like are considered as heterocycloalkyl according to the invention. Fused systems of an aryl ring with a heteroaryl ring are considered as heteroaryl irrespective of the ring that is bound to the core structure.

[0132] The term “heteroaryl” as used herein means an aromatic ring system including at least one heteroatom, i.e., N, O, or S as ring member of the aromatic ring system. Examples of heteroaryl include but are not limited to benzimidazole, benzisoxazole, benzoazole, benzodioxole, benzofuran, benzothiadiazole, benzothiazole, benzothiophene, carbazole, cinnoline, dibenzofuran, furane, furazane, imidazole, imidazopyridine, indazole, indole, indolizine, isobenzofuran, isoindole, isoquinoline, isothiazole, isoxazole, naphthyridine, oxadiazole, oxazole, oxindole, phthalazine, purine, pyrazine, pyrazole, pyridazine, pyridine, pyrimidine, pyrrole, quinazoline, quinoline, quinoxaline, tetrazole, thiadiazole, thiazole, thiophene, triazine, triazole, and [1,2,4]triazolo[4,3-a]pyrimidine.

[0133] By further way of example, carbon bonded heterocyclic rings are bonded at position 2, 3, 4, 5, or 6 of a pyridine, position 3, 4, 5, or 6 of a pyridazine, position 2, 4, 5, or 6 of a pyrimidine, position 2, 3, 5, or 6 of a pyrazine, position 2, 3, 4, or 5 of a furan, tetrahydrofuran, thiophene, pyrrole or tetrahydropyrrole, position 2, 4, or 5 of an oxazole, imidazole or thiazole, position 3, 4, or 5 of an isoxazole, pyrazole, or isothiazole, position 2 or 3 of an aziridine, position 2, 3, or 4 of an azetidine, position 2, 3, 4, 5, 6, 7, or 8 of a quinoline or position 1, 3, 4, 5, 6, 7, or 8 of an isoquinoline.

[0134] Carbon bonded heterocycles include 2-pyridyl, 3-pyridyl, 4-pyridyl, 5-pyridyl, 6-pyridyl, 3-pyridazinyl, 4-pyridazinyl, 5-pyridazinyl, 6-pyridazinyl, 2-pyrimidinyl, 4-pyrimidinyl, 5-pyrimidinyl, 6-pyrimidinyl, 2-pyrazinyl, 3-pyrazinyl, 5-pyrazinyl, 6-pyrazinyl, 2-thiazolyl, 4-thiazolyl, or 5-thiazolyl. By way of example, nitrogen bonded heterocyclic rings are bonded at position 1 of an aziridine, azetidine, pyrrole, pyrrolidine, 2-pyrroline, 3-pyrroline, imidazole, imidazolidine, 2-imidazoline, 3-imidazoline, pyrazole, pyrazoline, 2-pyrazoline, 3-pyrazoline, piperidine, piperazine, indole, indoline, 1H-indazole, position 2 of an isoindole, or isoindoline, position 4 of a morpholine, and position 9 of a carbazole, or ß-carboline. Nitrogen bonded heterocycles include 1-aziridyl, 1-azetedyl, 1-pyrrolyl, 1-imidazolyl, 1-pyrazolyl, and 1-piperidinyl. Further heteroaryls in the meaning of the invention are described in Paquette, Leo A. "Principles of Modern Heterocyclic Chemistry" (W.A. Benjamin, New York, 1968), particularly Chapters 1, 3, 4, 6, 7, and 9; "The Chemistry of Heterocyclic Compounds, A series of Monographs" (John Wiley & Sons, New York, 1950 to present), in particular Volumes 13, 14, 16, 19, and 28; Katritzky, Alan R., Rees, C.W. and Scriven, E. "Comprehensive Heterocyclic Chemistry" (Pergamon Press, 1996); and J. Am. Chem. Soc. (1960) 82:5566.

[0135] As used herein with respect to a substituting group, and unless otherwise stated, the terms “monosubstituted”, "disubstituted", "trisubstituted", "polysubstituted" and the like means

chemical structures defined herein, wherein the respective moiety is substituted with one or more substituents, meaning that one or more hydrogen atoms of said moiety are each independently replaced with a substituent. For example, -C_{1-6}-alkyl that may be polysubstituted with -F includes -CH_2F, -CHF_2, -CF_3, -CH_2CF_3, CF_2CF_3, and the like. Likewise, -C_{1-6}-alkyl that may be polysubstituted with substituents independently of one another selected from -F and -Cl includes -CH_2F, -CHF_2, -CF_3, -CH_2CF_3, CF_2CF_3, -CH_2Cl, -$CHCl_2$, -CCl_3, -CH_2CCl_3, CCl_2CCl_3, -CHClF, -$CClF_2$, -CCl_2CF_3, -CF_2CCl_3, -$CClFCCl_2F$, and the like. Any substituent designation that is found in more than one site in a compound of this invention shall be independently selected.

[0136] As used herein and unless otherwise stated, the term “solvate” includes any combination which may be formed by a derivative of this invention with a suitable inorganic solvent (e.g., hydrates) or organic solvent, such as but not limited to alcohols, ketones, esters, ethers, nitriles and the like.

[0137] The term “subject” as used herein, refers to an animal including humans, preferably a mammal, most preferably a human, who has been the object of treatment, observation or experiment.

[0138] The term “therapeutically effective amount” as used herein, means that amount of active compound or pharmaceutical agent that elicits the biological or medicinal response in a tissue system, animal or human that is being sought by a researcher, veterinarian, medical doctor or other clinician, which includes alleviation or partial alleviation of the symptoms of the disease or disorder being treated.

[0139] The term “composition” as used herein is intended to encompass a product comprising the specified ingredients in the therapeutically effective amounts, as well as any product which results, directly or indirectly, from combinations of the specified ingredients in the specified amounts.

[0140] The term “antagonist” or “inhibitor” as used herein refers to a compound capable of producing, depending on the circumstance, a functional antagonism of the TRPM3 ion channel, including competitive antagonists, non-competitive antagonists, desensitizing agonists, and partial agonists. In general, “antagonists” and “inhibitors” can be understood to modulate TRPM3.

[0141] For purposes of the invention, the term “TRPM3-modulated” is used to refer to the condition of being affected by the modulation of the TRPM3 ion channel, including the state of being mediated by the TRPM3 ion channel.

[0142] The term “TRPM3 mediated disorder” as used herein refers to disorders or diseases for which the use of an antagonist or modulator of TRPM3 would prevent, treat, (partially) alleviate or improve the symptoms and consist of pain, inflammatory hypersensitivity condition and epilepsy. According to the International Association for the Study of Pain and for the

purpose of the invention, pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage. Preferably, the TRPM3 mediated disorder is pain which is preferably selected from nociceptive pain, inflammatory pain, and neuropathic pain. More preferably, the pain is post-operative pain. For the purpose of the invention, the term "inflammatory hypersensitivity" is used to refer to a condition that is characterized by one or more hallmarks of inflammation, including edema, erythema, hyperthermia and pain, and/or by an exaggerated physiologic or pathophysiologic response to one or more than one type of stimulation, including thermal, mechanical and/or chemical stimulation.

[0143] The pyrazolo[1,5-a]pyridine derivatives of the invention have been shown to be or are understood to be antagonists or modulators of TRPM3 and the invention therefore provides the compounds as such, the compounds for use as a medicine, more specifically for use as a medicine in the prevention or treatment of TRPM3 mediated disorders in a subject with a therapeutically effective amount of a pyrazolo[1,5-a]pyridine derivative of the invention.

[0144] In an embodiment of the invention, the pyrazolo[1,5-a]pyridine derivative of the invention is the sole pharmacologically active compound to be administered for therapy. In another embodiment of the invention, the pyrazolo[1,5-a]pyridine derivative of the invention may be employed in combination with other therapeutic agents for the treatment or prophylaxis of TRPM3 mediated disorders. The invention therefore also relates to the use of a composition comprising:

- one or more compounds of the formulae and embodiments herein, and
- one or more further therapeutic or preventive agents that are used for the prevention or treatment of TRPM3 mediated disorders as biologically active agents in the form of a combined preparation for simultaneous, separate or sequential use.

[0145] The pharmaceutical composition or combined preparation according to this invention may contain pyrazolo[1,5-a]pyridine derivatives of the invention over a broad content range depending on the contemplated use and the expected effect of the preparation. Generally, the content of the pyrazolo[1,5-a]pyridine derivatives of the invention of the combined preparation is within the range of 0.1 to 99.9% by weight, preferably from 1 to 99% by weight, more preferably from 5 to 95% by weight.

[0146] In view of the fact that, when several active ingredients are used in combination, they do not necessarily bring out their joint therapeutic effect directly at the same time in the mammal to be treated, the corresponding composition may also be in the form of a medical kit or package containing the two ingredients in separate but adjacent repositories or compartments. In the latter context, each active ingredient may therefore be formulated in a way suitable for an administration route different from that of the other ingredient, e.g., one of them may be in the form of an oral or parenteral formulation whereas the other is in the form

of an ampoule for intravenous injection or an aerosol.

[0147] Those of skill in the art will also recognize that the pyrazolo[1,5-a]pyridine derivatives of the invention may exist in many different protonation states, depending on, among other things, the pH of their environment. While the structural formulae provided herein depict the compounds in only one of several possible protonation states, it will be understood that these structures are illustrative only, and that the invention is not limited to any particular protonation state - any and all protonated forms of the compounds are intended to fall within the scope of the invention.

[0148] The terms "pharmaceutically acceptable salts" or “physiologically acceptable salts” as used herein means the therapeutically active non-toxic salt forms which the compounds of formulae herein are able to form. Therefore, the compounds of this invention optionally comprise salts of the compounds herein, especially pharmaceutically acceptable non-toxic salts containing, for example, Na^+, Li^+, K^+, Ca^{2+} and Mg^{2+}. Such salts may include those derived by combination of appropriate cations such as alkali and alkaline earth metal ions or ammonium and quaternary amino ions with an acid anion moiety, typically a carboxylic acid. The pyrazolo[1,5-a]pyridine derivatives of the invention may bear multiple positive or negative charges. The net charge of the pyrazolo[1,5-a]pyridine derivatives of the invention may be either positive or negative. Any associated counter ions are typically dictated by the synthesis and/or isolation methods by which the compounds are obtained. Typical counter ions include, but are not limited to ammonium, sodium, potassium, lithium, halides, acetate, trifluoroacetate, etc., and mixtures thereof. It will be understood that the identity of any associated counter ion is not a critical feature of the invention, and that the invention encompasses the compounds in association with any type of counter ion. Moreover, as the compounds can exist in a variety of different forms, the invention is intended to encompass not only forms of the compounds that are in association with counter ions (e.g., dry salts), but also forms that are not in association with counter ions (e.g., aqueous or organic solutions). Metal salts typically are prepared by reacting the metal hydroxide with a compound of this invention. Examples of metal salts which are prepared in this way are salts containing Li^+, Na^+, and K^+. A less soluble metal salt can be precipitated from the solution of a more soluble salt by addition of the suitable metal compound. In addition, salts may be formed from acid addition of certain organic and inorganic acids to basic centers, typically amines, or to acidic groups. Examples of such appropriate acids include, for instance, inorganic acids such as hydrohalogen acids, e.g. hydrochloric or hydrobromic acid, sulfuric acid, nitric acid, phosphoric acid and the like; or organic acids such as, for example, acetic, propanoic, hydroxyacetic, 2-hydroxypropanoic, 2-oxopropanoic, lactic, pyruvic, oxalic (i.e. ethanedioic), malonic, succinic (i.e. butanedioic acid), maleic, fumaric, malic, tartaric, citric, methanesulfonic, ethanesulfonic, benzenesulfonic, p-toluenesulfonic, cyclohexanesulfamic, salicylic (i.e. 2-hydroxybenzoic), p-aminosalicylic and the like.

Furthermore, this term also includes the solvates which the compounds of formulae herein as well as their salts are able to form, such as for example hydrates, alcoholates and the like. Finally, it is to be understood that the compositions herein comprise pyrazolo[1,5-a]pyridine derivatives of the invention in their unionized, as well as zwitterionic form, and combinations with stoichiometric amounts of water as in hydrates.

[0149] Also included within the scope of this invention are the salts of the parental compounds with one or more amino acids, especially the naturally-occurring amino acids found as protein components. The amino acid typically is one bearing a side chain with a basic or acidic group, e.g., lysine, arginine or glutamic acid, or a neutral group such as glycine, serine, threonine, alanine, isoleucine, or leucine.

[0150] The pyrazolo[1,5-a]pyridine derivatives of the invention also include physiologically acceptable salts thereof. Examples of physiologically acceptable salts of the pyrazolo[1,5-a]pyridine derivatives of the invention include salts derived from an appropriate base, such as an alkali metal (for example, sodium), an alkaline earth (for example, magnesium), ammonium and $NX4^+$ (wherein X is $-C_{1-6}$-alkyl). Physiologically acceptable salts of a hydrogen atom or an amino group include salts of organic carboxylic acids such as acetic, benzoic, lactic, fumaric, tartaric, maleic, malonic, malic, isethionic, lactobionic and succinic acids; organic sulfonic acids, such as methanesulfonic, ethanesulfonic, benzenesulfonic and p-toluenesulfonic acids; and inorganic acids, such as hydrochloric, sulfuric, phosphoric and sulfamic acids. Physiologically acceptable salts of a compound containing a hydroxy group include the anion of said compound in combination with a suitable cation such as Na^+ and $NX4^+$ (wherein X typically is independently selected from -H or a $-C_{1-4}$-alkyl group). However, salts of acids or bases which are not physiologically acceptable may also find use, for example, in the preparation or purification of a physiologically acceptable compound. All salts, whether or not derived form a physiologically acceptable acid or base, are within the scope of the invention.

[0151] As used herein and unless otherwise stated, the term "enantiomer" means each individual optically active form of an pyrazolo[1,5-a]pyridine derivative of the invention, having an optical purity or enantiomeric excess (as determined by methods standard in the art) of at least 80% (i.e., at least 90% of one enantiomer and at most 10% of the other enantiomer), preferably at least 90% and more preferably at least 98%.

[0152] The term "isomers" as used herein means all possible isomeric forms, including tautomeric and stereochemical forms, which the compounds of formulae herein may possess, but not including position isomers. Typically, the structures shown herein exemplify only one tautomeric or resonance form of the compounds, but the corresponding alternative configurations are contemplated as well. Unless otherwise stated, the chemical designation of compounds denotes the mixture of all possible stereochemically isomeric forms, said mixtures containing all diastereomers and enantiomers (since the compounds of formulae herein may

have at least one chiral center) of the basic molecular structure, as well as the stereochemically pure or enriched compounds. More particularly, stereogenic centers may have either the R- or S-configuration, and multiple bonds may have either cis- or trans-configuration.

[0153] Pure isomeric forms of the said compounds are defined as isomers substantially free of other enantiomeric or diastereomeric forms of the same basic molecular structure. In particular, the term "stereoisomerically pure" or “chirally pure" relates to compounds having a stereoisomeric excess of at least about 80% (i.e., at least 90% of one isomer and at most 10% of the other possible isomers), preferably at least 90%, more preferably at least 94% and most preferably at least 97%. The terms "enantiomerically pure" and "diastereomerically pure" should be understood in a similar way, having regard to the enantiomeric excess, respectively the diastereomeric excess, of the mixture in question.

[0154] Separation of stereoisomers is accomplished by standard methods known to those in the art. One enantiomer of an pyrazolo[1,5-a]pyridine derivative of the invention can be separated substantially free of its opposing enantiomer by a method such as formation of diastereomers using optically active resolving agents ("Stereochemistry of Carbon Compounds," (1962) by E. L. Eliel, McGraw Hill; Lochmuller, C. H., (1975) J. Chromatogr., 113:(3) 283-302). Separation of isomers in a mixture can be accomplished by any suitable method, including: (1) formation of ionic, diastereomeric salts with chiral compounds and separation by fractional crystallization or other methods, (2) formation of diastereomeric compounds with chiral derivatizing reagents, separation of the diastereomers, and conversion to the pure enantiomers, or (3) enantiomers can be separated directly under chiral conditions. Under method (1), diastereomeric salts can be formed by reaction of enantiomerically pure chiral bases such as brucine, quinine, ephedrine, strychnine, a-methyl-b-phenylethylamine (amphetamine), and the like with asymmetric compounds bearing acidic functionality, such as carboxylic acid and sulfonic acid. The diastereomeric salts may be induced to separate by fractional crystallization or ionic chromatography. For separation of the optical isomers of amino compounds, addition of chiral carboxylic or sulfonic acids, such as camphorsulfonic acid, tartaric acid, mandelic acid, or lactic acid can result in formation of the diastereomeric salts. Alternatively, by method (2), the substrate to be resolved may be reacted with one enantiomer of a chiral compound to form a diastereomeric pair (Eliel, E. and Wilen, S. (1994) Stereochemistry of Organic Compounds, John Wiley & Sons, Inc., p. 322). Diastereomeric compounds can be formed by reacting asymmetric compounds with enantiomerically pure chiral derivatizing reagents, such as menthyl derivatives, followed by separation of the diastereomers and hydrolysis to yield the free, enantiomerically enriched compound. A method of determining optical purity involves making chiral esters, such as a menthyl ester or Mosher ester, a-methoxy-a-(trifluoromethyl)phenyl acetate (Jacob III. (1982) J. Org. Chem. 47:4165), of the racemic mixture, and analyzing the NMR spectrum for the presence of the two

atropisomeric diastereomers. Stable diastereomers can be separated and isolated by normal- and reverse-phase chromatography following methods for separation of atropisomeric naphthyl-isoquinolines (Hoye, T., WO 96/15111).Under method (3), a racemic mixture of two asymmetric enantiomers is separated by chromatography using a chiral stationary phase. Suitable chiral stationary phases are, for example, polysaccharides, in particular cellulose or amylose derivatives. Commercially available polysaccharide based chiral stationary phases are ChiralCel® CA, OA, OB5, OC5, OD, OF, OG, OJ and OK, and Chiralpak® AD, AS, OP(+) and OT(+). Appropriate eluents or mobile phases for use in combination with said polysaccharide chiral stationary phases are hexane and the like, modified with an alcohol such as ethanol, isopropanol and the like. ("Chiral Liquid Chromatography" (1989) W. J. Lough, Ed. Chapman and Hall, New York; Okamoto, (1990) "Optical resolution of dihydropyridine enantiomers by High-performance liquid chromatography using phenylcarbamates of polysaccharides as a chiral stationary phase", J. of Chromatogr. 513:375-378).

[0155] The terms cis and trans are used herein in accordance with Chemical Abstracts nomenclature and include reference to the position of the substituents on a ring moiety. The absolute stereochemical configuration of the compounds of the formulae described herein may easily be determined by those skilled in the art while using well-known methods such as, for example, X-ray diffraction.

[0156] When a compound is crystallized from a solution or slurry, it can be crystallized in a different arrangement lattice of spaces (this property is called "polymorphism") to form crystals with different crystalline forms, each of which is known as "polymorphs". The term “Polymorph” as used herein, therefore, refers to a crystal form of a compound of Formula (I), where the molecules are localized in the three-dimensional lattice sites. Different polymorphs of the compound of Formula (I) may be different from each other in one or more physical properties, such as solubility and dissolution rate, true specific gravity, crystal form, accumulation mode, flowability and/or solid state stability. etc.

[0157] Pyrazolo[1,5-a]pyridine derivatives of the invention and their physiologically acceptable salts (hereafter collectively referred to as the active ingredients) may be administered by any route appropriate to the condition to be treated, suitable routes including oral, rectal, nasal, topical (including ocular, buccal and sublingual), vaginal and parenteral (including subcutaneous, intramuscular, intranasal, intravenous, intraarterial, intradermal, intrathecal and epidural). The preferred route of administration may vary with for example the condition of the recipient.

[0158] The therapeutically effective amount of the preparation of the compound(s), especially for the treatment of TRPM3 mediated disorders in humans and other mammals or in animals, preferably is a TRPM3 ion channel inhibiting amount of the compounds as defined herein and corresponds to an amount which ensures a plasma level of between 1µg/ml and 100 mg/ml.

[0159] Suitable dosages of the compounds or compositions of the invention should be used to treat or prevent the TRPM3 mediated disorders in a subject. Depending upon the pathologic condition to be treated and the patient's condition, the said effective amount may be divided into several sub-units per day or may be administered at more than one day intervals.

[0160] The invention further provides (pharmaceutical) compositions comprising one or more pyrazolo[1,5-a]pyridine derivatives of the invention, more in particular of all the Formula (I) and other formulas and embodiments described herein and the more particular aspects or embodiments thereof. Furthermore, the invention provides the compounds or (pharmaceutical) compositions of the invention, more in particular of all the Formula (I) and other formulas and embodiments described herein and the more particular aspects or embodiments thereof, for use as a medicine, more in particular for use in the treatment of pain. The TRPM3 mediated disorders are selected from pain and an inflammatory hypersensitivity condition and epilepsy.

[0161] The pyrazolo[1,5-a]pyridine derivatives of the invention may be formulated with conventional carriers and excipients, which will be selected in accord with ordinary practice. Tablets will contain excipients, glidants, fillers, binders and the like. Aqueous formulations are prepared in sterile form, and when intended for delivery by other than oral administration generally will be isotonic. Formulations optionally contain excipients such as those set forth in the "Handbook of Pharmaceutical Excipients" (1986).

[0162] Subsequently, the term "pharmaceutically acceptable carrier" as used herein means any material or substance with which the active ingredient is formulated in order to facilitate its application or dissemination to the locus to be treated, for instance by dissolving, dispersing or diffusing the said composition, and/or to facilitate its storage, transport or handling without impairing its effectiveness. The pharmaceutically acceptable carrier may be a solid or a liquid or a gas which has been compressed to form a liquid, i.e., the compositions of this invention can suitably be used as concentrates, emulsions, solutions, granulates, dusts, sprays, aerosols, suspensions, ointments, creams, tablets, pellets or powders.

[0163] Suitable pharmaceutical carriers for use in the said pharmaceutical compositions and their formulation are well known to those skilled in the art, and there is no particular restriction to their selection within the invention. They may also include additives such as wetting agents, dispersing agents, stickers, adhesives, emulsifying agents, surface-active agents, solvents, coatings, antibacterial and antifungal agents, isotonic agents and the like, provided the same are consistent with pharmaceutical practice, i.e., carriers and additives which do not create permanent damage to mammals. The pharmaceutical compositions of the invention may be prepared in any known manner, for instance by homogeneously mixing, coating and/or grinding the active ingredients, in a one-step or multi-steps procedure, with the selected carrier material and, where appropriate, the other additives such as surface-active agents. may also be prepared by micronisation, for instance in view to obtain them in the form of microspheres

usually having a diameter of about 1 to 10 gm, namely for the manufacture of microcapsules for controlled or sustained release of the active ingredients.

[0164] While it is possible for the pyrazolo[1,5-a]pyridine derivatives to be administered alone it is preferable to present them as pharmaceutical formulations. The formulations, both for veterinary and for human use, of the invention comprise at least one active ingredient, as above described, together with one or more pharmaceutically acceptable carriers therefore and optionally other therapeutic ingredients. The carrier(s) optimally are "acceptable" in the sense of being compatible with the other ingredients of the formulation and not deleterious to the recipient thereof. The formulations include those suitable for oral, rectal, nasal, topical (including buccal and sublingual), vaginal or parenteral (including subcutaneous, intramuscular, intravenous, intradermal, intrathecal and epidural) administration. The formulations may conveniently be presented in unit dosage form and may be prepared by any of the methods well known in the art of pharmacy. Such methods include the step of bringing into association the active ingredient with the carrier which constitutes one or more accessory ingredients. In general, the formulations are prepared by uniformly and intimately bringing into association the active ingredient with liquid carriers or finely divided solid carriers or both, and then, if necessary, shaping the product.

[0165] Formulations of the invention suitable for oral administration may be presented as discrete units such as capsules, cachets or tablets each containing a predetermined amount of the active ingredient; as a powder or granules; as solution or a suspension in an aqueous liquid or a non-aqueous liquid; or as an oil-in-water liquid emulsion or a water-in-oil liquid emulsion. The active ingredient may also be presented as a bolus, electuary or paste.

[0166] A tablet may be made by compression or molding, optionally with one or more accessory ingredients. Compressed tablets may be prepared by compressing in a suitable machine the active ingredient in a free-flowing form such as a powder or granules, optionally mixed with a binder, lubricant, inert diluent, preservative, surface active or dispersing agent. Molded tablets may be made by molding in a suitable machine a mixture of the powdered compound moistened with an inert liquid diluent. The tablets may optionally be coated or scored and may be formulated so as to provide slow or controlled release of the active ingredient therein. For infections of the eye or other external tissues e.g., mouth and skin, the formulations are optionally applied as a topical ointment or cream containing the active ingredient(s) in an amount of, for example, 0.075 to 20% w/w (including active ingredient(s) in a range between 0.1% and 20% in increments of 0.1% w/w such as 0.6% w/w, 0.7% w/w, etc.), preferably 0.2 to 15% w/w and most preferably 0.5 to 10% w/w. When formulated in an ointment, the active ingredients may be employed with either a paraffinic or a water-miscible ointment base. Alternatively, the active ingredients may be formulated in a cream with an oil-in-water cream base. If desired, the aqueous phase of the cream base may include, for

example, at least 30% w/w of a polyhydric alcohol, i.e., an alcohol having two or more hydroxyl groups such as propylene glycol, butane 1,3-diol, mannitol, sorbitol, glycerol and polyethylene glycol (including PEG400) and mixtures thereof. The topical formulations may desirably include a compound which enhances absorption or penetration of the active ingredient through the skin or other affected areas. Examples of such dermal penetration enhancers include dimethylsulfoxide and related analogs.

[0167] The oily phase of the emulsions of this invention may be constituted from known ingredients in a known manner. While the phase may comprise merely an emulsifier (otherwise known as an emulgent), it desirably comprises a mixture of at least one emulsifier with a fat or an oil or with both a fat and an oil. Optionally, a hydrophilic emulsifier is included together with a lipophilic emulsifier which acts as a stabilizer. It is also preferred to include both an oil and a fat. Together, the emulsifier(s) with or without stabilizer(s) make up the so-called emulsifying wax, and the wax together with the oil and fat make up the so-called emulsifying ointment base which forms the oily dispersed phase of the cream formulations.

[0168] The choice of suitable oils or fats for the formulation is based on achieving the desired cosmetic properties, since the solubility of the active compound in most oils likely to be used in pharmaceutical emulsion formulations is very low. Thus, the cream should optionally be a non-greasy, non-staining and washable product with suitable consistency to avoid leakage from tubes or other containers. Straight or branched chain, mono- or dibasic alkyl esters such as di-isoadipate, isocetyl stearate, propylene glycol diester of coconut fatty acids, isopropyl myristate, decyl oleate, isopropyl palmitate, butyl stearate, 2-ethylhexyl palmitate or a blend of branched chain esters known as Crodamol CAP may be used, the last three being preferred esters. These may be used alone or in combination depending on the properties required. Alternatively, high melting point lipids such as white soft paraffin and/or liquid paraffin or other mineral oils can be used.

[0169] Formulations suitable for topical administration to the eye also include eye drops wherein the active ingredient is dissolved or suspended in a suitable carrier, especially an aqueous solvent for the active ingredient. The active ingredient is optionally present in such formulations in a concentration of 0.5 to 20%, advantageously 0.5 to 10% particularly about 1.5% w/w. Formulations suitable for topical administration in the mouth include lozenges comprising the active ingredient in a flavored basis, usually sucrose and acacia or tragacanth; pastilles comprising the active ingredient in an inert basis such as gelatin and glycerin, or sucrose and acacia; and mouthwashes comprising the active ingredient in a suitable liquid carrier.

[0170] Formulations for rectal administration may be presented as a suppository with a suitable base comprising for example cocoa butter or a salicylate. Formulations suitable for nasal administration wherein the carrier is a solid include a coarse powder having a particle

size for example in the range 20 to 500 microns (including particle sizes in a range between 20 and 500 microns in increments of 5 microns such as 30 microns, 35 microns, etc.), which is administered in the manner in which snuff is taken, i.e. by rapid inhalation through the nasal passage from a container of the powder held close up to the nose. Suitable formulations wherein the carrier is a liquid, for administration as for example a nasal spray or as nasal drops, include aqueous or oily solutions of the active ingredient. Formulations suitable for aerosol administration may be prepared according to conventional methods and may be delivered with other therapeutic agents.

[0171] Formulations suitable for vaginal administration may be presented as pessaries, tampons, creams, gels, pastes, foams or spray formulations containing in addition to the active ingredient such carriers as are known in the art to be appropriate.

[0172] Formulations suitable for parenteral administration include aqueous and non-aqueous sterile injection solutions which may contain anti-oxidants, buffers, bacteriostats and solutes which render the formulation isotonic with the blood of the intended recipient; and aqueous and non-aqueous sterile suspensions which may include suspending agents and thickening agents. The formulations may be presented in unit-dose or multi-dose containers, for example sealed ampoules and vials, and may be stored in a freeze-dried (lyophilized) condition requiring only the addition of the sterile liquid carrier, for example water for injections, immediately prior to use. Extemporaneous injection solutions and suspensions may be prepared from sterile powders, granules and tablets of the kind previously described.

[0173] Preferred unit dosage formulations are those containing a daily dose or unit daily sub-dose, as herein above recited, or an appropriate fraction thereof, of an active ingredient.

[0174] It should be understood that in addition to the ingredients particularly mentioned above the formulations of this invention may include other agents conventional in the art having regard to the type of formulation in question, for example those suitable for oral administration may include flavoring agents.

[0175] Pyrazolo[1,5-a]pyridine derivatives of the invention can be used to provide controlled release pharmaceutical formulations containing as active ingredient one or more pyrazolo[1,5-a]pyridine derivatives of the invention ("controlled release formulations") in which the release of the active ingredient can be controlled and regulated to allow less frequency dosing or to improve the pharmacokinetic or toxicity profile of a given invention compound. Controlled release formulations adapted for oral administration in which discrete units comprising one or more pyrazolo[1,5-a]pyridine derivatives of the invention can be prepared according to conventional methods.

[0176] Another embodiment of this invention relates to various precursor or “prodrug” forms of the pyrazolo[1,5-a]pyridine derivatives of the invention. It may be desirable to formulate the pyrazolo[1,5-a]pyridine derivatives of the invention in the form of a chemical species which

itself is not significantly biologically-active, but which when delivered to the animal, mammal or human will undergo a chemical reaction catalyzed by the normal function of the body, inter alia, enzymes present in the stomach or in blood serum, said chemical reaction having the effect of releasing a compound as defined herein. The term “prodrug” thus relates to these species which are converted in vivo into the active pharmaceutical ingredient.

[0177] The prodrugs of the pyrazolo[1,5-a]pyridine derivatives of the invention can have any form suitable to the formulator, for example, esters are non-limiting common pro-drug forms. In the present case, however, the pro-drug may necessarily exist in a form wherein a covalent bond is cleaved by the action of an enzyme present at the target locus. For example, a C-C covalent bond may be selectively cleaved by one or more enzymes at said target locus and, therefore, a pro-drug in a form other than an easily hydrolysable precursor, inter alia an ester, an amide, and the like, may be used. The counterpart of the active pharmaceutical ingredient in the pro-drug can have different structures such as an amino acid or peptide structure, alkyl chains, sugar moieties and others as known in the art.

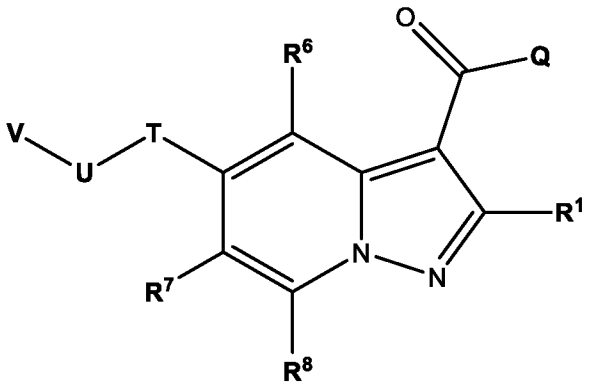
[0178] For the purpose of the invention the term “therapeutically suitable pro-drug” is defined herein as “a compound modified in such a way as to be transformed in vivo to the therapeutically active form, whether by way of a single or by multiple biological transformations, when in contact with the tissues of the animal, mammal or human to which the pro-drug has been administered, and without undue toxicity, irritation, or allergic response, and achieving the intended therapeutic outcome ”.

[0179] More specifically the term “prodrug”, as used herein, relates to an inactive or significantly less active derivative of a compound such as represented by the structural formulae herein described, which undergoes spontaneous or enzymatic transformation within the body in order to release the pharmacologically active form of the compound. For a comprehensive review, reference is made to Rautio J. et al. (“Prodrugs: design and clinical applications” Nature Reviews Drug Discovery, 2008, doi: 10.1038/nrd2468).

[0180] Representative pyrazolo[1,5-a]pyridine derivatives of the invention can be synthesized in accordance with the general synthetic methods described below and illustrated in the schemes that follow. Since the schemes are an illustration, the invention should not be construed as being limited by the specific chemical reaction and specific conditions described in the schemes and examples. The various starting material used in the schemes are commercially available or may be prepared by methods well within the skill persons versed in the art. The variables are as defined herein and within the skill of persons verses in the art.

[0181] Exemplary embodiments of the invention are summarized as Clauses 1 to 51 hereinafter:

1. A compound of formula (I), a stereo-isomeric form, a physiologically acceptable salt, solvate and/or polymorph thereof



(I)

preferably, the compound of formula (I), a stereo-isomeric form, a physiologically acceptable salt, solvate and/or polymorph thereof, optionally for use in the treatment of pain or epilepsy or in methods of treating pain or epilepsy;

wherein

R^1 represents -F, -Cl, -Br, -I, -CN, -**R**^{W}, -O**R**^{W}, -OC(=O)**R**^{W}, -N**R**^{W}**R**^{X}, -N**R**^{W}C(=O)**R**^{X}, -S**R**^{W}, -S(=O)**R**^{W}, -S(=O)$_2$**R**^{W}, -C(=O)**R**^{W}, -C(=O)O**R**^{W}, or -C(=O)N**R**^{W}**R**^{X};

Q represents -O**R**^{2} or -N**R**^{3}**R**^{4};

R^2 represents -**R**^{Y};

R^3 represents -OH or -**R**^{Y};

R^4 represents -**R**^{Y} or -S(=O)$_2$**R**^{Y};

or **R**^{3} and **R**^{4} together form a 4, 5, 6, 7 or 8 membered heterocycle containing 1 to 3 heteroatoms selected from N, O and S, saturated or unsaturated, unsubstituted or mono- or polysubstituted;

T represents -O- and **U** represents -C**R**^{5}**R**$^{5'}$-; or **T** represents -C**R**^{5}**R**$^{5'}$- and **U** represents -O-;

R^5 and **R**$^{5'}$ independently of one another represent -**R**^{Y};

R^6, **R**^{7} and **R**^{8} independently of one another represent -F, -Cl, -Br, -I, -CN, -NO_2, -SF_5, -**R**^{W}, -O**R**^{W}, -OC(=O)**R**^{W}, -N**R**^{W}**R**^{X}, -N**R**^{W}C(=O)**R**^{X}, -S**R**^{W}, -S(=O)**R**^{W}, -S(=O)$_2$**R**^{W}, -C(=O)**R**^{W}, -C(=O)O**R**^{W}, or -C(=O)N**R**^{W}**R**^{X};

V represents 3-14-membered heterocycloalkyl, saturated or unsaturated; 3-14-membered cycloalkyl, saturated or unsaturated; 5-14-membered aryl, C_1-C_6 alkyl; or 5-14-membered heteroaryl; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, -CF_3, -CF_2H, C_1-C_6 alkyl, -CN, -NO, -NO_2, =O, =S, -SF_5, -**R**^{Y}, -O**R**^{Y}, -OC(=O)**R**^{Y}, -N**R**^{Y}**R**^{Z}, -N**R**^{Y}C(=O)**R**^{Z}, -S**R**^{Y}, -S(=O)**R**^{Y}, -S(=O)$_2$**R**^{Y}, -C(=O)**R**^{Y}, -C(=O)O**R**^{Y}, or -C(=O)N**R**^{Y}**R**^{Z};

wherein

R^W and **R**^{X} independently of one another in each case independently represent

-H;

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

-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted; or

3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$\mathbf{R^Y}$ and $\mathbf{R^Z}$ independently of one another in each case independently represent

-H;

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

-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

6-14-membered aryl, unsubstituted, mono- or polysubstituted; wherein said 6-14-membered aryl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted; or

5-14-membered heteroaryl, unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

or $\mathbf{R^Y}$ and $\mathbf{R^Z}$ together form a 4, 5, 6, 7 or 8 membered heterocycle containing 1 to 3 heteroatoms selected from N, O and S, saturated or unsaturated, unsubstituted or mono- or polysubstituted;

and wherein "mono- or polysubstituted" in each case independently means substituted with one or more substituents independently of one another selected from -F, -Cl, -Br, -I, -CN, -$C_{1\text{-}6}$-alkyl, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -$C_{1\text{-}6}$-alkylene-CF_3, -$C_{1\text{-}6}$-alkylene-

CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-O-CF_3, -C_{1-6}-alkylene-O-CF_2H, -C_{1-6}-alkylene-O-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C_{1-6}-alkylene-C(=O)-OH, -C(=O)-OC_{1-6}-alkyl, -C_{1-6}-alkylene-C(=O)-OC_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)-NH_2, -C_{1-6}-alkylene-C(=O)-NH_2, -C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-C(=O)-NH(C_{1-6}-alkyl), -C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-C(=O)-N(C_{1-6}-alkyl)$_2$, -C(=O)-NH(OH), -C_{1-6}-alkylene-C(=O)-NH(OH), -OH, -C_{1-6}-alkylene-OH, =O, -OCF_3, -OCF_2H, -$OCFH_2$, -OCF_2Cl, -$OCFCl_2$, -O-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -O-C_{1-6}-alkylene-O-C_{1-6}-alkyl, -O-C_{1-6}-alkylene-NH_2, -O-C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -O-C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -O-C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C(=O)-C_{1-6}-alkyl, -O-C(=O)-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C(=O)-O-C_{1-6}-alkyl, -O-C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-O-C(=O)-NH(C_{1-6}-alkyl), -O-C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-O-C(=O)-N(C_{1-6}-alkyl)$_2$, -O-S(=O)$_2$-NH_2, -C_{1-6}-alkylene-O-S(=O)$_2$-NH_2, -O-S(=O)$_2$-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-O-S(=O)$_2$-NH(C_{1-6}-alkyl), -O-S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-O-S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, -NH_2, -NO, -NO_2, -C_{1-6}-alkylene-NH_2, -NH(C_{1-6}-alkyl), -N(3-14-membered cycloalkyl)(C_{1-6}-alkyl), -N(C_{1-6}-alkyl)-C_{1-6}-alkylene-OH, -N(H)-C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-NH(C_{1-6}-alkyl), -N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -NH-C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH-C(=O)-C_{1-6}-alkyl, -NH-C(=O)-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH-C(=O)-O-C_{1-6}-alkyl, -NH-C(=O)-NH_2, -C_{1-6}-alkylene-NH-C(=O)-NH_2, -NH-C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-NH-C(=O)-NH(C_{1-6}-alkyl), -NH-C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH-C(=O)-N(C_{1-6}-alkyl)$_2$, -N(C_{1-6}-alkyl)-C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)-C(=O)-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)-C(=O)-NH_2, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-NH_2, -N(C_{1-6}-alkyl)-C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-NH(C_{1-6}-alkyl), -N(C_{1-6}-alkyl)-C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-N(C_{1-6}-alkyl)$_2$, -NH-S(=O)$_2$OH, -C_{1-6}-alkylene-NH-S(=O)$_2$OH, -NH-S(=O)$_2$-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH-S(=O)$_2$-C_{1-6}-alkyl, -NH-S(=O)$_2$-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH-S(=O)$_2$-O-C_{1-6}-alkyl, -NH-S(=O)$_2$-NH_2, -C_{1-6}-alkylene-NH-S(=O)$_2$-NH_2, -NH-S(=O)$_2$-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-NH-S(=O)$_2$-NH(C_{1-6}-alkyl), -NH-S(=O)$_2$N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH-S(=O)$_2$N(C_{1-6}-alkyl)$_2$, -N(C_{1-6}-alkyl)-S(=O)$_2$-OH, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-S(=O)$_2$-OH, -N(C_{1-6}-alkyl)-S(=O)$_2$-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-S(=O)$_2$-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)-S(=O)$_2$-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-S(=O)$_2$-O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)-S(=O)$_2$-NH_2, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-S(=O)$_2$-NH_2, -N(C_{1-6}-alkyl)-S(=O)$_2$-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-S(=O)$_2$-NH(C_{1-6}-alkyl), -N(C_{1-6}-alkyl)-S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, -SH, =S, -SF_5, -SCF_3, -SCF_2H, -$SCFH_2$, -S-C_{1-6}-alkyl, -C_{1-6}-alkylene-S-C_{1-6}-alkyl, -S(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-S(=O)-C_{1-6}-alkyl, -S(=O)$_2$-C_{1-6}-alkyl, -C_{1-6}-alkylene-S(=O)$_2$-C_{1-6}-alkyl, -S(=O)$_2$-OH, -C_{1-6}-alkylene-S(=O)$_2$-OH, -S(=O)$_2$-

O-C_{1-6}-alkyl, -C_{1-6}-alkylene-$S(=O)_2$-O-C_{1-6}-alkyl, -$S(=O)_2$-NH_2, -C_{1-6}-alkylene-$S(=O)_2$-NH_2, -$S(=O)_2$-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-$S(=O)_2$-NH(C_{1-6}-alkyl), -$S(=O)_2$-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-$S(=O)_2$-N(C_{1-6}-alkyl)$_2$, 3-14-membered cycloalkyl, -C_{1-6}-alkylene-(3-14-membered cycloalkyl), 3 to 14-membered heterocycloalkyl, -C_{1-6}-alkylene-(3 to 14-membered heterocycloalkyl), -phenyl, -C_{1-6}-alkylene-phenyl, 5 to 14-membered heteroaryl, -C_{1-6}-alkylene-(5 to 14-membered heteroaryl), -O-(3-14-membered cycloalkyl), -O-(3 to 14-membered heterocycloalkyl), -O-phenyl, -O-(5 to 14-membered heteroaryl), -C(=O)-(3-14-membered cycloalkyl), -C(=O)-(3 to 14-membered heterocycloalkyl), -C(=O)-phenyl, -C(=O)-(5 to 14-membered heteroaryl), -$S(=O)_2$-(3-14-membered cycloalkyl), -$S(=O)_2$-(3 to 14-membered heterocycloalkyl), -$S(=O)_2$-phenyl, -$S(=O)_2$-(5 to 14-membered heteroaryl).

2. The compound per se, or for use according to Clause 1, wherein **T** represents -O- and **U** represents -C$\mathbf{R^5R^{5'}}$-.

3. The compound per se, or for use according to Clause 1, wherein **T** represents -C$\mathbf{R^5R^{5'}}$- and **U** represents -O-.

4. The compound per se, or for use according to any one of Clauses 1 to 3, wherein **Q** represents -N$\mathbf{R^3R^4}$.

5. The compound per se, or for use according to any one of Clauses 1 to 3, wherein **Q** represents -O$\mathbf{R^2}$.

6. The compound per se, or for use according to any one of Clauses 1 to 5, wherein **V** represents 3-14-membered heterocycloalkyl, saturated or unsaturated; 3-14-membered cycloalkyl, saturated or unsaturated; 5-14-membered aryl; C_1-C_6 alkyl; or 5-14-membered heteroaryl; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, -CF_3, -CF_2H, C_1-C_6 alkyl, -CN, -NO, -NO_2, =O, =S, -SF_5, -$\mathbf{R^Y}$, -O$\mathbf{R^Y}$, -OC(=O)$\mathbf{R^Y}$, -N$\mathbf{R^Y R^Z}$, -N$\mathbf{R^Y}$C(=O)$\mathbf{R^Z}$, -S$\mathbf{R^Y}$, -S(=O)$\mathbf{R^Y}$, -$S(=O)_2\mathbf{R^Y}$, -C(=O)$\mathbf{R^Y}$, -C(=O)O$\mathbf{R^Y}$, or -C(=O)N$\mathbf{R^Y R^Z}$.

7. The compound per se, or for use according to Clause 6, wherein the 5-14-membered heteroaryl is mono- or poly-substituted.

8. The compound per se, or for use according to Clause 6 or 7, wherein the 5-14-membered heteroaryl is selected from benzimidazole, benzisoxazole, benzoazole, benzodioxole, benzofuran, benzothiadiazole, benzothiazole, benzothiophene, carbazole, cinnoline, dibenzofuran, furane, furazane, imidazole, imidazopyridine, indazole, indole, indolizine, isobenzofuran, isoindole, isoquinoline, isothiazole, isoxazole, naphthyridine, oxadiazole, oxazole, oxindole, phthalazine, purine, pyrazine, pyrazole, pyridazine, pyridine, pyrimidine, pyrrole, quinazoline, quinoline, quinoxaline, tetrazole, thiadiazole, thiazole, thiophene, triazine, triazole, and [1,2,4]triazolo[4,3-a]pyrimidine; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another

selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, -$\mathbf{R^Y}$, -O$\mathbf{R^Y}$, -OC(=O)$\mathbf{R^Y}$, -N$\mathbf{R^Y}$$\mathbf{R^Z}$, -N$\mathbf{R^Y}$C(=O)$\mathbf{R^Z}$, -S$\mathbf{R^Y}$, -S(=O)$\mathbf{R^Y}$, $-S(=O)_2\mathbf{R^Y}$, -C(=O)$\mathbf{R^Y}$, -C(=O)O$\mathbf{R^Y}$, or -C(=O)N$\mathbf{R^Y}$$\mathbf{R^Z}$.

9. The compound per se, or for use according to any one of Clauses 6 to 8, wherein the 5-14-membered heteroaryl is selected from the group consisting of furane, thiophene, imidazole, pyrazole, oxazole, isoxazole, thiazole, triazole, pyridine, isoquinoline, benzothiazole, pyridazine, pyrimidine, imidazopyridine; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, -$\mathbf{R^Y}$, -O$\mathbf{R^Y}$, -OC(=O)$\mathbf{R^Y}$, -N$\mathbf{R^Y}$$\mathbf{R^Z}$, -N$\mathbf{R^Y}$C(=O)$\mathbf{R^Z}$, -S$\mathbf{R^Y}$, -S(=O)$\mathbf{R^Y}$, $-S(=O)_2\mathbf{R^Y}$, -C(=O)$\mathbf{R^Y}$, -C(=O)O$\mathbf{R^Y}$, or -C(=O)N$\mathbf{R^Y}$$\mathbf{R^Z}$.

10. The compound per se, or for use according to any one of Clauses 6 to 9, wherein the 5-14-membered heteroaryl is selected from the group consisting of furan-2-yl, furan-3-yl, thiophen-2-yl, thiophen-3-yl, pyrazol-3-yl, pyrazol-4-yl, pyrazol-5-yl, oxazol-5-yl, isoxazol-4-yl, thiazol-2-yl, thiazol-4-yl, thiazol-5-yl, 1,2,4-triazol-3-yl, 1,2,3-triazol-4-yl, pyridin-2-yl, pyridin-3-yl, pyridin-4-yl, isoquinolin-1-yl, isoquinolin-5-yl, benzo[d]thiazol-2-yl, pyridazin-3-yl, pyrimidin-5-yl, and imidazo[1,2-a]pyridin-6-yl; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, -$\mathbf{R^Y}$, -O$\mathbf{R^Y}$, -OC(=O)$\mathbf{R^Y}$, -N$\mathbf{R^Y}$$\mathbf{R^Z}$, -N$\mathbf{R^Y}$C(=O)$\mathbf{R^Z}$, -S$\mathbf{R^Y}$, -S(=O)$\mathbf{R^Y}$, $-S(=O)_2\mathbf{R^Y}$, -C(=O)$\mathbf{R^Y}$, -C(=O)O$\mathbf{R^Y}$, or -C(=O)N$\mathbf{R^Y}$$\mathbf{R^Z}$.

11. The compound per se, or for use according to any one of Clauses 1 to 5, wherein **V** represents 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, -$\mathbf{R^Y}$, -O$\mathbf{R^Y}$, -OC(=O)$\mathbf{R^Y}$, -N$\mathbf{R^Y}$$\mathbf{R^Z}$, -N$\mathbf{R^Y}$C(=O)$\mathbf{R^Z}$, -S$\mathbf{R^Y}$, -S(=O)$\mathbf{R^Y}$, $-S(=O)_2\mathbf{R^Y}$, -C(=O)$\mathbf{R^Y}$, -C(=O)O$\mathbf{R^Y}$, or -C(=O)N$\mathbf{R^Y}$$\mathbf{R^Z}$.

12. The compound per se, or for use according to Clause 11, wherein the 3-14-membered heterocycloalkyl is selected from azepane, 1,4-oxazepane, azetane, azetidine, aziridine, azocane, diazepane, dioxane, dioxolane, dithiane, dithiolane, imidazolidine, isothiazolidine, isoxalidine, morpholine, oxazolidine, oxepane, oxetane, oxirane, piperazine, piperidine, pyrazolidine, pyrrolidine, quinuclidine, tetrahydrofuran, tetrahydropyran, tetrahydrothiopyran, thiazolidine, thietane, thiirane, thiolane, thiomorpholine, indoline, dihydrobenzofuran, dihydrobenzothiophene, 1,1-dioxothiacyclohexane, 2-azaspiro[3.3]heptane, 2-oxaspiro[3.3]heptane, 7-azaspiro[3.5]nonane, 8-azabicyclo[3.2.1]octane, 9-azabicyclo[3.3.1]nonane, hexahydro-1H-pyrrolizine, hexahydrocyclopenta[c]pyrrole, octahydrocyclopenta[c]pyrrole, and octahydropyrrolo[1,2-

a]pyrazine; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

13. The compound per se, or for use according to Clause 11 or 12, wherein the 3-14-membered heterocycloalkyl is oxane, or oxetanyl; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

14. The compound per se, or for use according to any one of Clauses 11 to 13, wherein the 3-14-membered heterocycloalkyl is oxan-4-yl or oxetan-3-yl; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

15. The compound per se, or for use according to any one of clauses 1 to 5, wherein the 3-14-membered cycloalkyl, saturated or unsaturated, is cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, cyclooctyl, cyclononyl, or cyclodecyl including unfused or unbridged, fused, or bridged cycloalkyls; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, , CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

16. The compound per se, or for use according to any one of clauses 1 to 5, wherein the 5-14-membered aryl is phenyl or another 5-14 membered aryl unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

17. The compound per se, or for use according to any one of clauses 1 to 6, wherein the C_1-C_6 alkyl or C_1-C_6 heterolalkyl representing **V** is saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

18. The compound per se, or for use according to any one of the preceding Clauses, wherein **V** is unsubstituted, mono- or polysubstituted with substituents independently of one another selected from

-F, -Cl, -Br, -I, CF_3, $-CF_2H$, -CN, -C(=O)OH, $-NH_2$, $-NO_2$, -OH, =O, $-SF_5$;

$-C_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$-C(=O)O-C_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$-NHC_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$-N(C_{1-6}\text{-alkyl})_2$, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$-O-C_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$-S(=O)_2-C_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through $-C_1-C_6$-alkylene- or $-C_1-C_6$-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted; or

3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is optionally connected through $-C_1-C_6$-alkylene- or $-C_1-C_6$-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted.

19. The compound per se, or for use according to any one of the preceding Clauses, wherein **V** is unsubstituted, mono- or polysubstituted with substituents independently of one another selected from

-OH, -F, -Cl, -Br, -I, -SH, $-CF_3$, $-CHF_2$, $-CH_2F$, $-OCF_3$, $-OCHF_2$, $-OCH_2F$, SF_5, -CN, $-NO_2$, -C(=O)OH, $-NH_2$, $-N(CH_3)_2$, -cyclopropyl, or -O-cyclopropyl; preferably selected from -OH, -F, -Cl, -Br, -I, -SH, $-CF_3$, $-CHF_2$, $-CH_2F$, $-OCF_3$, $-OCHF_2$, $-OCH_2F$, SF_5, -CN, $-NO_2$, -C(=O)OH, $-NH_2$, or $-N(CH_3)_2$;

$-C_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another , selected from the group consisting of -F, -Cl, -Br, -I, $-C_{1-6}$-alkyl, C_{2-6}-alkenyl, $-C_{2-6}$-alkynyl, -OH, =O, -SH, =S, -CN, $-CF_3$, $-CHF_2$, $-CH_2F$, $-OCF_3$, $-OCHF_2$, $-OCH_2F$, SF_5, $-NO_2$, -C(=O)OH, $-NH_2$, C(=O)CHF_2, $-C(=O)NH_2$, and -cyclopropyl; preferably selected from the group consisting of -F, -Cl, -Br, -I, $-C_{1-6}$-alkyl, C_{2-6}-alkenyl, $-C_{2-6}$-alkynyl, -OH, =O, -SH, =S, -CN, $-CF_3$, $-CHF_2$, $-CH_2F$, $-OCF_3$, $-OCHF_2$, $-OCH_2F$, SF_5, $-NO_2$, -C(=O)OH, $-NH_2$, C(=O)CHF_2, and $-C(=O)NH_2$;

$-C_{1-6}$-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another , selected from the group consisting of -F, -Cl, -Br, -I, $-C_{1-6}$-alkyl, C_{2-6}-alkenyl, $-C_{2-6}$-alkynyl, -OH, =O, -SH, =S, -CN, $-CF_3$, $-CHF_2$, $-CH_2F$, $-OCF_3$, $-OCHF_2$, $-OCH_2F$, SF_5, $-NO_2$, -C(=O)OH, $-NH_2$, C(=O)CHF_2, and $-C(=O)NH_2$;

$-OC_{1-6}$-alkyl, unsubstituted, mono- or polysubstituted with substituents independently of one another , selected from the group consisting of -F, -Cl, -Br, -I, $-C_{1-6}$-alkyl, C_{2-6}-alkenyl, $-C_{2-6}$-alkynyl, -OH, =O, -SH, =S, -CN, $-CF_3$, $-CHF_2$, $-CH_2F$, $-OCF_3$, $-OCHF_2$, $-OCH_2F$, SF_5, $-NO_2$, -C(=O)OH, $-NH_2$, $C(=O)CHF_2$, and $-C(=O)NH_2$;

$-O(C=O)C_{1-6}$-alkyl, unsubstituted, mono- or polysubstituted with substituents independently of one another , selected from the group consisting of -F, -Cl, -Br, -I, $-C_{1-6}$-alkyl, C_{2-6}-alkenyl, $-C_{2-6}$-alkynyl, -OH, =O, -SH, =S, -CN, $-CF_3$, $-CHF_2$, $-CH_2F$, $-OCF_3$, $-OCHF_2$, $-OCH_2F$, SF_5, $-NO_2$, -C(=O)OH, $-NH_2$, $C(=O)CHF_2$, and $-C(=O)NH_2$;

$-C(=O)OC_{1-6}$-alkyl, unsubstituted, mono- or polysubstituted with substituents independently of one another , selected from the group consisting of -F, -Cl, -Br, -I, $-C_{1-6}$-alkyl, C_{2-6}-alkenyl, $-C_{2-6}$-alkynyl, -OH, =O, -SH, =S, -CN, $-CF_3$, $-CHF_2$, $-CH_2F$, $-OCF_3$, $-OCHF_2$, $-OCH_2F$, SF_5, $-NO_2$, -C(=O)OH, $-NH_2$, $C(=O)CHF_2$, and $-C(=O)NH_2$;

3-14-membered cycloalkyl selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl and cycloheptyl; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another , selected from the group consisting of -F, -Cl, -Br, -I, $-C_{1-6}$-alkyl, C_{2-6}-alkenyl, $-C_{2-6}$-alkynyl, -OH, =O, -SH, =S, -CN, $-CF_3$, $-CHF_2$, $-CH_2F$, $-OCF_3$, $-OCHF_2$, $-OCH_2F$, SF_5, $-NO_2$, -C(=O)OH, $-NH_2$, $C(=O)CHF_2$, and $-C(=O)NH_2$;

3-14-membered heterocycloalkyl selected from the group consisting of azepane, 1,4-oxazepane, azetane, azetidine, aziridine, azocane, diazepane, dioxane, dioxolane, dithiane, dithiolane, imidazolidine, isothiazolidine, isoxalidine, morpholine, oxazolidine, oxepane, oxetane, oxirane, piperazine, piperidine, pyrazolidine, pyrrolidine, quinuclidine, tetrahydrofuran, tetrahydropyran, tetrahydrothiopyran, thiazolidine, thietane, thiirane, thiolane, thiomorpholine, indoline, dihydrobenzofuran, dihydrobenzothiophene, 1,1-dioxothiacyclohexane, 2-azaspiro[3.3]heptane, 2-oxaspiro[3.3]heptane, 7-azaspiro[3.5]-nonane, 8-azabicyclo[3.2.1]octane, 9-azabicyclo[3.3.1]nonane, hexahydro-1H-pyrrolizine, hexahydrocyclopenta[c]pyrrole, octahydrocyclopenta[c]pyrrole, and octahydropyrrolo[1,2-a]pyrazine, in each case unsubstituted, mono- or polysubstituted with substituents independently of one another , selected from the group consisting of -F, -Cl, -Br, -I, $-C_{1-6}$-alkyl, C_{2-6}-alkenyl, $-C_{2-6}$-alkynyl, -OH, =O, -SH, =S, -CN, $-CF_3$, $-CHF_2$, $-CH_2F$, $-OCF_3$, $-OCHF_2$, $-OCH_2F$, SF_5, $-NO_2$, -C(=O)OH, $-NH_2$, $C(=O)CHF_2$, and $-C(=O)NH_2$.

20. The compound per se, or for use according to any one of the preceding Clauses, wherein **V** is unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -CN, -OH, =O, $-C_{1-6}$-alkyl, $-CHF_2$, $-CF_3$, $-C_{1-6}$-alkylene-NH_2, $-C_{1-6}$-alkylene-NHC(=O)O-C_{1-6}-alkyl, $-C_{1-6}$-alkylene-OH, $-C_{1-6}$-alkylene-NHC(=O)-O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)$_2$, $-OC_{1-6}$-alkyl, $-OCF_3$, -O-C_{1-6}-alkylene-N(C_{1-6}-

alkyl)$_2$, -S(=O)$_2$-C$_{1-6}$-alkyl, -azetidine, -C$_{1-6}$-alkylene-O-tetrahydropyran, or -piperazine substituted with -C$_{1-6}$-alkyl; or represents oxetanyl, unsubstituted, mono- or polysubstituted.

21. The compound per se, or for use according to any one of the preceding Clauses, wherein **V** is
(i) unsubstituted;
(ii) monosubstituted;
(iii) disubstituted;
(iv) trisubstituted; or
(v) tetrasubstituted.

22. The compound per se, or for use according to any one of the preceding Clauses, wherein **R^1** represents
-H, -F, -Cl, -Br, -I;
-C$_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; -O-C$_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
-C(=O)C$_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
-C(=O)OC$_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
-C(=O)NHC$_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
-C(=O)N(C$_{1-6}$-alkyl)$_2$, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
-S(=O)C$_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
-S(=O)$_2$-C$_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
-C$_1$-C$_6$-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or
3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C$_1$-C$_6$-alkylene- or -C$_1$-C$_6$-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted.

23. The compound per se, or for use according to any one of the preceding Clauses, wherein **R^1** represents -H, -F, -Cl, -Br, -I, -C$_{1-6}$-alkyl, -O-C$_{1-6}$-alkyl, -C$_{1-6}$-alkylene-O-C$_{1-6}$-alkyl, -C$_{1-6}$-alkylene-NH(C$_{1-6}$-alkyl), -C$_{1-6}$-alkylene-N(C$_{1-6}$-alkyl)$_2$, -CF$_3$, -CF$_2$H, -CFH$_2$, -CF$_2$Cl, -CFCl$_2$, -C$_{1-6}$-alkylene-CF$_3$, -C$_{1-6}$-alkylene-CF$_2$H, -C$_{1-6}$-alkylene-CFH$_2$, -C$_{1-6}$-alkylene-NH-C$_{1-6}$-alkylene-CF$_3$, -C$_{1-6}$-alkylene-N(C$_{1-6}$-alkyl)-C$_{1-6}$-alkylene-CF$_3$, -C(=O)C$_{1-6}$-alkyl, -C(=O)OC$_{1-6}$-alkyl, -C(=O)NHC$_{1-6}$-alkyl, -C(=O)N(C$_{1-6}$-alkyl)$_2$, -S(=O)-C$_{1-6}$-alkyl, -S(=O)$_2$-C$_{1-6}$-alkyl, -O-C$_{1-6}$-alkyl, -cyclopropyl unsubstituted, cyclobutyl unsubstituted, cyclopentyl unsubstituted or cyclohexyl unsubstituted.

24. The compound per se, or for use according to any one of the preceding Clauses, wherein **R^1** represents -H, -C$_{1-6}$-alkyl, -C$_{1-6}$-alkylene-O-C$_{1-6}$-alkyl, -CH$_2$F, -CHF$_2$, -CF$_3$, -cyclopentyl, unsubstituted, or -cyclopropyl, unsubstituted; preferably wherein **R^1**

represents -H, -C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -CH_2F, -CHF_2, -CF_3, or -cyclopentyl, unsubstituted.

25. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^1}$ represents -CH_2F, -CHF_2, -CH_3, or -cyclopropyl, unsubstituted; preferably wherein $\mathbf{R^1}$ represents -CH_2F, -CHF_2, -CH_3, or -CH_2CH_3.

26. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^2}$ represents

-H;

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

-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted; or

3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted.

27. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^2}$ represents -H, -C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, or -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3.

28. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^2}$ represents -H or -C_{1-6}-alkyl.

29. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^3}$ represents

-H;

-OH;

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

-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted.

30. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^3}$ represents -H, -OH, -C_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, or -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3.

31. The compound per se, or for use according to any one of the preceding Clauses, wherein **R^3** represents -H, -OH, or -C_{1-6}-alkyl, saturated, unsubstituted or monosubstituted with -OH.

32. The compound per se, or for use according to any one of the preceding Clauses, wherein **R^4** represents

-H;

-S(=O)C_{1-6}-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-S(=O)$_2$-C_{1-6}-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

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

-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

6-14-membered aryl, unsubstituted, mono- or polysubstituted; wherein said 6-14-membered aryl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted; or

5-14-membered heteroaryl, unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted.

33. The compound per se, or for use according to any one of the preceding Clauses, wherein **R^4** represents

-S(=O)$_2$$C_{1-6}$-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -Cl, -C_{1-6}-alkyl, -C_{1-6}-alkylene-CF_3, -OH, =O, -OC_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -NH_2, -NHC_{1-6}-alkyl, -N(C_{1-6}-alkyl)$_2$, -NHC(=O)O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)C(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C(=O)O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)NH_2, -C(=O)NH(C_{1-6}-alkyl), -C(=O)N(C_{1-6}-alkyl)$_2$, -S(=O)$_2$$C_{1-6}$-alkyl, -phenyl, -$C_{1-6}$-alkylene-phenyl, 3-14-membered heterocycloalkyl, saturated or unsaturated,

unsubstituted; and 5-14-membered heteroaryl, unsubstituted;

-S(=O)$_2$(3-14-membered cycloalkyl), wherein said 3-14-membered cycloalkyl is selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, and cycloheptyl, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -Cl, -C_{1-6}-alkyl, -C_{1-6}-alkylene-CF_3, -OH, =O, -OC_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -NH_2, -NHC_{1-6}-alkyl, -N(C_{1-6}-alkyl)$_2$, -NHC(=O)O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)C(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C(=O)O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)NH_2, -C(=O)NH(C_{1-6}-alkyl), -C(=O)N(C_{1-6}-alkyl)$_2$, -S(=O)$_2$$C_{1-6}$-alkyl, -phenyl, -$C_{1-6}$-alkylene-phenyl, 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted; and 5-14-membered heteroaryl, unsubstituted;

-C_{1-6}-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -Cl, -C_{1-6}-alkyl, -C_{1-6}-alkylene-CF_3, -OH, =O, -OC_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -NH_2, -NHC_{1-6}-alkyl, -N(C_{1-6}-alkyl)$_2$, -NHC(=O)O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)C(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C(=O)O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)NH_2, -C(=O)NH(C_{1-6}-alkyl), -C(=O)N(C_{1-6}-alkyl)$_2$, -S(=O)$_2$$C_{1-6}$-alkyl, -phenyl, -$C_{1-6}$-alkylene-phenyl, 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted; and 5-14-membered heteroaryl, unsubstituted;

3-14-membered cycloalkyl or -C_{1-6}-alkylene-(3-14-membered cycloalkyl), wherein -C_{1-6}-alkylene- is unsubstituted or monosubstituted with -OH, wherein said 3-14-membered cycloalkyl is selected from the group consisting of cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, and cycloheptyl, in each case saturated or unsaturated, in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -Cl, -C_{1-6}-alkyl, -C_{1-6}-alkylene-CF_3, -OH, =O, -OC_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -NH_2, -NHC_{1-6}-alkyl, -N(C_{1-6}-alkyl)$_2$, -NHC(=O)O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)C(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C(=O)O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)NH_2, -C(=O)NH(C_{1-6}-alkyl), -C(=O)N(C_{1-6}-alkyl)$_2$, -S(=O)$_2$$C_{1-6}$-alkyl, -phenyl, -$C_{1-6}$-alkylene-phenyl, 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted; and 5-14-membered heteroaryl, unsubstituted;

3-14-membered heterocycloalkyl or -C_{1-6}-alkylene-(3-14-membered heterocycloalkyl), wherein -C_{1-6}-alkylene- is unsubstituted or monosubstituted with -OH, wherein said 3-14-membered heterocycloalkyl in each case is selected from the group consisting of azepane, 1,4-oxazepane, azetane, azetidine, aziridine, azocane, diazepane, dioxane, dioxolane, dithiane, dithiolane, imidazolidine, isothiazolidine, isoxalidine, morpholine, oxazolidine, oxepane, oxetane, oxirane, piperazine, piperidine, pyrazolidine, pyrrolidine, quinuclidine, tetrahydrofuran, tetrahydropyran, tetrahydrothiopyran, thiazolidine, thietane, thiirane, thiolane, thiomorpholine, indoline, dihydrobenzofuran, dihydrobenzothiophene, 1,1-dioxothiacyclohexane, 2-azaspiro[3.3]heptane, 2-oxaspiro[3.3]heptane, 7-azaspiro[3.5]nonane, 8-azabicyclo[3.2.1]octane, 9-azabicyclo[3.3.1]nonane, hexahydro-1H-pyrrolizine, hexahydrocyclopenta[c]pyrrole, octahydrocyclopenta[c]pyrrole, and octahydropyrrolo[1,2-a]pyrazine; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -Cl, -C_{1-6}-alkyl, -C_{1-6}-alkylene-CF_3, -OH, =O, -OC_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -NH_2, -NHC_{1-6}-alkyl, -N(C_{1-6}-alkyl)$_2$, -NHC(=O)O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)C(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C(=O)O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)NH_2, -C(=O)NH(C_{1-6}-alkyl), -C(=O)N(C_{1-6}-alkyl)$_2$, -S(=O)$_2$$C_{1-6}$-alkyl, -phenyl, -$C_{1-6}$-alkylene-phenyl, 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted; and 5-14-membered heteroaryl, unsubstituted; -phenyl unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -Cl, -CN, -C_{1-6}-alkyl, -C_{1-6}-alkylene-CF_3, -OH, =O, -OC_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -NH_2, -NHC_{1-6}-alkyl, -N(C_{1-6}-alkyl)$_2$, -NHC(=O)O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)C(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C(=O)O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)NH_2, -C(=O)NH(C_{1-6}-alkyl), -C(=O)N(C_{1-6}-alkyl)$_2$, -S(=O)$_2$$C_{1-6}$-alkyl, -phenyl, -$C_{1-6}$-alkylene-phenyl, 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted; and 5-14-membered heteroaryl, unsubstituted;

5-14-membered heteroaryl or -C_{1-6}-alkylene-(5-14-membered heteroaryl), wherein -C_{1-6}-alkylene- is unsubstituted or monosubstituted with -OH, wherein said 5-14-membered heteroaryl in each case is selected from the group consisting of benzimidazole, benzisoxazole, benzoazole, benzodioxole, benzofuran, benzothiadiazole, benzothiazole, benzothiophene, carbazole, cinnoline, dibenzofuran, furane, furazane, imidazole, imidazopyridine, indazole, indole, indolizine, isobenzofuran, isoindole,

isoquinoline, isothiazole, isoxazole, naphthyridine, oxadiazole, oxazole, oxindole, phthalazine, purine, pyrazine, pyrazole, pyridazine, pyridine, pyrimidine, pyrrole, quinazoline, quinoline, quinoxaline, tetrazole, thiadiazole, thiazole, thiophene, triazine, triazole, and [1,2,4]triazolo[4,3-a]pyrimidine; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -Cl, -CN, -C_{1-6}-alkyl, -C_{1-6}-alkylene-CF_3, -OH, =O, -OC_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -NH_2, -NHC_{1-6}-alkyl, -$N(C_{1-6}$-alkyl$)_2$, -NHC(=O)O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)C(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl$)_2$, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C(=O)O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)NH_2, -C(=O)NH(C_{1-6}-alkyl), -C(=O)N(C_{1-6}-alkyl$)_2$, -$S(=O)_2C_{1-6}$-alkyl, -phenyl, -C_{1-6}-alkylene-phenyl, 3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted; and 5-14-membered heteroaryl, unsubstituted.

34. The compound per se, or for use according to any one of the preceding Clauses, wherein **R^4** represents

-H;

-$S(=O)_2C_{1-6}$-alkyl, saturated, unsubstituted, monosubstituted or polysubstituted with -F;

-$S(=O)_2$(3-14-membered cycloalkyl), saturated, unsubstituted;

-C_{1-6}-alkyl, saturated, unsubstituted, monosubstituted or disubstituted with substituents independently of one another selected from the group consisting of -OH, -OC_{1-6}-alkyl, -N(C_{1-6}-alkyl$)_2$, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -phenyl unsubstituted;

3-14-membered cycloalkyl or -C_{1-6}-alkylene-(3-14-membered cycloalkyl), wherein -C_{1-6}-alkylene- is unsubstituted or monosubstituted with -OH, wherein said 3-14-membered cycloalkyl is saturated, unsubstituted, monosubstituted or disubstituted with substituents independently of one another selected from the group consisting of -C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -OH, -OC_{1-6}-alkyl, -NH_2, -N(C_{1-6}-alkyl$)_2$, -NHC(=O)O-C_{1-6}-alkyl;

3-14-membered heterocycloalkyl or -C_{1-6}-alkylene-(3-14-membered heterocycloalkyl), wherein -C_{1-6}-alkylene- is unsubstituted or monosubstituted with -OH, wherein said 3-14-membered heterocycloalkyl in each case is selected from azetane, 1,4-oxazepane, pyrrolidine, piperidine, azepane, diazepane, tetrahydrofuran, tetrahydropyran, oxetane, morpholine, piperazine, hexahydrocyclopenta[c]pyrrole, octahydrocyclopenta[c]pyrrole, octahydropyrrolo[1,2-a]pyrazine, 8-azabicyclo[3.2.1]octane, 9-azabicyclo[3.3.1]nonane, quinuclidine, hexahydro-1H-pyrrolizine, 2-oxaspiro[3.3]heptane, 2-azaspiro[3.3]heptane, 7-azaspiro[3.5]nonane, 1,1-dioxothiacyclohexane, in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -OH, =O, -C_{1-6}-alkyl, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-OH, -C_{1-6}-

alkylene-O-C_{1-6}-alkyl, -NH_2, -N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C(=O)O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)NH_2, -C(=O)NH(C_{1-6}-alkyl), -S(=O)$_2$$C_{1-6}$-alkyl, oxetanyl, pyrimidinyl, -C_{1-6}-alkylene-phenyl;

-phenyl unsubstituted;

5-14-membered heteroaryl or -C_{1-6}-alkylene-(5-14-membered heteroaryl), wherein -C_{1-6}-alkylene- is unsubstituted or monosubstituted with -OH, wherein said 5-14-membered heteroaryl in each case is selected from the group consisting of pyridine, pyridazine, pyrazine, pyrazole, isoxazole, triazole, and [1,2,4]triazolo[4,3-a]pyrimidine, in each case unsubstituted, monosubstituted or disubstituted with substituents independently of one another selected from the group consisting of -C_{1-6}-alkyl, -OH.

35. The compound per se, or for use according to any one of the preceding Clauses, wherein **R^3** and **R^4** together form a 5- or 6-membered heterocycle containing 1 or 2 heteroatoms selected from N, O and S, saturated or unsaturated, unsubstituted or mono- or polysubstituted.

36. The compound per se, or for use according to any one of the preceding Clauses, wherein **R^3** and **R^4** together form a heterocycle selected from the group consisting of pyrrolidine, piperidine, morpholine, and piperazine, in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -C_{1-6}-alkyl, -NH_2, -$NHCH_3$, -N(CH_3)$_2$, -C(=O)NH-C_{1-6}-alkyl, -C(=O)N(C_{1-6}-alkyl)$_2$, -C(=O)O-C_{1-6}-alkyl, -NHC(=O)O-C_{1-6}-alkyl, -pyridyl unsubstituted, and 1,2,4-oxadiazole unsubstituted or monosubstituted with -C_{1-6}-alkyl.

37. The compound per se, or for use according to any one of the preceding Clauses, wherein **R^3** and **R^4** together form a

pyrrolidine ring, unsubstituted or monosubstituted with -N(CH_3)$_2$;

piperidine ring, unsubstituted or monosubstituted with a substituent selected from the group consisting of -C_{1-6}-alkyl, -NH_2, -N(CH_3)$_2$, -C(=O)NH-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkyl, -NHC(=O)O-C_{1-6}-alkyl, and 1,2,4-oxadiazole unsubstituted or monosubstituted with -C_{1-6}-alkyl;

morpholine ring, unsubstituted; or

piperazine ring, unsubstituted or N-substituted with a substituent selected from the group consisting of -C_{1-6}-alkyl and -pyridyl unsubstituted.

38. The compound per se, or for use according to one any one of the preceding Clauses, wherein **R^5** and **$R^{5'}$** independently of one another represent

-H;

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

-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted.

39. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^5}$ and $\mathbf{R^{5'}}$ independently of one another represent -H, -C_1-C_6-alkyl, or -C_1-C_6-alkylene-N(C_1-C_6-alkyl)$_2$.

40. The compound per se, or for use according to any one of the preceding Clauses, wherein at least one of $\mathbf{R^5}$ and $\mathbf{R^{5'}}$ does not represent -H.

41. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^6}$, $\mathbf{R^7}$ and $\mathbf{R^8}$ independently of one another represent

-H;

-F, -Cl, -Br, -I, -OH, -SH, -SF_5, -CN, -NO_2, -C(=O)OH, -NH_2;

-C_{1-6}-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-O-C_{1-6}-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-NHC_{1-6}-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-N(C_{1-6}-alkyl)$_2$, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-C(=O)OC_{1-6}-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-OC(=O)C_{1-6}-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

-C_{1-6}-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted.

42. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^6}$, $\mathbf{R^7}$ and $\mathbf{R^8}$ independently of one another represent

-H, -F, -Cl, -Br, -I, -OH, -SH, -SF_5, -CN, -NO_2, -C(=O)OH, -NH_2,

-C_{1-6}-alkyl, -CF_3, -CHF_2, -CH_2F,

-O-C_{1-6}-alkyl, -OCF_3, -$OCHF_2$, -OCH_2F,

-NHC_{1-6}-alkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;

-N(C_{1-6}-alkyl)$_2$ unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;

-C(=O)OC_{1-6}-alkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;

-OC(=O)C_{1-6}-alkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;

or

-C_{1-6}-heteroalkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2.

43. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^6}$ represents -H, -F, -Cl, -CN, or -C_1-C_6-alkyl.

44. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^6}$ does not represent -H.

45. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^7}$ represents -H, -F, -Cl, -CN, or -C_1-C_6-alkyl.

46. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^7}$ does not represent -H.

47. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^8}$ represents -H, -F, -Cl, -CN, or -C_1-C_6-alkyl.

48. The compound per se, or for use according to any one of the preceding Clauses, wherein $\mathbf{R^8}$ does not represent -H.

49. The compound per se, or for use according to any one of the preceding Clauses, wherein

(i) $\mathbf{R^6}$, $\mathbf{R^7}$ and $\mathbf{R^8}$ each represent -H; or

(ii) two of $\mathbf{R^6}$, $\mathbf{R^7}$ and $\mathbf{R^8}$ represent -H and the other of $\mathbf{R^6}$, $\mathbf{R^7}$ and $\mathbf{R^8}$ represents -F, -Cl, -CN, or -CH_3; or

(iii) one of $\mathbf{R^6}$, $\mathbf{R^7}$ and $\mathbf{R^8}$ represents -H and the other of $\mathbf{R^6}$, $\mathbf{R^7}$ and $\mathbf{R^8}$ independently of one another represent -F, -Cl, -CN, or -CH_3.

50. The compound per se, or for use according to any one of the preceding Clauses, which is selected from the group consisting of cpd 001 to cpd 036, or cpd 037 to 091, as mentioned above and the physiologically acceptable salts thereof.

51. The compound per se, or for use according to any one of the preceding Clauses, wherein the pain is selected from nociceptive pain, inflammatory pain, and neuropathic pain.

52. The compound per se, or for use according to any one of the preceding Clauses, wherein the pain is post-operative pain.

53. A compound of formula (I), a stereo-isomeric form, a physiologically acceptable salt, solvate and/or polymorph thereof, as defined in any one of the preceding Clauses, wherein

(a-1) **Q** represents -N$\mathbf{R^3R^4}$; $\mathbf{R^1}$ represents $\mathbf{R^W}$; and $\mathbf{R^W}$ represents -C_1-C_6-alkyl - and/or

(a-2) **Q** represents -N$\mathbf{R^3R^4}$; and at least one of $\mathbf{R^5}$ and $\mathbf{R^{5'}}$ represents -H; and/or

(a-3) **Q** represents -N$\mathbf{R^3R^4}$; and $\mathbf{R^6}$ represents -H; and/or

(a-4) **Q** represents -N$\mathbf{R^3R^4}$; and $\mathbf{R^8}$ represents -H;

or

(b-1)

(b-1) Q represents -NR^3R^4; and R^1 represents -CH_2F, -CHF_2, -CF_3, -CN, -methyl, -ethyl, -propyl or -cyclopropyl; and/or

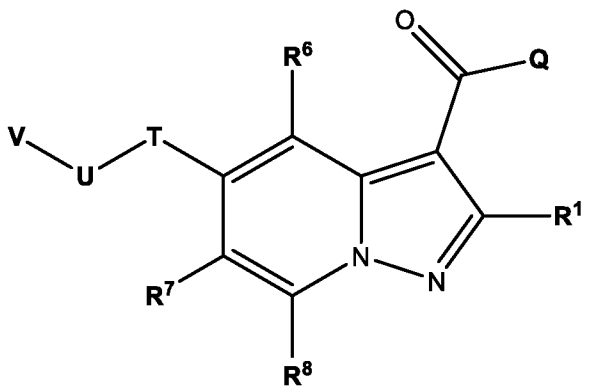
(b-2) Q represents -NR^3R^4; and at least one of R^5 and $R^{5'}$ does not represent -H; and/or

(b-3) Q represents -NR^3R^4; and R^3 represents -H.

54. A pharmaceutical composition or a medicament comprising a compound according to any one of the preceding Clauses.

Further exemplary embodiments of the invention are summarized as items 1 to 68 hereinafter:

1. A compound of formula (I), a stereo-isomeric form, a physiologically acceptable salt, solvate and/or polymorph thereof



(I)

wherein

R^1 represents -F, -Cl, -Br, -I, -CN, -R^W, -OR^W, -OC(=O)R^W, -N$R^W R^X$, -NR^WC(=O)R^X, -SR^W, -S(=O)R^W, -$S(=O)_2R^W$, -C(=O)R^W, -C(=O)OR^W, or -C(=O)N$R^W R^X$;

Q represents -OR^2 or -NR^3R^4;

R^2 represents -R^Y;

R^3 represents -OH or -R^Y;

R^4 represents -R^Y or -$S(=O)_2R^Y$;

or R^3 and R^4 together form a 4, 5, 6, 7 or 8 membered heterocycle containing 1 to 3 heteroatoms selected from N, O and S, saturated or unsaturated, unsubstituted or mono- or polysubstituted;

T represents -O- and **U** represents -C$R^5R^{5'}$-; or **T** represents -C$R^5R^{5'}$- and **U** represents -O-;

R^5 and $R^{5'}$ independently of one another represent -R^Y;

R^6, R^7 and R^8 independently of one another represent -F, -Cl, -Br, -I, -CN, -NO_2, -SF_5, -

$\mathbf{R^W}$, -O$\mathbf{R^W}$, -OC(=O)$\mathbf{R^W}$, -N$\mathbf{R^W R^X}$, -N$\mathbf{R^W}$C(=O)$\mathbf{R^X}$, -S$\mathbf{R^W}$, -S(=O)$\mathbf{R^W}$, -S(=O)$_2\mathbf{R^W}$, -C(=O)$\mathbf{R^W}$, -C(=O)O$\mathbf{R^W}$, or -C(=O)N$\mathbf{R^W R^X}$;

V represents 3-14-membered heterocycloalkyl, saturated or unsaturated; 3-14-membered cycloalkyl, saturated or unsaturated; 5-14-membered aryl; C_1-C_6 alkyl or 5-14-membered heteroaryl; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, -CF_3, -CF_2H, C_1-C_6 alkyl, -CN, -NO, -NO_2, =O, =S, -SF_5, -$\mathbf{R^Y}$, -O$\mathbf{R^Y}$, -OC(=O)$\mathbf{R^Y}$, -N$\mathbf{R^Y R^Z}$, -N$\mathbf{R^Y}$C(=O)$\mathbf{R^Z}$, -S$\mathbf{R^Y}$, -S(=O)$\mathbf{R^Y}$, -S(=O)$_2\mathbf{R^Y}$, -C(=O)$\mathbf{R^Y}$, -C(=O)O$\mathbf{R^Y}$, or -C(=O)N$\mathbf{R^Y R^Z}$;

wherein

$\mathbf{R^W}$ and $\mathbf{R^X}$ independently of one another and in each case independently represent

-H;

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

-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted; or

3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

$\mathbf{R^Y}$ and $\mathbf{R^Z}$ independently of one another and in each case independently represent

-H;

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

-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

6-14-membered aryl, unsubstituted, mono- or polysubstituted; wherein said 6-14-membered aryl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-

heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted; or

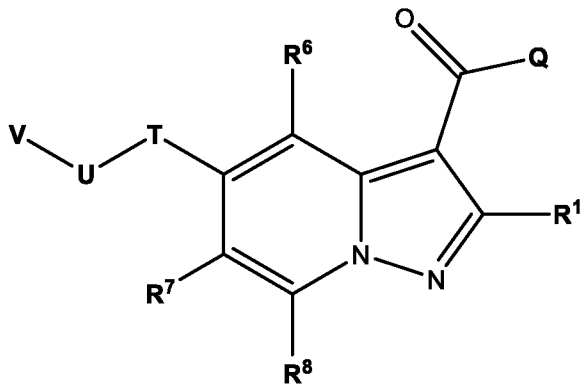
5-14-membered heteroaryl, unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

or $\mathbf{R^Y}$ and $\mathbf{R^Z}$ together form a 4, 5, 6, 7 or 8 membered heterocycle containing 1 to 3 heteroatoms selected from N, O and S, saturated or unsaturated, unsubstituted or mono- or polysubstituted;

and wherein "mono- or polysubstituted" in each case independently means substituted with one or more substituents independently of one another selected from -F, -Cl, -Br, -I, -CN, -C_{1-6}-alkyl, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-O-CF_3, -C_{1-6}-alkylene-O-CF_2H, -C_{1-6}-alkylene-O-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C_{1-6}-alkylene-C(=O)-OH, -C(=O)-OC_{1-6}-alkyl, -C_{1-6}-alkylene-C(=O)-OC_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)-NH_2, -C_{1-6}-alkylene-C(=O)-NH_2, -C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-C(=O)-NH(C_{1-6}-alkyl), -C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-C(=O)-N(C_{1-6}-alkyl)$_2$, -C(=O)-NH(OH), -C_{1-6}-alkylene-C(=O)-NH(OH), -OH, -C_{1-6}-alkylene-OH, =O, -OCF_3, -OCF_2H, -$OCFH_2$, -OCF_2Cl, -$OCFCl_2$, -O-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -O-C_{1-6}-alkylene-O-C_{1-6}-alkyl, -O-C_{1-6}-alkylene-NH_2, -O-C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -O-C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -O-C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C(=O)-C_{1-6}-alkyl, -O-C(=O)-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C(=O)-O-C_{1-6}-alkyl, -O-C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-O-C(=O)-NH(C_{1-6}-alkyl), -O-C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-O-C(=O)-N(C_{1-6}-alkyl)$_2$, -O-S(=O)$_2$-NH_2, -C_{1-6}-alkylene-O-S(=O)$_2$-NH_2, -O-S(=O)$_2$-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-O-S(=O)$_2$-NH(C_{1-6}-alkyl), -O-S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-O-S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, -NH_2, -NO, -NO_2, -C_{1-6}-alkylene-NH_2, -NH(C_{1-6}-alkyl), -N(3-14-membered cycloalkyl)(C_{1-6}-alkyl), -N(C_{1-6}-alkyl)-C_{1-6}-alkylene-OH, -N(H)-C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-NH(C_{1-6}-alkyl), -N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -NH-C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH-C(=O)-C_{1-6}-alkyl, -NH-C(=O)-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH-C(=O)-O-C_{1-6}-alkyl, -NH-C(=O)-NH_2, -C_{1-6}-alkylene-NH-C(=O)-NH_2, -NH-C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-NH-C(=O)-NH(C_{1-6}-alkyl), -NH-C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH-C(=O)-N(C_{1-6}-alkyl)$_2$, -N(C_{1-6}-alkyl)-C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)-C(=O)-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)-C(=O)-NH_2, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-NH_2, -N(C_{1-6}-alkyl)-C(=O)-

$NH(C_{1-6}\text{-alkyl})$, $-C_{1-6}\text{-alkylene-N}(C_{1-6}\text{-alkyl})\text{-C(=O)-NH}(C_{1-6}\text{-alkyl})$, $-N(C_{1-6}\text{-alkyl})\text{-C(=O)-N}(C_{1-6}\text{-alkyl})_2$, $-C_{1-6}\text{-alkylene-N}(C_{1-6}\text{-alkyl})\text{-C(=O)-N}(C_{1-6}\text{-alkyl})_2$, $-NH\text{-S(=O)}_2OH$, $-C_{1-6}\text{-alkylene-NH-S(=O)}_2OH$, $-NH\text{-S(=O)}_2\text{-C}_{1-6}\text{-alkyl}$, $-C_{1-6}\text{-alkylene-NH-S(=O)}_2\text{-C}_{1-6}\text{-alkyl}$, $-NH\text{-S(=O)}_2\text{-O-C}_{1-6}\text{-alkyl}$, $-C_{1-6}\text{-alkylene-NH-S(=O)}_2\text{-O-C}_{1-6}\text{-alkyl}$, $-NH\text{-S(=O)}_2\text{-NH}_2$, $-C_{1-6}\text{-alkylene-NH-S(=O)}_2\text{-NH}_2$, $-NH\text{-S(=O)}_2\text{-NH}(C_{1-6}\text{-alkyl})$, $-C_{1-6}\text{-alkylene-NH-S(=O)}_2\text{-NH}(C_{1-6}\text{-alkyl})$, $-NH\text{-S(=O)}_2N(C_{1-6}\text{-alkyl})_2$, $-C_{1-6}\text{-alkylene-NH-S(=O)}_2N(C_{1-6}\text{-alkyl})_2$, $-N(C_{1-6}\text{-alkyl})\text{-S(=O)}_2\text{-OH}$, $-C_{1-6}\text{-alkylene-N}(C_{1-6}\text{-alkyl})\text{-S(=O)}_2\text{-OH}$, $-N(C_{1-6}\text{-alkyl})\text{-S(=O)}_2\text{-C}_{1-6}\text{-alkyl}$, $-C_{1-6}\text{-alkylene-N}(C_{1-6}\text{-alkyl})\text{-S(=O)}_2\text{-C}_{1-6}\text{-alkyl}$, $-N(C_{1-6}\text{-alkyl})\text{-S(=O)}_2\text{-O-C}_{1-6}\text{-alkyl}$, $-C_{1-6}\text{-alkylene-N}(C_{1-6}\text{-alkyl})\text{-S(=O)}_2\text{-O-C}_{1-6}\text{-alkyl}$, $-N(C_{1-6}\text{-alkyl})\text{-S(=O)}_2\text{-NH}_2$, $-C_{1-6}\text{-alkylene-N}(C_{1-6}\text{-alkyl})\text{-S(=O)}_2\text{-NH}_2$, $-N(C_{1-6}\text{-alkyl})\text{-S(=O)}_2\text{-NH}(C_{1-6}\text{-alkyl})$, $-C_{1-6}\text{-alkylene-N}(C_{1-6}\text{-alkyl})\text{-S(=O)}_2\text{-NH}(C_{1-6}\text{-alkyl})$, $-N(C_{1-6}\text{-alkyl})\text{-S(=O)}_2\text{-N}(C_{1-6}\text{-alkyl})_2$, $-C_{1-6}\text{-alkylene-N}(C_{1-6}\text{-alkyl})\text{-S(=O)}_2\text{-N}(C_{1-6}\text{-alkyl})_2$, $-SH$, $=S$, $-SF_5$, $-SCF_3$, $-SCF_2H$, $-SCFH_2$, $-S\text{-}C_{1-6}\text{-alkyl}$, $-C_{1-6}\text{-alkylene-S-}C_{1-6}\text{-alkyl}$, $-S(=O)\text{-}C_{1-6}\text{-alkyl}$, $-C_{1-6}\text{-alkylene-S(=O)-}C_{1-6}\text{-alkyl}$, $-S(=O)_2\text{-}C_{1-6}\text{-alkyl}$, $-C_{1-6}\text{-alkylene-S(=O)}_2\text{-}C_{1-6}\text{-alkyl}$, $-S(=O)_2\text{-OH}$, $-C_{1-6}\text{-alkylene-S(=O)}_2\text{-OH}$, $-S(=O)_2\text{-O-}C_{1-6}\text{-alkyl}$, $-C_{1-6}\text{-alkylene-S(=O)}_2\text{-O-}C_{1-6}\text{-alkyl}$, $-S(=O)_2\text{-NH}_2$, $-C_{1-6}\text{-alkylene-S(=O)}_2\text{-NH}_2$, $-S(=O)_2\text{-NH}(C_{1-6}\text{-alkyl})$, $-C_{1-6}\text{-alkylene-S(=O)}_2\text{-NH}(C_{1-6}\text{-alkyl})$, $-S(=O)_2\text{-N}(C_{1-6}\text{-alkyl})_2$, $-C_{1-6}\text{-alkylene-S(=O)}_2\text{-N}(C_{1-6}\text{-alkyl})_2$, 3-14-membered cycloalkyl, $-C_{1-6}\text{-alkylene-}$(3-14-membered cycloalkyl), 3 to 14-membered heterocycloalkyl, $-C_{1-6}\text{-alkylene-}$(3 to 14-membered heterocycloalkyl), -phenyl, $-C_{1-6}\text{-alkylene-phenyl}$, 5 to 14-membered heteroaryl, $-C_{1-6}\text{-alkylene-}$(5 to 14-membered heteroaryl), -O-(3-14-membered cycloalkyl), -O-(3 to 14-membered heterocycloalkyl), -O-phenyl, -O-(5 to 14-membered heteroaryl), -C(=O)-(3-14-membered cycloalkyl), -C(=O)-(3 to 14-membered heterocycloalkyl), -C(=O)-phenyl, -C(=O)-(5 to 14-membered heteroaryl), $-S(=O)_2$-(3-14-membered cycloalkyl), $-S(=O)_2$-(3 to 14-membered heterocycloalkyl), $-S(=O)_2$-phenyl, $-S(=O)_2$-(5 to 14-membered heteroaryl).

2. The compound of formula (I), a stereo-isomeric form, a physiologically acceptable salt, solvate and/or polymorph thereof, preferably according to item 1,



wherein

Q represents -OR^2 or -NR^3R^4;

T represents -O-;

U represents –$CR^5R^{5'}$-;

V represents H or R^4

R^1 represents -H, R^9, -O-C_{1-6}-alkyl, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3, -S(=O)-C_{1-6}-alkyl, -$S(=O)_2$-C_{1-6}-alkyl, cyclopropyl unsubstituted, cyclobutyl unsubstituted, cyclopentyl unsubstituted or cyclohexyl unsubstituted;

R^2 represents hydrogen or R^9;

R^3 represents -H, R^9, -OH, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, or -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3;

R^4 represents $R^{4'}$ or -SO_2-$R^{4'}$, wherein

$R^{4'}$ represents -R^9, -R^{cycl} or -R^{10}-R^{cycl}; and

R^{cycl} represents

3-14-membered cycloalkyl, saturated or unsaturated

4-14-membered heterocycloalkyl, saturated or unsaturated, with one or more N, O or S atom in the heterocycloalkyl ring

6-14-membered aryl, or

5-14-membered heteroaryl with one or more N, O or S in the heteroaryl ring;

R^1 and R^3 together may form a group -R^{10}-; or

R^3 and R^4 together may form a group -R^{10}-;

R^5, $R^{5'}$, R^6, R^7 and R^8 independently of each other represent hydrogen or R^9; and

R^{cycl} may be substituted by R^9 and the cycloalkyl rings and the heterocycloalkyl rings of R^{cycl} independently of each other may be substituted by =O or =S; and

R^9 represents -C_{1-6}-alkyl or -C_{1-6}-heteroalkyl with one or more N, O or S in the chain; and

R^{10} represents -C_{1-6}-alkylen- or -C_{1-6}-heteroalkylen- with one or more N, O or S in the chain; and

wherein R^9 and R^{10} may be straight or branched, saturated or unsaturated; and

R^9 , R^{10} and R^{cycl} may be substituted by R^{11}; and

R^{11} is selected from the list consisting of a -OR, -NR_2, halogen, -CN, -COOR, -CO-NR_2, -CONR(OR), -O-CO-O-C_{1-6}-alkyl, -NR-C(=O)-R, -NR-C(=O)-O-R, -NR-C(=O)-$N(R)_2$, -O-$S(=O)_2$-NR_2, -NR-SO_2-R, -N(R)-$S(=O)_2$OR, -N(R)-$S(=O)_2NR_2$, -SR, -S(=O)-R, -$S(=O)_2$-OR, -$S(=O)_2$-NR_2, -NO, -NO_2, -C_{1-6}-alkylen-OR, -C_{1-6}-alkylen-NR_2, =O or =S or 3-7-membered cycloalkyl, saturated or unsaturated wherein the residues R may be independently of each

other selected from the group consisting of H or -C_{1-6}-alkyl, which may be substituted by halogen.

3. The compound of item 1, wherein R^1 represents a straight or branched alkyl with 1 to 6 carbon atoms, which may be substituted by halogen, -OR, -$CONR_2$ or -NR_2, wherein the residues R independently of each other represent H or C_{1-6}-alkyl, which may be substituted by halogen.

4. The compound of any one of the preceding items, wherein R^3 represents hydrogen or R^9.

5. The compound of any one of the preceding items, wherein

Q represents OR^2 or -NR^3R^4;
T represents -O-;
U represents –$CR^5R^{5'}$-;
V represents H or R^4
R^1 represents a straight or branched alkyl with 1 to 6 carbon atoms, which may be substituted by halogen, -OR, -$CONR_2$ or -NR_2, wherein the residues R independently of each other represent H or C_{1-6}-alkyl, which may be substituted by halogen;
R^2 and R^3 represent hydrogen or R^9;
or R^1 and R^3 together may form a group -R^{10}-;
R^4 represents $R^{4'}$ or -SO_2-$R^{4'}$, wherein
$R^{4'}$ represents -R^9, -R^{cycl} or -R^{10}-R^{cycl}; and
R^{cycl} represents
3-14-membered cycloalkyl, saturated or unsaturated
4-14-membered heterocycloalkyl with one or more N, O or S atom in the heterocycloalkyl ring, saturated or unsaturated
6-14-membered aryl, or
5-14-membered heteroaryl with one or more N, O or S in the heteroaryl ring;
R^5, $R^{5'}$, R^6, R^7 and R^8 independently of each other represent hydrogen or R^9; and
R^{cycl} may be substituted by R^9 and the cycloalkyl rings and the heterocycloalkyl rings of R^{cycl} independently of each other may be substituted by =O or =S; and
R^9 represents -C_{1-6}-alkyl or -C_{1-6}-heteroalkyl with one or more N, O or S in the chain; and
R^{10} represents -C_{1-6}-alkylen- or -C_{1-6}-heteroalkylen- with one or more N, O or S in the chain; and
wherein R^9 and R^{10} may be straight or branched, saturated or unsaturated; and

R^9 , R^{10} and R^{cycl} may be substituted by R^{11}; and

R^{11} is selected from the list consisting of a -OR, -NR_2, halogen, -CN, -COOR, -CO-NR_2, -CONR(OR), -O-CO-O-C_{1-6}-alkyl, -NR-C(=O)-R, -NR-C(=O)-O-R, -NR-C(=O)-$N(R)_2$, -O-$S(=O)_2$-NR_2, -NR-SO_2-R, -N(R)-$S(=O)_2$OR, -N(R)-$S(=O)_2NR_2$, -SR, -S(=O)-R, -$S(=O)_2$-OR, -$S(=O)_2$-NR_2, -NO, -NO_2, -C_{1-6}-alkylen-OR, -C_{1-6}-alkylen-NR_2 or 3-7-membered cycloalkyl, saturated or unsaturated wherein the residues R may be independently of each other H or -C_{1-6}-alkyl, which may be substituted by halogen.

6. The compound of any one of the preceding items, wherein V represents

H,

-R^9,

3-14 membered cycloalkyl, saturated or unsaturated,

4-14-membered heterocycloalkyl, saturated or unsaturated, with one or more N, O or S atom in the heterocycloalkyl ring,

6-14-membered aryl,

5-14-membered heteroaryl with one or more N, O or S atom in the heteroaryl ring, wherein the cyclic groups may be substituted by R^9.

7. The compound of any one of the preceding items, wherein R^5, $R^{5'}$, R^6, R^7 and R^8 independently of each other represent hydrogen or C_{1-3}-alkyl.

8. The compound of any one of the preceding items, wherein R^5, $R^{5'}$, R^6, R^7 and R^8 independently of each other represent hydrogen or methyl.

9. The compound of any one of the preceding items, wherein

Q represents OR^2 or -NR^3R^4;

T represents -O-;

U represents –$CR^5R^{5'}$-;

V represents H, -R^9 or -R^{cycl};

R^1 represents -C_{1-6}-alkyl, which may be substituted by halogen, -OH, OR, -$CONR_2$ or -NR_2, wherein the residues R independently of each other represent H or -C_{1-6}-alkyl, which may be substituted by halogen;

R^2 and R^3 represent hydrogen or methyl;

or R^1 and R^3 together may form a group -R^{10}-;

R^4 represents $R^{4'}$ or -SO_2-$R^{4'}$, wherein

$R^{4'}$ represents -R^9, -R^{cycl} or -R^{10}-R^{cycl}; and

R^{cycl} represents

3-14-membered cycloalkyl, saturated or unsaturated

4-14-membered heterocycloalkyl, saturated or unsaturated, with one or more N, O or S atom in the heterocycloalkyl ring

6-14-membered aryl, or

5-14-membered heteroaryl with one or more N, O or S in the heteroaryl ring;

R^5, $R^{5'}$, R^6, R^7 and R^8 independently of each other represent hydrogen or methyl; and

R^{cycl} may be substituted by R^9 and the cycloalkyl rings and the heterocycloalkyl rings of R^{cycl} independently of each other may be substituted by =O or =S; and

R^9 represents -C_{1-6}-alkyl or -C_{1-6}-heteroalkyl with one or more N, O or S in the chain; and

R^{10} represents -C_{1-6}-alkylen- or a -C_{1-6}-heteroalkylen- with one or more N, O or S in the chain; and

wherein R^9 and R^{10} may be straight or branched, saturated or unsaturated; and

R^9 , R^{10} and R^{cycl} may be substituted by R^{11}; and

R^{11} is selected from the list consisting of a -OR, -NR_2, halogen, -CN, -COOR, -CO-NR_2, -CONR(OR), -O-CO-O-C_{1-6}-alkyl, -NR-C(=O)-R, -NR-C(=O)-O-R, -NR-C(=O)-$N(R)_2$, -O-$S(=O)_2$-NR_2, -NR-SO_2-R, -N(R)-$S(=O)_2$OR, -N(R)-$S(=O)_2NR_2$, -SR, -S(=O)-R, -$S(=O)_2$-OR, -$S(=O)_2$-NR_2, -NO, -NO_2, -C_{1-6}-alkylen-OR, -C_{1-6}-alkylen-NR_2 or 3-7-membered cycloalkyl, saturated or unsaturated wherein the residues R may be independently of each other H or -C_{1-6}-alkyl, which may be substituted by halogen.

10. The compound of any one of the preceding items, wherein R^5 and $R^{5'}$ represent hydrogen.

11. The compound of any one of the preceding items, wherein R^1 and R^3 together form a group -R^{10}-.

12. The compound of any one of the preceding items, wherein R^1 and R^3 together form a straight or branched alkanediyl or alkenediyl with 1 to 4 carbon atoms, which may not be substituted or may be substituted by Halogen, C_{1-6}-alkyl or $CONR_2$, wherein the residues R may be independently of each other H or a C_{1-6}-alkyl.

13. The compound of any one of the preceding items, wherein R^1 and R^3 together form a straight or branched alkanediyl or alkenediyl with 1 to 3 carbon atoms, which may be not substituted or substituted by Halogen, C_{1-6}-alkyl or $CONR_2$, wherein the residues R may be independently of each other H or a C_{1-6}-alkyl.

14. The compound of any one of items 1 to 13, wherein R^1 and R^3 are not connected to form a heterocycle.

15. The compound of any one of the preceding items, wherein R^4 represents $R^{4'}$ or $-SO_2-C_{1-6}$-alkyl.

16. The compound of any one of the preceding items, wherein V represents H, C_{1-6}-alkyl or $-R^{cycl}$.

17. The compound of any one of the preceding items, wherein

Q represents OR^2 or $-NR^3R^4$;
T represents -O-;
U represents $–CH_2-$;
V represents H, C_{1-6}-alkyl or $-R^{cycl}$; and wherein the cyclic groups in the group V may be substituted by at least one group selected from the list consisting of $-COO-C_{1-6}$-alkyl, $-CO-NR_2$, -CN, halogen or a C_{1-6}-alkyl, wherein R represents independently of each other H or $-C_{1-6}$-alkyl and the alkyl groups in the group V may be substituted by one or more halogen atoms;
R^1 represents $-C_{1-6}$-alkyl, which may be substituted by halogen, -OH, $-CONR_2$ or $-NR_2$, wherein the residues R independently of each other represent H or $-C_{1-6}$-alkyl, which may be substituted by halogen;
R^2 and R^3 represent hydrogen or methyl;
R^4 represents $-SO_2-C_{1-6}$-alkyl, $-R^9$, $-R^{cycl}$ or $-R^{10}-R^{cycl}$; and
R^{cycl} represents
3-14-membered cycloalkyl, saturated or unsaturated
4-14-membered heterocycloalkyl, saturated or unsaturated, with one or more N, O or S atom in the heterocycloalkyl ring
6-14-membered aryl, or
5-14-membered heteroaryl with one or more N, O or S in the heteroaryl ring; and
R^6, R^7 and R^8 independently of each other represent hydrogen or methyl; and
R^{cycl} may be substituted by R^9 and the cycloalkyl rings and the heterocycloalkyl rings of R^{cycl} independently of each other may be substituted by =O or =S; and
R^9 represents $-C_{1-6}$-alkyl or a $-C_{1-6}$-heteroalkyl with one or more N, O or S in the chain; and
R^{10} represents $-C_{1-6}$-alkylen- or a $-C_{1-6}$-heteroalkylen- with one or more N, O or S in the chain; and
wherein R^9 and R^{10} may be straight or branched, saturated or unsaturated; and

R^9 , R^{10} and R^{cycl} of R^4 may be substituted by R^{11}; and

R^{11} is selected from the list consisting of a -OR, -NR_2, halogen, -CN, -COOR, -CO-NR_2, -CONR(OR), -O-CO-O-C_{1-6}-alkyl, -NR-C(=O)-R, -NR-C(=O)-O-R, -NR-C(=O)-$N(R)_2$, -O-$S(=O)_2$-NR_2, -NR-SO_2-R, -N(R)-$S(=O)_2$OR, -N(R)-$S(=O)_2NR_2$, -SR, -S(=O)-R, -$S(=O)_2$-OR, -$S(=O)_2$-NR_2, -NO, -NO_2, -C_{1-6}-alkylen-OR, -C_{1-6}-alkylen-NR_2 or 3-7-membered cycloalkyl, saturated or unsaturated wherein the residues R may be independently of each other H or -C_{1-6}-alkyl, which may be substituted by halogen.

18. The compound of any one of the preceding items, wherein R^6, R^7 and R^8 independently of each other represent hydrogen.

19. The compound of any one of the preceding items, wherein R^2 represents hydrogen.

20. The compound of any one of the preceding items, wherein R^3 represents hydrogen.

21. The compound of any one of the preceding items, wherein R^2 and R^3 represent hydrogen.

22. The compound of any one of the preceding items, wherein R^2, R^3, R^5, $R^{5'}$, R^6, R^7 and R^8 independently of each other represent hydrogen.

23. The compound of any one of the preceding items, wherein R^1 represents -C_{1-6}-alkyl.

24. The compound of any one of the preceding items, wherein

Q represents OR^2 or –NR^3R^4;
T represents -O-;
U represents -CH_2-;
V represents H, C_{1-6}-alkyl or -R^{cycl}; and wherein R^{cycl} in group V may be substituted by at least one group selected from the list consisting of -COO-C_{1-6}-alkyl, -CO-NR_2, -CN, halogen or a C_{1-6}-alkyl, wherein R represents independently of each other H or -C_{1-6}-alkyl and the alkyl groups in the group V may be substituted by one or more halogen atoms;
R^1 represents -C_{1-6}-alkyl;
R^2 represents hydrogen;
R^3 represents hydrogen;
R^4 represents -SO_2-C_{1-6}-alkyl, -R^9, -R^{cycl} or -R^{10}-R^{cycl}; and
R^{cycl} represents
3-6-membered cycloalkyl, saturated or unsaturated

4-7-membered heterocycloalkyl, saturated or unsaturated, with one or more N, O or S atom in the heterocycloalkyl ring

6-membered aryl, or

6-membered heteroaryl with one or more N, O or S in the heteroaryl ring; and

R^6, R^7 and R^8 independently of each other represent hydrogen or methyl; and

R^{cycl} may be substituted by R^9 and the cycloalkyl rings and the heterocycloalkyl rings of R^{cycl} independently of each other may be substituted by =O or =S; and

R^9 represents -C_{1-6}-alkyl or a -C_{1-6}-heteroalkyl with one or more N, O or S in the chain; and

R^{10} represents -C_{1-6}-alkylen- or a -C_{1-6}-heteroalkylen- with one or more N, O or S in the chain; and

wherein R^9 and R^{10} may be straight or branched, saturated or unsaturated; and

R^9 , R^{10} and R^{cycl} of R^4 may be substituted by R^{11}; and

R^{11} is selected from the list consisting of a -OR, -NR_2, halogen, -CN, -COOR, -CO-NR_2, -CONR(OR), -O-CO-O-C_{1-6}-alkyl, -NR-C(=O)-R, -NR-C(=O)-O-R, -NR-C(=O)-$N(R)_2$, -O-$S(=O)_2$-NR_2, -NR-SO_2-R, -N(R)-$S(=O)_2$OR, -N(R)-$S(=O)_2NR_2$, -SR, -S(=O)-R, -$S(=O)_2$-OR, -$S(=O)_2$-NR_2, -NO, -NO_2, -C_{1-6}-alkylen-OR, -C_{1-6}-alkylen-NR_2 or 3-7-membered cycloalkyl, saturated or unsaturated wherein the residues R may be independently of each other H or -C_{1-6}-alkyl, which may be substituted by halogen.

25. The compound of any one of the preceding items, wherein R^9 represents -C_{1-6}-alkyl, straight or branched.

26. The compound of any one of the preceding items, wherein R^{10} represents -C_{1-6}-alkylen-, straight or branched.

27. The compound of any one of the preceding items, wherein R^9 represents -C_{1-6}-alkyl, straight or branched and R^{10} represents -C_{1-6}-alkylen-, straight or branched.

28. The compound of any one of the preceding items, wherein R^9 represents -C_{1-3}-alkyl, straight or branched.

29. The compound of any one of the preceding items, wherein R^{10} represents -C_{1-3}-alkylen-, straight or branched.

30. The compound of any one of the preceding items, wherein R^9 represents -C_{1-3}-alkyl, straight or branched and R^{10} represents -C_{1-3}-alkylen-, straight or branched.

31. The compound of any one of the preceding items, wherein the substituents of the cyclic groups in the residue R^4 are bonded directly to the cyclic groups.

32. The compound of any one of the preceding items, wherein

Q represents OR^2 or $–NR^3R^4$;
T represents -O-;
U represents $-CH_2-$;
V represents H, C_{1-6}-alkyl or $-R^{cycl}$; and wherein R^{cycl} in group V may be substituted by at least one group selected from the list consisting of -CN, halogen or a C_{1-3}-alkyl and the alkyl groups in the group V may be substituted by one or more halogen atoms;
R^1 represents $-C_{1-3}$-alkyl;
R^2 represents hydrogen;
R^3 represents hydrogen;
R^4 represents $-SO_2-C_{1-6}$-alkyl, $-R^9$, $-R^{cycl}$ or $-R^{10}-R^{cycl}$; and
R^{cycl} represents
3-6-membered cycloalkyl, saturated or unsaturated
4-7-membered heterocycloalkyl, saturated or unsaturated, with one or more N, O or S atom in the heterocycloalkyl ring
6-membered aryl, or
5-6-membered heteroaryl with one or more N, O or S in the heteroaryl ring; and
R^6, R^7 and R^8 represent hydrogen; and
R^{cycl} may be substituted by R^9 and the cycloalkyl rings and the heterocycloalkyl rings of R^{cycl} independently of each other may be substituted by =O or =S; and
R^9 represents C_{1-6} alkyl; and
R^{10} represents $-C_{1-3}$-alkylen; and
wherein R^9 and R^{10} may be straight or branched, saturated or unsaturated; and
R^9 , R^{10} and R^{cycl} of R^4 may be substituted R^{11}; and
R^{11} selected from the list consisting of OH, halogen, a C_{1-3}-alkyl group, $-NR-SO_2-R$ or a $–CONR_2$ group, wherein R may be independently of each other H or a C_{1-3}-alkyl group, which may be substituted by halogen.

33. The compound of any one of the preceding items, wherein R^{cycl} comprises 1, 2 or 3 heteroatoms.

34. The compound of any one of the preceding items, wherein R^{cycl} comprises 1 or 2 heteroatoms.

35. The compound of any one of the preceding items, wherein R^{cycl} comprises 1 heteroatom.

36. The compound of any one of the preceding items, wherein

Q represents OR^2 or $–NR^3R^4$;
T represents -O-;
U represents $-CH_2-$;
V represents
H;
C_{1-3}-alkyl which may be substituted with at least one halogen;
3-6 membered cycloalkyl, which may be substituted with a -CN group;
4-6-membered heterocycloalkyl, comprising one oxygen atom in the heterocycloalkyl ring;
6-membered aryl, which may be substituted with at least one halogen or with a C_{1-3}-alkyl group, wherein the C_{1-3}-alkyl group may be substituted by at least one halogen atom;
5-6-membered heteroaryl with one or more N, O or S atom in the heteroaryl ring, wherein the heteroaryl ring may be substituted with halogen or a C_{1-3}-alkyl group which may be substituted by at least one halogen atom;
R^1 represents $-C_{1-3}$-alkyl;
R^2 represents hydrogen;
R^3 represents hydrogen;
R^4 represents
$-SO_2-C_{1-3}$-alkyl;
C_{1-6} alkyl which may be substituted by OH, F, $-NR_2$, $-NR-SO_2-R$ or $-CONR_2$, wherein residues R are independently from each other hydrogen or C_{1-3} alkyl;
3-6-membered cycloalkyl which may be substituted by halogen, C_{1-3}-alkyl, which may be substituted by halogen or -OH, =O or $-CONH_2$;
C_{1-3}-alkylene-3-6-membered cycloalkyl which may be substituted by a C_{1-3}-alkyl or a $-N(C_{1-6}\text{ alkyl})_2$ group;
4-7-membered heterocycloalkyl with one or more N or O atom in the heterocycloalkyl ring and wherein the heterocycloalkyl ring may be substituted by =O, halogen or $-CONR_2$ wherein the residues R independently of each other represent H or C_{1-3}-alkyl or the heterocycloalkyl ring may be substituted by a C_{1-3} alkyl group, which may be substituted by OH or halogen;

C_{1-4}-alkylene-4-7-membered heterocycloalkyl with one or more N, O in the heterocycloalkyl ring, wherein the heterocycloalkyl group may be substituted by C_{1-3} alkyl, which may be substituted by halogen or =O;

6-membered aryl which may be substituted by halogen, C_{1-3} alkyl or –O- C_{1-3} alkyl wherein the C_{1-3} alkyl and –O- C_{1-3} alkyl groups may be substituted by halogen; or

5-7-membered heteroaryl with one or more N, O or S in the heteroaryl ring, wherein the heteroaryl ring may be substituted by C_{1-3} alkyl, which may be substituted by halogen or the heteroaryl ring may be substituted by OH; or a

C_{1-3}-alkylene-5-6-membered heteroaryl, with one or more N or O in the heteroaryl ring wherein the C_{1-3}-alkylene group may be substituted by halogen or OH and the heteroaryl ring may be substituted by OH or a C_{1-3} alkyl group, which may be substituted by halogen;
and R^6, R^7 and R^8 represent hydrogen.

37. The compound of any one of the preceding items, wherein

Q represents OR^2 or $–NR^3R^4$;
T represents -O-;
U represents $-CH_2-$;
V represents

H;

C_{1-3}-alkyl which may be straight or branched and which may be substituted with at least one fluorine atom;

3-6 membered cycloalkyl;

4-6-membered heterocycloalkyl, comprising one oxygen atom in the heterocycloalkyl ring;

6-membered aryl, which may be substituted with at least one fluorine atom, with at least one chlorine atom or with at least one C_{1-3}-alkyl group, wherein the C_{1-3}-alkyl group may be substituted by at least one fluorine atom;

5-6-membered heteroaryl with one or more N, O or S atom in the heteroaryl ring, wherein the heteroaryl ring may be substituted with a C_{1-3}-alkyl group which may be substituted by at least one fluorine atom;

R^1 represents $-C_{1-3}$-alkyl;
R^2 represents hydrogen;
R^3 represents hydrogen;
R^4 represents

C_{1-6} alkyl which may be straight or branched and which may be substituted by OH, F, =O, -NR_2, -NR-SO_2-Me or -$CONR_2$, wherein residues R are independently from each other hydrogen or methyl;

3-5-membered cycloalkyl which may be substituted by halogen, C_{1-3}-alkyl, which may be substituted by halogen or –OH;

4-7-membered heterocycloalkyl with one or more N or O atom in the heterocycloalkyl ring and wherein the heterocycloalkyl ring may be substituted by halogen, =O or -$CONR_2$ wherein the residues R independently of each other represent H or C_{1-3}-alkyl or the heterocycloalkyl ring may be substituted by a C_{1-3} alkyl group, which may be substituted by OH or halogen;

C_{1-4}-alkylene-5-6-membered heterocycloalkyl with one or more N or O in the heterocycloalkyl ring, wherein the C_{1-4}-alkylene groups may be straight or branched and may substituted by OH; or

6-membered aryl which may be substituted by halogen or straight or branched C_{1-3} alkyl; or

C_{1-4}-alkylene-6-membered aryl, wherein the C_{1-4}-alkylene groups may be straight or branched and may substituted by halogen or OH and the aryl groups may be substituted by halogen C_{1-3}-alkyl or –O-C_{1-3}-alkyl, wherein the C_{1-3}-alkyl and –O-C_{1-3}-alkyl groups may be independently of each other substituted by halogen; or

5-7-membered heteroaryl with one or more N, O or S in the heteroaryl ring, wherein the heteroaryl ring may be substituted by C_{1-6} alkyl, which may be substituted by halogen or the heteroaryl ring may be substituted by OH; or

C_{1-3}-alkylene-5-6-membered heteroaryl, with one or more N or O in the heteroaryl ring wherein the C_{1-3}-alkylene group may be substituted by halogen or OH and the heteroaryl ring may be substituted by OH, cyclopropyl, cyclobutyl or a C_{1-3} alkyl group, which may be substituted by halogen;

and R^6, R^7 and R^8 represent hydrogen.

38. The compound of any one of the preceding items, wherein

Q represents OR^2 or $–NR^3R^4$;
T represents -O-;
U represents -CH_2-;
V represents

methyl which may be substituted with at least one fluorine atom;

3-5-membered cycloalkyl;

phenyl, which may be substituted with at least one fluorine atom, with at least one chlorine atom or with at least one methyl group, which may be substituted with fluorine;

1,3-thiazole which may be substituted with a methyl group; or

pyridine, which may be substituted with a methyl group, which may be substituted with fluorine;

R^1 represents -C_{1-3}-alkyl;

R^2 represents hydrogen;

R^3 represents hydrogen;

R^4 represents

C_{1-6} alkyl which may be straight or branched and which may be substituted by OH, F, =O, -NMe_2, -NR-SO_2-Me or -$CONR_2$, wherein residues R are independently from each other hydrogen or methyl;

3-4-membered cycloalkyl which may be substituted by fluor or C_{1-3}-alkyl, which may be substituted with –OH;

4-6-membered heterocycloalkyl with one or two N or O atom in the heterocycloalkyl ring and wherein the heterocycloalkyl ring may be substituted by halogen or =O or C_{1-3} alkyl group, which may be substituted by OH or fluor;

C_{1-4}-alkylene-5-6-membered heterocycloalkyl with one or two O atoms in the heterocycloalkyl ring, wherein the C_{1-4}-alkylene group may be substituted with OH;

C_{1-4}-alkylene-6-membered aryl, wherein the C_{1-4}-alkylene groups may be straight or branched and may be substituted by fluor or OH and the aryl groups may be substituted by fluor or methoxy, wherein the methoxy groups may be substituted by fluor; or

5-6-membered heteroaryl with one or two nitrogen atoms in the heteroaryl ring, wherein the heteroaryl ring may be substituted with OH or C_{1-3} alkyl, which may be substituted by fluor; or

C_{1-3}-alkylene-5-6-membered heteroaryl, with one or two nitrogen atoms in the heteroaryl ring wherein the C_{1-3}-alkylene group may be substituted by fluor or OH and the heteroaryl ring may be substituted by OH, cyclopropyl, cyclobutyl or a C_{1-3} alkyl group, which may be substituted by halogen;

and R^6, R^7 and R^8 represent hydrogen.

39. The compound of any one of the preceding items, wherein

Q represents OR^2 or –NR^3R^4;

T represents -O-;

U represents -CH_2-;

V represents

methyl which is substituted with two fluorine atoms;

cyclopropyl;

phenyl, which may be substituted with one or two fluorine atoms or chlorine atoms or with a fluorine atom and a methyl group, which is substituted with 1, 2 or 3 fluorine atoms;

1,3-thiazole which is substituted with a methyl group; or

pyridine, which is substituted with a methyl group;

R^1 represents -C_{1-3}-alkyl;

R^2 represents hydrogen;

R^3 represents hydrogen;

R^4 represents

C_{1-5} alkyl which may be substituted by up to two OH, up to two F, -$CONR_2$, or -$NHS(=O)_2$-Me, wherein residues R are independently from each other hydrogen or methyl; or a

3-4-membered cycloalkyl which may be substituted by fluor or C_{1-3}-alkyl, which may be substituted with fluor or -OH;

5-6-membered heterocycloalkyl with one or two N or O atoms in the heterocycloalkyl ring and wherein the heterocycloalkyl ring may be substituted by halogen, =O or C_{1-2} alkyl group, which may be substituted by OH or fluor;

C_{1-3}-alkylene-tetrahydropyran rest, wherein the C_{1-4}-alkylene group is substituted by OH;

C_{1-2}-alkylene-6-membered aryl, wherein the C_{1-2}-alkylene groups may be straight or branched and may be substituted by fluor or OH and the aryl groups may be substituted by fluor, methyl or methoxy, wherein the methyl or methoxy groups may be substituted by fluor; or

pyridine ring substituted with OH and trifluoromethyl; or

C_{1-3}-alkylene-5-6-membered heteroaryl, with one or two nitrogen atoms in the heteroaryl ring wherein the C_{1-3}-alkylene group may be substituted by fluor or OH and the heteroaryl ring may be substituted by OH, cyclopropyl, cyclobutyl or methyl, which may be substituted by fluor; and R^6, R^7 and R^8 represent hydrogen.

40. The compound of any one of the preceding items, wherein

Q represents OR^2 or $–NR^3R^4$;

T represents -O-;

U represents -CH_2-;

V represents

H;

C_{1-3}-alkyl which may be substituted with at least one halogen;

3-6 membered cycloalkyl, which may be substituted with a -CN group;

4-6-membered heterocycloalkyl, comprising one oxygen atom in the heterocycloalkyl ring;

6-membered aryl, which may be substituted with at least one halogen or with a C_{1-3}-alkyl group, wherein the C_{1-3}-alkyl group may be substituted by at least one halogen atom;

5-6-membered heteroaryl with one or more N, O or S atom in the heteroaryl ring, wherein the heteroaryl ring may be substituted with halogen or a C_{1-3}-alkyl group which may be substituted by at least one halogen atom;

R^1 represents -C_{1-3}-alkyl;

R^2 represents hydrogen;

R^3 represents hydrogen;

R^4 represents

-SO_2-C_{1-3}-alkyl;

C_{1-6} alkyl which may be substituted by OH, F, -NR-SO_2-R or -$CONR_2$, wherein residues R are independently from each other hydrogen or C_{1-3} alkyl;

3-6-membered cycloalkyl which may be substituted by halogen, C_{1-3}-alkylene-OH, =O or -$CONH_2$;

C_{1-3}-alkylene-3-6-membered cycloalkyl which may be substituted by a C_{1-3}-alkyl or a -N(C_{1-6} alkyl)$_2$ group;

4-7-membered heterocycloalkyl with one or more N or O atom in the heterocycloalkyl ring and wherein the heterocycloalkyl ring may be substituted by =O, halogen or -$CONR_2$ wherein the residues R independently of each other represent H or C_{1-3}-alkyl or the cycloalkyl ring may be substituted by a C_{1-3} alkyl group, which may be substituted by at least one of OH or halogen;

C_{1-4}-alkylene-4-7-membered heterocycloalkyl with one or more N, O in the heterocycloalkyl ring, wherein the heterocycloalkyl group may be substituted by C_{1-3} alkyl or =O;

5-7-membered heteroaryl with one or more N, O or S in the heteroaryl ring, wherein the heteroaryl ring may be substituted by C_{1-6} alkyl or OH; or a

C_{1-3}-alkylene-5-6-membered heteroaryl, with one or more N, O or S in the heteroaryl ring wherein the heteroaryl ring may be substituted by OH;

and R^6, R^7 and R^8 represent hydrogen.

41. The compound of any one of the preceding items, wherein

Q represents OR^2 or $–NR^3R^4$;

T represents -O-;

U represents -CH_2-;

V represents

H;

C_{1-3}-alkyl which may be substituted with at least one fluorine atom;

3-6 membered cycloalkyl, which may be substituted with a -CN group;

4-6-membered heterocycloalkyl, comprising one oxygen atom in the heterocycloalkyl ring;

6-membered aryl, which may be substituted with at least one fluorine atom, with at least one chlorine atom or with at least one C_{1-3}-alkyl group, wherein the C_{1-3}-alkyl group may be substituted by at least one fluorine atom;

5-6-membered heteroaryl with one or more N, O or S atom in the heteroaryl ring, wherein the heteroaryl ring may be substituted with a C_{1-3}-alkyl group which may be substituted by at least one fluorine atom;

R^1 represents -C_{1-3}-alkyl;

R^2 represents hydrogen;

R^3 represents hydrogen;

R^4 represents

C_{1-6} alkyl which may be substituted by OH, F, -NH-SO_2-C_{1-3}-alkyl or -$CONR_2$, wherein residues R are independently from each other hydrogen or methyl;

4-7-membered heterocycloalkyl with one or more N or O atom in the heterocycloalkyl ring and wherein the heterocycloalkyl ring may be substituted by =O or by C_{1-3}-alkylene-OH;

and R^6, R^7 and R^8 represent hydrogen.

42. The compound of any one of the preceding items, wherein

Q represents OR^2 or $–NR^3R^4$;

T represents -O-;

U represents -CH_2-;

V represents

methyl which may be substituted with at least one fluorine atom;

3-5-membered cycloalkyl;

phenyl, which may be substituted with at least one fluorine atom, with at least one chlorine atom or with at least one methyl group;

1,3-thiazole which may be substituted with a methyl group; or

pyridine, which may be substituted with a methyl group;

R^1 represents -C_{1-3}-alkyl;

R^2 represents hydrogen;

R^3 represents hydrogen;

R^4 represents

C_{1-5} alkyl which may be substituted by OH, F or -$CONR_2$, or –NH-$S(=O)_2$-Me, wherein the residues R are independently from each other hydrogen or methyl;

4-6-membered heterocycloalkyl with one N atom in the heterocycloalkyl ring which may be a lactam ring and wherein the heterocycloalkyl ring may be substituted by a C_{1-2}-alkylene-OH;

and R^6, R^7 and R^8 represent hydrogen.

43. The compound of any one of the preceding items, wherein

Q represents OR^2 or $–NR^3R^4$;

T represents -O-;

U represents -CH_2-;

V represents

methyl which is substituted with two fluorine atoms;

3-4-membered cycloalkyl;

phenyl, which may be substituted with one or two fluorine atoms or with a fluorine atom and a methyl group;

1,3-thiazole which is substituted with a methyl group; or

pyridine, which is substituted with a methyl group;

R^1 represents -C_{1-3}-alkyl;

R^2 represents hydrogen;

R^3 represents hydrogen;

R^4 represents

C_{1-5} alkyl which may be substituted by up to two OH, up to two F, -$CONR_2$, or -$NHS(=O)_2$-Me, wherein residues R are independently from each other hydrogen or methyl; or a

2-pyrrolidone ring with a C_{1-2}-alkylene-OH;

and R^6, R^7 and R^8 represent hydrogen.

44. The compound of item 1, wherein **R^3** represents -H.

45. . The compound of item 2, wherein **R^4** represents a residue other than -H.

46. The compound of any one of items 44 to 45, wherein **R^1** represents -methyl or ethyl.

47. The compound of any one of items 44 to 46, wherein **T** represents -O- and **U** represents -**$CR^5R^{5'}$**-.

48. The compound of one of the preceding items, wherein **V** represents (i) 5-14-membered heteroaryl selected from benzimidazole, benzisoxazole, benzoazole, benzodioxole, benzofuran, benzothiadiazole, benzothiazole, benzothiophene, carbazole, cinnoline, dibenzofuran, furane, furazane, imidazole, imidazopyridine, indazole, indole, indolizine, isobenzofuran, isoindole, isoquinoline, isothiazole, isoxazole, naphthyridine, oxadiazole, oxazole, oxindole, phthalazine, purine, pyrazine, pyrazole, pyridazine, pyridine, pyrimidine, pyrrole, quinazoline, quinoline, quinoxaline, tetrazole, thiadiazole, thiazole, thiophene, triazine, triazole, and [1,2,4]triazolo[4,3-a]pyrimidine; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -CN, -OH, =O, -C_{1-6}-alkyl, -CHF_2, -CF_3, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-CHF_2, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-cyclopropyl, -cyclopropyl, -O-cyclopropyl, -C_{1-6}-alkylene-NHC(=O)-O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)$_2$, -OC_{1-6}-alkyl, -OCF_3, -O-C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -S(=O)$_2$-C_{1-6}-alkyl, -azetidine, -C_{1-6}-alkylene-O-tetrahydropyran, or -piperazine substituted with -C_{1-6}-alkyl; particularly in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -CN, -OH, =O, -C_{1-6}-alkyl, -CHF_2, -CF_3, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-NHC(=O)-O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)$_2$, -OC_{1-6}-alkyl, -OCF_3, -O-C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -S(=O)$_2$-C_{1-6}-alkyl, -azetidine, -C_{1-6}-alkylene-O-tetrahydropyran, or -piperazine substituted with -C_{1-6}-alkyl; or represents (ii) -oxetanyl, unsubstituted, mono- or polysubstituted.

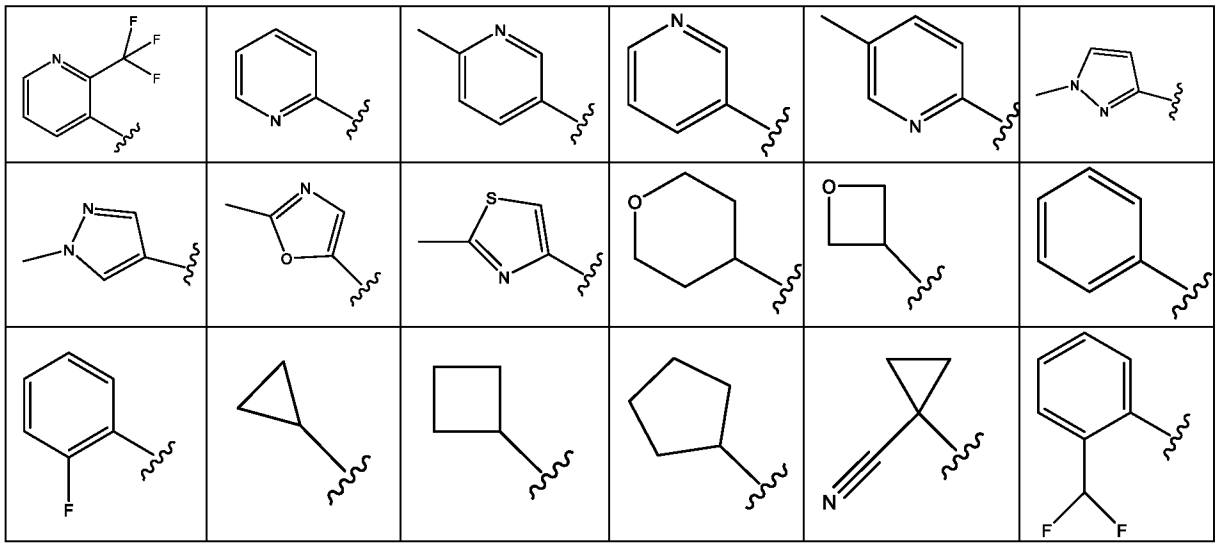
49. The compound of any one of items 1 to 47, wherein the 3-14-membered cycloalkyl, saturated or unsaturated within the definition of **V** is cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, cyclooctyl, cyclononyl, or cyclodecyl including unfused or unbridged, fused, or bridged cycloalkyls; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, , CF_3, -CF_2H, C_1-C_6 alkyl, -CN, -NO, -NO_2, =O, =S, -SF_5, -$\mathbf{R^Y}$, -O$\mathbf{R^Y}$, -OC(=O)$\mathbf{R^Y}$, -N$\mathbf{R^Y R^Z}$, -N$\mathbf{R^Y}$C(=O)$\mathbf{R^Z}$, -S$\mathbf{R^Y}$, -S(=O)$\mathbf{R^Y}$, -S(=O)$_2\mathbf{R^Y}$, -C(=O)$\mathbf{R^Y}$, -C(=O)O$\mathbf{R^Y}$, or -C(=O)N$\mathbf{R^Y R^Z}$.

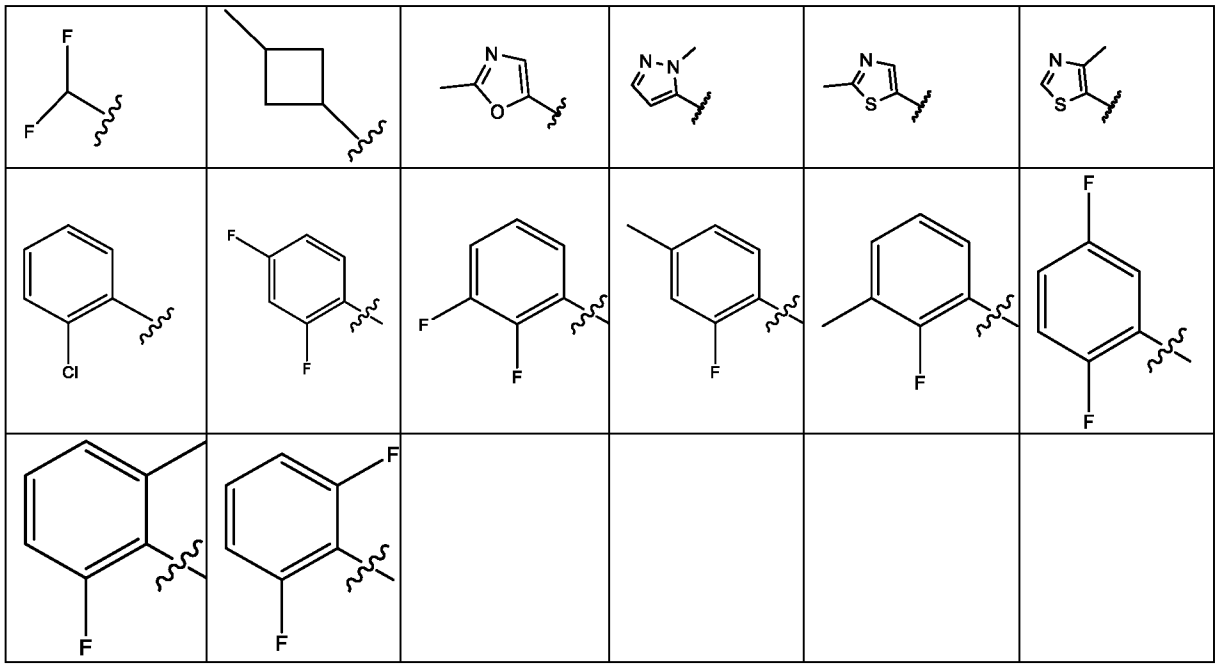
50. The compound of any one of items 1 to 47 wherein the 5-14-membered aryl within the definition of **V** is phenyl or another 5-14-membered aryl, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, -CF_2H, C_1-C_6 alkyl, -CN, -NO, -NO_2, =O, =S, -SF_5, -$\mathbf{R^Y}$, -O$\mathbf{R^Y}$, -OC(=O)$\mathbf{R^Y}$, -N$\mathbf{R^Y R^Z}$, -N$\mathbf{R^Y}$C(=O)$\mathbf{R^Z}$, -S$\mathbf{R^Y}$, -S(=O)$\mathbf{R^Y}$, -S(=O)$_2\mathbf{R^Y}$, -C(=O)$\mathbf{R^Y}$, -C(=O)O$\mathbf{R^Y}$, or -C(=O)N$\mathbf{R^Y R^Z}$.

51. The compound of any one of items 1 to 47 wherein the 3-14-membered heterocycloalkyl within the definition of **V** is selected from azepane, 1,4-oxazepane, azetane, azetidine, aziridine, azocane, diazepane, dioxane, dioxolane, dithiane, dithiolane, imidazolidine, isothiazolidine, isoxalidine, morpholine, oxazolidine, oxane, oxepane, oxetane, oxirane, piperazine, piperidine, pyrazolidine, pyrrolidine, quinuclidine, tetrahydrofurane, tetrahydropyrane, tetrahydrothiopyrane, thiazolidine, thietane, thiirane, thiolane, thiomorpholine, indoline, dihydrobenzofuran, dihydrobenzo-thiophene, 1,1-dioxothia-cyclohexane, 2-azaspiro[3.3]heptane, 2-oxaspiro[3.3]heptane, 7-azaspiro[3.5]nonane, 8-azabicyclo[3.2.1]octane, 9-azabicyclo[3.3.1]nonane, hexahydro-1H-pyrrolizine, hexa-hydro-cyclopenta[c]pyrrole, octahydro-cyclopenta[c]pyrrole, and octahydro-pyrrolo[1,2-a]pyrazine; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

52. The compound of any one of items 1 to 47 wherein **V** represents C_1-C_6 alkyl or C_1-C_6 heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

53. The compound of any one of 1 to 47 wherein **V** is a residue selected from the group consisting of:





54. The compound according to any of the preceding items, wherein $\mathbf{R^1}$ represents -H, -F, -Cl, -Br, -I, -C_{1-6}-alkyl, -O-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3, -C(=O)C_{1-6}-alkyl, -C(=O)OC_{1-6}-alkyl, -C(=O)NH_2, -C(=O)NHC_{1-6}-alkyl, -C(=O)N(C_{1-6}-alkyl)$_2$, -S(=O)-C_{1-6}-alkyl, -S(=O)$_2$-C_{1-6}-alkyl, -O-C_{1-6}-alkyl, -cyclopropyl unsubstituted, cyclobutyl unsubstituted, cyclopentyl unsubstituted or cyclohexyl unsubstituted.

55. The compound according to any of the preceding items, wherein $\mathbf{R^3}$ represents -H, -OH, -C_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, or -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3.

56. The compound according to any one of the preceding items, wherein $\mathbf{R^4}$ represents
-H;
-S(=O)$_2$$C_{1-6}$-alkyl, saturated, unsubstituted, monosubstituted or polysubstituted with -F;
-S(=O)$_2$(3-14-membered cycloalkyl), saturated, unsubstituted;
-C_{1-6}-alkyl, saturated, unsubstituted mono- or polysubstituted ;
3-14-membered cycloalkyl or -C_{1-6}-alkylene-(3-14-membered cycloalkyl), each unsubstituted, mono- or polysubstituted;

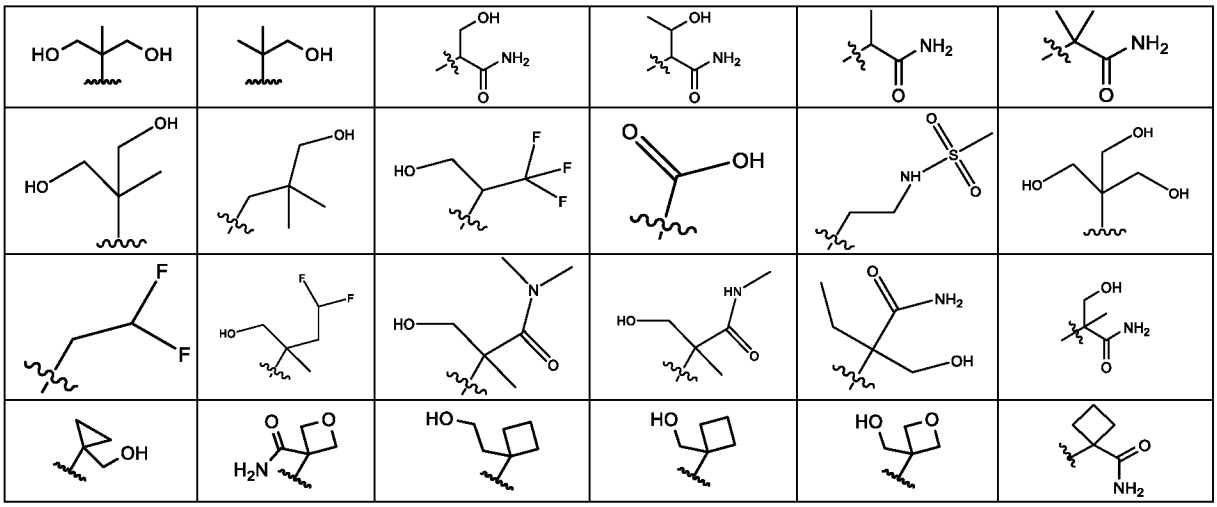
3-14-membered heterocycloalkyl or -C_{1-6}-alkylene-(3-14-membered heterocycloalkyl), unsubstituted, mono- or polysubstituted;

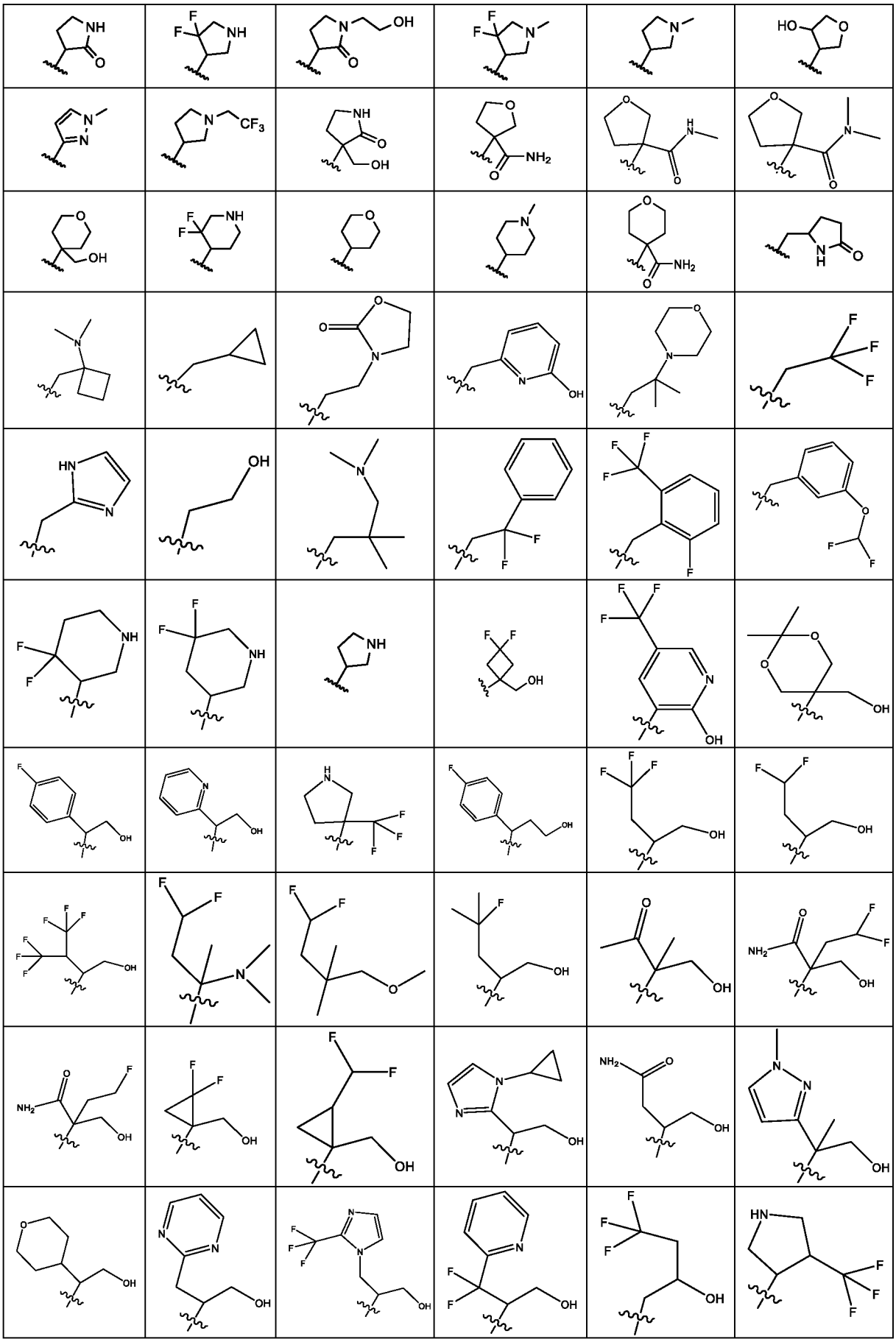
-phenyl, or -C_{1-6}-alkylene-phenyl, each unsubstituted, mono- or polysubstituted; or

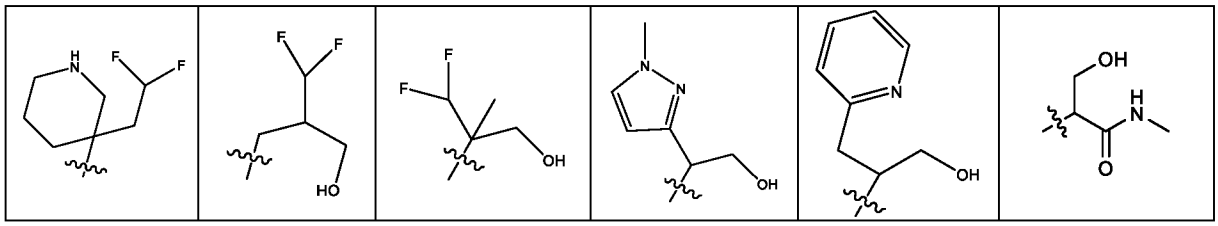
5-14-membered heteroaryl or -C_{1-6}-alkylene-(5-14-membered heteroaryl), each unsubstituted, mono- or polysubstituted.

57. The compound according to any one of claims 1 to 55 wherein **R^4** represents a 3-14-membered cycloalkyl (preferably a 3, 4, 5 or 6-membered cycloalkyl), saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is connected through -C_1-C_6-alkylene-, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 3-14-membered heterocycloalkyl (preferably a 4, 5 or 6-membered heterocycloalkyl), saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is connected through -C_1-C_6-alkylene-, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 6-14-membered aryl (preferably a 6-membered aryl), unsubstituted, mono- or polysubstituted; wherein said 6-14-membered aryl is connected through -C_1-C_6-alkylene-, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 5-14-membered heteroaryl (preferably a 5 or 6-membered heteroaryl), unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl is connected through -C_1-C_6-alkylene-, saturated or unsaturated, unsubstituted, mono- or polysubstituted.

58. The compound according to any one of the preceding items wherein **R^3** is H and **R^4** is a residue selected from the group consisting of:







59. The compound of any one of the preceding items wherein $\mathbf{R^3}$ and $\mathbf{R^4}$ together form a heterocycle selected from the group consisting of pyrrolidine, piperidine, morpholine, and piperazine, in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -C_{1-6}-alkyl, -NH_2, -$NHCH_3$, -$N(CH_3)_2$, -C(=O)NH-C_{1-6}-alkyl, -C(=O)N(C_{1-6}-alkyl)$_2$, -C(=O)O-C_{1-6}-alkyl, -NHC(=O)O-C_{1-6}-alkyl, -pyridyl unsubstituted, and 1,2,4-oxadiazole unsubstituted or monosubstituted with -C_{1-6}-alkyl.

60. The compound of any one of the preceding items, wherein $\mathbf{R^5}$ and $\mathbf{R^{5'}}$ independently of one another represent
-H;
-C_1-C_6-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted.

61. The compound according to any one of the preceding items, wherein $\mathbf{R^6}$, $\mathbf{R^7}$ and $\mathbf{R^8}$ independently of one another represent
-H, -F, -Cl, -Br, -I, -OH, -SH, -SF_5, -CN, -NO_2, -C(=O)OH, -NH_2,
-C_{1-6}-alkyl, -CF_3, -CHF_2, -CH_2F,
-O-C_{1-6}-alkyl, -OCF_3, -$OCHF_2$, -OCH_2F,
-NHC_{1-6}-alkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;
-N(C_{1-6}-alkyl)$_2$ unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;
-C(=O)OC_{1-6}-alkyl unsubstituted or substituted with one or more substituents

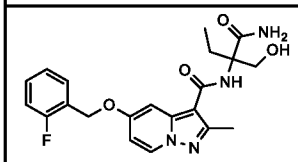
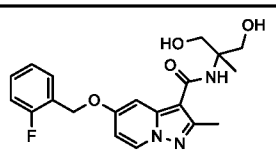
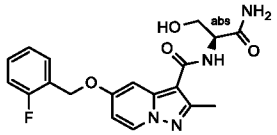
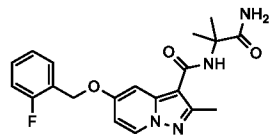
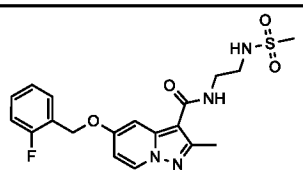
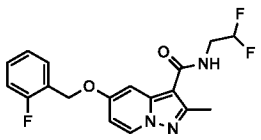
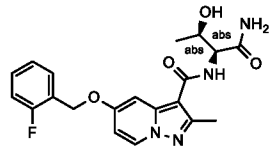
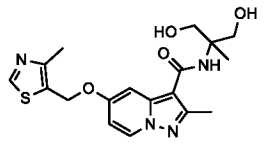
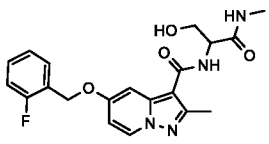
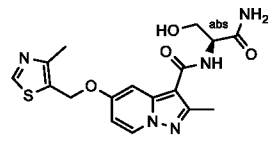
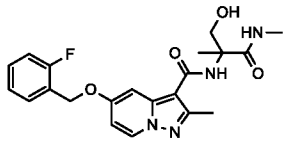
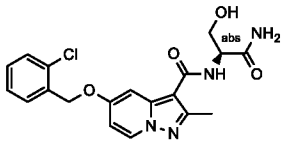
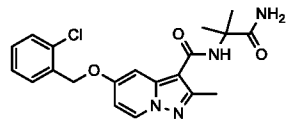
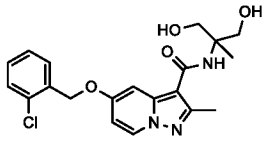
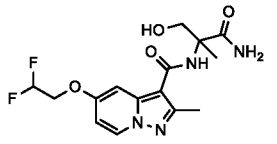
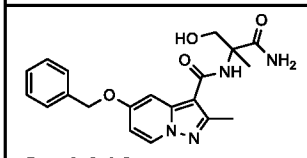
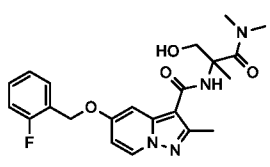
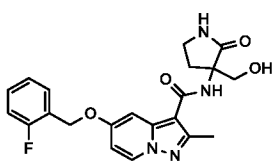
independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;

-OC(=O)C_{1-6}-alkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;

or

-C_{1-6}-heteroalkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2.

62. The compound of any one of the preceding items, which is selected from the group consisting of compounds 001 – 036 as shown in the table below:

Structure and **Compound CODE**	Structure and **Compound CODE**	Structure and **Compound CODE**
 **Cpd 001**	 **Cpd 002**	 **Cpd 003**
 **Cpd 004**	 **Cpd 005**	 **Cpd 006**
 **Cpd 007**	 **Cpd 008**	 **Cpd 009**
 **Cpd 010**	 **Cpd 011**	 **Cpd 012**
 **Cpd 013**	 **Cpd 014**	 **Cpd 015**
 **Cpd 016**		

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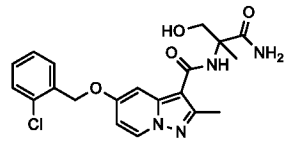
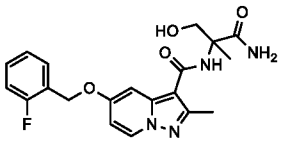
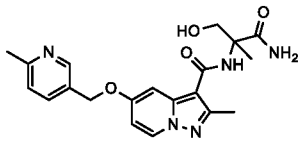
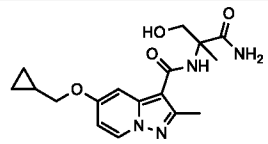
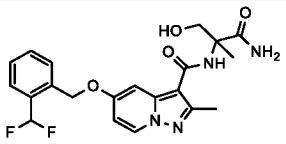
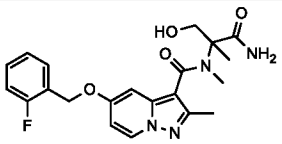
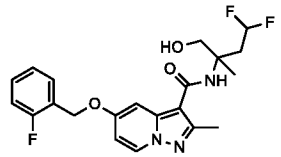
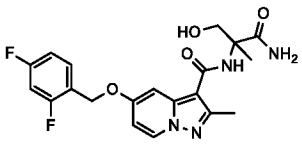
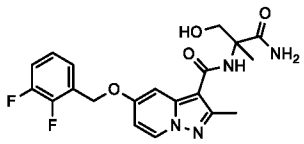
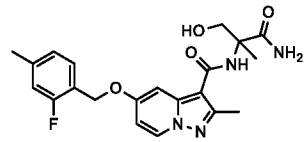
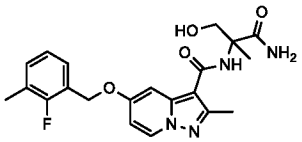
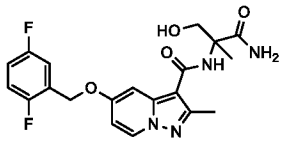
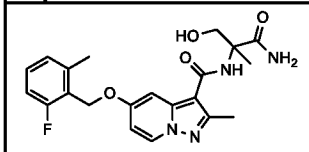
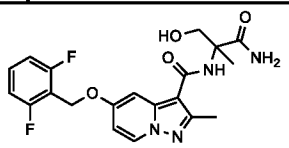
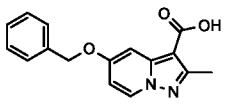
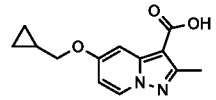
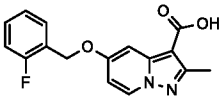
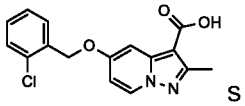
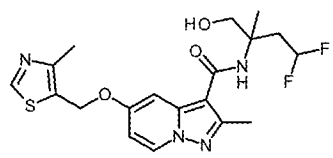
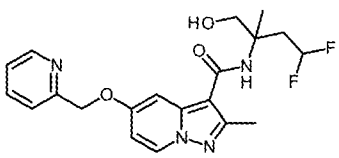
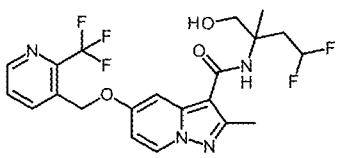
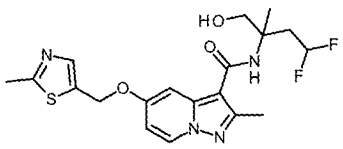
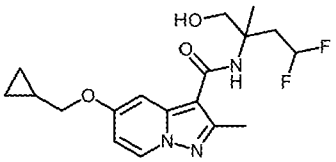
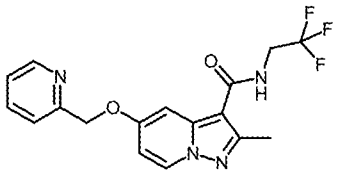
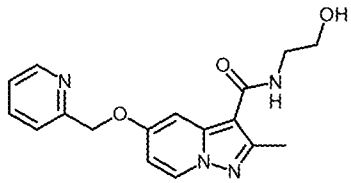
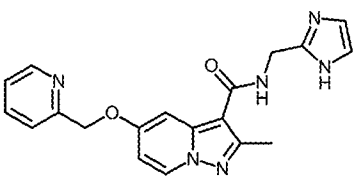
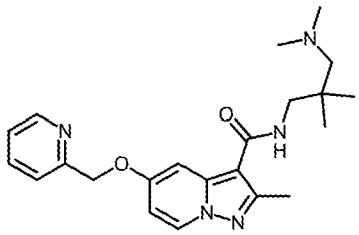
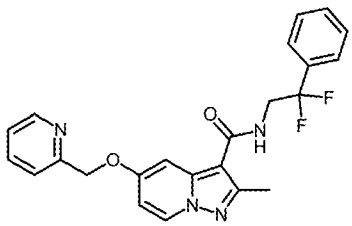
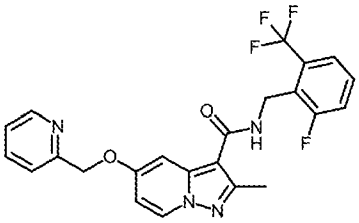
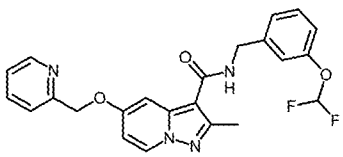
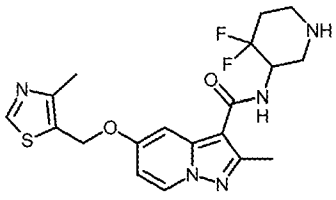
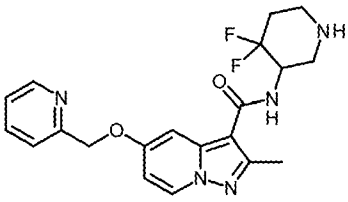
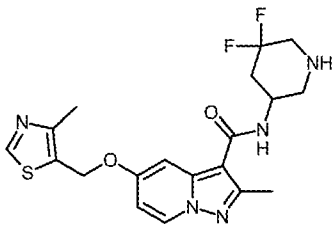
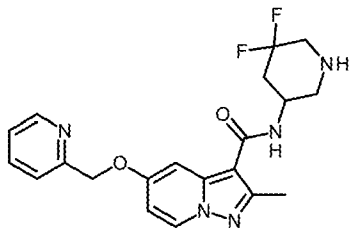
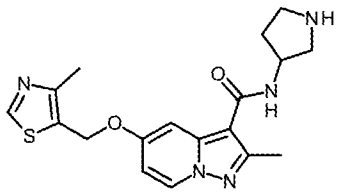
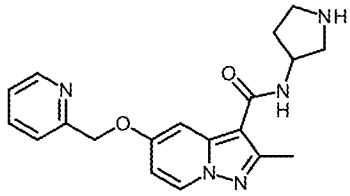
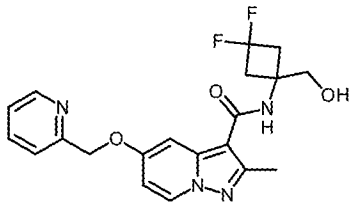
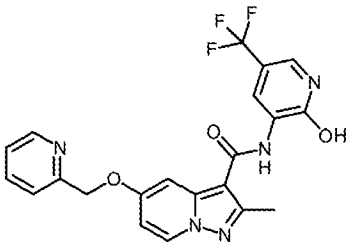
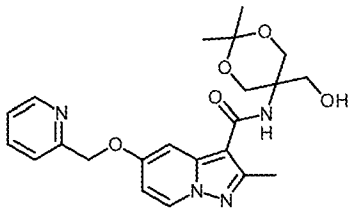
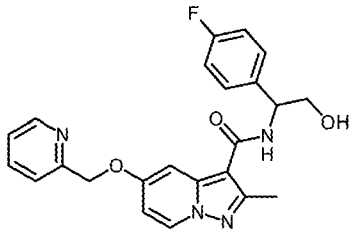
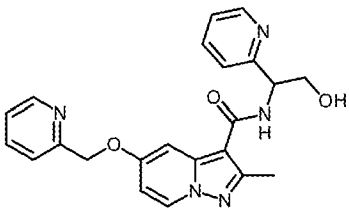
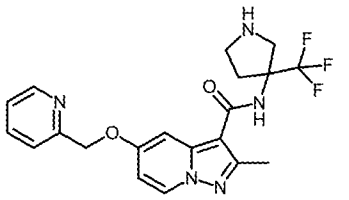
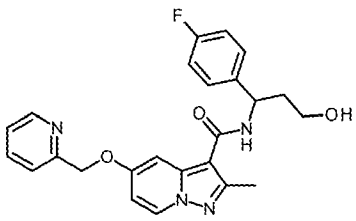
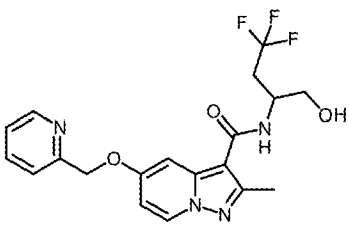
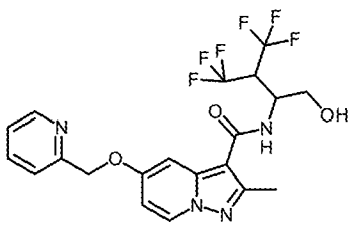
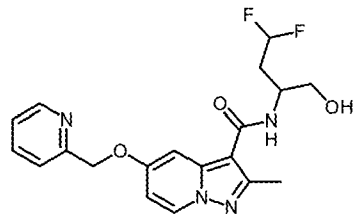
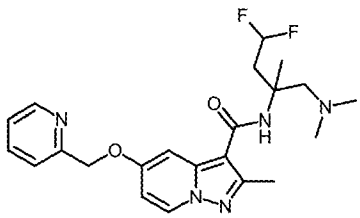
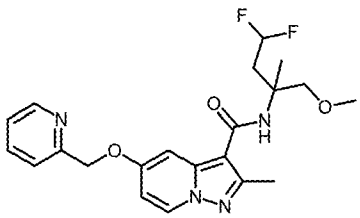
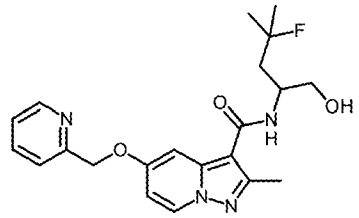
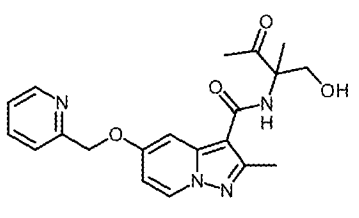
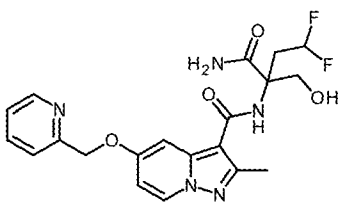
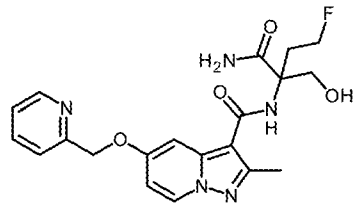
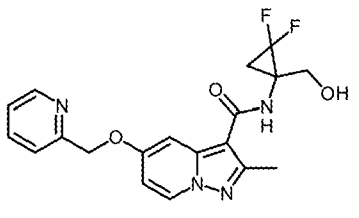
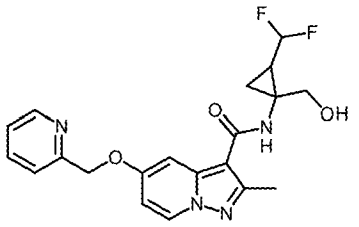
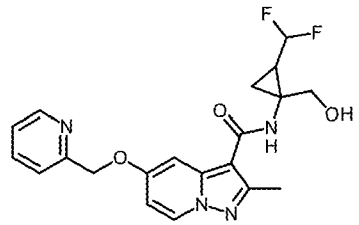
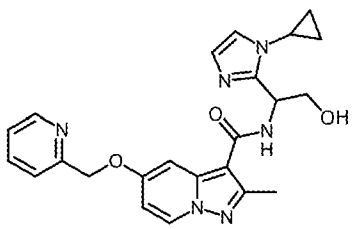
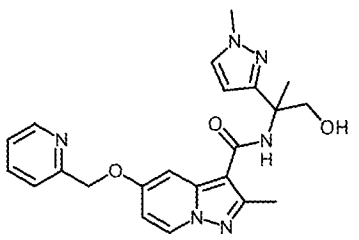
 Cpd 019	 Cpd 020	 Cpd 021
 Cpd 022	 Cpd 023	 Cpd 024
 Cpd 025	 Cpd 026	 Cpd 027
 Cpd 028	 Cpd 029	 Cpd 030
 Cpd 031	 Cpd 032	 Cpd 033
 Cpd 034	 Cpd 035	 Cpd 036

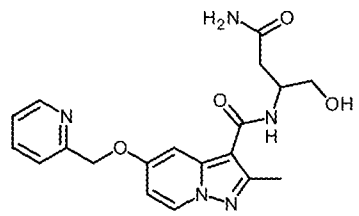
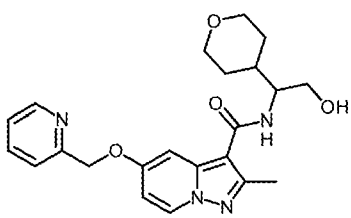
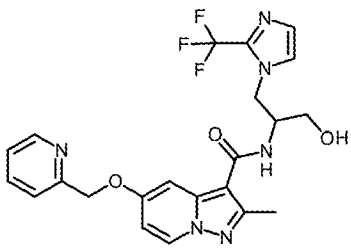
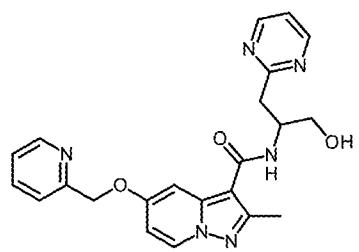
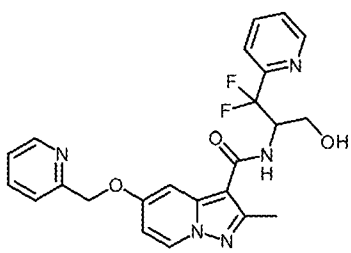
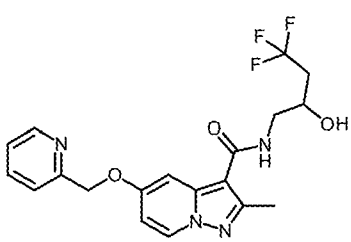
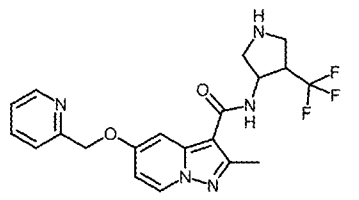
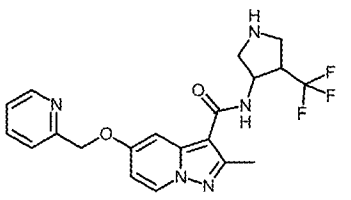
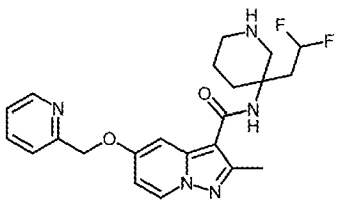
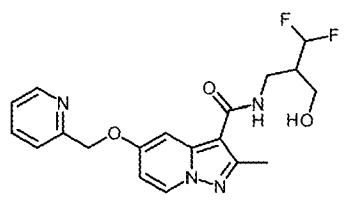
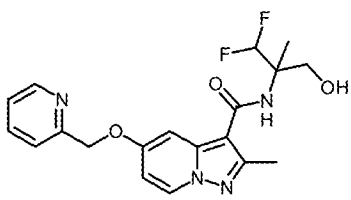
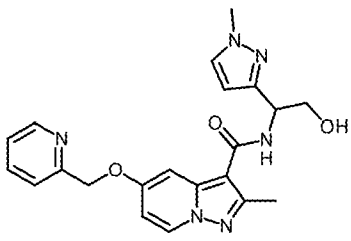
63. The compound of any one of the preceding items, which is selected from the group consisting of compounds 037 – 091 as shown in the table below:

Structure and **Compound CODE**	Structure and **Compound CODE**	Structure and **Compound CODE**
 **Cpd 037**	 **Cpd 038**	 **Cpd 039**

 Cpd 040	 Cpd 041	 Cpd 042
 Cpd 043	 Cpd 044	 Cpd 045
 Cpd 046	 Cpd 047	 Cpd 048
 Cpd 049	 Cpd 050	 Cpd 051

 Cpd 052	 Cpd 053	 Cpd 054
 Cpd 055	 Cpd 056	 Cpd 057
 Cpd 058	 Cpd 059	 Cpd 060
 Cpd 061	 Cpd 062	 Cpd 063

 Cpd 064	 Cpd 065	 Cpd 066
 Cpd 067	 Cpd 068	 Cpd 069
 Cpd 070	 Cpd 071	 Cpd 072
 Cpd 073	 Cpd 074	 Cpd 075

 Cpd 076	 Cpd 077	 Cpd 078
 Cpd 079	 Cpd 080	 Cpd 081
 Cpd 082	 Cpd 083	 Cpd 084
		 Cpd 087

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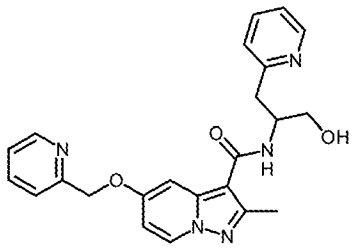	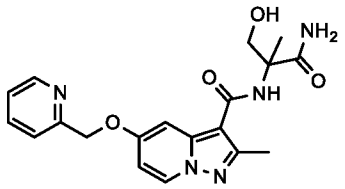	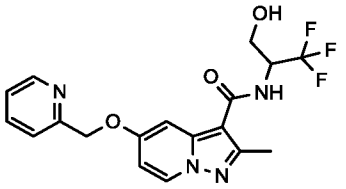
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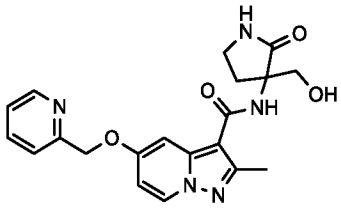
		
Cpd 091		

64. A pharmaceutical composition comprising a compound according to any one of the preceding items.

65. The compound according to any one of items 1 to 63 or the pharmaceutical composition according to item 64, for use in the treatment of pain.

66. The compound or the pharmaceutical composition for use in the treatment of pain according to item 65, wherein the pain is selected from nociceptive pain, inflammatory pain, and neuropathic pain; preferably post-operative pain.

67. A method of treating of pain comprising administering a compound according to any one of items 1 to 63, or a pharmaceutical composition according to any one of items 64 to 66, to a subject in need thereof.

68. The method of item 67 wherein the pain is selected from nociceptive pain, inflammatory pain, and neuropathic pain; preferably post-operative pain.

69. The compound according to any one of items 1 to 63 or the pharmaceutical composition

according to claim 64, for use in the treatment of epilepsy.

70. A method of treating of epilepsy comprising administering a compound according to any one of items 1 – 63, or a pharmaceutical composition according to any of items 64 or 69, to a subject in need thereof.

EXAMPLES

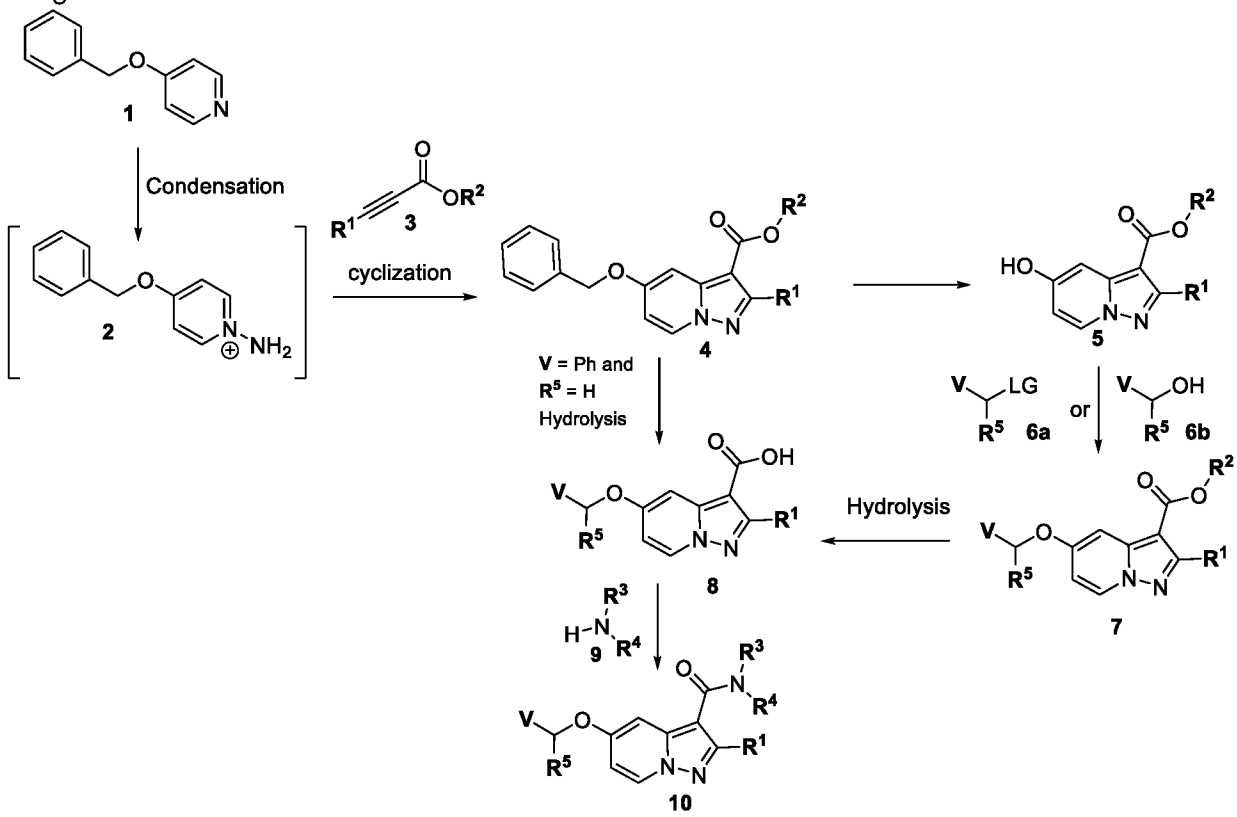
[0182] The following examples are provided for the purpose of illustrating the invention and by no means should be interpreted to limit the scope of the invention.

[0183] Representative compounds of the present invention can be synthesized in accordance with the general synthetic methods described below and illustrated in the schemes that follow. Since the schemes are an illustration, the invention should not be construed as being limited by the specific chemical reaction and specific conditions described in the schemes and examples. The various starting material used in the schemes are commercially available or may be prepared by methods well within the skill of persons versed in the art. The variables are as defined herein an within the skill of persons versed in the art.

[0184] Abbreviations used in the instant specification, particularly in the schemes and examples, are as follows: ABC – Aqueous solution of Ammonium Bicarbonate, ACN – acetonitrile, AcOH - Acetic acid, ADDP - 1,1'-(Azodicarbonyl)dipiperidide, aq. – Aqueous, AIBN – Azobisisobutyronitrile, CAN - Ceric ammonium nitrate, COMU - (1-Cyano-2-ethoxy-2-oxoethylidenaminooxy)dimethylamino-morpholino-carbenium , hexafluorophosphate, DABCO - 1,4-diazabicyclo[2.2.2]octane, DAST - Diethylaminosulfur trifluoride, DBU - 1,8-Diazabicyclo[5.4.0]undec-7-ene, DCC - N,N'-dicyclohexylcarbodiimide, DCM – Dichloromethane, DEAD - Diethyl azodicarboxylate, DIA – Diastereomer, DIAD – Diisopropyl azodicarboxylate, DEA – Diethylamine, DIPEA - Diisopropyl-ethyl amine, DME - 1,2-Dimethoxyethane, DMF - N,N-Dimethylformamide, DMSO – Dimethylsulfoxide, DPPA - Diphenylphosphoryl azide, 2,4-DNPH - 2,4-Dinitrophenylhydrazine, DTBAD - tert-Butylazodicarboxylate, EDCI or EDC - 1-Ethyl-3-(3-dimethylaminopropyl)¬carbodiimide, En – Enantiomer, Et2O - Diethyl ether, EtOH – Ethanol, EtOAc - Ethyl acetate, Eq. – Equivalent, FA - Formic acid, FCC - Flash column chromatography, h – Hour, HATU - O-(7-Azabenzotriazol-1-yl)-N,N,N′,N′-tetramethyluronium hexafluorophosphate, HPLC - High performance liquid chromatography, IPA – isopropyl alcohol, LAH – Lithiumaluminiumhydrid, LG - Leaving group, MeOH – methanol, MgSO4 - Magnesium sulfate, min. – Minute, Ms – Methanesulfonyl, Na_2SO_4 - Sodium sulfate, NBS - N-Bromosuccinimide, nBuLi - n-Butyl lithium, NMP - 1-Methyl-2-pyrrolidinone, Pd(PPh3)4 - Tetrakis-(triphenylphosphine)-palladium(0), Pd2(dba)3 - Tris(dibenzylideneacetone)dipalladium, Pet ether - Petroleum ether, PPh3 – Triphenylphospine, PS-DIEA - Diisoprpropyl-ethyl amine supported on PolyStyrene, PS-PPh3

- Triphenylphospine supported on PolyStyrene, PyBop - Benzotriazol-1-yl-oxytripyrrolidinophosphonium hexafluorophosphate, PTSA - p-Toluenesulfonic acid, RF: ratio of frontiers, RM - Reaction mixture, RP - Reverse phase, RT - Room temperature, sat. – Saturated, SEM - [2-(Trimethylsilyl)ethoxy]methyl acetal, SFC - Supercritical fluid chromatography, SPE - Solid Phase Extraction, TBDMS - Tert-Butyldimethylsilyl ether, TBAF - Tetrabutylammonium fluoride hydrate, TBAI - Tetrabutylammonium iodide, TEA – Triethylamine, THF - Tetrahydrofurane , TFA - Trifluoroacetic acid, TLC – thin layer chromatography, TPP – triphenyl phosphine, IPA – isopropyl alcohol, TMS – trimethyl silyl, T3P - Propylphosphonic anhydride.

[0185] The compounds of interest having a structure according to the general formula (A) and all other formulas described herein and embodiments thereof can be prepared as outlined in the general chemical scheme 1.



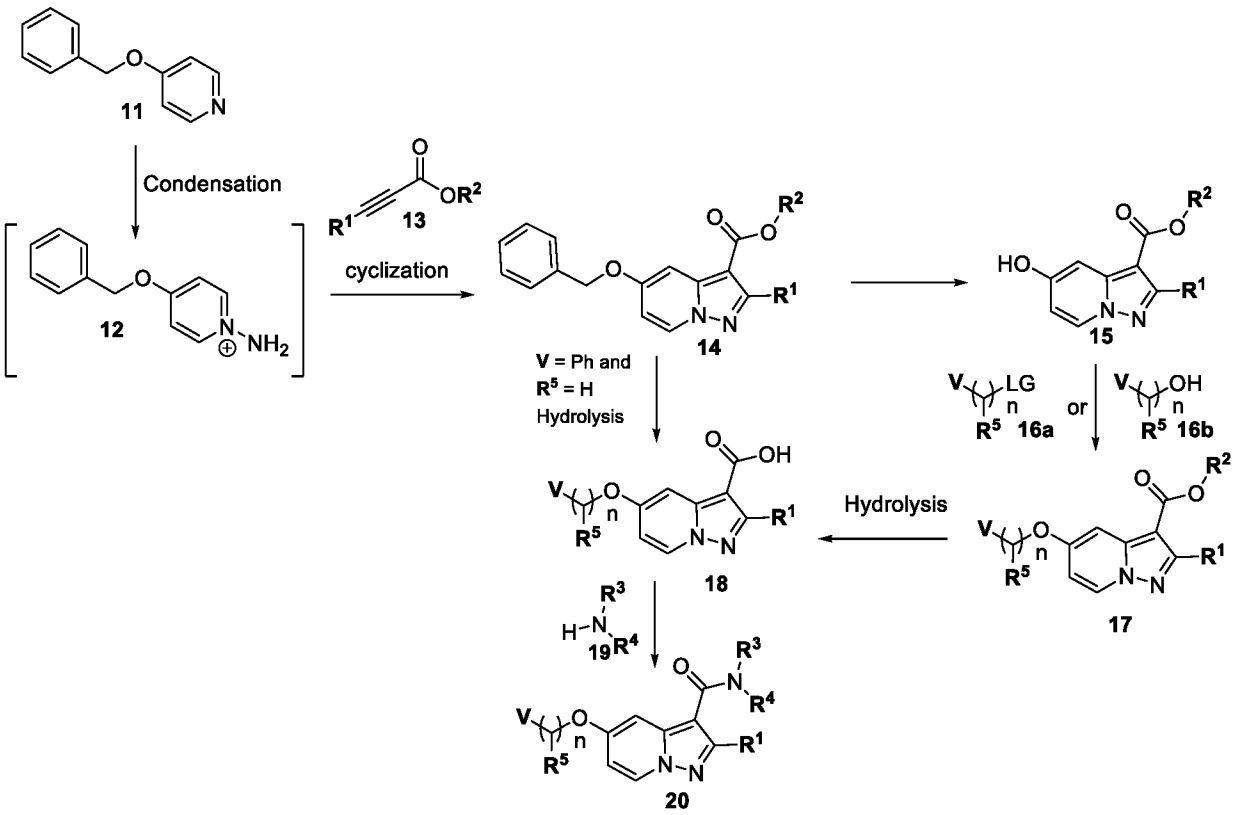
[0186] Scheme 1: all **V**, $\mathbf{R^1}$, $\mathbf{R^2}$, $\mathbf{R^3}$, $\mathbf{R^4}$ and $\mathbf{R^5}$ are as described for the compounds of the present invention. At each occurrence of R^5, up to two independent substituents are contemplated (i.e. R^5 and $R^{5'}$).

[0187] 4-(Benzyloxy)pyridine of formula **1**, may be reacted with a reagent bearing an electrophilic amine (e.g. 2,4-DNPH, 0-(mesitylsulfonyl)hydroxylamine, and the like) in a suitable solvent (e.g., MeCN, DMF, NMP, and the like) to provide N-aminopyridinium salts of formula **2.** Intermediate of formula **2** may be condensed with an alkyne ester derivatives **3** (commercially available or synthesized by procedures known to those skilled in the art), wherein R2 is an ester protecting group (e.g. methyl, ethyl, t-Bu and the like), in the presence

of a base (e.g., potassium carbonate, DBU and the like) in a polar solvent (e.g., DMF, DCM, MeCN, and the like) at a temperature ranging from 0 to 100°C to provide pyrazolo[1,5-a]pyridines of formula **4**. Ester derivatives **4** may then be converted into the intermediate compounds of formula **5** via a hydrogenation reactions with a reducing agent (e.g., hydrogen gas, ammonium formate, cyclohexadiene and the like) using a catalyst (more preferably Pd or Pt) in a solvent (e.g., THF, EtOH, and the like). Intermediates of formula **5** may then be converted into the desired compounds of formula **7** via nucleophilic substitution using intermediates of formula **6a** (commercially available or synthesized), wherein LG is a leaving group, in the presence of a base (e.g., DIPEA, DBU, triethylamine, Cs_2CO_3, and the like) in a polar solvent (e.g., MeCN, DMF, NMP, and the like), with or without a chelating agent (e.g., 18-crown-6, cis-anti-cis-dicyclohexano-18-crown-6, and the like) at a temperature ranging from 0 to 100°C. Alternatively, intermediates of formula **5** may instead be reacted with intermediates of formula **6b** (commercially available or synthesized) in the presence of an azodicarboxylate reagent (e.g., DEAD, DIAD, ADDP, and the like) and a phosphine (e.g., tributylphosphine, triphenylphosphine and the like) in a solvent (e.g., THF, toluene, and the like) at a temperature ranging from 0 to 100°C, to provide the desired compounds of formula **7**. Ester derivatives **7** may then be converted into the desired compounds of formula **8** via standard saponification reactions. Alternatively, benzyl derivatives **4** may then be converted into the desired compounds of formula **8** *via* standard saponification reactions The desired compounds of formula **10** may be obtained from acid derivatives of formula **8** by reaction with amine derivatives of formula **9** (commercially available or synthesized by procedures known in the art or as set forth in the examples below) under standard peptide coupling conditions (e.g. DCC, EDCI, HATU, PyBop and the like) in a polar aprotic solvent (e.g. DCM, DMF and the like). Alternatively, carboxylic acid derivatives of formula **8**, may be converted into acid chloride derivatives by procedures known to those skilled in the art or as set forth in the examples below, and then reacted with amines of formula 9 to obtain the desired pyrazolo[1,5-a]pyridines of formula **10** by procedures known to those skilled in the art or as set forth in the examples below

[0188]

[0189] The compounds of interest having a structure according to the general formula (A) and all other formulas described herein and embodiments thereof can be prepared as outlined in the general chemical scheme 2.



[0190] Scheme 2: all **V**, n, R^1, R^2 R^3, R^4 and R^5 are as described for the compounds of the present invention. At each occurrence of R^5, up to two independent substituents are contemplated (i.e. R^5 and $R^{5'}$). The integer n may range from 1 to 10 in some embodiments.

[0191] 4-(Benzyloxy)pyridine of formula **11**, may be reacted with a reagent bearing an electrophilic amine (e.g. 2,4-DNPH, 0-(mesitylsulfonyl)hydroxylamine, and the like) in a suitable solvent (e.g., MeCN, DMF, NMP, and the like) to provide N-aminopyridinium salts of formula **12.** Intermediate of formula **12** may be condensed with an alkyne ester derivatives **13** (commercially available or synthesized by procedures known to those skilled in the art), wherein R2 is an ester protecting group (e.g. methyl, ethyl, t-Bu and the like), in the presence of a base (e.g., potassium carbonate, DBU and the like) in a polar solvent (e.g., DMF, DCM, MeCN, and the like) at a temperature ranging from 0 to 100°C to provide pyrazolo[1,5-a]pyridines of formula **14**. Ester derivatives **14** may then be converted into the intermediate compounds of formula **15** via a hydrogenation reactions with a reducing agent (e.g., hydrogen gas, ammonium formate, cyclohexadiene and the like) using a catalyst (more preferably Pd or Pt) in a solvent (e.g., THF, EtOH, and the like). Intermediates of formula **15** may then be converted into the desired compounds of formula **17** via nucleophilic substitution using intermediates of formula **16a** (commercially available or synthesized), wherein LG is a leaving group, in the presence of a base (e.g., DIPEA, DBU, triethylamine, Cs_2CO_3, and the like) in a polar solvent (e.g., MeCN, DMF, NMP, and the like), with or without a chelating agent (e.g., 18-crown-6, cis-anti-cis-dicyclohexano-18-crown-6, and the like) at a temperature ranging from 0 to 100°C. Alternatively, intermediates of formula **15** may instead be reacted with

intermediates of formula **16b** (commercially available or synthesized) in the presence of an azodicarboxylate reagent (e.g., DEAD, DIAD, ADDP, and the like) and a phosphine (e.g., tributylphosphine, triphenylphosphine and the like) in a solvent (e.g., THF, toluene, and the like) at a temperature ranging from 0 to 100°C, to provide the desired compounds of formula **17**. Ester derivatives **17** may then be converted into the desired compounds of formula **18** via standard saponification reactions. Alternatively, benzyl derivatives **14** may then be converted into the desired compounds of formula **18** *via* standard saponification reactions The desired compounds of formula 20 may be obtained from acid derivatives of formula **18** by reaction with amine derivatives of formula **19** (commercially available or synthesized by procedures known in the art or as set forth in the examples below) under standard peptide coupling conditions (e.g. DCC, EDCI, HATU, PyBop and the like) in a polar aprotic solvent (e.g. DCM, DMF and the like). Alternatively, carboxylic acid derivatives of formula **18**, may be converted into acid chloride derivatives by procedures known to those skilled in the art or as set forth in the examples below, and then reacted with amines of formula 9 to obtain the desired pyrazolo[1,5-a]pyridines of formula **20** by procedures known to those skilled in the art or as set forth in the examples below

[0192] Table 3: Exemplary Compounds

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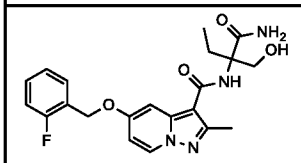
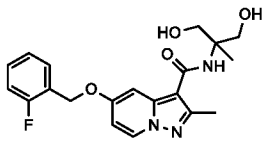
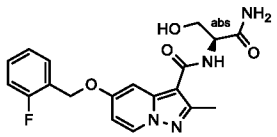
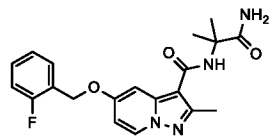
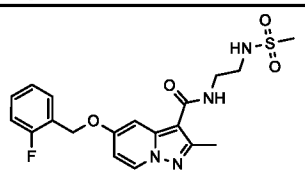
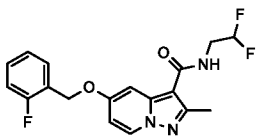
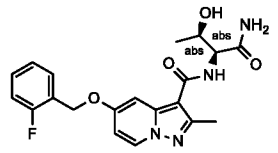
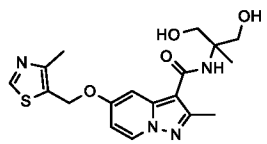
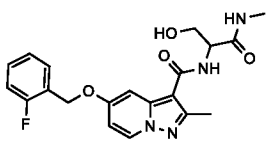
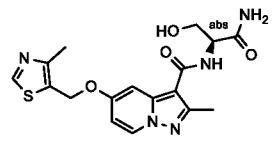
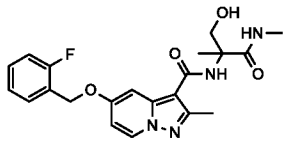
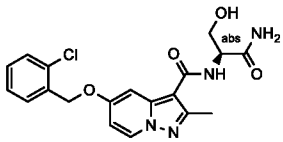
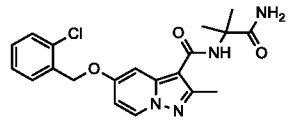
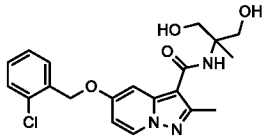
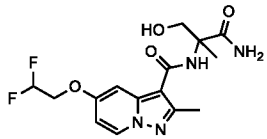
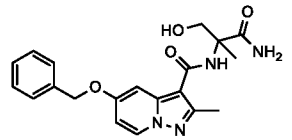
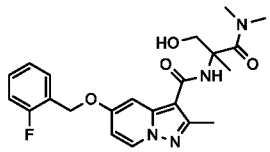
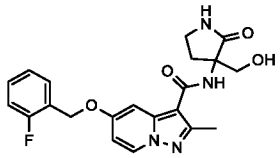
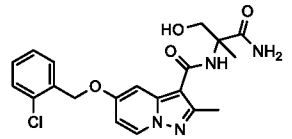
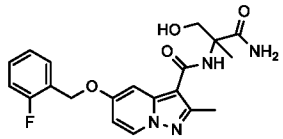
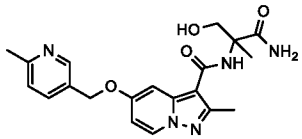
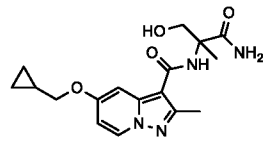
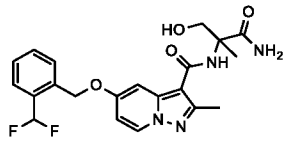
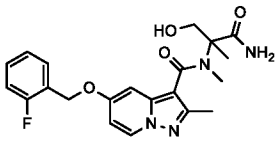
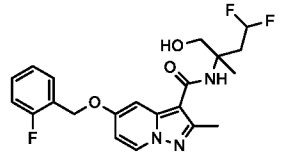
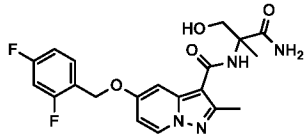
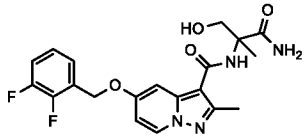
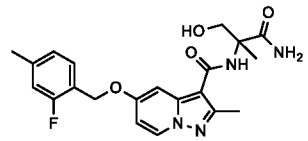
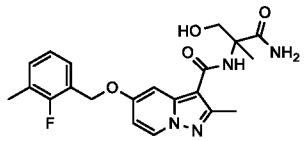
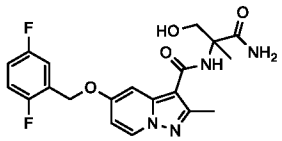
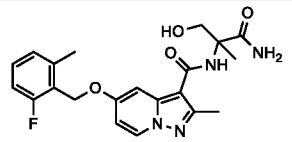
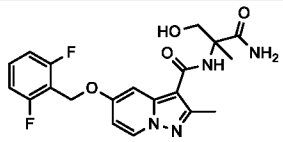
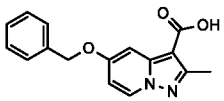
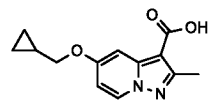
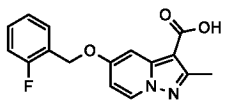
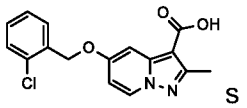
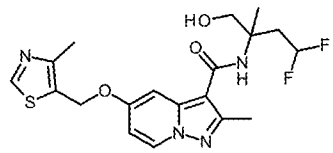
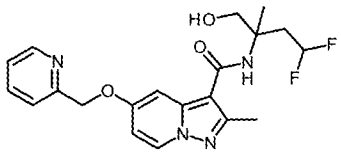
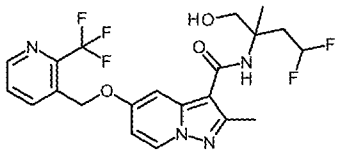
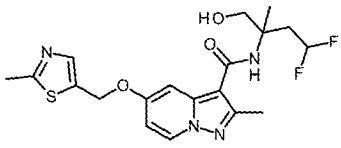
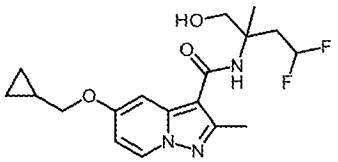
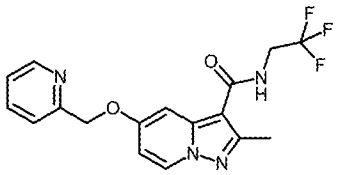
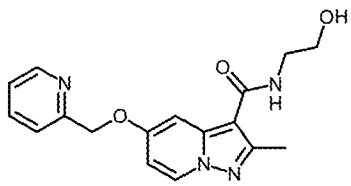
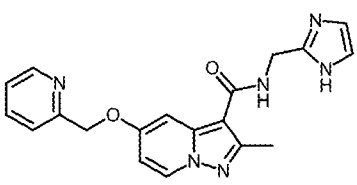
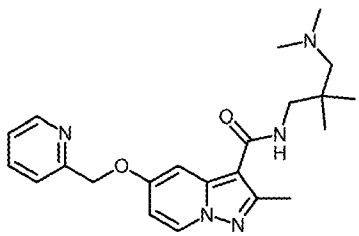
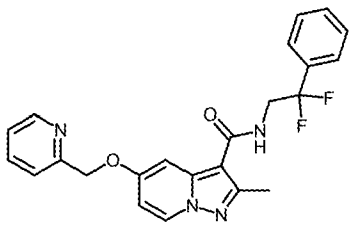
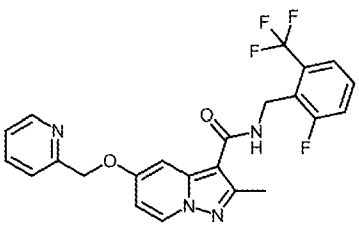
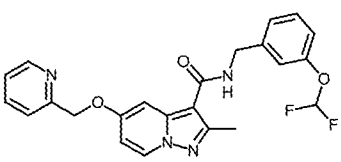
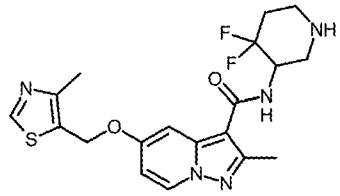
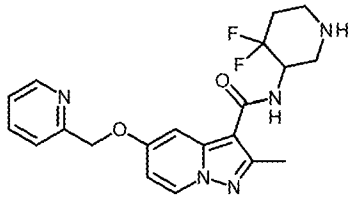
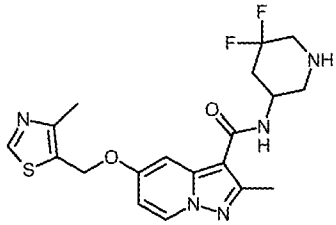
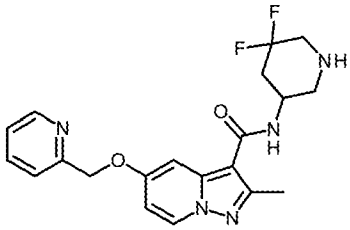
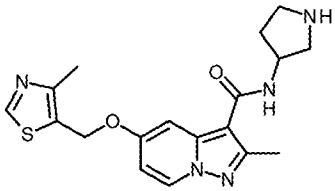
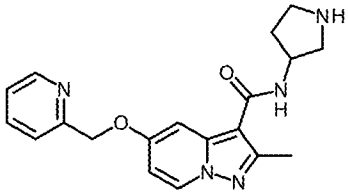
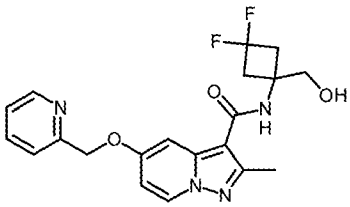
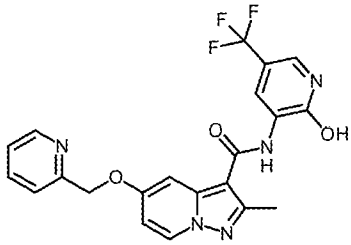
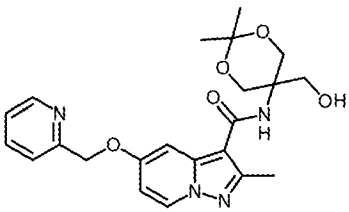
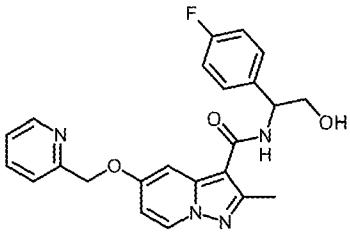
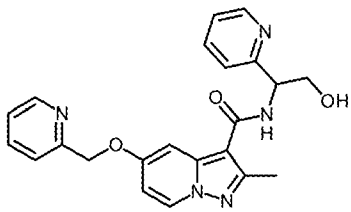
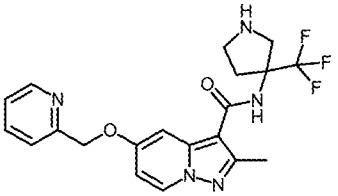
 **Cpd 001**	 **Cpd 002**	 **Cpd 003**
 **Cpd 004**	 **Cpd 005**	 **Cpd 006**
 **Cpd 007**	 **Cpd 008**	 **Cpd 009**
 **Cpd 010**	 **Cpd 011**	 **Cpd 012**

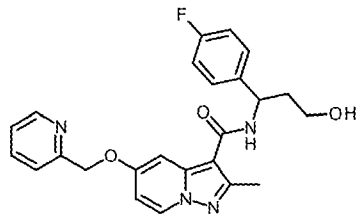
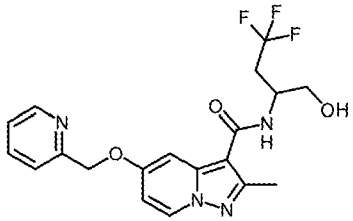
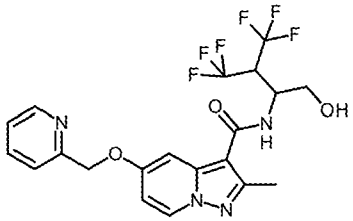
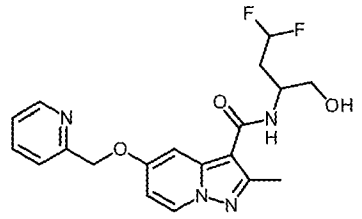
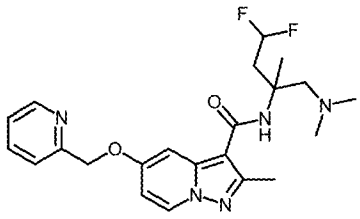
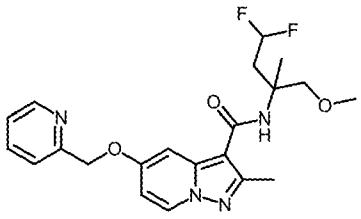
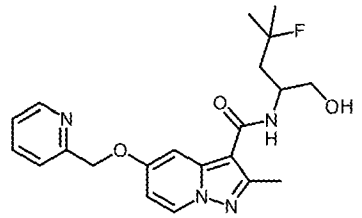
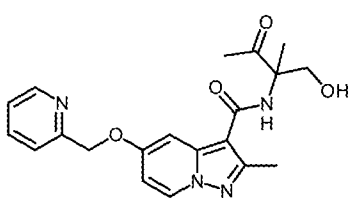
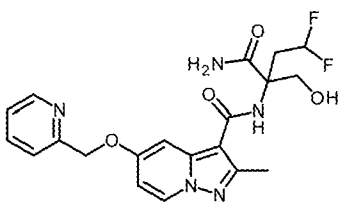
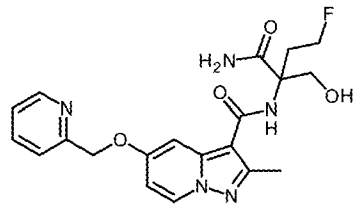
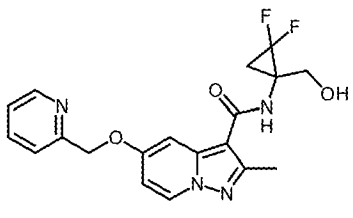
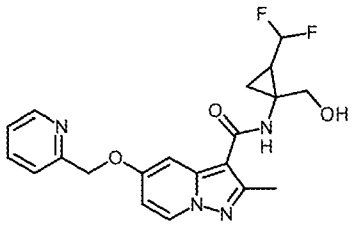
 Cpd 013	 Cpd 014	 Cpd 015
 Cpd 016	 Cpd 017	 Cpd 018
 Cpd 019	 Cpd 020	 Cpd 021
 Cpd 022	 Cpd 023	 Cpd 024
 Cpd 025	 Cpd 026	 Cpd 027
 Cpd 028	 Cpd 029	 Cpd 030
 Cpd 031	 Cpd 032	 Cpd 033
 Cpd 034	 Cpd 035	 Cpd 036

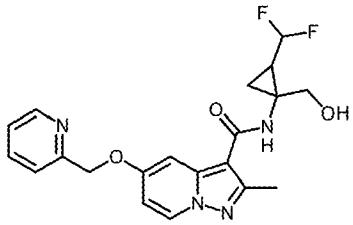
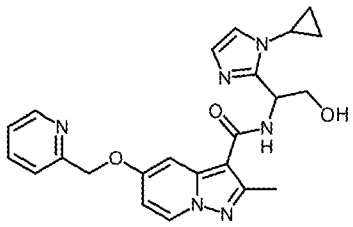
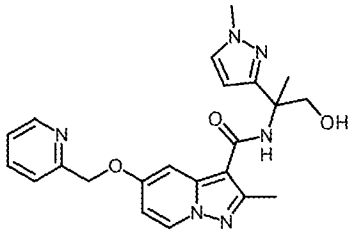
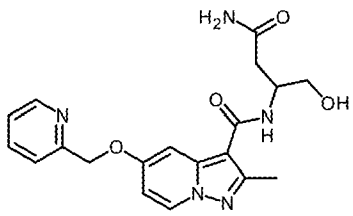
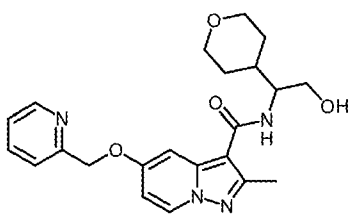
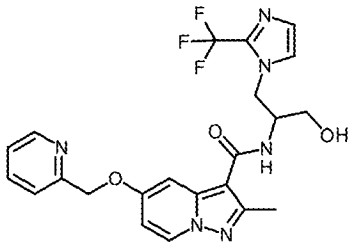
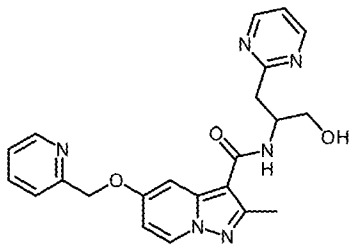
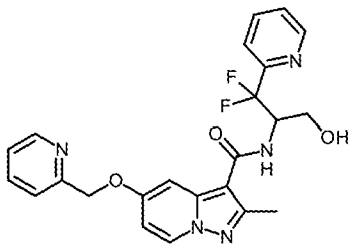
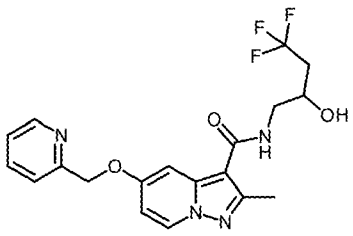
[0193] Table 4: Exemplary Compounds

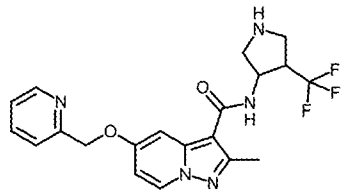
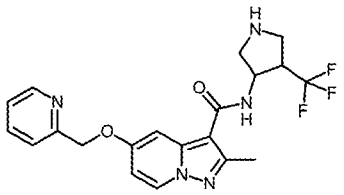
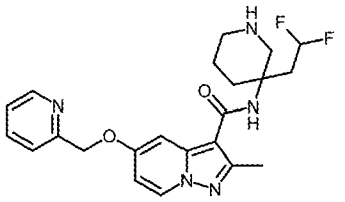
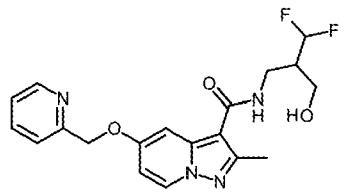
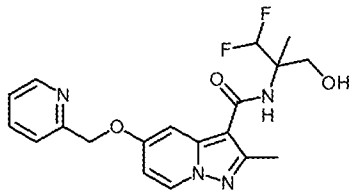
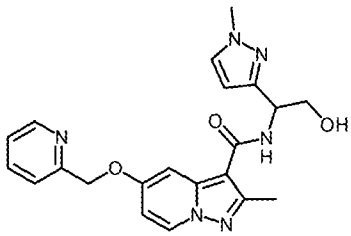
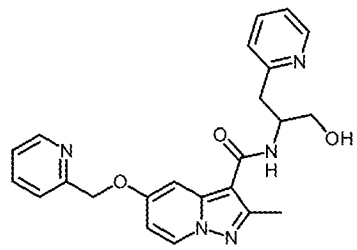
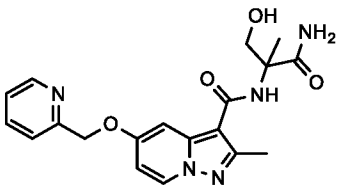
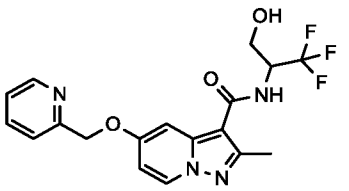
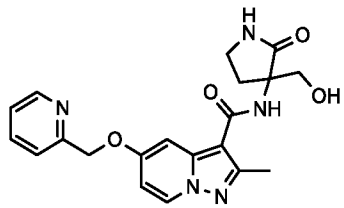
Structure and **Compound CODE**	Structure and **Compound CODE**	Structure and **Compound CODE**

 Cpd 037	 Cpd 038	 Cpd 039
 Cpd 040	 Cpd 041	 Cpd 042
 Cpd 043	 Cpd 044	 Cpd 045
 Cpd 046	 Cpd 047	 Cpd 048

 Cpd 049	 Cpd 050	 Cpd 051
 Cpd 052	 Cpd 053	 Cpd 054
 Cpd 055	 Cpd 056	 Cpd 057
 Cpd 058	 Cpd 059	 Cpd 060

 Cpd 061	 Cpd 062	 Cpd 063
 Cpd 064	 Cpd 065	 Cpd 066
 Cpd 067	 Cpd 068	 Cpd 069
 Cpd 070	 Cpd 071	 Cpd 072

 Cpd 073	 Cpd 074	 Cpd 075
 Cpd 076	 Cpd 077	 Cpd 078
 Cpd 079	 Cpd 080	 Cpd 081

 Cpd 082	 Cpd 083	 Cpd 084
 Cpd 085	 Cpd 086	 Cpd 087
 Cpd 088	 Cpd 089	 Cpd 090
 Cpd 091		

[0194] The following examples are provided for the purpose of illustrating the present invention and by no means should be interpreted to limit the scope of the present invention.

[0195] Part A represent the preparation of the compounds whereas Part B represents the pharmacological examples.

[0196] **Part A**

[0197] All starting materials which are not explicitly described were either commercially available (the details of suppliers such as for example ABCR, Apollo Scientific Combi-Blocks, Enamine, FluoroChem, MatrixScientific, Maybridge, Merck, TCI etc. can be found in the SciFinder® Database for example) or the synthesis thereof has already been described precisely in the specialist literature (experimental guidelines can be found in the Reaxys® Database or the SciFinder® Database respectively, for example) or can be prepared using the conventional methods known to the person skilled in the art.

[0198] The reactions were, if necessary, carried out under an inert amosphere (mostly argon and N_2). The number of equivalents of reagents and the amounts of solvents employed as well as the reaction temperatures and times can vary slightly between different reactions carried out by analogous methods. The work-up and purification methods were adapted according to the characteristic properties of each compound and can vary slightly for analogous methods. The yields of the compounds prepared are not optimized.

[0199] The indication „equivalents“ ("eq." or “eq” or “equiv.”) means molar equivalents, “RT” or “rt” means room temperature T (23 ± 7 °C), “M” are indications of concentration in mol/l, “sol.” means solution, "conc." means concentrated. The mixing ratios of solvents are usually stated in the volume / volume ratio.

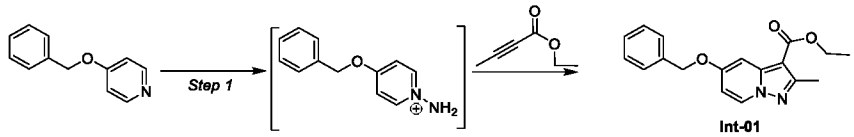
[0200] Key analytical characterization was carried out by means of ^{1}H-NMR spectroscopy and/or mass spectrometry (MS, m/z for $[M+H]^+$ and/or $[M-H]^-$) for all the exemplary compounds and selected intermediate products. In certain cases, where e.g. regioisomers and/or diatereomers could be/were formed during the reaction, additional analytics, such as, e.g. ^{13}C NMR and NOE (nuclear overhauser effect) NMR experiments were in some cases performed.

[0201] Analytical instruments employed were e.g. for NMR analysis a BRUKER 400MHz or a BRUKER 500MHz machine (Software Topspin), alternatively a BRUKER AVANCE 300MHz and 400Mhz was employed. For LC/MS analysis e.g. an Agilent 1290 infinity,Mass:6150 SQD(ESI/APCI) or an Agilent 1200 SERIES,Mass:6130 SQD(ESI/APCI) (Software Chemistation) was employed. Analytical HPLCs were measured e.g. on Waters (Software Empower), an Agilent-1200-ELSD (Software Chemistation) or an Agilent-1260 (Software OpenLAB). Analytical SFC were performed e.g. on a PIC solution (Software: SFC PICLAB ONLINE), a WATERS-X5 (Software MASSLYNX) or a WATERS-UPC2 (Empower).

[0202] Preparative HPLC were performed e.g. on a Waters 2998 (Software Empower) or a YMC (Software K-Prep). Preparative SFC were performed e.g. on a Waters,SFC- 200 (Software Chromscope or Super chrome), a Waters,SFC-80 (Super chrome) or a PIC,PIC-175 (Software S10-100).

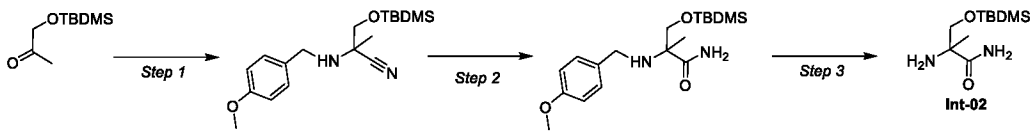
[0203] Structures of example compounds that contain stereocenters are drawn and named with absolute stereochemistry, if known. In case of unknown absolute stereochemistry the compounds can be either racemic, a mixture of diastereomers, a pure diastereomer of unknown stereochemistry, or a pure enantiomer of unknown stereochemistry. **Dia 1** and **Dia 2** means that diastereoisomers were separated but the stereochemistry is unknown. **En 1** and **En 2** means that both enantiomers were separated but the absolute configuration is unknown. No suffix given after the compound code means that a compound containing stereocenters was obtained as a racemic mixture or a mixture of diastereomers, respectively, unless the chemical name of the compound specifies the exact stereochemistry.

[0204] **Synthesis of ethyl 5-(benzyloxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxylate (Int-01).**



[0205] *Step 1* : To a stirred solution of 4-Benzyloxy-pyridine (60 g, 324.3.961 mmol) in MeCN (600 mL) was added 2,4-DNPH (64.5 g, 324.3 mmol) at RT. The reaction mixture was heated to 40 °C and stirred for 16 h at 40 °C. The reaction mixture was concentrated under reduce pressure keeping water bath temperature below 40 °C to afford 1-Amino-4-benzyloxy-pyridinium. To a solution of 1-amino-4-benzyloxy-pyridinium in DMF (600 mL) was added potassium carbonate (447.5 g, 3243.2 mmol) and followed by but-2-ynoic acid methyl ester (56.6 mL, 486.4 mmol) at room temperature. The reaction mixture was stirred for 16 h at room temperature. The RM was quenched with ice cold water and extracted with EtOAc: MTBE (1:3, 3 L). Combined organic layers were washed with brine (900 mL x 2), dried over anhydrous Na_2SO_4 and concentrated under reduced pressure. The crude was purified by column chromatography over silica gel (100-200 mesh) using 20 to 25 % EtOAc in Pet ether as an eluent to afford ethyl 5-(benzyloxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxylate (**Int-01**) (20 g, 19.8 % over two step) as an off-white solid.. ^{1}H-NMR (400 MHz, CDCl3) d [ppm]: 8.21-8.23 (m, 1H), 7.26-7.47 (m, 7H), 6.60-6.62 (m, 1H), 5.15 (s, 2H), 4.36 (q, 3H), 2.62 (s, 3H), 1.40 (t, 3H).

[0206] **Synthesis of 2-amino-3-((tert-butyldimethylsilyl)oxy)-2-methylpropanamide (Int-02).**



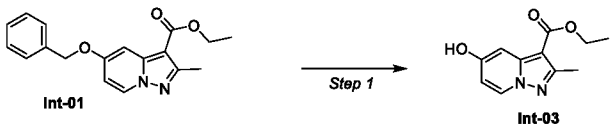
[0207] *Step* 1 : To a stirred solution of 1-(tert-Butyl-dimethyl-silanyloxy)-propan-2-one (25 g, 132.7 mmol) in EtOH (250ml) was added 4-methoxy benzylamine (19.08 ml, 146 mmol) at room temperature. Trimethylsillylcyanide (19.93 ml, 159.286 mmol) followed by ammonium

chloride (2.13 g, 39.8 mmol) were added to the RM at RT. The RM was stirred at 80°C for 16 h. The RM was concentrated. The crude was partitioned between EtOAc and saturated sodium bicarbonate solution. Organic layer was washed with brine solution, dried over sodium sulphate and concentrated. The crude was purified on FCC (using 100-200 silica gel, eluted with 10% EtOAc-Hexane) to afford 3-(tert-Butyl-dimethyl-silanyloxy)-2-(4-methoxy-benzylamino)-2-methyl-propionitrile (25 g, 57%) as yellow liquid.^{1}H-NMR (400 MHz, DMSO) δ [ppm]: 7.25-7.23 (d, 2H), 6.68-6.86(d, 2H), 3.72-3.68(m, 6H), 3.51-3.48 (m, 1H), 1.36(s, 3H), 0.87 (s, 9H), 0.06 (s, 6H).

[0208] *Step 2* : To a stirred solution of 3-(tert-Butyl-dimethyl-silanyloxy)-2-(4-methoxy-benzylamino)-2-methyl-propionitrile (10 g, 29.9 mmol) in DMSO (100 ml) was added potassium carbonate (28.92 g, 209.243 mmol) at RT. Hydrogen peroxide (14.03 ml, 298.92 mmol) was added drop wise to the reaction at 0°C. The RM was stirred for 16 h at RT. The RM was quenched with ice cold water and extracted with MTBE. Organic part was dried over Na_2SO_4 and concentrated. Resultant crude material was purified on FCC (using 100-200 silica gel, eluted with 50% EtOAc-Hexane) to afford 3-(tert-Butyl-dimethyl-silanyloxy)-2-(4-methoxy-benzylamino)-2-methyl-propionamide (3.4 g, 33%) as oily liquid. ^{1}H-NMR (400 MHz, DMSO) δ [ppm]: 7.26-7.24 (d, 3H), 7.06 (s, 1H), 6.87-6.85 (d, 2H), 3.72 (s, 3H), 3.70-3.68 (m, 1H), 3.58-3.56 (m, 1H), 3.51-3.50 (d, 2H), 2.04 (m, 1H), 1.15 (s, 3H), 0.85 (s, 9H), 0.03 (s, 6H).

[0209] *Step 3* :To a stirred solution of -(tert-Butyl-dimethyl-silanyloxy)-2-(4-methoxy-benzylamino)-2-methyl-propionamide (3 g, 8.509 mmol) in MeOH (60 ml) was added palladium hydroxide (1.5 g) was added at RT. The RM was stirred for 4 h under H_2 gas balloon pressure at RT. The RM was filtered through celite bed, washed with 10% MeOH-DCM. Combine filtrate was concentrated to afford 2-amino-3-((tert-butyldimethylsilyl)oxy)-2-methylpropanamide (**Int-02**) (1.5 g, 76%) as off white solid. ^{1}H-NMR (400 MHz, DMSO) δ [ppm]: 7.25 (s, 1H), 6.95 (s, 1H), 3.77-3.74 (d, 1H), 3.70-3.68 (m, 1H), 3.27-3.24 (d, 1H), 1.82 (s, 2H), 1.04 (s, 3H), 0.85 (s, 9H), 0.02 (s, 6H).

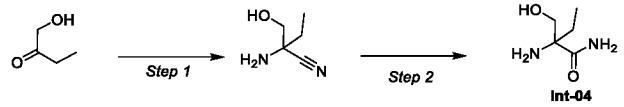
[0210] **Synthesis of ethyl 5-hydroxy-2-methylpyrazolo[1,5-a]pyridine-3-carboxylate (Int-03).**



[0211] *Step 1* To a stirred solution of 5-benzyloxy-2-methyl-pyrazolo[1,5-a]pyridine-3-carboxylic acid ethyl ester (int-01) (10.0 g) in MeOH (650 mL), 10% Pd/C (2.5 g) was added at RT. The RM was stirred for 4 h in H_2 gas under balloon pressure. The RM was filtered through celite bed and celite bed was washed with 10% MeOH in dichloromethane (50 mL). Combined filtrate was concentrated under reduced pressure. The crude was triturated with MTBE and n-pentane (1:9, 100 mL) to afford ethyl 5-hydroxy-2-methylpyrazolo[1,5-a]pyridine-3-carboxylate (**Int-03**) (5.0 g, 70%) as an off-white solid.. ^{1}H-NMR (400 MHz, DMSO-d6) d

[ppm]: 10.89 (s, 1H), 8.49-8.51 (m, 1H), 7.20 (s, 1H), 6.59-6.62 (m, 1H), 4.24 (q, 2H), 2.47 (s, 3H), 1.32 (t, 3H).

[0212] **Synthesis of 2-amino-2-(hydroxymethyl)butanamide (Int-04).**

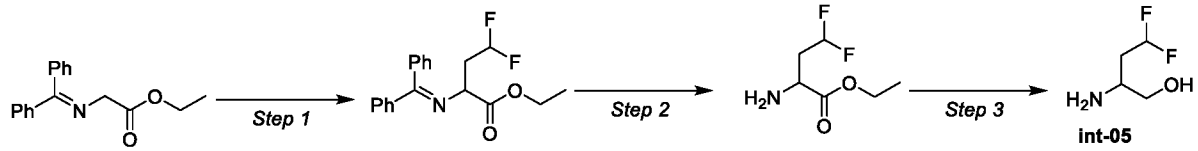


Int-04

[0213] *Step 1* : A mixture of sodium cyanide (4.45 g, 90.90 mmol), ammonium chloride (4.9 g, 90.90 mmol), and ammonia solution (7M in methanol, 120 mL) in methanol (65 ml) was stirred at RT and stirred for 10 min, then 1-hydroxybutan-2-one (4.0 g, 45.45 mmol) was added. The reaction mixture was stirred for 24 h at RT and filter through celite bed, celite bed was washed with methanol (50 mL). Combined filtrate was concentrated under vacuum. To the residue was added ethyl acetate (80 mL) and the mixture was filtered. The filtrate was concentrated under vacuum. The residue was co-distilled with dichloromethane (2 x 50 mL) to afford 2-amino-2-(hydroxymethyl)butanenitrile (4.2 g) as a pale yellow residue. TLC system: 100% Ethyl acetate; RF: 0.3.

[0214] *Step 2* : To a stirred solution of 2-amino-2-(hydroxymethyl)butanenitrile (2.0 g, 17.54 mmol) in ethanol (20 mL) cooled to 0 °C was added KOH (1.47 g, 26.31 mmol) followed by 30% H_2O_2 (2 mL) drop wise at 0 °C. Reaction mixture was stirred for 1 h at RT. The reaction progress was monitored by TLC and reaction mixture was concentrated under vacuum. The crude was diluted with 10% methanol in dichloromethane (2 x 50 ml), stirred for 20 minutes and filtered. Filtrate was concentrated under reduced pressure to afford 2-amino-2-(hydroxymethyl)butanamide (**Int-04**) (1.8 g) as a thicky residue. TLC system: 10% Methanol in dichloromethane; RF: 0.1.

[0215] **Synthesis of Synthesis of 2-amino-4,4-difluorobutan-1-ol (Int-05).**



int-05

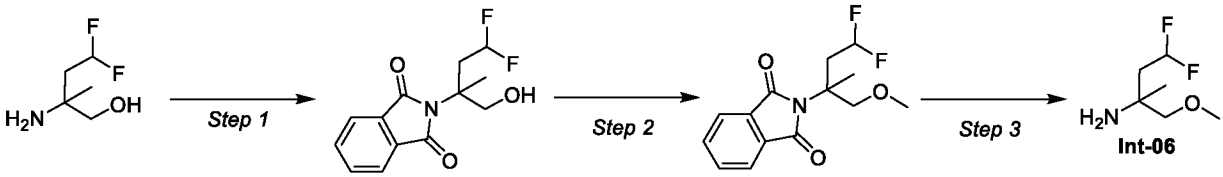
[0216] *Step 1:* To a solution of t-BuOK (13.2 g, 117.836 mmol) in DMF (150 mL) was added ethyl 2-((diphenylmethylene)amino) acetate (30 g, 112.225 mmol) at 0 °C. After 30 min, 1,1-difluoro-2-iodoethane (24.9 g, 130.181 mmol) was added over 10 min maintaining the temperature at –5 °C to 5 °C. The RM was stirred at 5°C for 1 h . After completion, the RM was diluted with saturated NH_4Cl solution (100 mL), extracted with EtOAc (3 x 100 mL). Combined organic layer was washed with brine (100 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure. The residue was purified by FCC on silica gel using 5% EtOAc in pet ether as an eluent to afford ethyl 2-((diphenylmethylene)amino)-4,4-difluorobutanoate as a pale yellow liquid (30 g, 80.67%). ^{1}H NMR (400 MHz, $CDCl_3$) δ ppm: 7.64 (d, 2 H), 7.42 – 7.48 (m, 4 H), 7.31 – 7.39 (m, 2 H), 7.18 – 7.25 (m, 2 H), 5.75 – 5.91 (tt,

1 H), 4.27 – 4.30 (m, 1 H), 4.12 – 4.21 (m, 2 H), 2.45 – 2.53 (m, 2 H), 1.25 (t, 3 H)

[0217] *Step 2* : To a solution of ethyl 2-((diphenylmethylene)amino)-4,4-difluorobutanoate (8.0 g, 24.143 mmol) in Hexane (40 ml) was added 1N HCL (80 ml) at RT. The RM was stirred at RT for 4 h. After completion, the RM was washed with Hexane (2 x 40 mL). The aqueous solution was basified with $NaHCO_3$ (pH ~8) and extracted with EtOAc (2 x 100 mL). The combined organic layer was dried over Na_2SO_4 and concentrated under reduced pressure to afford the desired product as a brown liquid (2.5 g). ^{1}H NMR (400 MHz, $CDCl_3$) δ ppm: 5.91 – 6.22 (m, 1 H), 4.20 (q, 2 H), 3.61 – 3.65 (m, 1 H), 2.24 - 2.36 (m, 1 H), 1.98 – 2.00 (m, 1 H), 1.27 (t, 3 H).

[0218] *Step 3* : To a solution of ethyl 2-amino-4,4-difluorobutanoate (2.5 g, 14.956 mmol) in EtOH (30 mL) was added Sodium borohydride (1.697 g, 44.868 mmol) at 0 °C. The RM was stirred at RT for 6 h. The RM was diluted with saturated NH_4Cl (20.0 mL), extracted with EtOAc (3 x 50 mL). Combined organic layer was washed with brine (20.0 mL), dried over anhydrous Na_2SO_4, filtered and concentrated under reduced pressure to afford 2-amino-4,4-difluorobutan-1-ol (**Int-05**) as a yellow liquid (1.2 g, 64.13%).

[0219] **Synthesis of Synthesis of 4,4-difluoro-1-methoxy-2-methylbutan-2-amine hydrochloride (**Int-06**).**



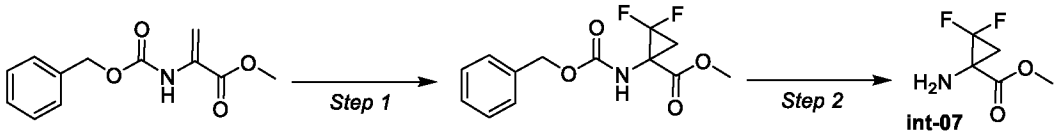
[0220] *Step 1* : To a solution of 2-amino-4,4-difluoro-2-methylbutan-1-ol (2.5 g, 17.96 mmol) in toluene (25 mL) was added phthalic anhydride (2.66 g, 17.96 mmol). The RM was stirred at 120 °C for 24 h in a sealed tube. After consumption, the RM was concentrated under reduced pressure. The residue was purified by FCC on silica gel using 25% EtOAc in pet ether as an eluent to afford 2-(4,4-difluoro-1-hydroxy-2-methylbutan-2-yl)isoindoline-1,3-dione as a pale yellow gummy (2.0 g, yield: 41.34%). ^{1}H NMR (400 MHz, $CDCl_3$) δ ppm: 7.79 – 7.84 (m, 2 H), 7.71 – 7.75 (m, 2 H), 6.06 – 6.37 (dt, 1 H), 4.03 – 4.12 (m, 2 H), 3.62 (t, 1 H), 2.87 – 3.00 (m, 1 H), 2.29 – 2.43 (m, 1 H), 1.66 (s, 3 H).

[0221] *Step 2* : To a solution of 2-(4,4-difluoro-1-hydroxy-2-methylbutan-2-yl)isoindoline-1,3-dione (2.6 g, 9.657 mmol) in DMF (26 mL) were added NaH (60% in mineral oil) (463.51 mg, 19.313 mmol), Iodomethane (1.194 mL, 19.31 mmol) at 0 °C . The RM was stirred at RT for 2 h. After consumption, the RM was quenched with ice cold water (20 mL) and extracted with EtOAc (2 x 40 mL). Organic layer was dried over Na_2SO_4, filtered and concentrated under reduced pressure. The residue was purified by FCC on silica gel using 25% EtOAc in pet ether as an eluent to afford 2-(4,4-difluoro-1-methoxy-2-methylbutan-2-yl)isoindoline-1,3-dione as a pale yellow gummy (1.1 g, yield: 40.21%). ^{1}H NMR (400 MHz, $CDCl_3$) δ ppm: 7.76 – 7.81 (m, 2 H), 7.67 – 7.72 (m, 2 H), 5.87 – 6.17 (dt, 1 H), 3.99 (d, 1 H), 3.79 (d, 2 H), 3.36 (d, 3 H), 2.77

– 2.90 (m, 1 H), 2.40 – 2.53 (m, 1 H), 1.82 (s, 3 H).

[0222] *Step 3* : To a solution of 2-(4,4-difluoro-1-methoxy-2-methylbutan-2-yl)isoindoline-1,3-dione (1.1 g, 3.883 mmol) in IPA (22 mL) and water (2.2 mL) was added $NaBH_4$ (733.9 mg, 19.41 mmol) at 0 °C. The RM was stirred at RT for 16 h. After completion, the RM was concentrated and the resulting residue was quenched with cold water (30 mL), extracted with EtOAc (2 X 30 mL). Organic layer was washed with brine (20 mL), dried over anhydrous Na_2SO_4, filtered and concentrated under reduced pressure. The residue was treated with 6N HCl (22 mL) and heated to 80 °C for 2 h. The RM was concentrated under reduced pressure and the obtained residue was triturated with diethyl ether (2 x 30 mL). The solid was filtered and dried under vacuum to afford 4,4-difluoro-1-methoxy-2-methylbutan-2-amine hydrochloride (**Int-06**) as an off white solid (650 mg, yield: 88.27%). ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 8.40 (s, 3 H), 6.20 – 6.50 (dt, 1 H), 3.43 (s, 2 H), 3.33 (s, 3 H), 2.19 – 2.30 (m, 2 H), 1.29 (s, 3 H).

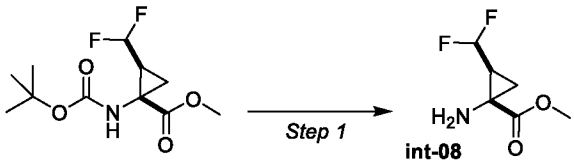
[0223] **Synthesis of methyl 1-amino-2,2-difluorocyclopropane-1-carboxylate hydrobromide (**Int-07**).**



[0224] *Step 1* : To z solution of methyl 2-(((benzyloxy)carbonyl)amino)acrylate (2.5 g, 10.627 mmol) in toluene (50 mL) was added NaF (44.61 mg, 1.063 mmol) at RT and heated to 110 °C. After 10 min, a solution of trimethylsilyl 2,2-difluoro-2-(fluorosulfonyl)acetate (5.236 mL, 26.56 mmol) in toluene (50 mL) was added dropwise over 4 h to the RM.. The RM was stirred at 110 °C for 18 h. After completion, the RM was cooled to 0 °C and quenched with sat Na_2CO_3 solution (70 mL), extracted with EtOAc (2 x 70 mL). The combined organic layers were washed with brine solution (50 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure. The residue was purified by FCC on silica gel using 15% EtOAc in pet ether as an eluent to afford methyl 1-(((benzyloxy)carbonyl)amino)-2,2-difluorocyclopropane-1-carboxylate as a pale yellow liquid (1.4 g, yield: 46.18%). ^{1}H NMR (400 MHz, $CDCl_3$) δ ppm: 7.32 – 7.38 (m, 5 H), 5.57 (s, 1 H), 5.14 (s, 2 H), 3.77 (s, 3 H), 2.66 – 2.71 (m, 1 H), 1.75 – 1.95 (m, 1 H).

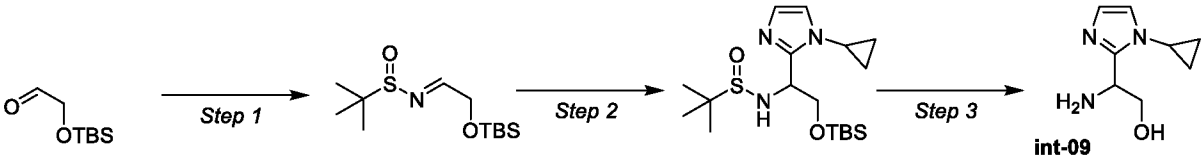
[0225] *Step 2*: Methyl 1-(((benzyloxy)carbonyl)amino)-2,2-difluorocyclopropane-1-carboxylate (1.4 g, 4.908 mmol) and HBr in acetic acid (33%) (7.5 mL) was stirred at RT for 2 h. After consumption, the RM was concentrated under reduced pressure and the obtained residue was triturated with diethyl ether (2 x 30 mL). The obtained solid was filtered and dried under vacuum to afford methyl 1-amino-2,2-difluorocyclopropane-1-carboxylate hydrobromide (**Int-07**) as a pale brown solid (1.0 g, Yield: 87.81%). ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 9.15 (s, 2 H), 3.82 (s, 3 H), 2.69 – 2.78 (m, 1 H), 2.43 – 2.51 (m, 1 H).

[0226] **Synthesis of (cis-1-amino-2-(difluoromethyl)cyclopropyl)methanol hydrochloride (**Int-08**).**



[0227] *Step 1* : To a solution of tert-butyl (cis-2-(difluoromethyl)-1-(hydroxymethyl)cyclopropyl)carbamate (880 mg, 3.318 mmol) in DCM (10 mL) was added 4 M HCl in Dioxane (5.0 mL) at RT. The RM was stirred at RT for 1 h. After consumption , the RM was concentrated under reduced pressure and the obtained residue was triturated with diethyl ether (2 x 20 mL). The residue was dried under vacuum to afford cis-1-amino-2-(difluoromethyl)cyclopropyl)methanol hydrochloride (**Int-08**) as pale yellow gummy (700 mg). ^{1}H NMR (400 MHz, $CDCl_3$) δ ppm: 9.19 (s, 2 H), 6.00 – 5.70 (dt, 1 H), 3.70 (s, 3 H), 2.80- 2.70 (m, 1 H), 2.23- 2.18 (m, 1 H), 1.90- 1.86 (m, 1 H).

[0228] **Synthesis of 2-amino-2-(1-cyclopropyl-1H-imidazol-2-yl)ethan-1-ol hydrochloride (**Int-09**).**



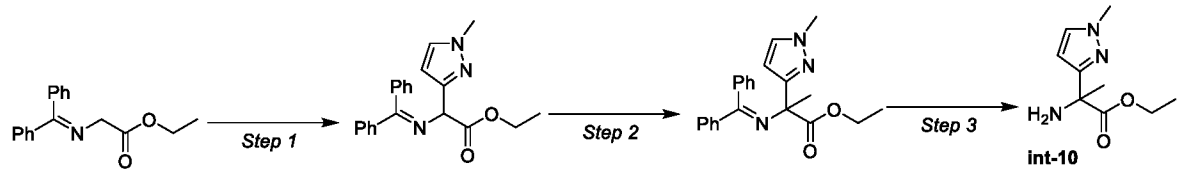
[0229] *Step 1* : To a solution of 2-((tert-butyldimethylsilyl)oxy)acetaldehyde (2 g, 11.47 mmol) in DCM (30 mL) were added 2-methylpropane-2-sulfinamide (1.53 g, 12.62 mmol) and copper(II)sulphate (3.66 g, 22.94 mmol) at RT under N_2 atmosphere. The RM was stirred at RT for 12 h. After completion, the RM was filtered and rinsed with DCM (50 mL). The filtrate was concentrated under reduced pressure. The residue was purified by FCC on silica gel using 10% EtOAc in Pet. Ether as an eluent to afford (E/Z)-N-(2-((tert-butyldimethylsilyl)oxy)ethylidene)-2-methylpropane-2-sulfinamide as a pale yellow gum (1.5 g, yield: 47.11%). ^{1}H NMR (400 MHz, $CDCl_3$) δ ppm: 7.96 (s, 1 H), 4.44 (s, 2H), 1.10 (s, 9H). 0.82 (s, 9H).

[0230] *Step 2* : To a solution of 1-cyclopropyl-1H-imidazole (500 mg, 4.62 mmol) in THF (22 mL) was treated with nBuLi (5 mL, 2.5 M) drop wise at -78 °C. The RM was stirred for 2 h at -78°C. After 2 h, a solution of (E)-N-(2-((tert-butyldimethylsilyl)oxy)ethylidene)-2-methylpropane-2-sulfinamide (1.54 g, 5.54 mmol) in THF (2 mL) was added drop wise to the RM. The RM was stirred for 1.5 h. After completion, the RM was quenched with sat. NH_4Cl (25 mL) at 0 °C, extracted with EtOAc (3 × 30 mL). The combined organic layers were washed with brine (30 mL) and concentrated to afford compound (1.5 g, 84%).

[0231] *Step 3* :To q solution of N-(2-((tert-butyldimethylsilyl)oxy)-1-(1-cyclopropyl-1H-imidazol-

2-yl)ethyl)-2-methylpropane-2-sulfinamide (1.3 g, 3.37 mmol) in 1,4-dioxane (10 mL) was added 4M HCl in 1,4-dioxane (5 mL) at 0°C. The RM was stirred at RT for 16 h. After consumption, the RM was concentrated under reduced pressure. The residue was triturated with DCM (2 x 5 mL) and dried under vacuum to afford 2-amino-2-(1-cyclopropyl-1H-imidazol-2-yl)ethan-1-ol hydrochloride (**Int-09**) as a brown gummy (800 mg, 88%).

[0232] **Synthesis of ethyl 2-amino-2-(1-methyl-1H-pyrazol-3-yl)propanoate** (Int-10**).**



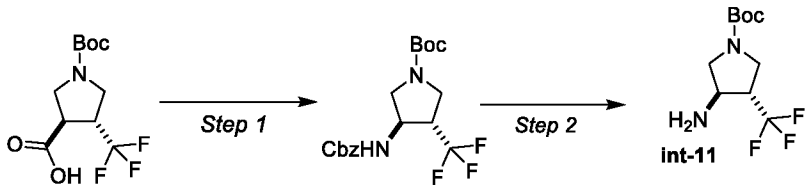
[0233] *Step 1* :To a solution of ethyl 2-((diphenylmethylene)amino)acetate (5.0 g, 18.704 mmol), 3-bromo-1-methyl-1H-pyrazole (2.850 mL, 28.056 mmol) in toluene (50 mL, taken in 100 mL sealed tube) was added K_3PO_4 (11.907 g, 56.113 mmol). The RM was degassed with argon for 20 min. Pd(t-Bu3P)2 (955.87 mg, 1.870 mmol) was added at RT. The resulted RM was stirred at 100 °C for 16 h. After completion, the RM was diluted with cold water (100 mL), extracted with EtOAc (2 x 100 mL). Combined organic layers were washed with brine (100 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure. The residue was purified by FCC on silica gel using 12% EtOAc in pet ether as an eluent to afford ethyl 2-((diphenylmethylene)amino)-2-(1-methyl-1H-pyrazol-3-yl) acetate as a pale yellow gummy (2.5 g, yield: 38.47%). ^{1}H NMR (400 MHz, $CDCl_3$) δ ppm: 7.68 - 7.71 (q, 2 H), 7.42 - 7.44 (m, 3 H), 7.36 - 7.38 (m, 1 H), 7.30 - 7.33 (m, 3 H), 7.17 - 7.20 (m, 2 H), 6.45 (d, 1 H), 5.34 (s, 1 H), 4.15 - 4.19 (m, 2 H), 3.84 (s, 3 H), 1.22 (t, 3 H).

[0234] *Step 2*: To a solution of ethyl 2-((diphenylmethylene)amino)-2-(1-methyl-1H-pyrazol-3-yl)acetate (1.8 g, 5.181 mmol,) in DMF (20 mL, taken in a sealed tube) was added NaH (60%) (621 mg, 15.543 mmol) portion wise at 0 °C. The RM was stirred for 30 min at 0 °C. After 30 min, Iodomethane (1.613 mL, 25.90 mmol) was added. The RM was stirred at RT for 16 h. After completion, the RM was quenched with cold water (50 mL), extracted with EtOAc (2 x 50 mL). Combined organic layers were washed with brine (50 mL), dried over anhydrous Na_2SO_4, filtered and concentrated under reduced pressure. The residue was purified by FCC on silica gel using 20% EtOAc in pet ether as an eluent to afford ethyl 2-((diphenylmethylene)amino)-2-(1-methyl-1H-pyrazol-3-yl)propanoate as a pale brown gummy (1.0 g, yield: 53.40%). ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 7.48 - 7.52 (m, 3 H), 7.34 - 7.42 (m, 6 H), 6.34 (d, 2 H), 5.75 (s, 1 H), 3.63 - 3.75 (m, 5 H), 1.62 (s, 3 H), 1.00 (t, 3 H).

[0235] *Step 3* : To a solution of ethyl 2-((diphenylmethylene)amino)-2-(1-methyl-1H-pyrazol-3-yl)propanoate (1.6 g, 4.427 mmol) in Hexane (15 mL) was added 1N HCl (aq) (30 mL) at RT. The RM was stirred for 16 h. After completion, the RM was extracted with EtOAc (3 x 20 mL). Aqueous layer was basified with sat. $NaHCO_3$ solution (pH~0.8), extracted with 10% MeOH in

DCM (3 x 30 mL). Combined organic layer was dried over Na_2SO_4, filtered and concentrated under reduced pressure to afford ethyl 2-amino-2-(1-methyl-1H-pyrazol-3-yl)propanoate (**Int-10**) as a brown liquid (630 mg, 72.24%). ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 7.54 (s, 1 H), 6.18 (s, 1 H), 4.00 - 4.07 (m, 2 H), 3.99 (s, 3 H), 2.21 (s, 2 H), 1.50 (s, 3 H), 1.12 (t, 3 H).

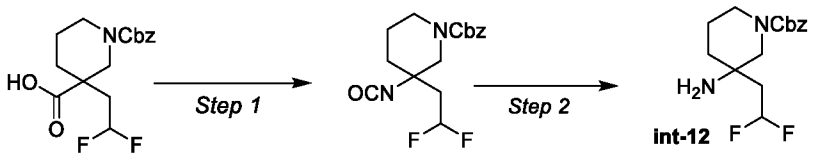
[0236] **Synthesis of tert-butyl trans-3-amino-4-(trifluoromethyl)pyrrolidine-1-carboxylate (**Int-11**).**



[0237] *Step 1* : To a solution of Trans-1-(tert-butoxycarbonyl)-4-(trifluoromethyl)pyrrolidine-3-carboxylic acid (3 g, 10.591 mmol) in xylene (25 mL) were added TEA (1.771 mL, 12.710 mmol) and DPPA (2.505 mL ,11.651 mmol) dropwise at RT. The RM was heated to 130 °C and stirred for 1 h. After 1 h, phenyl methanol (1.211 mL, 11.651 mmol) was added into the RM and stirred at 130 °C for 3 h. After cooling to RT, the RM was quenched with 1N NaOH solution (80.0 mL), washed with EtOAc (2 x 50 mL). The aqueous layer was washed acidified with aqueous citric acid solution (pH~5), extracted with DCM (2 x 80 mL). Organic layers were washed with brine (50 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure. The residue was purified by FCC on silica gel using 15% EtOAc in pet ether as an eluent to afford tert-butyl trans-3-(((benzyloxy)carbonyl)amino)-4-(trifluoromethyl)pyrrolidine-1-carboxylate as a yellow solid (2.2 g, 53.48 %). ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 7.32 – 7.38 (m, 7 H), 5.10 (s, 3 H), 4.69 (d, 1 H), 4.35 - 4.40 (m, 1 H), 3.77 - 3.82 (m, 1 H), 3.49 (s, 2 H), 2.94 (s, 2 H), 1.45 (s, 9 H).

[0238] *Step 2* : To a solution of tert-butyl trans-3-(((benzyloxy)carbonyl)amino)-4-(trifluoromethyl)pyrrolidine-1-carboxylate (2.4 g, 6.179 mmol) in EtOAc (20 mL) was added 10% Pd/C (1.315 g, 12.359 mmol). The RM was stirred at RT for 16 h under hydrogen balloon pressure. After completion, the RM was filtered through a celite pad, washed with EtOAc (2 x 100 mL) and the filtrate was concentrated under reduce pressure. The residue was purified by FCC on silica gel using 45% EtOAc in pet ether as an eluent to afford tert-butyl trans-3-amino-4-(trifluoromethyl)pyrrolidine-1-carboxylate (Int-11) as a colorless liquid (1.3 g, 82.74%). ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 3.49 - 3.62 (m, 3 H), 3.26 - 3.31 (m, 2 H), 2.96 (s, 1 H), 2.85 (s, 1 H), 1.82 - 1.98 (m, 2 H), 1.39 (s, 9 H).

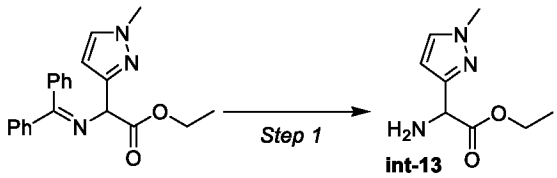
[0239] **Synthesis of benzyl 3-amino-3-(2,2-difluoroethyl)piperidine-1-carboxylate (**Int-12**).**



[0240] *Step 1* : To a solution of 1-((benzyloxy)carbonyl)-3-(2,2-difluoroethyl)piperidine-3-carboxylic acid (2.0 g, 6.114 mmol) in toluene (20 mL) was added TEA (1.704 mL, 12.228 mmol) and DPPA (1.446 mL, 6.725 mmol) dropwise at RT. The RM was heated at 100 °C for 2 h. After cooling to RT, the RM was diluted with water, extracted with EtOAc (2 x 100 mL). The combined organic layers were washed with brine (50 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure to afford benzyl 3-(2,2-difluoroethyl)-3-isocyanatopiperidine-1-carboxylate as a pale yellow liquid (1.8 g, 90.78%).

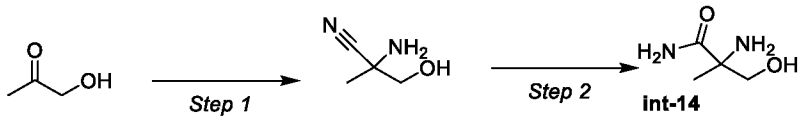
[0241] *Step 2*: To a solution of benzyl 3-(2,2-difluoroethyl)-3-isocyanatopiperidine-1-carboxylate (1.8 g, 5.550 mmol) in 1,4-dioxane (18 mL) was added an aqueous solution 6M HCl (18 mL). The RM was heated to 45 °C for 16 h. After completion, the RM was concentrated. The residue was diluted with water (50 mL), washed with EtOAc (100 mL). Aqueous layer was basified with 1N NaOH solution (50 mL), extracted with DCM (2 x 100 mL). The combined organic layers were washed with brine (10 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure to afford benzyl 3-amino-3-(2,2-difluoroethyl)piperidine-1-carboxylate (**Int-12**) as a pale yellow liquid (900 mg, 54.36%). ^{1}H NMR (400 MHz, DMSO d_6) δ ppm: 7.37 – 7.30 (m, 5 H), 6.37 – 6.07 (m, 1 H), 5.06 (s, 2 H), 3.56 (s, 4 H), 3.38 – 3.16 (m, 3 H), 1.90 – 1.79 (m, 2 H), 1.65 – 1.55 (m, 4 H), 1.43 – 1.38 (m, 2 H).

[0242] **Synthesis of ethyl 2-amino-2-(1-methyl-1H-pyrazol-3-yl)acetate (**Int-13**).**



[0243] *Step 1* : To a solution of ethyl 2-((diphenylmethylene)amino)-2-(1-methyl-1H-pyrazol-3-yl)acetate (2.4 g, 6.908 mmol, 1.0 eq) in Hexane (10 mL) was added 1N HCl (aq) (25 mL) at RT. The RM was stirred for 16 h. After completion, the RM was extracted with EtOAc (2 x 30 mL). Aqueous layer was basified with sat. $NaHCO_3$ solution (pH~0.8), extracted with 10% MeOH in DCM (3 x 50 mL). The combined organic layer was dried over Na_2SO_4, filtered and concentrated under reduced pressure to afford ethyl 2-amino-2-(1-methyl-1H-pyrazol-3-yl)acetate (Int-13) (900 mg, 71.11%). ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 7.57 (d, 1 H), 6.15 (d, 1 H), 4.43 (s, 1 H), 4.11- 4.01 (m, 2 H), 3.70 (s, 3 H), 2.07 (s, 2 H), 1.14 (t, 3 H).

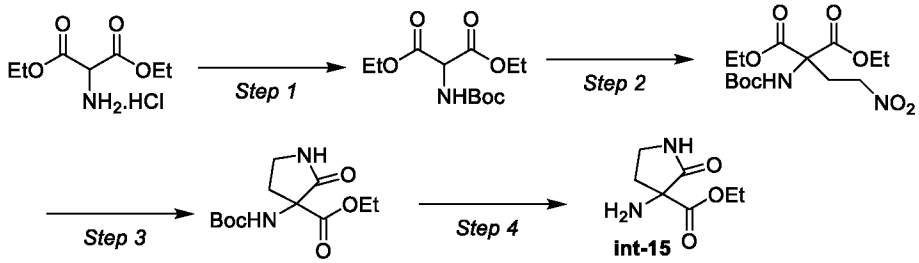
[0244] **Synthesis of 2-amino-3-hydroxy-2-methylpropanamide (**Int-14**).**



[0245] *Step 1* : To a mixture of sodium cyanide (3.97 g, 81.08 mmol), ammonium chloride (4.29 g, 81.08 mmol), and ammonia solution (7M in methanol, 30 mL) was added, after 10 min, 1-hydroxyacetone (3.0 g, 40.54 mmol,). The RM was stirred for RT, under nitrogen, for 23 h and then concentrated under vacuum. To the residue was added EtOAc (200 mL) and the solid was filtered. The filtrate was concentrated under vacuum and to the residue was added DCM (1 x 50 mL). The solution was cooled to -20 °C and allowed to stand for 60 h at RT. The precipitate was collected by filtration, washed with cold DCM and dried under vacuum to afford 2-amino-3-hydroxy-2-methylpropanenitrile (2.0 g, 50%).

[0246] *Step 2* : To a stirred solution of amino-3-hydroxy-2-methylpropanenitrile (2.0 g, 20 mmol), in ethanol (30 mL), at 0 °C, was added KOH (1.62 g, 30 mmol, 1.5 eq), then H_2O_2 (2 mL) was added drop wise at 0 °C. The RM was stirred at RT for 18 h. The RM was concentrated under reduced pressure. The residue was diluted with 10% MeOH in DCM (2 x 100 ml), stirred for 20 minutes, then filtered and the filtrate was concentrated under reduced pressure to afford 2-amino-3-hydroxy-2-methylpropanamide (Int-**14**) (0.6 g, 26%).

[0247] **Synthesis of Ethyl 3-amino-2-oxopyrrolidine-3-carboxylate hydrochloride (**Int-15**).**



[0248] *Step 1* : Boc anhydride (35.8 mL, 155.9 mmol) was added to a solution of diethyl 2-aminomalonate hydrochloride (30 g, 141.7 mmol) and TEA (60.18 mL, 425.25 mmol) in DCM (400 mL) at 0 °C. The RM was stirred at RT for 16 h. The RM was diluted with ice water (500 mL) and the organic layer was separated, organic layer was washed with brine (200 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure to afford diethyl 2-((tert-butoxycarbonyl)amino)malonate (35.8 g) as a colorless .

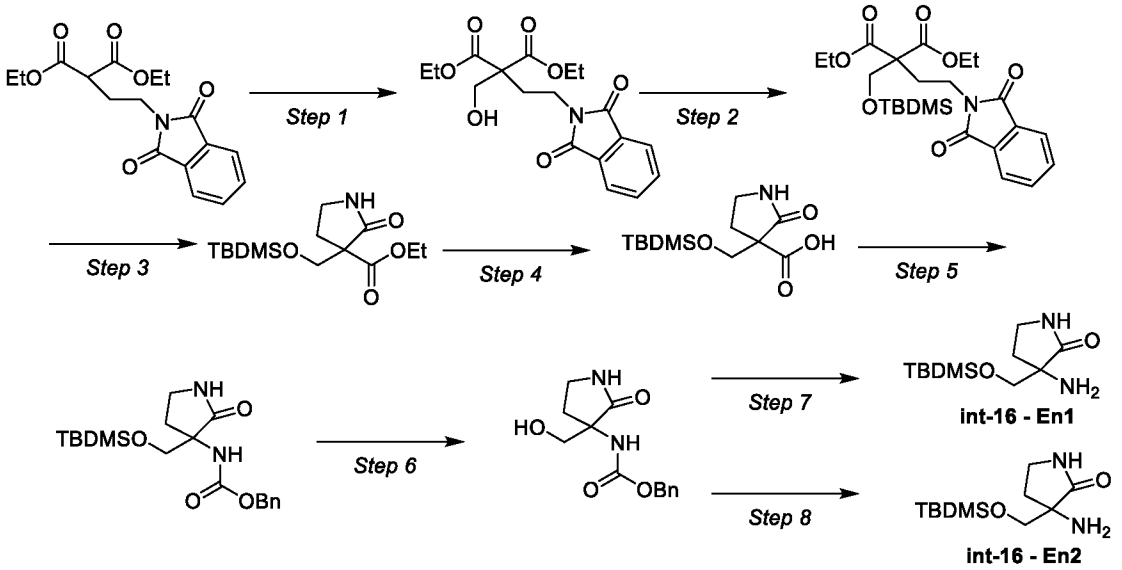
[0249] *Step 2* : To a solution of diethyl 2-((tert-butoxycarbonyl)amino)malonate (10 g, 36.36 mmol) and sodium ethoxide (1.97 g, 29.08 mmol) in ethanol (300 mL) cooled to 0 °C, was added a solution of nitroethene (6.64 g, 90.90 mmol) dissolved in diethyl ether (15 mL). The RM was slowly allowed to reach RT. Then, the RM was stirred for 2 h. The RM was diluted with ice water (500 mL) and the organic layer was separated, washed with brine (100 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure to give residue. Residue was purified by reverse phase GRACE flash chromatography using 0.1% FA in water and ACN

as an eluent. The fractions were collected and concentrated under vacuum to afford diethyl 2-((tert-butoxycarbonyl)amino)-2-(2-nitroethyl)malonate (4.1 g).

[0250] *Step 3*: Raney-Ni (5.3 g) was added to a solution of diethyl 2-((tert-butoxycarbonyl)amino)-2-(2-nitroethyl)malonate (4.0 g, 11.49 mmol) in ethanol (50 mL) in Parr hydrogenation vessel under inert atmosphere. The RM was subjected to hydrogenation under 70 psi at RT for 16 h. The RM was filtered through celite pad, and the celite pad was washed with ethanol. The combined filtrate was concentrated under reduced pressure to afford ethyl 3-((tert-butoxycarbonyl)amino)-2-oxopyrrolidine-3-carboxylate (1.6 g) as a colorless oil.

[0251] *Step 4 :* HCl (4M in dioxane, 3.6 mL) was added to a stirred solution of ethyl 3-((tert-butoxycarbonyl)amino)-2-oxopyrrolidine-3-carboxylate (1.6 g, 5.9 mmol) in DCM (30 mL) at 0 °C. The RM was stirred at RT for 2 h. The RM was concentrated under vacuum. The residue was triturated with diethyl ether (10 mL), filtered and dried under vacuum to afford ethyl 3-amino-2-oxopyrrolidine-3-carboxylate hydrochloride (1.03 g) as an off-white solid.

[0252] **Synthesis of 3-Amino-3-(hydroxymethyl)pyrrolidin-2-one (**Int-16 - En1**) and (**Int-16 – En2**) .**



[0253] *Step 1* : To a stirred solution of diethyl 2-(2-(1,3-dioxoisoindolin-2-yl)ethyl)malonate (60 g, 179.99 mmol) in 1,4-Dioxane (600 mL) was added TEA (49.90 mL, 359.99 mmol) at 0 °C. After 15 minutes, formaldehyde (29.18 g, 359.99 mmol) was added at 0 °C. The RM was warmed to RT and stirred at 80 °C for 16 h. After completion, the RM was diluted with ice-cold water (200 mL) and extracted with EtOAc (2 × 300 mL). The combined organic layers were washed with brine (150 mL), dried over Na_2SO_4, filtered, and concentrated under reduced pressure. The residue was purified by FCC on silica gel using a gradient of 0 to 40% EtOAc in pet ether to afford diethyl 2-(2-(1,3-dioxoisoindolin-2-yl)ethyl)-2-(hydroxymethyl)malonate (59 g, 90%) as pale yellow gummy. ^{1}H NMR (400 MHz, $CDCl_3$) δ ppm: 7.86–7.82 (m, 2 H), 7.74–7.69 (m, 2 H), 4.25–4.18 (m, 4 H), 4.07 (d, 2 H), 3.83–3.79 (m, 2 H), 2.79 (t, 1 H), 2.33–2.30

(m, 2 H), 1.28 (t, 6 H).

[0254] *Step 2*: To a stirred solution of diethyl 2-(2-(1,3-dioxoisoindolin-2-yl)ethyl)-2-(hydroxymethyl)malonate (68 g, 187.13 mmol) in DCM (700 mL) was added Imidazole (25.48 g, 374.27 mmol) at 0 °C and stirred for 15 min. Then, tert-Butyldimethylsilyl chloride (33.84 g, 224.56 mmol) at 0 °C as added. The RM was stirred for 16 h at RT. After completion, the RM was diluted with ice cold water (300 mL) and extracted with DCM (2 × 500 mL). The combined organic layers were washed with brine (200 mL), dried over Na_2SO_4, filtered, and concentrated under reduced pressure. The residue was purified by FCC on silica gel using a gradient of 10% EtOAc in pet ether to afford diethyl 2-(((tert-butyldimethylsilyl)oxy)methyl)-2-(2-(1,3-dioxoisoindolin-2-yl)ethyl)malonate (68 g, 77%) as an off-white solid. ^{1}H NMR (400 MHz, $CDCl_3$) δ ppm: 7.84–7.82 (m, 2 H), 7.71–7.69 (m, 2 H), 4.18–4.11 (m, 6 H), 3.76–3.72 (m, 2 H), 2.41–2.37 (m, 2 H), 1.26 (t, 6 H), 0.89 (s, 9 H), 0.08 (s, 6 H). *Step 3* : To a stirred solution of diethyl 2-(((tert-butyldimethylsilyl)oxy)methyl)-2-(2-(1,3-dioxoisoindolin-2-yl)ethyl)malonate (68 g, 142.37 mmol) in Ethanol (700 mL) was added Hydrazine hydrate (10.69 g, 213.55 mmol) at 0 °C. The RM was stirred for 16 h at RT. After completion, the RM was diluted with ice cold water (300 mL) and extracted with EtOAc (2 x 500 mL). The combined organic layers were washed with brine solution (200 mL), dried over Na_2SO_4, filtered, and concentrated under reduced pressure. The residue was purified by FCC on silica gel using a gradient of 0-30% EtOAc in Pet. ether to afford ethyl 3-(((tert-butyldimethylsilyl)oxy)methyl)-2-oxopyrrolidine-3-carboxylate (30.7 g, 71%) as an off white solid. ^{1}H NMR (400 MHz, $CDCl_3$) δ ppm: 5.76 (s, 1 H), 4.22–4.17 (m, 2 H), 4.06 (d, 1 H), 3.94 (d, 1 H), 3.46–3.42 (m, 1 H), 3.36–3.35 (m, 1 H), 2.59–2.55 (m, 1 H), 2.49–2.43 (m, 1 H), 1.27 (t, 3 H), 0.87 (d, 9 H), 0.06 (d, 6 H).

[0255] *Step 4 :* To a solution of ethyl 3-(((tert-butyldimethylsilyl)oxy)methyl)-2-oxopyrrolidine-3-carboxylate (29 g, 96.19 mmol) in EtOH (120 mL), THF (60 mL) and H_2O (30 mL) was added LiOH.H2O (20.18 g, 480.99 mmol) portion wise at 0 °C. The RM was stirred for 16 h at RT. After completion, the volatiles were removed under reduced pressure. The residue was diluted with cold water (20 mL) and then acidified with saturated aqueous Citric acid solution (pH~4). The solid was filtered, washed with water (10 mL) followed by water (10 mL), dried under vacuum to afford 3-(((tert-butyldimethylsilyl)oxy)methyl)-2-oxopyrrolidine-3-carboxylic acid (16.7 g, 63%) as a white solid. ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 7.82 (s, 1 H), 3.88 (d, 1 H), 3.70 (d, 1 H), 3.27–3.21 (m, 1 H), 3.17–3.12 (m, 1 H), 2.34–2.32 (m, 1 H), 2.24–2.22 (m, 1 H), 0.84 (s, 9 H), 0.01 (d, 6 H).

[0256] *Step 5* : To a stirred solution of 3-(((tert-butyldimethylsilyl)oxy)methyl)-2-oxopyrrolidine-3-carboxylic acid (9.5 g, 34.74 mmol) in THF (40 mL) and benzene (120 mL) were added TEA (14.65 mL, 104.24 mmol) followed by Diphenylphosphoryl azide (19.12 g, 69.49 mmol) at RT. The RM was stirred at RT for 2 h. After completion, the RM was quenched with ice cold water (100 mL) and extracted with EtOAc (2 × 200 mL). The combined organic layers were washed with saturated aqueous sodium bicarbonate (2 × 50 mL), brine solution (50 mL), then dried

over Na_2SO_4, filtered, and concentrated under reduced . The residue was dissolved in THF (40 mL) and benzene (120 mL). Then, Benzyl alcohol (7.51 g, 69.49 mmol) was added at RT. The RM was stirred at 55 °C for 16 h. After completion, the RM was diluted with ice-cold water (100 mL) and extracted with EtOAc (2 × 200 mL). The combined organic layers were washed with brine solution (100 mL), dried over Na_2SO_4, filtered, and concentrated under reduced pressure. The residue was purified by FCC on silica gel using a gradient of 0-40% EtOAc in Pet. ether to afford benzyl (3-(((tert-butyldimethylsilyl)oxy)methyl)-2-oxopyrrolidin-3-yl)carbamate (9 g, 68%). ^{1}H NMR (400 MHz, $CDCl_3$) δ ppm: 7.37–7.29 (m, 5 H), 5.84 (brs, 1 H), 5.42 (brs, 1 H), 5.07 (s, 2 H), 3.85 (d, 1 H), 3.67 (d, 1 H), 3.39–3.33 (m, 2 H), 2.63–2.62 (m, 1 H), 2.53–2.51 (m, 1 H), 0.88 (s, 9 H), 0.05 (d, 6 H).

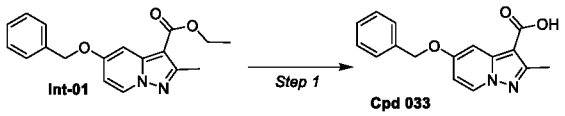
[0257] *Step 6* : To a stirred solution of benzyl (3-(((tert-butyldimethylsilyl)oxy)methyl)-2-oxopyrrolidin-3-yl)carbamate (11 g, 29.05 mmol) in MeOH (150 mL) was added PTSA monohydrate (2.21 g, 11.62 mmol) in MeOH (50 mL) over 2 h at 0 °C. The RM was stirred for 16 h at RT. After completion, the RM was concentrated under reduced pressure and the residue was quenched with ice-cold water (50 mL) and extracted with 10% MeOH in DCM (3 × 50 mL). The combined organic layer was dried over Na_2SO_4, filtered, and concentrated under reduced pressure. The residue was triturated with n-pentane (3 × 15 mL) followed by diethyl ether (15 mL), filtered and dried under vacuum to afford benzyl (3-(hydroxymethyl)-2-oxopyrrolidin-3-yl)carbamate (7 g, 91%) as an off white solid. ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 7.66 (s, 1 H), 7.38–7.29 (m, 5 H), 7.08 (s, 1 H), 4.98–4.95 (m, 3 H), 3.46–3.38 (m, 2 H), 3.18–3.15 (m, 1 H), 3.13–3.07 (m, 1 H), 2.28–2.25 (m, 2 H). 3.5 g of benzyl (3-(hydroxymethyl)-2-oxopyrrolidin-3-yl)carbamate was purified by chiral SFC prep.[Preparative SFC Conditions: Column: Chiral peak IF (250 × 30 × 5µm), %CO2: 65%, %Co-solvent: 35% (100% Methanol), Total Flow: 90 g/min, Back Pressure: 100.0 bar, Temperature: 30 °C, Wavelength: 215 nm, Stack time: 7.2 min, Solubility: 100 ml of MeOH.] The collected pure fractions were concentrated under reduced pressure to afford two isomers **En1** (the first eluting) and **En2** (the second eluting).

[0258] *Step 7* : To a stirred solution of benzyl (3-(hydroxymethyl)-2-oxopyrrolidin-3-yl)carbamate **En1** (1.4 g, 5.297 mmol) in Ethanol (30 mL) was added Pd/C (450 mg) at RT. The RM was stirred under hydrogen gas pressure (70 psi, Parr shaker) at RT for 16 h. After completion, the RM was filtered through a small pad of Celite, and washed with MeOH (50 mL). The filtrate concentrated under reduced pressure. The residue was triturated with diethyl ether (2 × 5 mL) and dried under high vacuum to afford 3-amino-3-(hydroxymethyl)pyrrolidin-2-one (**Int-16 – En1**) (610 mg, 88%) as an off-white solid. 1H NMR (400 MHz, DMSO-d6) δ ppm: 7.54 (s, 1 H), 4.73 (t, 1 H), 3.36–3.34 (m, 1 H), 3.18–3.12 (m, 2 H), 3.10–3.04 (m, 1 H), 2.22–2.15 (m, 1 H), 1.76–1.72 (m, 1 H), 1.56 (s, 2 H). UPLC: Rt = 2.29 min (98%).

[0259] *Step 8* : To a stirred solution of benzyl (3-(hydroxymethyl)-2-oxopyrrolidin-3-yl)carbamate **En2** (1.2 g, 4.54 mmol) in Ethanol (30 mL) was added Pd/C (350 mg) at RT. The

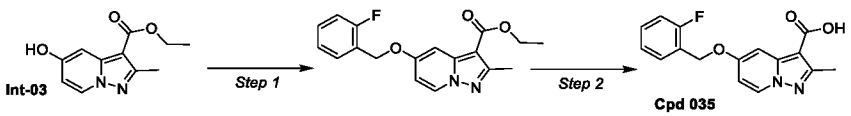
RM was stirred under hydrogen gas pressure (70 psi, Parr shaker) at RT for 16 h. After completion, the RM was filtered through a small pad of Celite, and washed with MeOH (50 mL). The filtrate was concentrated under reduced pressure. The residue was triturated with diethyl ether (2 × 5 mL) and dried under high vacuum to afford 3-amino-3-(hydroxymethyl)pyrrolidin-2-one (**Int-16 – En2**) (550 mg, Yield: 93%) as an off-white solid. ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 7.54 (s, 1 H), 4.73 (brs, 1 H), 3.36–3.32 (m, 1 H), 3.18–3.12 (m, 2 H), 3.10–3.04 (m, 1 H), 2.22–2.15 (m, 1 H), 1.76–1.71 (m, 1 H), 1.57 (s, 2 H).

[0260] **Synthesis of 5-(benzyloxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxylic acid (Cpd 033).**



[0261] *Step 1* : A sealed tube was charged with ethyl 5-(benzyloxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxylate (**Int-01**) (0.14 g, 0.45 mmol, 1 eq) and a mixture of EtOH/MeOH/THF/H2O (1/1/0.5/1,5 mL). Then potassium hydroxide (0.126 g; 2.26 mmol; 5 eq) was added. The tube was sealed and irradiated in a microwave oven at 160 °C for 30 min. The mixture was cooled to ambient temperature and the solvent was evaporated. The remaining was diluted with water and acidified with 2N hydrochloric acid. The precipitate was collected by filtration, washed with water, acetone then hot ethyl acetate and dried to afford 0.117 g (92%) of 5-(benzyloxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxylic acid (**Cpd 033**) as a white solid.

[0262] **Synthesis of 5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridine-3-carboxylic acid (Cpd 035).**



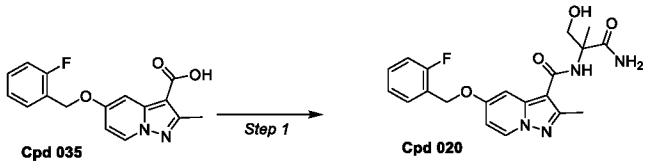
[0263] *Step 1* : To a stirred solution of ethyl 5-hydroxy-2-methylpyrazolo[1,5-a]pyridine-3-carboxylate (Int-03) (2.0 g, 9.09 mmol) in MeCN (25 mL) was added Cs_2CO_3 (5.9 g, 18.18 mmol) and followed by addition of 2-fluorobenzyl methanesulfonate (2.78 g, 13.6 mmol) at RT. The reaction mixture was heated to 80 °C, stirred for 6 h at 80 °C. The reaction mixture was filtered over celite bed, and celite bed was washed with ethyl acetate (2 x 30 mL). The filtrate was concentrated under reduced pressure to get crude. Crude was purified by column chromatography over silica gel (100 - 200 mesh) using 15% ethyl acetate in pet ether as an eluent to afford ethyl 5-((2-fluorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxylate (2.5 g, 83%) as an off-white solid. TLC system: 40% Ethyl acetate in Pet ether; RF: 0.6..

[0264] *Step 2* : To a stirred solution of ethyl 5-((2-fluorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxylate (2.0 g, 6.09 mmol) in EtOH: THF: H2O (1:1:1, 30 mL) was added

NaOH (1.46 g, 36.5 mmol) at RT. The reaction mixture was stirred for 6 h at 90 °C. The reaction mixture was concentrated, diluted with water (50 mL), acidified to pH ~2 with 1N aq. HCl solution, and stirred for 30 minutes. The precipitated solid was filtered, washed with water (10 mL) and dried under vacuum to afford 5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridine-3-carboxylic acid (**Cpd 035**) (1.5 g, 82%) as an off-white solid. TLC system: 50% Ethyl acetate in Pet ether; RF: 0.2.

[0265] The following compound was prepared in a similar manner (use of appropriate reagents (chiral or racemic) and purification methods (including chiral HPLC or chiral SFC) known to the person skilled in the art) as described for **Cpd 035 : Cpd 034.**

[0266] **Synthesis of 2-({5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-2-methylpropanamide (Cpd 020).**



Cpd 035 Cpd 020

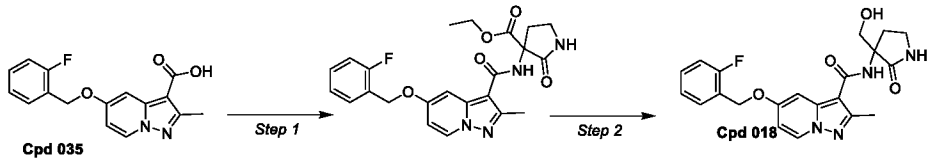
[0267] *Step 1* : To a stirred solution of 5-((2-fluorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxylic acid (Cpd 035) (500 mg, 1.6 mmol) in DMF (10 mL) was added HATU (1.26 g, 3.3 mmol), DIPEA (0.6 mL, 3.3 mmol) at 0 °C and followed by addition of 2-amino-3-hydroxy-2-methylpropanamide (600 mg, crude). The reaction mixture was stirred for 16 h at RT. The reaction mixture was diluted with water (25 mL) and extracted with ethyl acetate (3 x 20 mL). Combined organic layers were washed with water (2 x 25 mL), dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to get crude. Crude was purified by grace column chromatography using 0.1% formic acid in water and acetonitrile as an eluent to afford 2-({5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-2-methylpropanamide (**Cpd 020**) (90 mg, 14%) as an off-white solid. TLC system: 70% Ethyl acetate in Pet ether; RF: 0.1.

[0268] A preparative chiral SFC was performed on the racemic mixture of **Cpd 020** to afford **Cpd 020 – En1 and Cpd 020– En2.**

[0269] The following compounds were prepared in a similar manner (use of appropriate reagents (chiral or racemic) and purification methods (including chiral HPLC or chiral SFC) known to the person skilled in the art) as described for **Cpd 020 – En1 and Cpd 020 – En2** : **Cpd 001, Cpd 002, Cpd 003, Cpd 004, Cpd 005, Cpd 006, Cpd 007, Cpd 008, Cpd 010, Cpd 012, Cpd 013, Cpd 014, Cpd 025 – En1, Cpd 025 – En2, Cpd 031 – En1, Cpd 031 – En2, Cpd 055, Cpd 056, Cpd 057, Cpd 058 – En1, Cpd 058 – En2, Cpd 059 – En1, Cpd 059 – En2, Cpd 061 – En1, Cpd 061 – En2, Cpd 062 – En1, Cpd 062 – En2, Cpd 063 – En1, Cpd 063 – En2, Cpd 064 – En1, Cpd 064 – En2, Cpd 066 – En1, Cpd 066 – En2, Cpd 068 – En1, Cpd 068 – En2, Cpd 074 – En1, Cpd 074 – En2, Cpd 081 – En1, Cpd 081 – En2, Cpd 090 – En1, Cpd 090 – En2, Cpd 091 – En1, Cpd 091 – En2.**

[0270]

[0271] **Synthesis of 5-[(2-fluorophenyl)methoxy]-N-[3-(hydroxymethyl)-2-oxopyrrolidin-3-yl]-2-methylpyrazolo[1,5-a]pyridine-3-carboxamide (Cpd 018).**

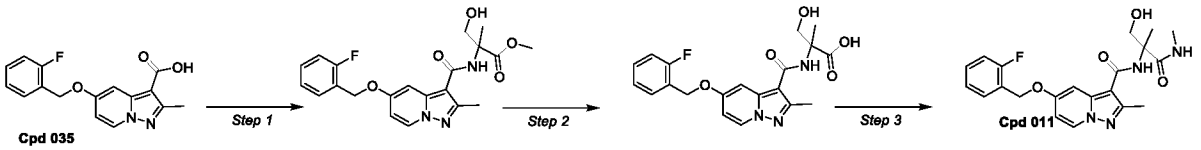


[0272] *Step 1* : To a stirred solution of 5-((2-fluorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxylic acid (Cpd 035) (500 mg, 1.60 mmol) in DMF (10 mL) was added HATU (1.26 g, 3.3 mmol), DIPEA (0.6 mL, 3.3 mmol) at 0 °C and followed by addition of ethyl 3-amino-2-oxopyrrolidine-3-carboxylate (429 mg, 2.4 mmol). The reaction mixture was stirred for 16 h at RT and reaction progress was monitored by TLC. The reaction mixture was diluted with water (25 mL) and extracted with ethyl acetate (2 x 25 mL). Combined organic layers were washed with water (2 x 25 mL), dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to get crude. Crude was purified by grace column chromatography using 0.1% formic acid in water and acetonitrile as an eluent to afford ethyl 3-(5-((2-fluorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxamido)-2-oxopyrrolidine-3-carboxylate (300 mg, 40%) as a white solid. TLC system: 50% Ethyl acetate in Pet ether; RF: 0.15.

[0273] *Step 2* : To a stirred solution of ethyl 3-(5-((2-fluorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxamido)-2-oxopyrrolidine-3-carboxylate (300 mg, 0.66 mmol) in methanol (20 mL) was added $NaBH_4$ (100 mg, 2.64 mmol) at 0 °C. The reaction mixture was stirred for 1 h at RT and the reaction progress was monitored by TLC. The reaction mixture was concentrated, diluted with ice water (20 mL), and stirred for 15 min. The precipitated solid was filtered and dried under vacuum to afford 5-[(2-fluorophenyl)methoxy]-N-[3-(hydroxymethyl)-2-oxopyrrolidin-3-yl]-2-methylpyrazolo[1,5-a]pyridine-3-carboxamide (**Cpd 018**) (210 mg, 77%) as a white solid. TLC system: 70% Ethyl acetate in pet ether; RF: 0.15.

[0274] A preparative chiral SFC was performed on the racemic mixture of **Cpd 018** to afford **Cpd 018 – En1 and Cpd 018– En2.**

[0275] **Synthesis of 2-({5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-N,2-dimethylpropanamide (Cpd 011).**



[0276] *Step 1* : To a solution of 5-((2-fluorobenzyl)oxy)-2-methylpyrazolo [1,5-a]pyridine-3-carboxylic acid (Cpd 035) (1.2 g, 4.00 mmol), HATU (3.0 g, 8.00 mmol) and DIPEA (2.6 mL, 16.00 mmol) in DMF (20 mL) was added methyl 2-amino-3-hydroxy-2-methylpropanoate (798 mg, 6.00 mmol) at 0°C under argon atmosphere. The resulting reaction mixture was stirred at

room temperature for 16 h and reaction progress was monitored by TLC. The reaction mixture was diluted with ice water (50 mL) and the precipitated solid was collected by filtration. The crude was purified by GRACE flash chromatography using 0.1% formic acid in water and acetonitrile as an eluent to afford methyl 2-(5-((2-fluorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxamido)-3-hydroxy-2-methylpropanoate (1.0 g, 62%) as an off-white solid. TLC system: 50% Ethyl acetate in pet-ether; RF: 0.2.

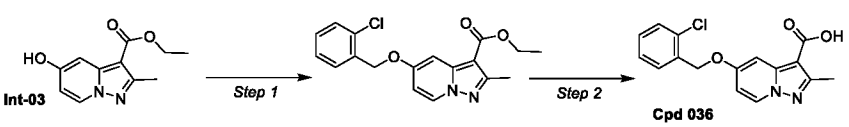
[0277] *Step 2* : A solution of NaOH (192.7 mg, 4.81 mmol) in water (15 mL) was added to a stirred solution of methyl 2-(5-((2-fluorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxamido)-3-hydroxy-2-methylpropanoate (1.0 g, 2.40 mmol) in MeOH (20 mL) and THF (20 mL) at RT. The RM was stirred for 16 h at 70 °C. The reaction mixture was concentrated under reduced pressure, diluted with water (20 mL), pH was adjusted to ~3 with 1N aq. HCl solution and extracted with ethyl acetate (3 x 50 mL). Combined organic layers were dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to afford 2-(5-((2-fluorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxamido)-3-hydroxy-2-methylpropanoic acid (700 mg, 72%) as an off-white solid. Proceeded to next step without purification. TLC system: 10% MeOH in dichloromethane; RF: 0.2.

[0278] *Step 3* : To a solution of 2-(5-((2-fluorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxamido)-3-hydroxy-2-methylpropanoic acid (300 mg, 074 mmol), HATU (568 mg, 1.49 mmol) and DIPEA (0.49mL, 2.99 mmol) in DMF (10 mL) was added methenamine hydrochloride (151 mg, 2.24 mmol) at 0°C under argon atmosphere. The resulting reaction mixture was stirred at room temperature for 16 h and reaction progress was monitored by TLC. The reaction mixture was diluted with ice water (50 mL) and the precipitated solid was collected by filtration to give crude. Crude was purified by GRACE flash chromatography using 0.1% formic acid in water and acetonitrile as an eluent to afford 2-({5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-N,2-dimethylpropanamide (**Cpd 011**) (200 mg; 64%) as an off-white solid. TLC system: 50% Ethyl acetate in pet-ether; RF: 0.3.

[0279] A preparative chiral SFC was performed on the racemic mixture of **Cpd 011** to afford **Cpd 011 – En1 and Cpd 011– En2.**

[0280] The following compounds were prepared in a similar manner (use of appropriate reagents (chiral or racemic) and purification methods (including chiral HPLC or chiral SFC) known to the person skilled in the art) as described for **Cpd 011 – En1 and Cpd 011 – En2** : **Cpd 009 – En1, Cpd 009 – En2, Cpd 017 – En1, Cpd 017 – En2,**

[0281] **Synthesis of 5-[(2-chlorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridine-3-carboxylic acid (Cpd 036).**

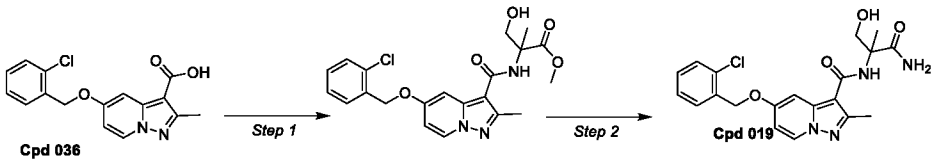


[0282] *Step 1* : To a pre-stirred solution of ethyl 5-hydroxy-2-methylpyrazolo[1,5-a]pyridine-3-

carboxylate (Int-03) (500 mg, 2.272 mmol) and (2-chlorophenyl)methanol (645.4 mg, 4.545 mmol) in THF (30 mL) was added ADDP (1.1 g, 4.545 mmol) and n-Bu3P (0.918 g, 4.545 mmol) at 0 °C. The reaction mixture was stirred for 16 h at RT and reaction progress was monitored by TLC. The reaction mixture was diluted with water (100 mL) and extracted with ethyl acetate (2 x 100 mL). Combined organic layers were washed with brine (100 mL), dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to get crude. Crude was purified by column chromatography using 5% ethyl acetate in pet ether as an eluent to afford ethyl 5-((2-chlorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxylate (550 mg, 70%) as an off-white solid. TLC system: 30% Ethyl acetate in pet ether; RF: 0.5.

[0283] *Step 2* : To a pre-stirred solution of ethyl 5-((2-chlorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxylate (500 mg, 1.92 mmol) in Ethanol (15 mL) was added 2N NaOH solution (10 mL) at RT and the resulting reaction mixture was stirred for 16 h at 80 °C. The reaction progress was monitored by TLC. Reaction mixture was concentrated under reduced pressure and diluted with water (40 mL), pH was adjusted to ~3 with 1N aq. HCl solution. Solid precipitated was collected by filtration, dried under vacuum to afford 5-[(2-chlorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridine-3-carboxylic acid (**Cpd 036**) (450 mg, 97 %) as a pale yellow solid. TLC system: 50% Ethyl acetate in pet ether; RF: 0.2

[0284] **Synthesis of 2-({5-[(2-chlorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-2-methylpropanamide (Cpd 019).**



[0285] *Step 1*: Methyl 2-amino-3-hydroxy-2-methylpropanoate (420 mg, 3.164 mmol) was added to a stirred solution of 5-(benzyloxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxylic acid (Cpd 036) (500 mg, 1.582 mmol), HATU (1.2 g, 3.164 mmol) and DIPEA (1.4 mL, 7.911 mmol) in DMF (5 mL) at 0°C and the resulting reaction mixture was stirred at room temperature for 16 h. The reaction mixture was diluted with water (60 mL) and extracted with 10% methanol in dichloromethane (2 x 20 mL). Combined organic layers were dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to afford methyl 2-(5-((2-chlorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxamido)-3-hydroxy-2-methylpropanoate (450 mg, crude) as a white solid. TLC system: 5% Methanol in dichloromethane; RF: 0.01.

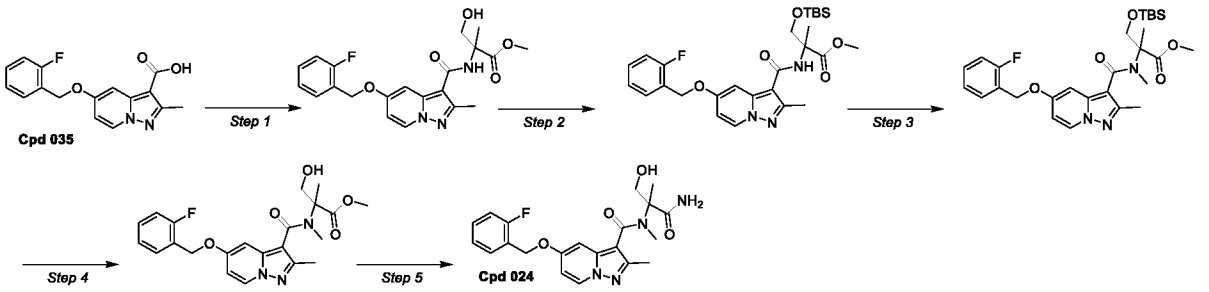
[0286] *Step 2* : Ammonia in methanol (7M) (25 mL) was added to a solution of methyl (5-((2-chlorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carbonyl)serinate (450 mg, crude) in a sealed tube. the reaction mixture was stirred at 90 °C for 16 h. The reaction was monitored by TLC. The reaction mixture was cooled and concentrated under reduced pressure to get crude. Crude was purified by GRACE flash chromatography using 45 to 50% acetonitrile and 0.1% formic acid in water as an eluent to afford 2-({5-[(2-chlorophenyl)methoxy]-2-

methylpyrazolo[1,5-a]pyridin-3-yl}formamido)-3-hydroxy-2-methylpropanamide (**Cpd 019**) (120 mg, 23%) as an off-white solid. TLC system: 10% Methanol in dichloromethane; RF: 0.01

[0287] A preparative chiral SFC was performed on the racemic mixture of **Cpd 019** to afford **Cpd 019 – En1 and Cpd 019– En2.**

[0288] The following compounds were prepared in a similar manner (use of appropriate reagents (chiral or racemic) and purification methods (including chiral HPLC or chiral SFC) known to the person skilled in the art) as described for **Cpd 019 – En1 and Cpd 019 – En2** : **Cpd 015 – En1, Cpd 015 – En2, Cpd 016 – En1, Cpd 016 – En2, Cpd 021 – En1, Cpd 021 – En2, Cpd 022 – En1, Cpd 022 – En2, Cpd 023 – En1, Cpd 023 – En2, Cpd 026 – En1, Cpd 026 – En2, Cpd 027 – En1, Cpd 027 – En2, Cpd 028 – En1, Cpd 028 – En2, Cpd 029 – En1, Cpd 029 – En2, Cpd 030 – En1, Cpd 030 – En2, Cpd 032 – En1, Cpd 032 – En2.**

[0289] **Synthesis of 2-(1-{5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}-N-methylformamido)-3-hydroxy-2-methylpropanamide (Cpd 024).**



[0290] *Step 1* : To a solution of 5-((2-fluorobenzyl)oxy)-2-methylpyrazolo [1,5-a]pyridine-3-carboxylic acid (Cpd 035) (1.2 g, 4.00 mmol), HATU (3.0 g, 8.00 mmol) and DIPEA (2.6 mL, 16.00 mmol) in DMF (20 mL) was added methyl 2-amino-3-hydroxy-2-methylpropanoate (798 mg, 6.00 mmol) at 0°C under argon atmosphere. The resulting reaction mixture was stirred at room temperature for 16 h and reaction progress was monitored by TLC. The reaction mixture was diluted with ice water (50 mL) and the precipitated solid was collected by filtration. The crude was purified by GRACE flash chromatography using 0.1% formic acid in water and acetonitrile as an eluent to afford methyl 2-(5-((2-fluorobenzyl)oxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxamido)-3-hydroxy-2-methylpropanoate (1.0 g, 62%) as an off-white solid. TLC system: 50% Ethyl acetate in pet-ether; RF: 0.2.

[0291] *Step 2* : To a solution of methyl 2-(5-(2-fluorobenzyloxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxamido)-3-hydroxy-2-methylpropanoate (1.0 g, 2.409 mmol), in dichloromethane (50 mL) was added Imidazole (0.490 g, 7.228 mmol) and TBSCl (0.542 g, 3.614 mmol) at RT. The resulting reaction mixture was stirred at room temperature for 3 h and reaction progress was monitored by TLC. The reaction mixture was poured into ice water (150 mL) and extracted with dichloromethane (2 x 150 mL). Combined organic layers were washed with water (2 x 150 mL), brine (150 mL), dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to afford methyl 3-(tert-butyldimethylsilyloxy)-2-(5-(2-fluorobenzyloxy)-2-

methylpyrazolo[1,5-a]pyridine-3-carboxamido)-2-methylpropanoate (1.5 g, crude) as a pale brown gummy solid. TLC system: 50% ethyl acetate in n-Hexane RF: 0.6.

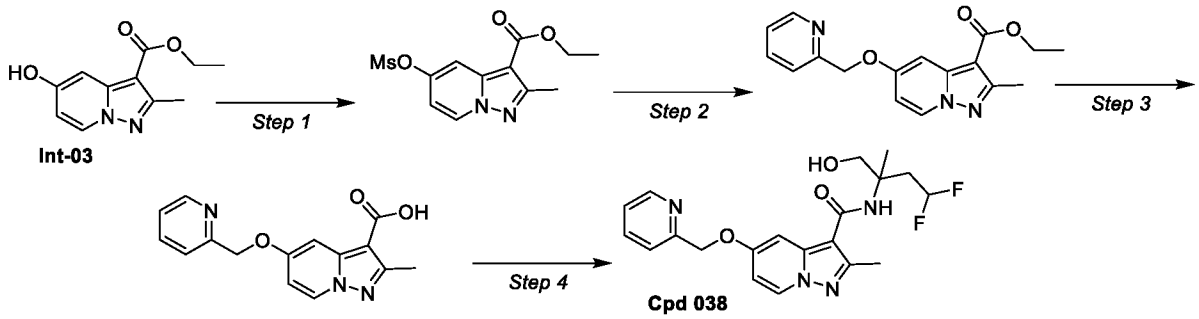
[0292] *Step 3* : To a solution of methyl 3-(tert-butyldimethylsilyloxy)-2-(5-(2-fluorobenzyloxy)-2-methylpyrazolo[1,5-a]pyridine-3-carboxamido)-2-methylpropanoate (1.5 g, 2.835 mmol) in THF (100 mL) was added NaH (216 mg, 5.671 mmol) and Methyl iodide (805 mg, 5.671 mmol) at 0 °C. The RM was stirred at RT for 3 h and reaction progress was monitored by TLC. The reaction mixture was poured into ice water (150 mL) and extracted with ethyl acetate (2 x 150 mL). Combined organic layers were washed with water (2 x 150 mL), brine (150 mL), dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to afford methyl 3-(tert-butyldimethylsilyloxy)-2-(5-(2-fluorobenzyloxy)-N,2-dimethylpyrazolo[1,5-a]pyridine-3-carboxamido)-2-methylpropanoate (1.5 g, Crude) as a pale brown gummy solid. TLC system: 30% ethyl acetate in n-Hexane RF: 0.2.

[0293] *Step 4* : To a solution of methyl 3-(tert-butyldimethylsilyloxy)-2-(5-(2-fluorobenzyloxy)-N,2-dimethylpyrazolo[1,5-a]pyridine-3-carboxamido)-2-methylpropanoate (1.5 g, 2.762 mmol) in THF (50 mL) was added TBAF in THF (1M, 8.2 mL, 8.287 mmol) at 0 °C. The resulting reaction mixture was stirred at room temperature for 1 h and reaction progress was monitored by TLC. The reaction mixture was poured into ice water (150 mL) and extracted with ethyl acetate (2 x 100 mL). Combined organic layers were washed with water (2 x 100 mL), brine (100 mL), dried over anhydrous Na_2SO_4 and concentrated under reduced pressure to give crude. Crude product was purified by GRACE flash chromatography using 30 to 50% acetonitrile and 0.1% formic acid in water to afford methyl 2-(5-(2-fluorobenzyloxy)-N,2-dimethylpyrazolo[1,5-a]pyridine-3-carboxamido)-3-hydroxy-2-methylpropanoate as an off - white solid (500 mg, 39%). TLC system: 70% ethyl acetate in n-Hexane RF: 0.2.

[0294] *Step 5* : Ammonia in methanol (7M, 25 mL) was added to a solution of methyl 2-(5-(2-fluorobenzyloxy)-N,2-dimethylpyrazolo[1,5-a]pyridine-3-carboxamido)-3-hydroxy-2-methylpropanoate (450 mg) in a sealed tube. The reaction mixture was heated to 100 °C and stirred at 100 °C for 16 h. The reaction was monitored by TLC. The reaction mixture was cooled and concentrated under reduced pressure to get crude. Crude was purified by GRACE flash chromatography using 20 to 30% acetonitrile in 0.1% formic acid - water as an eluent to afford 2-(1-{5-[(2-fluorophenyl)methoxy]-2-methylpyrazolo[1,5-a]pyridin-3-yl}-N-methylformamido)-3-hydroxy-2-methylpropanamide (**Cpd 024**) (125 mg, 18%) as an off-white solid. TLC system: 10% MeOH in dichloromethane; RF: 0.01

[0295] A preparative chiral SFC was performed on the racemic mixture of **Cpd 024** to afford **Cpd 024 – En1 and Cpd 024– En2.**

[0296] **Synthesis of N-(4,4-difluoro-1-hydroxy-2-methylbutan-2-yl)-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide (Cpd 038).**



[0297] *Step 1* : To a solution of ethyl 5-hydroxy-2-methylpyrazolo[1,5-a]pyridine-3-carboxylate (Int-03) (10.0 g, 45.40 mmol) in DCM (100 mL) was added TEA (13.9 mL, 99.89 mmol) at RT. The RM was cooled to 0 °C, MsCl (3.86 mL, 49.94 mmol) was added. The RM was stirred for 30 min at the 0°C. The RM was stirred for 4 h at RT. The RM was quenched with saturated $NaHCO_3$ (50 mL), extracted with DCM (2 x 100 mL). Combined organic layer was washed with brine (100 mL) and dried over Na_2SO_4, filtered and concentrated under reduced pressure to afford ethyl 2-methyl-5-((methylsulfonyl)oxy)pyrazolo[1,5-a]pyridine-3-carboxylate as a pale brown solid (12.4 g, 91.54%). ^{1}H NMR (400 MHz, $CDCl_3$) δ ppm: 8.43 (d, 1 H), 7.97 (d, 1 H), 6.88 (dd, 1 H), 4.38 (q, 2 H), 3.26 (s, 3 H), 2.67 (s, 3 H), 1.43 (t, 3 H). *Step 2* : To a solution of ethyl 2-methyl-5-((methylsulfonyl)oxy)pyrazolo[1,5-a]pyridine-3-carboxylate (6 g, 20.113 mmol) in DMF (60.0 ml) were added pyridin-2-ylmethanol (2.195 g, 20.113 mmol), Cs_2CO_3 (9.830 g, 30.170 mmol) at RT. The RM was stirred for 16 h. The RM was quenched with water (100 mL), extracted with EtOAc (2 x 100 mL). The combined organic layers were washed with brine (100 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure. The residue was purified by FCC on silica gel using 30% EtOAc in pet ether as an eluent to afford ethyl 2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxylate as a white solid (4.5 g, 94 %). ^{1}H NMR (400 MHz, $CDCl_3$) δ ppm: 8.64 (d, 1 H), 8.25 (d, 1 H), 7.73 – 7.77 (m, 1 H), 7.50 (d, 1 H), 7.45 (d, 1 H), 7.25 – 7.29 (m, 1 H), 6.66 (dd, 1 H), 5.29 (s, 2 H), 4.35 (q, 2 H), 2.62 (s, 3 H), 1.39 (t, 3 H).

[0298] *Step 3* : To a solution of ethyl 2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxylate (4.5 g, 14.454 mmol) in MeOH:THF:H_2O (1:1:0.5) (50.0 mL) was added NaOH (5.781 g, 144.536 mmol) at RT. The RM was stirred at 50 °C for 16 h. After completion, the volatiles were removed under reduced pressure. The residue was acidified with AcOH (pH~4), precipitated solid was filtered, washed with water (50.0 mL) and dried to afford 2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxylic acid as an off-white solid (3.2 g). ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 12.16 (br, s, 1 H), 8.59 (d, 2 H), 7.86 (dt, 1 H), 7.56 (d, 1 H), 7.36 – 7.39 (m, 2 H), 6.83 (dd, 1 H), 5.29 (s, 2 H), 2.50 (s, 3 H).

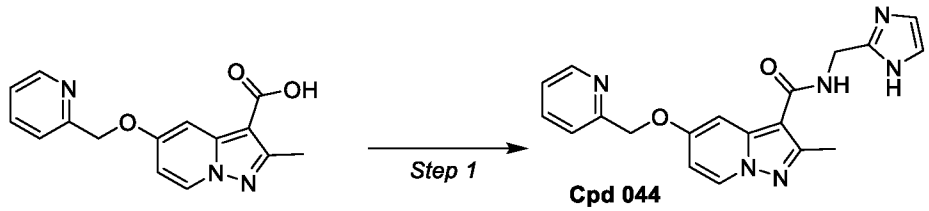
[0299] *Step 4* : To a solution of 2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxylic acid (600 mg, 2.119 mmol) and HATU (1.208 g, 3.179 mmol) in DMF (10.0 mL) were added DIPEA (1.10 mL, 6.358 mmol) and 2-amino-4,4-difluoro-2-methylbutan-1-ol (442 mg, 3.179 mmol) at 0 °C. The RM was stirred at RT for 2 h. After completion, the RM was diluted with cold water (50 mL), extracted with EtOAc (2 x 50 mL). The combined organic layers

were washed with a saturated solution of $NaHCO_3$ (50 mL), brine (50 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure. The compound was purified by Prep. HPLC. [Prep. HPLC conditions: Mobile phase: 10mM ABC in Water, Mobile phase B: ACN, Column: YMC TRIART C18 (25 x 150mm) 5µm, FLOW: 19 ml/min, Method: (T in min./ % of B): 0/25,2/25,10/40,15.50/40,15.51/98,18/98,18.10/25,21/25, Solubility: ACN+Water+THF, Temperature: RT.] The desired fractions were evaporated and lyophilized to afford N-(4,4-difluoro-1-hydroxy-2-methylbutan-2-yl)-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide (Cpd 038) as an off-white solid (400 mg, 46.67%).

[0300] A preparative chiral SFC was performed on the racemic mixture of **Cpd 038** to afford **Cpd 038 – En1 and Cpd 038 – En2.**

[0301] The following compounds were prepared in a similar manner (use of appropriate reagents (chiral or racemic) and purification methods (including chiral HPLC or chiral SFC) known to the person skilled in the art) as described for **Cpd 038 – En1 and Cpd 038 – En2 : Cpd 037 – En1, Cpd 037 – En2, Cpd 042, Cpd 043, Cpd 045, Cpd 046, Cpd 047, Cpd 048,**

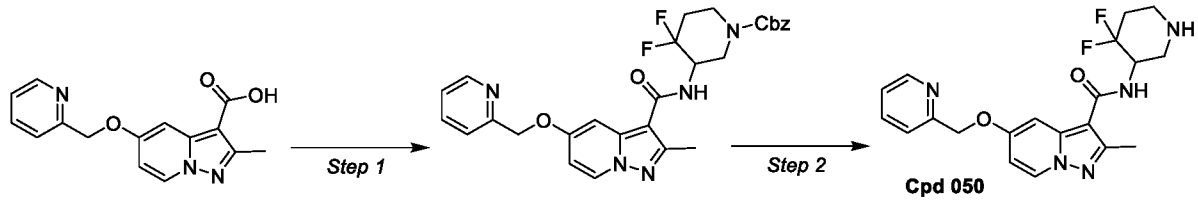
[0302] **Synthesis of N-[(1H-imidazol-2-yl)methyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide (Cpd 044).**



Cpd 044

[0303] *Step 1* : To a solution of 2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxylic acid (200 mg, 0.706 mmol), EDCI (202 mg, 1.059 mmol) and 1-Hydroxybenzotriazole hydrate (143 mg, 1.059 mmol) in DMF (5.0 mL) were added DIPEA (0.65 mL, 3.53 mmol) and (1H-imidazol-2-yl)methanamine dihydrochloride (238 mg, 1.412 mmol) at 0 °C. The RM stirred at RT for 16 h. After completion, the RM was diluted with cold water (30 mL), extracted with EtOAc (2 x 100 mL). The combined organic layers were washed with saturated $NaHCO_3$ solution (30 mL), brine (30 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure. The compound was purified by Prep. HPLC. [Prep. HPLC conditions: Mobile phase: 10mM ABC in Water, Mobile phase B: ACN, Column: XB, C18 (250 x 19) mm, 5µm, FLOW: 13 ml/min, Method: (T in min./ % of B): 0/20,2/20,12/45, Solubility: ACN+Water+DMSO, Temperature: RT.] The desired fractions were evaporated and lyophilized to afford N-[(1H-imidazol-2-yl)methyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide (Cpd 044) as an off-white solid (58 mg, 22%).

[0304] **Synthesis of N-(4,4-difluoropiperidin-3-yl)-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide (Cpd 050).**



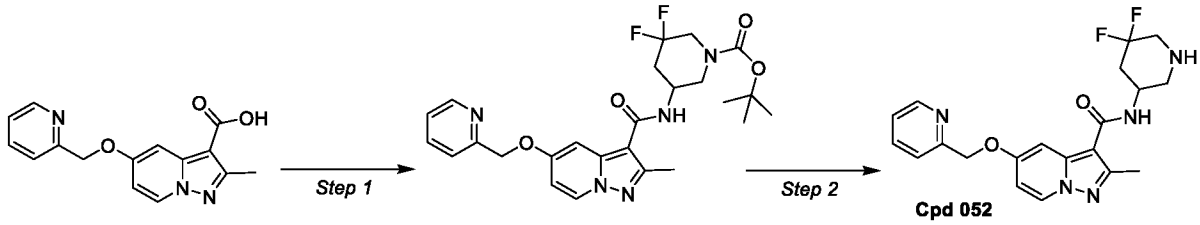
[0305] *Step 1* : To a solution of 2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxylic acid (250 mg, 0.882 mmol) in DMF (10 mL) were added HATU (500 mg, 1.32 mmol) , DIPEA (0.5 mL, 2.65 mmol) and tert-butyl 3-amino-4,4-difluoropiperidine-1-carboxylate (310 mg, 1.32 mmol) at 0 °C . The RM was stirred at RT for 16 h. After completion, the RM was diluted with cold water (30 mL), extracted with EtOAc (2 x 30 mL). The combined organic layers were washed with sat. bicarbonate solution (30 mL), brine (30 mL), dried Na_2SO_4, filtered and concentrated under reduced pressure to afford tert-butyl 4,4-difluoro-3-(2-methyl-5-(pyridin-2-ylmethoxy) pyrazolo[1,5-a] pyridine-3-carboxamido) piperidine-1-carboxylate as off-white solid. (325 mg, 73%). ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 8.60 - 8.55 (m, 2 H), 7.88 - 7.83 (m, 1 H), 7.57 - 7.53 (m, 2 H), 7.39 - 7.36 (m, 1 H), 7.23 (s, 1 H), 6.79 - 6.76 (m, 1 H), 5.26 (s, 2 H), 4.50 - 4.32 (m, 1 H), 3.95 - 3.72 (m, 2 H), 3.15 (t, 2 H), 2.4 - 2.21 (m, 1 H), 2.15 - 1.95 (m, 1 H), 1.46 (s, 9 H) (CH3 protons merged in DMSO peak).

[0306] Step 2 : To a solution of tert-butyl 4,4-difluoro-3-(2-methyl-5-(pyridin-2-ylmethoxy) pyrazolo[1,5-a] pyridine-3-carboxamido) piperidine-1-carboxylate (300 mg, 0.598 mmol) in DCM (10 mL) was added 4N HCl in dioxane (0.8 mL) at 0 °C. The RM was stirred at RT for 2 h. After completion, the RM was concentrated under reduced pressure. The residue was triturated with n-pentane (20 mL) and dried to afford crude compound as an off white solid (HCl salt). The solid was dissolved in water (25 mL), basified with sat sodium bicarbonate solution (pH~ 10), extracted with EtOAc (2 x 25 mL). Combined organic layers were washed with brine (30 mL), dried over sodium sulphate, concentrated under reduced pressure to afford N-(4,4-difluoropiperidin-3-yl)-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide (**Cpd 050**).as off white solid (170 mg, 71%).

[0307] A preparative chiral SFC was performed on the racemic mixture of **Cpd 050** to afford **Cpd 050 – En1 and Cpd 050– En2.**

[0308] The following compounds were prepared in a similar manner (use of appropriate reagents (chiral or racemic) and purification methods (including chiral HPLC or chiral SFC) known to the person skilled in the art) as described for **Cpd 050 – En1 and Cpd 050 – En2 : Cpd 049 – En1, Cpd 049 – En2, Cpd 084 – En1, Cpd 084 – En2.**

[0309] **Synthesis of N-(5,5-difluoropiperidin-3-yl)-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide (Cpd 052).**



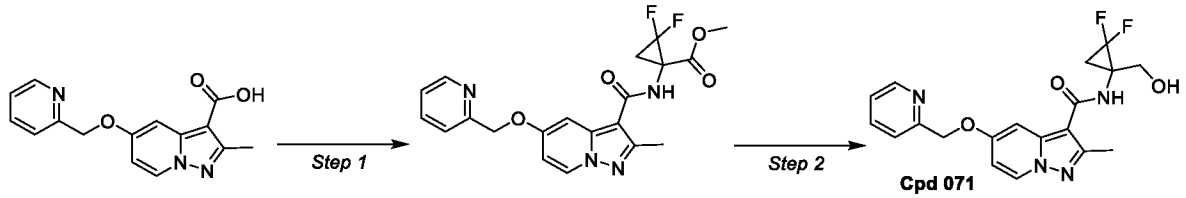
[0310] *Step 1* : To a solution of 2-methyl-5-(pyridin-2-ylmethoxy)-2H-indazole-3-carboxylic acid (300 mg, 1.059 mmol) in DMF (20 mL) were added HATU (805.3 mg, 2.118 mmol), DIPEA (0.92 mL, 5.295 mmol) and tert-butyl 5-amino-3,3-difluoropiperidine-1-carboxylate (300.2 mg, 1.271 mmol) at 0 °C. The RM was stirred at RT for 16 h. After completion, the RM was treated with ice-cold water (30 mL), extracted with EtOAc (2 x 40 mL). Combined organic layers were washed with saturated $NaHCO_3$ (20 mL), brine (20 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure. The residue was purified by FCC on silica gel using 2% MeOH in DCM as an eluent to afford tert-butyl,3,3-difluoro-5-(2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxamido) piperidine-1-carboxylate as a pale yellow liquid (500 mg).

[0311] *Step 2* : To a solution of N-(5,5-difluoropiperidin-3-yl)-2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxamide (500 mg, 0.998 mmol) in DCM (30 mL) was added 4N HCl in 1,4-Dioxane (2.0 mL) at 0 °C. The RM was stirred at RT for 3 h. After completion, the RM was concentrated under reduced pressure. The residue was basified with a saturated solution of $NaHCO_3$ (20 mL), extracted with DCM (2 x 30 mL). Combined organic layer was dried over Na_2SO_4, filtered and concentrated under reduced pressure. The compound was purified by Prep. HPLC. [Prep. HPLC conditions: Mobile phase: 10mM ABC in Water, Mobile phase B: ACN, Column: X-SELECT CSH C18(250 x 19mm) 5µm, FLOW: 17 ml/min, Method: (T in min./ % of B): 0/15,2/15,10/35,15/35,15.1/100,20/100,20.10/15,23/15, Solubility: ACN+Water+THF, Temperature: RT.] The desired fractions were evaporated and lyophilized to afford N-(5,5-difluoropiperidin-3-yl)-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide (**Cpd 052**) (110 mg, 27.49%).

[0312] A preparative chiral SFC was performed on the racemic mixture of **Cpd 052** to afford **Cpd 052 – En1 and Cpd 052– En2.**

[0313] The following compounds were prepared in a similar manner (use of appropriate reagents (chiral or racemic) and purification methods (including chiral HPLC or chiral SFC) known to the person skilled in the art) as described for **Cpd 052 – En1 and Cpd 052 – En2 : Cpd 051 – En1, Cpd 051 – En2, Cpd 053 – En1, Cpd 053 – En2, Cpd 054 – En1, Cpd 054 – En2, Cpd 082 – En1, Cpd 082 – En2**

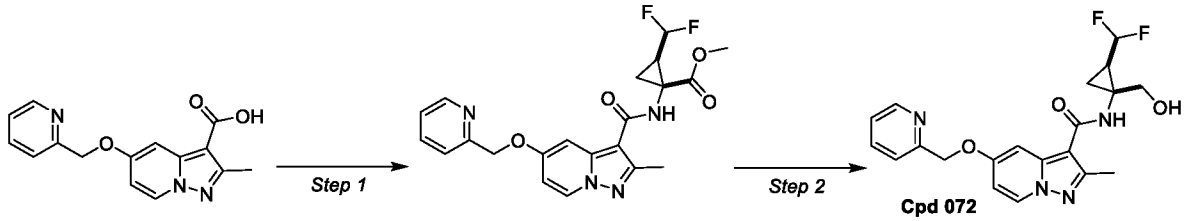
[0314] **Synthesis of N-[2,2-difluoro-1-(hydroxymethyl)cyclopropyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide (Cpd 071).**



[0315] *Step 1* : To a solution of 2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxylic acid (400 mg, 1.412 mmol) in THF (10 mL) were added PyBroP (987.36 mg, 2.118 mmol), DIPEA (1.231 mL, 7.060 mmol) at RT. The RM stirred for 10 min. After 10 min, methyl 1-amino-2,2-difluorocyclopropane-1-carboxylate hydro bromide (655.23 mg, 2.824 mmol) was added. The RM was stirred at RT for 6 h. After completion, the RM was diluted with ice-cold water (20 mL), extracted with EtOAc (2 x 30 mL). Combined organic layers were washed with saturated solution of $NaHCO_3$ (20 mL), brine (20 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure. The residue was purified by FCC on silica gel using 5% MeOH in DCM as an eluent to afford methyl 2,2-difluoro-1-(2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxamido) cyclopropane-1-carboxylate as an off white solid (190 mg, 32.32%). ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 8.57 – 8.60 (m, 2 H), 8.40 (d, 1 H), 7.84 - 7.88 (dt, 1 H), 7.50 (d, 1 H), 7.36 – 7.39 (dt, 1 H), 7.31 (d, 1 H), 6.78 – 6.81 (dd, 1 H), 5.28 (s, 2 H), 3.70 (s, 3 H), 2.60 – 2.67 (m, 1 H), 2.10 – 2.13 (m, 1 H).

[0316] *Step 2* : To a solution of methyl 2,2-difluoro-1-(2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxamido) cyclopropane-1-carboxylate (180 mg, 0.432 mmol) in ethanol (5.0 mL) was added $NaBH_4$ (49.06 mg, 1.297 mmol) portion wise at 0 °C. The RM was stirred at RT for 16 h. After completion, the RM was concentrated under reduced pressure and the obtained residue was diluted with water (30 mL) and extracted with DCM (2 x 30 mL). Organic layer was dried over Na_2SO_4, filtered and concentrated under reduced pressure. The compound was purified by Prep. HPLC. [Prep. HPLC conditions: Mobile phase: 0.1% FA in water, Mobile phase B: ACN, Column: LUNA C 18 (21.2 x 250) 5µm, FLOW: 16 ml/min, Method: (T in min./ % of B): 0/10, 2/10, 10/30, 14/30, 14.1/98, 17/98, 17.1/10, 20/10., Solubility: ACN+Water+THF, Temperature: RT.] The desired fractions were evaporated and lyophilized to afford N-[2,2-difluoro-1-(hydroxymethyl)cyclopropyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide (Cpd 071) as an off-white solid (13 mg, 7.74%).

[0317] **Synthesis of N-[cis-2-(difluoromethyl)-1-(hydroxymethyl)cyclopropyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide (Cpd 072).**



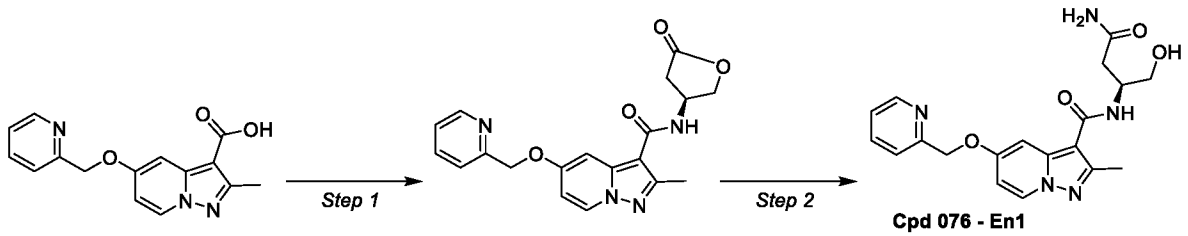
[0318] *Step 1* : To a solution of 2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxylic acid (300 mg, 1.059 mmol) in DMF (5.0 mL) were added HATU (603.99 mg, 1.588 mmol), DIPEA (0.923 mL, 5.295 mmol) at RT and stirred for 10 min. After 10 min, methyl 1-amino-2-(difluoromethyl)cyclopropane-1-carboxylate hydrochloride (320.23 mg, 1.588 mmol) was added. The RM was stirred at 50 °C for 48 h. After completion, the RM was diluted with ice-cold water (20 mL), extracted with DCM (2 x 20 mL). Combined organic layers were washed with saturated $NaHCO_3$ (20 mL), brine (20 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure to afford methyl 2-(difluoromethyl)-1-(2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxamido) cyclopropane-1-carboxylate as a pale yellow solid (240 mg, yield: 52.65%). ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 8.60 (d, 1 H), 8.55 (d, 1 H), 8.27 (s, 1 H), 7.84 - 7.88 (dt, 1 H), 7.56 (d, 1 H), 7.36 - 7.39 (dt, 1 H), 7.28 (d, 1 H), 6.75 – 6.78 (dd, 1 H), 5.82 – 6.12 (dt, 1 H), 5.30 (s, 2 H), 3.65 (s, 3 H), 2.49 (s, 3 H), 2.20 - 2.23 (m, 1 H), 1.87(t, 1 H), 1.52 - 1.56 (m, 1 H).

[0319] *Step 2* : To a solution of methyl 2-(difluoromethyl)-1-(2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxamido)cyclopropane-1-carboxylate (240 mg, 0.558 mmol) in ethanol (10 mL) was added $NaBH_4$ (105.38 mg, 2.788 mmol) portion wise at 0 °C. The RM was stirred at RT for 16 h. After completion, the RM was concentrated under reduced pressure. The residue was diluted with water (30 mL), extracted with DCM (2 x 30 mL). Combined organic layer was dried over Na_2SO_4, filtered and concentrated under reduced pressure. The compound was purified by Prep. HPLC. [Prep. HPLC conditions: Mobile phase: 10 mM ABC in water, Mobile phase B: ACN, Column: YMC C18 (25 x 150) mm, 5µm, FLOW: 22 ml/min, Method: (T in min./ % of B): 0/25, 2/25, 10/55, 13/55, 13.2/100, 17/100, 17.1/25, 20/25, Solubility: ACN+Water+THF, Temperature: RT.] The desired fractions were evaporated and lyophilized to afford N-[cis-2-(difluoromethyl)-1-(hydroxymethyl)cyclopropyl]-2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridine-3-carboxamide (Cpd 072) as an off-white solid (130 mg, 57.94%).

[0320] A preparative chiral SFC was performed on the racemic mixture of **Cpd 072** to afford **Cpd 072 – En1 and Cpd 072– En2.**

[0321] The following compounds were prepared in a similar manner (use of appropriate reagents (chiral or racemic) and purification methods (including chiral HPLC or chiral SFC) known to the person skilled in the art) as described for **Cpd 072 – En1** and **Cpd 072 – En2** : **Cpd 075 – En1**, **Cpd 075 – En2**, **Cpd 077 – En1**, **Cpd 077 – En2**, **Cpd 079 – En1**, **Cpd 079 – En2**, **Cpd 087 – En1**, **Cpd 087 – En2**, **Cpd 088 – En1**, **Cpd 088 – En2**

[0322] **Synthesis of (S)-4-hydroxy-3-({2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridin-3-yl}formamido)butanamide (Cpd 076 – En1).**

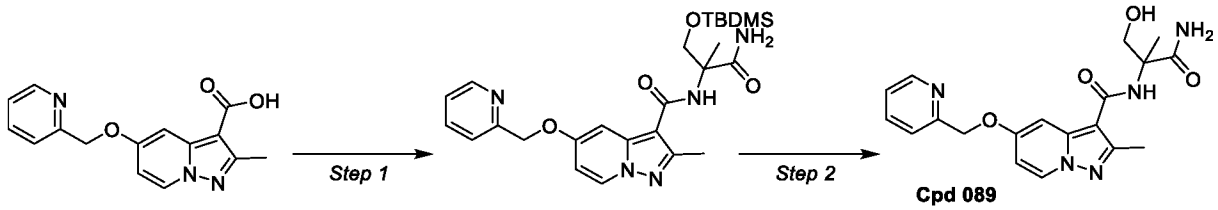


[0323] *Step 1* : To a solution of 2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxylic acid (200 mg, 0.706 mmol) in DMF (10 mL) were added HATU (805 mg, 2.11 mmol), DIPEA (2.1 mL, 3.53 mmol) and (S)-3-Amino-g-butyrolactone hydrochloride (155 mg, 1.13 mmol) at 0 °C. The RM was stirred at RT for 16 h under nitrogen atmosphere. After completion, the RM was diluted with cold water (100 mL), extracted with EtOAc (2 × 100 mL). The combined organic layers were washed sodium bicarbonate solution (2 × 20 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure. The residue was purified by FCC on silica gel using 10% MeOH in DCM as an eluent to afford (S)-2-methyl-N-(5-oxotetrahydrofuran-3-yl)-5-(pyridin-2-ylmethoxy)pyrazolo [1,5-a]pyridine-3-carboxamide as an off white solid (160 mg , 90%).

[0324] *Step 2* : To a solution of (S)-2-methyl-N-(5-oxotetrahydrofuran-3-yl)-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a] pyridine-3-carboxamide (250 mg, 0.682 mmol) in aqueous ammonia (15 mL) was stirred at RT for 16 h. After completion, the RM was concentrated under reduced pressure. The compound was purified by Prep. HPLC. [Prep. HPLC conditions: Mobile phase: 0.1% FA in water, Mobile phase B: ACN, Column: Sunfire (19 x 250) 5µm, FLOW: 18 ml/min, Method: (T in min./ % of B): 0/10, 2/10,10/50,12/50,12.4/100,19.02/100,19.1/10,20/4.10, Solubility: ACN+THF, Temperature: RT.] The desired fractions were evaporated and lyophilized to afford (S)-4-hydroxy-3-({2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridin-3-yl}formamido)butanamide (Cpd 076 – En1) as an off-white solid (21.6 mg, 8%).

[0325] The following compounds was prepared in a similar manner (use of appropriate reagents (chiral or racemic) and purification methods (including chiral HPLC or chiral SFC) known to the person skilled in the art) as described for **Cpd 076 – En1** : **Cpd 076 – En2.**

[0326] **Synthesis of 3-hydroxy-2-methyl-2-({2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridin-3-yl}formamido)propanamide (Cpd 089).**



[0327] *Step 1* : To a solution of 2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxylic acid (400 mg, 1.413 mmol) in DMF (5.0 mL) were added HATU (805 mg, 2.119 mmol), DIPEA (0.739 ml, 4.239 mmol) and 2-amino-3-((tert-butyldimethylsilyl)oxy)-2-

methylpropanamide (393.359 mg, 1.696 mmol) at 0 °C. The RM was stirred at RT for 16 h. After completion, the RM was quenched with water (50 mL), extracted with EtOAc (2 x 100 mL). The combined organic layers were washed with sat. $NaHCO_3$ (50 mL), brine (50 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure to afford N-(1-amino-3-((tert-butyldimethylsilyl)oxy)-2-methyl-1-oxopropan-2-yl)-2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxamide as an off white solid (650 mg, 92.44%). ^{1}H NMR (400 MHz, DMSO-d_6) δ ppm: 8.62 (d, 1 H), 8.59 (d, 1 H), 7.88 (t, 1 H), 7.58 (d, 1 H), 7.50 (m, 2 H), 7.40- 7.36 (m, 2 H), 7.34 (s, 1 H), 7.28 (s, 1 H), 7.09 (d, 1 H), 6.81 (m, 2 H), 5.77 (s, 1 H), 5.27 (s, 2 H), 4.20 (d, 1 H), 4.06 (d, 1 H), 3.96 (d, 1 H), 3.72 (s, 1 H), 3.40-3.19 (m, 2 H), 2.91 (s, 1 H), 2.75 (s, 1 H), 2.71 (s, 3 H), 2.57 (s, 3 H), 2.24 (s, 1 H), 1.55 (s, 3 H), 1.25-1.03 (m, 6 H), 0.90-0.784 (m, 15 H).*Step 2* : To a solution of N-(1-amino-3-((tert-butyldimethylsilyl)oxy)-2-methyl-1-oxopropan-2-yl)-2-methyl-5-(pyridin-2-ylmethoxy)pyrazolo[1,5-a]pyridine-3-carboxamide (750 mg, 1.509 mmol) in THF (40 mL) was added TBAF (1M in THF) (4.527 ml, 4.527 mmol) at RT. The RM was stirred for 3 h. After completion, the RM was diluted with water (100 mL), extracted with EtOAc (3 x 100 mL). The combined organic phases were washed with sat. NH_4Cl solution (100 mL), brine solution (100 mL), dried over Na_2SO_4, filtered and concentrated under reduced pressure. The compound was purified by Prep. HPLC. [Prep. HPLC conditions: Mobile phase: 10mM ABC in water, Mobile phase B: ACN, Column: LUNA C18 (21.2 x 250) 5µm, FLOW: 18 ml/min, Method: (T in min./ % of B): 00/10,2/10,10/40,11/40,11.10/98,16/98,16.10/10,20/10, Solubility: ACN+Water+DMSO, Temperature: RT.] The desired fractions were evaporated and lyophilized to afford 3-hydroxy-2-methyl-2-({2-methyl-5-[(pyridin-2-yl)methoxy]pyrazolo[1,5-a]pyridin-3-yl}formamido)propanamide (**Cpd 089**) (100 mg, 17.28%).

[0328] A preparative chiral SFC was performed on the racemic mixture of **Cpd 089** to afford **Cpd 089 – En1 and Cpd 089– En2.**

[0329] *Analytical data*

Cpd Code	[M+H]+ (m/z) :	^{1}H NMR (δ ppm)
Cpd 001	415.4	(400 MHz, DMSO-d6): δ 8.55 (d, 1H), 7.63 (t, 1H), 7.62 - 7.54 (m, 2H), 7.50 - 7.43(m, 1H), 7.41 (s, 1H), 7.34 (s, 1H), 7.30 - 7.24 (m, 2H), 6.71 (dd, 1H), 5.25 - 5.19 (m, 2H), 4.97 (t, 1H), 4.16 - 4.12 (m, 1H), 3.79 - 3.75 (m, 1H), 2.57 (s, 3H), 2.45 - 2.37 (m, 1H), 1.75 - 1.70 (m, 1H), 0.72 (t, 3H).
Cpd 002		(600 MHz, DMSO-d_6) δ 8.515 (dd, 1H), 7.638 – 7.579 (m, 1H), 7.500 – 7.422 (m, 2H), 7.313 – 7.232 (m, 2H), 6.696 (ddd, 1H), 6.657 (s, 1H), 5.220 (s, 2H), 5.055 (td, 2H), 3.632 (dd, 2H), 3.515 (dd, 2H), 1.314 (d, 3H).

Cpd 003		(600 MHz, DMSO-d_6) δ 8.536 (d, 1H), 7.614 (td, 1H), 7.544 (d, 1H), 7.496 – 7.421 (m, 2H), 7.311 – 7.232 (m, 2H), 7.155 – 7.085 (m, 2H), 6.719 (dd, 1H), 5.236 (s, 2H), 5.027 – 4.969 (m, 1H), 4.447 (dt, 1H), 3.776 (ddd, 1H), 3.719 (dt, 1H), 2.555 (s, 3H).
Cpd 004		(600 MHz, DMSO-d_6) δ 8.522 (d, 1H), 7.609 (td, 1H), 7.494 (d, 1H), 7.489 – 7.433 (m, 1H), 7.328 (s, 1H), 7.315 (s, 1H), 7.304 – 7.233 (m, 2H), 7.063 (s, 1H), 6.707 (dd, 1H), 5.246 (s, 2H), 2.551 (s, 3H), 1.558 (s, 6H).
Cpd 008		(600 MHz, DMSO-d_6) δ 9.011 (s, 1H), 8.504 (d, 1H), 7.435 (d, 1H), 6.670 (dd, 1H), 6.637 (s, 1H), 5.389 (s, 2H), 5.101 – 5.041 (m, 2H), 3.630 (dd, 2H), 3.509 (dd, 2H), 2.496 (s, 3H), 2.456 (s, 3H), 1.313 (s, 3H).
Cpd 009 - En1		(600 MHz, DMSO-d_6) δ 8.541 (d, 1H), 7.886 (q, 1H), 7.613 (td, 1H), 7.524 (d, 1H), 7.460 (tdd, 1H), 7.311 – 7.231 (m, 2H), 7.103 (d, 1H), 6.726 (dd, 1H), 5.241 (s, 2H), 5.042 – 4.984 (m, 1H), 4.454 (dt, 1H), 3.755 (dt, 1H), 3.692 (dt, 1H), 2.630 (d, 3H), 2.560 (s, 3H).
Cpd 009 - En2		(600 MHz, DMSO-d_6) δ 8.541 (d, 1H), 7.886 (d, 1H), 7.613 (td, 1H), 7.524 (d, 1H), 7.460 (tdd, 1H), 7.312 – 7.231 (m, 2H), 7.103 (d, 1H), 6.726 (dd, 1H), 5.241 (s, 2H), 5.014 (tt, 1H), 4.454 (dt, 1H), 3.754 (dt, 1H), 3.692 (dt, 1H), 2.630 (d, 3H), 2.560 (s, 3H).
Cpd 010		(600 MHz, DMSO-d_6) δ 9.015 (s, 1H), 8.535 (d, 1H), 7.535 (d, 1H), 7.436 (s, 1H), 7.138 (s, 1H), 7.082 (d, 1H), 6.700 (dd, 1H), 5.409 (s, 2H), 4.998 (td, 1H), 4.446 (dt, 1H), 3.776 (dt, 1H), 3.716 (dt, 1H), 2.559 (s, 3H), 2.459 (s, 3H).
Cpd 011 - En1	415.2	(600 MHz, DMSO-d_6) δ 8.527 (dd, 1H), 7.751 (q, 1H), 7.608 (td, 1H), 7.554 – 7.517 (m, 1H), 7.505 – 7.392 (m, 1H), 7.305 – 7.230 (m, 2H), 7.198 (s, 1H), 6.716 (dd, 1H), 5.232 (s, 2H), 5.166 (t, 1H), 3.830 (dd, 1H), 3.722 (dd, 1H), 2.637 (d, 3H), 2.566 (s, 3H), 1.509 (s, 3H).
Cpd 011 - En2	415.2	(600 MHz, DMSO-d_6) δ 8.526 (d, 1H), 7.751 (q, 1H), 7.607 (td, 1H), 7.535 (d, 1H), 7.457 (tdd, 1H), 7.303 – 7.230 (m, 2H), 7.197 (s, 1H), 6.716 (dd, 1H), 5.231 (s, 2H), 3.829 (dd, 1H), 3.721 (dd, 1H), 2.637 (d, 3H), 2.565 (s, 3H), 1.509 (s, 3H).
Cpd 012		(600 MHz, DMSO-d_6) δ 8.550 (d, 1H), 7.663 (dd, 1H), 7.568 – 7.517 (m, 2H), 7.466 – 7.382 (m, 3H), 7.135 (s, 1H), 7.101 (d, 1H), 6.745 (dd, 1H), 5.257 (s, 2H), 4.991 (ddd, 1H), 4.441 (dt, 1H), 3.774 (ddd, 1H), 3.717 (dt, 1H), 2.562 (s, 3H).
Cpd 013		(600 MHz, DMSO-d_6) δ 8.536 (d, 1H), 7.685 – 7.636 (m, 1H), 7.543 (dd, 1H), 7.489 (d, 1H), 7.466 – 7.383 (m, 2H), 7.320 (d, 2H), 7.060 (s, 1H), 6.759 – 6.709 (m, 1H), 5.265 (s, 2H), 2.557 (s, 3H), 1.555 (s, 6H).

Cpd 014		(600 MHz, DMSO-d_6) δ 8.528 (d, 1H), 7.660 (dd, 1H), 7.567 – 7.519 (m, 1H), 7.467 – 7.384 (m, 3H), 6.723 (dd, 1H), 6.654 (s, 1H), 5.241 (s, 2H), 5.044 (t, 2H), 3.630 (dd, 2H), 3.514 (dd, 2H), 2.504 (s, 3H), 1.312 (s, 3H).
Cpd 015 - En1	357.2	(400 MHz, DMSO-d_6): δ 8.56 (d, 1H), 7.45 (d, 1H), 7.39 (s, 1H), 7.28 (s, 1H), 7.20 (s, 1H), 6.73 (dd, 1H), 6.44 (tt, 1H), 5.13 (s, 1H), 4.48 - 4.38 (m, 2H), 3.91 (d, 1H), 3.74 (m, 1H), 2.56 (s, 3H), 1.51 (s, 3H)
Cpd 015 - En2	357.2	(400 MHz, DMSO-d_6): δ 8.56 (d, 1H), 7.45 (d, 1H), 7.39 (s, 1H), 7.27 (s, 1H), 7.20 (s, 1H), 6.74 (dd, 1H), 6.44 (tt, 1H), 5.11 (t, 1H), 4.48 - 4.38 (m, 2H), 3.94 - 3.88 (m, 1H), 3.77 - 3.71 (m, 1H), 2.56 (s, 3H), 1.51 (s, 3H).
Cpd 016 - En1	383.2	(400 MHz, DMSO-d_6): δ 8.53 (d, 1H), 7.53 - 7.49 (m, 3H), 7.44 - 7.33 (m, 4H), 7.25 (s, 1H), 7.21 (s, 1H), 6.72 (dd, 1H), 5.20 - 5.14 (m, 3H), 3.92 (d, 1H), 3.74 (d, 1H), 2.55 (s, 3H), 1.51 (s, 3H).
Cpd 016 - En2	383.2	*(400 MHz, DMSO-d_6): δ 8.53 (d, 1H), 7.53 - 7.49 (m, 3H), 7.43 - 7.34 (m, 4H), 7.25 (s, 1H), 7.21 (s, 1H), 6.72 (dd, 1H), 5.19 (s, 2H), 5.12 (s, 1H), 3.94 - 3.89 (m, 1H), 3.78 - 3.72 (m, 1H), 2.55 (s, 3H), 1.51 (s, 3H).*
Cpd 017 - En1	429.2	400 MHz, DMSO-d6): δ 8.53 (d, 1H), 7.61 - 7.58 (m, 1H), 7.49 - 7.40 (m, 2H), 7.36 (d, 1H), 7.31 - 7.23 (m, 2H), 6.71 (dd, 1H), 5.23 (s, 2H), 4.92 (t, 1H), 3.80 - 3.68 (m, 2H), 2.93 (bs, 6H), 2.50 (s, 3H), 1.46 (s, 3H).
Cpd 017 - En2	429.2	(400 MHz, DMSO-d_6): δ 8.53 (d, 1H), 7.59 (t, 1H), 7.49 - 7.43 (m, 2H), 7.36 (d, 1H), 7.30 - 7.24 (m, 2H), 6.71 (dd, 1H), 5.23 (s, 2H), 4.96 (brs, 1H), 3.79 - 3.69 (m, 2H), 2.93 (brs, 6H), 2.50 (s, 3H), 1.46 (s, 3H).
Cpd 018 - En1	413.2	(400 MHz, DMSO-d_6): δ 8.54 (d, 1H), 7.76 (s, 1H), 7.62 (t, 1H), 7.50 - 7.41 (m, 2H), 7.31 - 7.23 (m, 2H), 6.90 (s, 1H), 6.71 (dd, 1H), 5.31 (s, 1H), 5.22 (s, 2H), 3.65 - 3.55 (m, 2H), 3.27 - 3.15 (m, 2H), 2.52 – 2.48 (m, 3H), 2.45 - 2.39 (m, 2H
Cpd 018 - En2	413.2	(400 MHz, DMSO-d_6): δ 8.54 (d, 1H), 7.76 (s, 1H), 7.62 (t, 1H), 7.50 - 7.41 (m, 2H), 7.31 - 7.23 (m, 2H), 6.92 (s, 1H), 6.71 (dd, 1H), 5.31 (s, 1H), 5.23 (s, 2H), 3.65 - 3.55 (m, 2H), 3.28 - 3.15 (m, 2H), 2.52 – 2.48 (m, 3H), 2.45 - 2.39 (m, 2H).
Cpd 019 - En1	417.2	*(400 MHz, DMSO-d_6): δ 8.55 (d, 1H), 7.67 (d, 1H), 7.56 - 7.52 (m, 2H), 7.45 - 7.38 (m, 3H), 7.28 (s, 1H), 7.20 (s, 1H), 6.74 (dd, 1H), 5.24 (s, 2H), 5.13 (s, 1H), 3.94 - 3.89 (m, 1H), 3.77 - 3.72 (m, 1H), 2.55 (s, 3H), 1.52 (s, 3H)*

Cpd 019 - En2	417.2	(400 MHz, DMSO-d_6): δ 8.55 (d, 1H), 7.68 - 7.65 (m, 1H), 7.56 - 7.52 (m, 2H), 7.46 - 7.38 (m, 3H), 7.29 (s, 1H), 7.20 (s, 1H), 6.74 (dd, 1H), 5.24 (s, 2H), 5.14 (s, 1H), 3.92 (d, 1H), 3.74 (d, 1H), 2.56 (s, 3H), 1.51 (s, 3H).
Cpd 020 - En1	401.2	(400 MHz, DMSO-d6): δ 8.54 (d, 1H), 7.62 (t, 1H), 7.56 (d, 1H), 7.50 – 7.42 (m, 1H), 7.39 (brs, 1H), 7.31 – 7.22 (m, 3H), 7.21 (brs, 1H), 6.70 (dd, 1H), 5.22 (s, 2H), 5.12 (t, 1H), 3.95 - 3.88 (m, 1H), 3.80 - 3.71 (m, 1H), 2.56 (s, 3H), 1.52 (s, 3H).
Cpd 020 - En2	401.2	(400 MHz, DMSO-d6): δ 8.54 (d, 1H), 7.63 (t, 1H), 7.56 (d, 1H), 7.50 - 7.42 (m, 1H), 7.39 (brs, 1H), 7.31 – 7.22 (m, 3H), 7.21 (brs, 1H), 6.70 (dd, 1H), 5.22 (s, 2H), 5.12 (t, 1H), 3.95 - 3.88 (m, 1H), 3.80 - 3.71 (m, 1H), 2.56 (s, 3H), 1.52 (s, 3H).
Cpd 021 - En1	398.2	(400 MHz, DMSO-d6): δ 8.57 (s, 1H), 8.54 (d, 1H), 7.81 (dd, 1H), 7.55 (d, 1H), 7.40 (s, 1H), 7.31 (d, 1H), 7.26 (s, 1H), 7.21 (s, 1H), 6.71 (dd, 1H), 5.19 (s, 3H), 3.94 - 3.89 (m, 1H), 3.77 - 3.73 (m, 1H), 2.56 (s, 3H), 2.50 (s, 3H), 1.52 (s, 3H).
Cpd 021 - En2	398.2	400 MHz, DMSO-d_6): δ 8.57 (d, 1H), 8.54 (d, 1H), 7.81 (d, 1H), 7.55 (d, 1H), 7.40 (s, 1H), 7.30 (m, 1H), 7.26 (s, 1H), 7.21 (s, 1H), 6.71 (dd, 1H), 5.19 (s, 2H), 5.12 (t, 1H), 3.95 - 3.89 (m, 1H), 3.78 - 3.72 (m, 1H), 2.56 (s, 3H), 2.50 (s, 3H), 1.52 (s, 3H).
Cpd 022 - En1	347.2	(400 MHz, DMSO-d6): δ 8.50 (d, 1H), 7.40 - 7.34 (m, 2H), 7.25 - 7.18 (d, 2H), 6.66 (dd, 1H), 5.11 (s, 1H), 3.91 - 3.90 (m, 3H), 3.76 - 3.70 (m, 1H), 2.54 (s, 3H), 1.50 (s, 3H), 1.30 - 1.23 (m, 1H), 0.63 - 0.57 (m, 2H), 0.41 - 0.36 (m, 2H),
Cpd 022 - En2	347.2	(400 MHz, DMSO-d_6): δ 8.50 (d, 1H), 7.39 - 7.33 (m, 2H), 7.23 - 7.18 (m, 2H), 6.66 (dd, 1H), 5.11 (s, 1H), 3.91 - 3.88 (m, 3H), 3.75 - 3.71 (m, 1H), 2.54 (s, 3H), 1.50 (s, 3H), 1.31 - 1.22 (m, 1H), 0.63 - 0.58 (m, 2H), 0.40 - 0.36 (m, 2H).
Cpd 023 - En1	433.2	(400 MHz, DMSO-d_6): δ 8.54 (d, 1H), 7.70 - 7.65 (m, 2H), 7.63 - 7.52 (m, 3H), 7.42 - 7.14 (m, 4H), 6.71 (dd, 1H), 5.34 (s, 2H), 5.14 (bs, 1H), 3.92 (d, 1H), 3.75 (d, 1H), 2.57 (s, 3H), 1.52 (s, 3H).
Cpd 023 - En2	433.2	(400 MHz, DMSO-d_6): δ 8.54 (d, 1H), 7.70 - 7.66 (m, 2H), 7.63 - 7.53 (m, 3H), 7.42 - 7.14 (m, 4H), 6.71 (dd, 1H), 5.34 (s, 2H), 5.14 (bs, 1H), 3.92 (d, 1H), 3.75 (d, 1H), 2.57 (s, 3H), 1.52 (s, 3H).
Cpd 024 - En1	415.2	400 MHz, DMSO-d_6): δ 8.60 (d, 1H), 7.66 - 7.62 (m, 2H), 7.51 - 7.43 (m, 1H), 7.39 (s, 1H), 7.31 - 7.25 (m, 2H), 7.16 (s, 1H), 6.78 (dd, 1H), 5.34 - 5.27 (m, 2H), 4.32 - 4.23 (m, 2H), 2.50 (s, 3H), 2.30 - 2.21 (s, 4H), 1.25 (s, 3H).
Cpd 024 - En2	415.2	(400 MHz, DMSO-d_6): δ 8.60 (d, 1H), 7.66 - 7.62 (m, 2H), 7.50 - 7.44 (m, 1H), 7.39 (s, 1H), 7.32 - 7.25 (m, 2H), 7.16 (s, 1H), 6.77 (dd, 1H), 5.34 - 5.27 (m, 2H), 4.32 - 4.23 (m, 2H), 2.50 (s, 3H), 2.32 - 2.22 (s, 4H), 1.25 (s, 3H).

Cpd 025 - En1	422.2	(400 MHz, DMSO-d_6): δ 8.52 (d, 1H), 7.60 (t, 1H), 7.50 - 7.43 (m, 1H), 7.36 (d, 1H), 7.31 - 7.23 (m, 2H), 6.83 (s, 1H), 6.70 (dd, 1H), 6.37- 6.07 (tt, 1H), 5.25 (s, 1H), 5.22 (s, 2H), 3.63 - 3.53 (m, 2H), 2.51 - 2.32 (m, 5H), 1.42 (s, 3H).
Cpd 025 - En2	422.2	(400 MHz, DMSO-d_6): δ 8.52 (d, 1H), 7.64 - 7.57 (m, 1H), 7.50 - 7.42 (m, 1H), 7.36 (d, 1H), 7.31 - 7.23 (m, 2H), 6.83 (s, 1H), 6.70 (dd, 1H), 6.22 (tt, 1H), 5.26 (s, 1H), 5.22 (s, 2H), 3.58 (q, 2H), 2.48 (s, 3H), 2.47 - 2.35 (m, 2H), 1.39 (s, 3H).
Cpd 026 - En1	419.2	(500 MHz, DMSO-d_6): δ 8.54 (d, 1H), 7.71 - 7.66 (m, 1H), 7.55 (d, 1H), 7.40 (s, 1H), 7.36 - 7.32 (m, 1H), 7.28 (s, 1H), 7.22 (s, 1H), 7.18 - 7.14 (m, 1H), 6.71 (dd, 1H), 5.20 (s, 2H), 5.12 (t, 1H), 3.94 - 3.91 (m, 1H), 3.76 - 3.73 (m, 1H), 2.56 (s, 3H), 1.52 (s, 3H).
Cpd 026 - En2	419.2	(500 MHz, DMSO-d_6): δ 8.54 (d, 1H), 7.71 - 7.66 (m, 1H), 7.55 (d, 1H), 7.40 (s, 1H), 7.36 - 7.32 (m, 1H), 7.28 (s, 1H), 7.22 (s, 1H), 7.17 - 7.14 (m, 1H), 6.71 (dd, 1H), 5.20 (s, 2H), 5.12 (t, 1H), 3.94 - 3.91 (m, 1H), 3.76 - 3.73 (m, 1H), 2.56 (s, 3H), 1.52 (s, 3H).
Cpd 027 - En1	419.2	(400 MHz, DMSO-d_6): δ 8.55 (d, 1H), 7.56 (d, 1H), 7.55 - 7.44 (m, 2H), 7.43 (s, 1H), 7.31 - 7.24 (m, 2H), 7.21 (s, 1H), 6.73 (dd, 1H), 5.28 (s, 2H), 5.11 (t, 1H), 3.94 - 3.90 (m, 1H), 3.77 - 3.73 (m, 1H), 2.56 (s, 3H), 1.52 (s, 3H).
Cpd 027 - En2	419.3	(400 MHz, DMSO-d_6): δ 8.55 (d, 1H), 7.56 (d, 1H), 7.50 - 7.40 (m, 3H), 7.30 - 7.21 (m, 3H), 6.73 (dd, 1H), 5.28 (s, 2H), 5.11 (t, 1H), 3.94 - 3.90 (m, 1H), 3.77 - 3.73 (m, 1H), 2.56 (s, 3H), 1.52 (s, 3H).
Cpd 028 - En1	415.2	(500 MHz, DMSO-d_6): δ 8.53 (d, 1H), 7.53 (d, 1H), 7.47 (t, 1H), 7.39 (brs, 1H), 7.28 (s, 1H), 7.21 (brs, 1H), 7.12 -7.06 (m, 2H), 6.69 (dd, 1H), 5.17 (s, 2H), 5.14 (s, 1H), 3.92 (d, 1H), 3.75 (d, 1H), 2.55 (s, 3H), 2.34 (s, 3H), 1.52 (s, 3H).
Cpd 028 - En2	415.2	(500 MHz, DMSO-d_6): δ 8.53 (d, 1H), 7.53 (d, 1H), 7.47 (t, 1H), 7.39 (brs, 1H), 7.28 (s, 1H), 7.21 (brs, 1H), 7.12 -7.06 (m, 2H), 6.69 (dd, 1H), 5.17 (s, 2H), 5.14 (s, 1H), 3.92 (d, 1H), 3.75 (d, 1H), 2.55 (s, 3H), 2.34 (s, 3H), 1.52 (s, 3H).
Cpd 029 - En1	415.2	(400 MHz, DMSO-d_6): δ 8.53 (d, 1H), 7.54 (d, 1H), 7.43 - 7.40 (m, 2H), 7.34 - 7.28 (m, 2H), 7.21 (brs, 1H), 7.14 (t, 1H), 6.71 (dd, 1H), 5.20 (s, 2H), 5.13 (s, 1H), 3.92 (d, 1H), 3.75 (d, 1H), 2.56 (s, 3H), 2.27 (s, 3H), 1.52 (s, 3H).
Cpd 029 - En2	415.2	(400 MHz, DMSO-d_6): δ 8.53 (d, 1H), 7.55 (d, 1H), 7.43 - 7.39 (m, 2H), 7.34 - 7.28 (m, 2H), 7.21 (brs, 1H), 7.14 (t, 1H), 6.71 (dd, 1H), 5.20 (s, 2H), 5.13 (s, 1H), 3.92 (d, 1H), 3.75 (d, 1H), 2.56 (s, 3H), 2.27 (s, 3H), 1.52 (s, 3H),
Cpd 030 - En1	419.3	(400 MHz, DMSO-d_6): δ 8.55 (d, 1H), 7.55 (d, 1H), 7.52 - 7.48 (m, 1H), 7.40 (s, 1H), 7.38 - 7.29 (m, 2H), 7.28 (s, 1H), 7.21 (s, 1H), 6.75 (dd, 1H), 5.38 - 5.21 (m, 3H), 3.94 - 3.90 (m, 1H), 3.76 - 3.73 (m, 1H), 2.56 (s, 3H), 1.52 (s, 3H).

Cpd 030 - En2	419.3	(400 MHz, DMSO-d_6): δ 8.55 (d, 1H), 7.55 (d, 1H), 7.52 - 7.48 (m, 1H), 7.42 (s, 1H), 7.38 - 7.29 (m, 2H), 7.27 (s, 1H), 7.21 (s, 1H), 6.75 (dd, 1H), 5.22 (s, 2H), 5.11 (t, 1H), 3.94 - 3.90 (m, 1H), 3.77 - 3.73 (m, 1H), 2.56 (s, 3H), 1.52 (s, 3H).
Cpd 031 - En1	415.2	(400 MHz, DMSO-d_6): δ 8.53 (d, 1H), 7.61 (d, 1H), 7.42 – 7.33 (m, 2H), 7.29 (s, 1H), 7.26 (s, 1H), 7.16 – 7.07 (m, 2H), 6.67 (dd, 1H), 5.19 (s, 2H), 5.13 (s, 1H), 3.95 - 3.89 (m, 1H), 3.80 - 3.72 (m, 1H), 2.56 (s, 3H), 2.39 (s, 3H), 1.53 (s, 3H).
Cpd 031 - En2	415.2	(400 MHz, DMSO-d_6): δ 8.53 (d, 1H), 7.61 (d, 1H), 7.42 – 7.33 (m, 2H), 7.29 (s, 1H), 7.21 (s, 1H), 7.16 - 7.07 (m, 2H), 6.67 (dd, 1H), 5.19 (s, 2H), 5.13 (s, 1H), 3.95 - 3.89 (m, 1H), 3.80 - 3.72 (m, 1H), 2.56 (s, 3H), 2.39 (s, 3H), 1.53 (s, 3H).
Cpd 032 - En1	419.2	(400 MHz, DMSO-d_6): δ 8.54 (d, 1H), 7.60 - 7.53 (m, 2H), 7.39 (brs, 1H), 7.30 (s, 1H), 7.23 - 7.19 (m, 3H), 6.68 (dd, 1H), 5.20 (s, 2H), 5.16 (bs, 1H), 3.91 (d, 1H), 3.75 (d, 1H), 2.56 (s, 3H), 1.52 (s, 3H).
Cpd 032 - En2	419.2	400 MHz, DMSO-d_6): δ 8.54 (d, 1H), 7.60 - 7.55 (m, 2H), 7.39 (brs, 1H), 7.30 (s, 1H), 7.23 -7.19 (m, 3H), 6.68 (dd, 1H), 5.20 (s, 2H), 5.14 (bs, 1H), 3.91 (d, 1H), 3.75 (d, 1H), 2.56 (s, 3H), 1.52 (s, 3H).
Cpd 033	283	(300 MHz, DMSO-d_6) d ppm 12.14 (br. s., 1 H), 8.52 (d, 1 H), 7.41 - 7.52 (m, 2 H), 7.24 - 7.40 (m, 4 H), 6.73 (d, 1 H), 5.16 (s, 2 H), 2.45 (s, 3H).
Cpd 034	247.2	(400 MHz, DMSO-d6): δ 12.15 (s, 1H), 8.54 (d, 1H), 7.23 (d, 1H), 6.72 (dd, 1H), 3.93 (d, 2H), 2.49 (s, 3H), 1.28 - 1.21 (m, 1H), 0.63 - 0.56 (m, 2H), 0.42 - 0.37 (m, 2H).
Cpd 035	301.1	(300 MHz, DMSO-d_6) d ppm 12.20 (br. s., 1 H), 8.58 (d, 1 H), 7.61 (t, 1H), 7.48-7.43 (m, 2H), 7.26 (q, 2H), 6.77 (d, 1H)5.27 (s, 2H).
Cpd 036	317.1	(300 MHz, DMSO-d_6) d ppm : 8.58 (d, 1 H), 7.66 (d, 1H), 7.56-7.40 (m, 4H), 6.81 (d, 1H), 5.29 (s, 2H), 2.53 (s, 3H)
Cpd 037 - En1	425.19	(400 MHz, DMSO-D_6) δ ppm: 9.02 (s, 1 H), 8.52 (d, 1 H), 7.37 (d, 1 H), 6.78 (s, 1 H), 6.67 (dd, 1 H), 6.07 – 6.38 (m, 1 H), 5.40 (s, 2 H), 5.25 (t, 2 H), 3.54 – 3.62 (m, 2 H), 2.50 – 2.67 (m, 1 H), 2.49 (s, 3 H), 2.46 (s, 3 H), 2.29 – 2.43 (m, 1 H), 1.39 (s, 3 H).
Cpd 037 - En2	425.19	(400 MHz, DMSO-D_6) δ ppm: 9.02 (s, 1 H), 8.52 (d, 1 H), 7.37 (d, 1 H), 6.78 (s, 1 H), 6.67 (dd, 1 H), 6.07 – 6.38 (m, 1 H), 5.40 (s, 2 H), 5.25 (t, 2 H), 3.54 – 3.62 (m, 2 H), 2.50 – 2.67 (m, 1 H), 2.49 (s, 3 H), 2.46 (s, 3 H), 2.29 – 2.43 (m, 1 H), 1.39 (s, 3 H).
Cpd 038 - En1	405.25	(400 MHz, DMSO-D_6) δ ppm: 8.59 – 8.61 (m, 1 H), 8.53 (d, 1 H), 7.84 – 7.88 (m, 1 H), 7.56 (d, 1 H), 7.36 – 7.39 (m, 1 H), 7.29 (d, 1 H), 6.81 (s, 1 H), 6.74 (dd, 1 H), 6.05 – 6.35 (m, 1 H), 5.26 (s, 2 H), 5.21 – 5.25 (m, 1 H), 3.53 – 3.61 (m, 2 H), 2.51 – 2.58 (m, 1 H), 2.49 (s, 3 H), 2.27 – 2.41 (m, 1 H), 1.37 (s, 3 H).
Cpd 038 - En2	405.25	(400 MHz, DMSO-D_6) δ ppm: 8.59 – 8.61 (m, 1 H), 8.53 (d, 1 H), 7.84 – 7.88 (m, 1 H), 7.56 (d, 1 H), 7.36 – 7.39 (m, 1 H), 7.29 (d, 1 H), 6.81 (s, 1 H), 6.74 (dd, 1 H), 6.05 – 6.35 (m, 1 H), 5.26 (s, 2 H), 5.21 – 5.25 (m, 1 H), 3.53 – 3.61 (m, 2 H), 2.51 – 2.58 (m, 1 H), 2.49 (s, 3 H), 2.27 – 2.41 (m, 1 H), 1.37 (s, 3 H).

Cpd 042	365.15	(400 MHz, DMSO-D_6) δ ppm: 8.57 - 8.60 (m, 2 H), 7.93 (t, 1 H), 7.84 - 7.92 (m, 1 H), 7.55 - 7.57 (d, 1 H), 7.36 - 7.39 (m, 1 H), 7.30 - 7.31 (d, 1 H), 6.79 - 6.81 (m, 1 H), 5.29 (s, 2 H), 4.02 - 4.11 (m, 2 H), 2.49 - 2.50 (m, 3 H).
Cpd 043	327.25	(400 MHz, DMSO-D_6) δ ppm: 8.59 - 8.61 (m, 1 H), 8.50 (d, 1 H), 7.86 - 7.90 (m, 1 H), 7.58 (d, 1 H), 7.35 - 7.41 (m, 2 H), 7.27 (t, 1 H), 6.77 (dd, 1 H), 5.27 (s, 2 H), 4.74 (t, 1 H), 3.54 (q, 2 H), 3.35 (m, 2 H), 2.50 (s, 3 H).
Cpd 044	363.22	(400 MHz, DMSO-D_6) δ ppm: 11.74 (s, 1 H), 8.60 – 8.61 (m, 1 H), 8.54 (d, 1 H), 7.86 (dt, 1 H), 7.79 (t, 1 H), 7.58 (d, 1 H), 7.53 (d, 1 H), 7.36 – 7.39 (m, 1 H), 7.01 (brs, 1 H), 6.83 (brs, 1 H), 6.76 (dd, 1 H), 5.29 (s, 2 H), 4.49 (d, 2 H), 2.53 (s, 3 H).
Cpd 045	396.42	(400 MHz, DMSO-D_6) δ ppm: 8.59 - 8.61 (m, 1 H), 8.54 (d, 1 H), 7.83 - 7.87 (m, 1 H), 7.64 (t, 1 H), 7.54 (d, 1 H), 7.36 - 7.39 (m, 2 H), 6.76 (dd, 1 H), 5.26 (s, 2 H), 3.19 (d, 2 H), 2.49 - 2.51 (m, 3 H), 2.24 (s, 6 H), 2.19 (s, 2 H), 0.89 (s, 6 H).
Cpd 046	423.34	(400 MHz, DMSO-D_6) δ ppm: 8.60-8.62 (m, 1 H), 8.54 (d, 1 H), 7.85 - 7.89 (dt, 1 H), 7.77 (t, 1 H), 7.56 (t, 3 H), 7.49 (t, 3 H), 7.37 - 7.40 (m, 1 H), 7.19 (d, 1 H), 6.74 - 6.77 (m, 1 H), 5.22 (s, 2 H), 4.00 - 4.08 (m, 2 H), 2.41 (s, 3 H).
Cpd 047	459.15	(400 MHz, DMSO-D_6) δ ppm: 8.59 (d, 1 H), 8.52 (d, 1 H), 7.83 - 7.88 (m, 1 H), 7.76 (t, 1 H), 7.53 - 7.63 (m, 4 H), 7.36 - 7.39 (m, 1 H), 7.22 (d, 1 H), 6.73 (dd, 1 H), 5.22 (s, 2 H), 4.64 (d, 2 H), 2.43 (s, 3 H)
Cpd 048	439.2	(400 MHz, DMSO-D_6) δ ppm: 8.58 - 8.59 (dt, 1 H), 8.55 (dd, 1 H), 7.95 (t, 1 H), 7.83-7.87 (td, 1 H), 7.55 - 7.56 (dd, 1 H), 7.02 - 7.40 (m, 7 H), 6.75 - 6.78 (dd, 1 H), 5.27 (s, 2 H), 4.50 (d, 2 H), 2.49 - 2.51 (m, 3 H).
Cpd 049 - En1	422.2	(400 MHz, DMSO-D_6) δ ppm: 9.02 (s, 1 H), 8.54 (d, 1 H), 7.34 - 7.30 (m, 2 H), 6.70 - 6.68 (m, 1 H), 5.40 (s, 2 H), 4.37 - 4.32 (m, 1 H), 2.96 - 2.82 (m, 2 H), 2.74 - 2.63 (m, 2 H), 2.45 (s, 3 H), 2.46 (s, 3 H), 1.94 - 1.92 (m, 1 H), 1.90 - 1.83 (m, 1 H);
Cpd 049 - En2	422.2	(400 MHz, DMSO-D_6) δ ppm: 9.02 (S, 1 H), 8.55-8.49 (m, 1 H), 7.35 - 7.30 (m, 2 H), 6.70 - 6.67 (m, 1 H), 5.40 (s, 2 H), 4.38 - 4.32 (m, 1 H), 2.99 - 2.81 (m, 2 H), 2.70 - 2.59 (m, 2 H), 2.49 (s, 3 H), 2.45 (s, 3 H), 2.18 - 2.03 (m, 1 H), 1.93 - 1.85 (m, 1 H);
Cpd 050 - En1	402.4	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.55 (d, 1 H),7.88 - 7.83 (m, 1 H), 7.56 (d, 1 H), 7.39 - 7.36 (m, 2 H), 7.24 (s, 1 H), 6.78 - 6.75 (m, 1 H), 5.26 (s, 2 H), 4.36 - 4.29 (m, 1 H), 2.91 (t, 2 H), 2.69 - 2.65 (m, 2 H), 2.49 (s, 4 H), 2.12 - 2.03 (m, 1 H), 1.95 - 1.84 (m, 1 H).
Cpd 050 - En2	402.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.55 (d, 1 H), 7.88 - 7.83 (m, 1 H), 7.56 (d, 1 H), 7.38 (t, 2 H), 7.23 (d, 1 H), 6.78 - 6.75 (m, 1 H), 5.26 (s, 2 H), 4.35 - 4.29 (m, 1 H), 2.91 (m, 2 H), 2.65 (t, 2 H), 2.49 (s, 4 H), 2.12 - 2.03 (m, 1 H), 1.92 - 1.84 (m, 1 H).
Cpd 051 - En1	422.3	(400 MHz, DMSO-D_6) δ ppm: 9.02 (s, 1 H), 8.52 (d, 1 H), 7.33 (d, 1 H), 7.22 (d, 1 H), 6.67 (dd, 1 H), 5.41 (s, 2 H), 4.12 - 4.13 (m, 1 H), 3.16 - 3.17 (m, 2 H), 2.62 - 2.98 (m, 2 H), 2.50 (s, 3 H), 2.46 (s, 3 H), 2.29 - 2.35 (m, 1 H), 2.00 - 2.12 (m, 1 H)
Cpd 051 - En2	422.3	(400 MHz, DMSO-D_6) δ ppm: 1H NMR (400 MHz, DMSO-D6) δ ppm: 9.02 (s, 1H), 8.52 (d, 1 H), 7.34 (dd, 1 H), 7.22 (d, 1 H), 6.67 (dd, 1 H), 5.41 (s, 2 H), 4.11 - 4.12 (m, 1 H), 2.95 - 2.98 (m, 2 H), 2.67 - 2.84 (m, 2 H), 2.49 (s, 3 H), 2.46 (s, 3 H), 2.29 - 2.38 (m, 1 H), 2.00 - 2.12 (m, 1 H)

Cpd 052 - En1	402.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.54 (d, 1 H), 7.85 - 7.88 (m, 1 H), 7.56 (d, 1 H), 7.37 (t, 1 H), 7.27 (s, 1 H), 7.23 (d, 1 H), 6.74 - 6.76 (m, 1 H), 5.28 (s, 2 H), 4.10 (bs, 1 H), 2.93 - 2.99 (m, 2 H), 2.50 - 2.73 (m, 2 H), 2.49 (s, 1 H), 2.48 (s, 3 H), 2.30 - 2.33 (m, 1 H), 2.08 - 2.12 (m, 1 H),
Cpd 052 - En2	402.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.54 (d, 1 H), 7.85-7.88 (m, 1 H), 7.56 (d, 1 H), 7.37 (t, 1 H), 7.27 (s, 1 H), 7.23 (d, 1 H), 6.74-6.76 (m, 1 H), 5.28 (s, 2 H), 4.10 (bs, 1 H), 2.93-2.99 (m, 2 H), 2.50-2.73 (m, 2 H), 2.49 (s, 1 H), 2.48 (s, 3 H), 2.30-2.33 (m, 1 H), 2.0-2.1 (m, 1 H).
Cpd 053 - En 1	372.3	(400 MHz, DMSO-D_6) δ ppm: 9.02 (S, 1H), 8.50 (d, 1H), 7.27-7.31 (M, 2H), 6.65 (dd, 1H), 5.41 (s, 2H), 4.30-4.33 (m, 1H), 2.88-2.98 (m, 1H), 2.65-2.76 (m, 1H), 2.49 (s, 3H), 2.46 (s, 3H), 1.94-2.01 (m, 1H), 1.65-1.66 (m, 1H);
Cpd 053 - En 2	327.3	(400 MHz, DMSO-D_6) δ ppm: 9.02 (S, 1H), 8.50 (d, 1H), 7.29-7.31 (M, 2H), 6.65 (dd, 1H), 5.41 (s, 2H), 4.30-4.32 (m, 1H), 2.88-2.98 (m, 1H), 2.65-2.76 (m, 1H), 2.49 (s, 3H), 2.45 (s, 3H), 1.94-2.07 (m, 1H), 1.65-1.76 (m, 1H)
Cpd 054 - En1	352.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.52 (d, 1 H), 7.86 (td, 1 H), 7.55 (d, 1 H), 7.38 (m, 1 H), 7.31 (d, 1 H), 7.22 – 7.23 (m, 1 H), 6.73 (dd, 1 H), 5.28 (s, 2H), 4.28 – 4.42 (m, 1 H), 2.88 – 2.96 (m, 2 H), 2.64 – 2.76 (m, 2 H), 1.93 – 1.99 (m, 1 H), 1.59 – 1.70 (m, 1 H)
Cpd 054 - En2	352.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.52 (d, 1 H), 7.86 (td, 1 H), 7.55 (d, 1 H), 7.38 (m, 1 H), 7.31 (d, 1 H), 7.22 – 7.23 (m, 1 H), 6.73 (dd, 1 H), 5.28 (s, 2H), 4.28 – 4.42 (m, 1 H), 2.88 – 2.96 (m, 2 H), 2.64 – 2.76 (m, 2 H), 1.93 – 1.99 (m, 1 H), 1.59 – 1.70 (m, 1 H).
Cpd 055	403.23	(400 MHz, DMSO-D_6) δ ppm: 8.59 - 8.61 (m, 1 H), 8.54 (d, 1 H), 7.84 - 7.88 (m, 1 H), 7.58 (t, 2 H), 7.36 - 7.39 (m, 1 H), 7.27 (d, 1 H), 6.75 (dd, 1 H), 5.26 (s, 3 H), 3.62 (s, 2 H), 2.84 (s, 4 H), 2.50 (s, 3 H).
Cpd 056	444.2	(400 MHz, DMSO-D_6) δ ppm: 12.71 (s, 1 H), 8.91 (s, 1 H), 8.65 (d, 1 H), 8.61 (d, 1 H), 8.48 (d, 1 H), 7.87 (dt, 1 H), 7.70 (s, 1 H), 7.64 (d, 1 H), 7.60 (d, 1 H), 7.37 – 7.40 (m, 1 H), 6.88 (dd, 1 H), 5.32 (s, 2 H), 2.67 (s, 3 H).
Cpd 057	427.37	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.57 (d, 1 H), 8.55 (d, 1 H), 7.86 (dt, 1 H), 7.57 (d, 1 H), 7.36 – 7.39 (m, 2 H), 6.75 – 6.77 (m, 2 H), 5.26 (s, 2 H), 5.10 (t, 1 H), 4.21 (d, 2 H), 3.85 (d, 2 H), 3.76 (d, 2 H), 2.50 (s, 3 H), 1.42 (s, 3 H), 1.35 (s, 3 H).
Cpd 058 - En1	421.3	(400 MHz, DMSO-D_6) δ ppm: 8.54 - 8.59 (dd, 2 H), 7.83 - 7.87 (dt, 1 H), 7.61 (d, 1 H), 7.55 (d, 1 H), 7.39 - 7.46 (m, 2 H), 7.37 (t, 1 H), 7.33 (d, 1 H), 7.14 (t, 2 H), 6.74 - 6.76 (dd, 1H), 5.25 (s, 2 H), 5.01 - 5.06 (m, 2 H), 3.66 - 3.70 (m, 2 H), 2.49 - 2.52 (m, 3 H).
Cpd 058 - En2	421.3	(400 MHz, DMSO-D_6) δ ppm: 8.54 - 8.59 (dd, 2 H), 7.83 - 7.87 (dt, 1 H), 7.61 (d, 1 H), 7.55 (d, 1 H), 7.39 - 7.46 (m, 2 H), 7.37 (t, 1 H), 7.33 (d, 1 H), 7.14 (t, 2 H), 6.74 -6.76 (dd, 1H), 5.25 (s, 2 H), 5.01 - 5.06 (m, 2 H), 3.66 - 3.70 (m, 2 H), 2.49 - 2.52 (m, 3 H).
Cpd 059 - En1	404.3	(400 MHz, DMSO-D_6) δ ppm: 8.60- 8.55 (m, 3 H), 7.88- 7.83 (m, 1 H), 7.79- 7.76 (m, 1 H), 7.62 (d, 1 H), 7.57 (d, 1 H), 7.46- 7.44 (m, 2 H), 7.39- 7.36 (m, 1 H), 7.30- 7.27 (m, 1 H), 6.78- 6.76 (dd, 1 H), 5.27 (s, 2 H), 5.16- 5.11 (q, 1 H), 4.99 (m, 1 H), 3.79 (m, 2 H), 2.57 (s, 3 H).
Cpd 059 - En2	404.3	(400 MHz, DMSO-D_6) δ ppm: 8.60- 8.55 (m, 3 H), 7.88- 7.83 (m, 1 H), 7.79- 7.76 (m, 1 H), 7.62 (d, 1 H), 7.57 (d, 1 H), 7.46- 7.44 (m, 2 H), 7.39- 7.36 (m, 1 H), 7.30- 7.27 (m, 1 H), 6.78- 6.76 (dd, 1 H),

		5.27 (s, 2 H), 5.16- 5.11 (q, 1 H), 4.99 (m, 1 H), 3.79 (m, 2 H), 2.57 (s, 3 H).
Cpd 061 - En1	435.36	(400 MHz, DMSO-D_6) δ ppm: 8.58 (d, 1 H), 8.54 (d, 1 H), 7.83 - 7.88 (m, 2 H), 7.54 (d, 1 H), 7.36 - 7.43 (m, 3 H), 7.25 (d, 1 H), 7.14 (t, 2 H), 6.74 (dd, 1 H), 5.25 (s, 2 H), 5.13 - 5.18 (m, 1 H), 4.77 (s, 1 H), 3.45 (brs, 2 H), 2.50 (s, 3 H), 1.87 - 2.03 (m, 2 H).
Cpd 061 - En2	435.32	(400 MHz, DMSO-D_6) δ ppm: 8.58 (d, 1 H), 8.54 (d, 1 H), 7.83 - 7.88 (m, 2 H), 7.54 (d, 1 H), 7.36 - 7.43 (m, 3 H), 7.25 (d, 1 H), 7.14 (t, 2 H), 6.74 (dd, 1 H), 5.25 (s, 2 H), 5.13 - 5.18 (m, 1 H), 4.77 (s, 1 H), 3.45 (brs, 2 H), 2.50 (s, 3 H), 1.87-2.03 (m, 2 H).
Cpd 062 - En1	409.2	(400 MHz, DMSO-D_6) δ ppm: 8.60 (dd, 1 H), 8.54 (d, 1 H), 7.86 (dt, 1 H), 7.56 (d, 1 H), 7.36 - 7.39 (m, 1 H), 7.27 – 7.29 (m, 2 H), 6.75 (dd, 1 H), 5.26 (s, 2 H), 5.07 (t, 1 H), 4.28 – 4.33 (m, 1 H), 3.51 – 3.56 (m, 1 H), 3.35 – 3.41 (m, 1 H), 2.55 – 2.67 (m, 2 H), 2.49 (s, 3 H).
Cpd 062 - En2	409.2	(400 MHz, DMSO-D_6) δ ppm: 8.60 (dd, 1 H), 8.54 (d, 1 H), 7.86 (dt, 1 H), 7.56 (d, 1 H), 7.36 - 7.39 (m, 1 H), 7.27 – 7.29 (m, 2 H), 6.75 (dd, 1 H), 5.26 (s, 2 H), 5.07 (t, 1 H), 4.28 – 4.33 (m, 1 H), 3.51 – 3.56 (m, 1 H), 3.35 – 3.41 (m, 1 H), 2.55 – 2.67 (m, 2 H), 2.49 (s, 3 H).
Cpd 063 - En1	477.3	(400 MHz, DMSO-D_6) δ ppm: 8.59 (d, 1 H), 8.56 (d, 1 H), 7.84 - 7.88 (m, 1 H), 7.56 (d, 1 H), 7.36 - 7.39 (m, 1 H), 7.32 (d, 1 H), 7.28 (d, 1 H), 6.77 (dd, 1 H), 5.20 - 5.27 (m, 3 H), 4.91 - 4.93 (m, 1 H), 4.13 - 4.18 (m, 1 H), 3.58 - 3.64 (m, 2 H), 2.50 (s, 3 H).
Cpd 063 - En2	477.3	(400 MHz, DMSO-D_6) δ ppm: 8.59 (d, 1 H), 8.56 (d, 1 H), 7.84 - 7.88 (m, 1 H), 7.56 (d, 1 H), 7.36 - 7.39 (m, 1 H), 7.32 (d, 1 H), 7.28 (d, 1 H), 6.77 (dd, 1H), 5.20 - 5.27 (m, 3 H), 4.91 - 4.93 (m, 1 H), 4.13 - 4.18 (m, 1 H), 3.58 - 3.64 (m, 2 H), 2.50 (s, 3 H)
Cpd 064 - En1	391.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.53 (d, 1 H), 7.86 (dt, 1 H), 7.56 (d, 1 H), 7.36 – 7.39 (m, 1 H), 7.31 (d, 1 H), 7.20 (d, 1 H), 6.74 (dd, 1 H), 6.00 – 6.30 (tt, 1 H), 5.27 (s, 2 H), 4.97 (brs, 1 H), 4.11 – 4.21 (m, 1 H), 3.52 – 3.54 (m, 1 H), 3.42 – 3.44 (m, 1 H), 2.50 (s, 3 H), 2.08 – 2.23 (m, 2 H).
Cpd 064 - En2	391.2	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.53 (d, 1 H), 7.86 (dt, 1 H), 7.56 (d, 1 H), 7.36 – 7.39 (m, 1 H), 7.31 (d, 1 H), 7.20 (d, 1 H), 6.74 (dd, 1 H), 6.00 – 6.30 (tt, 1 H), 5.27 (s, 2 H), 4.97 (brs, 1 H), 4.11 – 4.21 (m, 1 H), 3.52 – 3.54 (m, 1 H), 3.42 – 3.44 (m, 1 H), 2.50 (s, 3 H), 2.08 – 2.23 (m, 2 H). LCMS: Rt= 1.72 min (99.85%),
Cpd 066 - En1	419.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 – 8.59 (m, 1 H), 8.54 (d, 1 H), 7.84 – 7.88 (dt, 1 H), 7.56 (d, 1 H), 7.36 – 7.39 (m, 3 H), 7.25 (d, 1 H), 6.92 (S, 1 H), 6.73 – 6.76 (dd, 1 H), 6.03 – 6.34 (dt, 1 H), 5.26 (s, 2 H), 3.52 – 3.58 (q, 2 H), 3.33 (s, 3 H), 2.49 – 2.55 (m, 1 H), 2.46 (s, 3 H), 2.29 - 2.38 (m, 1 H), 1.41 (s, 3 H)
Cpd 066 - En2	419.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 – 8.59 (m, 1 H), 8.54 (d, 1 H), 7.84 – 7.88 (dt, 1 H), 7.56 (d, 1 H), 7.36 – 7.39 (m, 3 H), 7.25 (d, 1 H), 6.91 (S, 1 H), 6.73 – 6.76 (dd, 1 H), 6.03 – 6.34 (dt, 1 H), 5.26 (s, 2 H), 3.52 – 3.58 (q, 2 H), 3.33 (s, 3 H), 2.49 – 2.55 (m, 1 H), 2.46 (s, 3 H), 2.29 – 2.39 (m, 1 H), 1.41 (s, 3 H)
Cpd 068 - En1	383.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 – 8.55 (m, 2 H), 7.88 – 7.83 (m, 1 H),7.57 (d, 1 H), 7.44 (s, 1 H), 7.39 – 7.33 (m, 2 H), 6.78 – 6.76 (m, 1 H), 5.28 (s, 2 H), 5.13 (s, 1 H), 3.70 (s, 2 H), 2.52 – 2.49 (m, 3 H), 2.10 (s, 3 H), 1.37 (s, 3 H);

Cpd 068 - En2	383.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 – 8.55 (m, 2 H), 7.88 – 7.83 (m, 1 H),7.57 (d, 2 H), 7.44 (s, 1 H), 7.39 – 7.33 (m, 2 H), 6.78 – 6.76 (m, 1 H), 5.28 (s, 2 H), 5.12 (s, 1 H), 3.69 (s, 2 H), 2.52 – 2.49 (m, 3 H), 2.10 (s, 3 H), 1.37 (s, 3 H);
Cpd 071	389.2	(400 MHz, DMSO-D_6) δ ppm: 8.54 – 8.61 (m, 2 H), 7.85 - 7.89 (m, 2 H), 7.57 (d,1 H), 7.37 – 7.40 (m, 1 H), 7.31 (d, 1 H), 6.76 – 6.78 (dd, 1 H), 5.29 (s, 2 H), 5.04 (t, 1 H), 3.62 – 3.83 (m, 2 H), 2.49 (s, 3 H), 1.66 – 1.88 (m, 1 H).
Cpd 072 - En1	403.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.52 (d, 1 H), 7.84 - 7.88 (dt, 1 H), 7.76 (s, 1 H), 7.57 (d, 1 H), 7.36 – 7.40 (dt, 1 H), 7.29 (d, 1 H), 6.73 - 6.75 (dd, 1H), 5.83 – 6.13 (dt, 1 H), 5.29 (s, 2 H), 5.05 (s, 1 H), 3.81 (d, 1 H), 3.68 (d, 1 H), 2.50 (s, 3 H), 1.67 - 1.74 (m, 1 H), 1.20 (d, 2 H).
Cpd 072 - En2	403.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.52 (d, 1 H), 7.84 - 7.88 (dt, 1 H), 7.76 (s, 1 H), 7.57 (d, 1 H), 7.36 – 7.40 (dt, 1 H), 7.29 (d, 1 H), 6.73 - 6.75 (dd, 1H), 5.83 – 6.13 (dt, 1 H), 5.29 (s, 2 H), 5.05 (s, 1 H), 3.81 (d, 1 H), 3.68 (d, 1 H), 2.50 (s, 3 H), 1.67 - 1.74 (m, 1 H), 1.20 (d, 2 H).
Cpd 074 - En1	433.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.54 (d, 1 H), 7.86 (dt, 1 H), 7.58 (d, 1 H), 7.52 (d, 1 H), 7.49 (d, 1 H), 7.39 - 7.36 (m, 1 H), 7.05 (d, 1 H), 6.80 (d, 1 H), 6.75 (dd, 1 H), 5.49 (q, 1 H), 5.28 (q, 2 H), 4.99 (t, 1 H), 3.84 - 3.79 (m, 2 H), 3.48 - 3.43 (m, 1 H), 2.49 (s, 3 H), 1.02 - 0.95 (m, 4 H)
Cpd 074 - En2	433.3	(400 MHz, DMSO-D_6) δ ppm: 8.61 (d, 1 H), 8.54 (d, 1 H), 7.86 (dt, 1 H), 7.58 (d, 1 H), 7.52 (d, 1 H), 7.49 (d, 1 H), 7.39 - 7.36 (m, 1 H), 7.05 (d, 1 H), 6.80 (d, 1 H), 6.75 (dd, 1 H), 5.49 (q, 1 H), 5.28 (q, 2 H), 4.98 (t, 1 H), 3.86 - 3.77 (m, 2 H), 3.48 - 3.44 (m, 1 H), 2.49 (s, 3 H), 1.02 - 0.96 (m, 4 H).
Cpd 075 - En1	421.3	(400 MHz, DMSO-D_6) δ ppm: 8.55 - 8.59 (m, 2 H), 7.84 - 7.88 (m, 1 H), 7.57 (t, 2 H), 7.46 (d, 1 H), 7.36 - 7.39 (q, 1 H), 7.26 (s, 1 H), 6.77 (dd, 1 H), 6.15 (d, 1 H), 5.26 (s, 2 H), 5.12 (t, 1 H), 3.80 (s, 3 H), 3.74 (d, 2 H), 2.56 (s, 3 H), 1.68 (s, 3 H).
Cpd 075 - En2	421.3	(400 MHz, DMSO-D_6) δ ppm: 8.55 - 8.59 (m, 2 H), 7.84 - 7.85 (m, 1 H), 7.57 (t, 2 H), 7.46 (d, 1 H), 7.37 (q, 1 H), 7.26 (s, 1 H), 6.77 (dd, 1 H), 6.15 (d, 1 H), 5.26 (s, 2 H), 5.12 (t, 1 H), 3.80 (s, 3 H), 3.74 (d, 2 H), 2.56 (s, 3 H), 1.68 (s, 3 H). LCMS: Rt= 1.70 min (99.73%)
Cpd 076 - En1	384.2	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.53 (d, 1 H), 7.86 (t, 1 H), 7.57 (d, 1 H), 7.43 (br s, 2 H), 7.39 - 7.36 (m, 1 H), 7.32 (d, 1 H), 6.91 (br s, 1 H), 6.74 (dd, 1 H), 5.27 (s, 2 H), 4.85 - 4.83 (m, 1 H), 4.27 - 4.22 (m, 1 H), 3.54 - 3.41 (m, 2 H), 2.45 (s, 3 H), 2.43 (t, 2 H)
Cpd 076 - En2	384.2	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.53 (d, 1 H), 7.86 (t, 1 H), 7.57 (d, 1 H), 7.43 (br s, 2 H), 7.39 - 7.36 (m, 1 H), 7.32 (d, 1 H), 6.91 (br s, 1 H), 6.74 (dd, 1 H), 5.27 (s, 2 H), 4.85 - 4.83 (m, 1 H), 4.27 - 4.22 (m, 1 H), 3.54 - 3.41 (m, 2 H), 2.45 (s, 3 H), 2.43 (t, 2 H).
Cpd 077 - En1	411.4	(400 MHz, DMSO-D_6) δ ppm: 8.60 (dd, 1 H), 8.53 (d, 1 H), 7.86 (td, 1 H), 7.56 (d, 1 H), 7.38 (dt, 1 H), 7.32 (d, 1 H), 6.95 (d, 1 H), 6.74 (dd, 1 H), 5.26 (s, 2H), 4.72 (t, 1 H), 3.83 - 3.88 (m, 3 H), 3.49 - 3.59 (m, 2 H), 3.21 - 3.29 (m, 2 H), 2.49 (s, 3 H), 1.82 - 1.90 (m, 1 H), 1.61 (d, 2 H), 1.26 - 1.37 (m, 2 H).
Cpd 077 - En2	411.4	(400 MHz, DMSO-D_6) δ ppm: 8.60 (dd, 1 H), 8.53 (d, 1 H), 7.86 (td, 1 H), 7.56 (d, 1 H), 7.38 (dt, 1 H), 7.32 (d, 1 H), 6.95 (d, 1 H), 6.74 (dd, 1 H), 5.26 (s, 2H), 4.72 (t, 1 H), 3.83 - 3.87 (m, 3 H), 3.50 - 3.57 (m, 2 H), 3.21 - 3.31 (m, 2 H), 2.49 (s, 3 H), 1.82 - 1.90 (m, 1 H)), 1.60 (d, 2 H), 1.29 - 1.37 (m, 2 H).

Cpd 079 - En 1	419.3	(400 MHz, DMSO-D_6) δ ppm: 8.72 (d, 2 H), 8.60 - 8.62 (m, 1 H), 8.51 (d, 1 H), 7.85 - 7.89 (m, 1 H), 7.58 (d, 1 H), 7.37 - 7.40 (m, 1 H), 7.31 (t, 2 H), 7.25 (d, 1 H), 6.72 -6.74 (dd, 1 H), 5.29 (s, 2 H), 4.88 (t, 1 H), 4.50 (m, 1 H), 3.56 - 3.60 (m, 1 H), 3.42 - 3.48 (m, 1 H), 3.25 - 3.30 (m, 1 H), 3.07 - 3.12 (m, 1 H), 2.41 (s, 3 H).
Cpd 079 - En 2	419.3	(400 MHz, DMSO-D_6) δ ppm: 8.72 (d, 2 H), 8.60 - 8.62 (m, 1 H), 8.51 (d, 1 H), 7.85 - 7.89 (m, 1 H), 7.58 (d, 1 H), 7.37 - 7.40 (m, 1 H), 7.31 (t, 2 H), 7.25 (d, 1 H), 6.72 - 6.74 (dd, 1 H), 5.29 (s, 2 H), 4.88 (t, 1 H), 4.50 (m, 1 H), 3.57 - 3.60 (m, 1 H), 3.45 - 3.46 (m, 1 H), 3.25 - 3.30 (m, 1 H), 3.07 - 3.12 (m, 1 H), 2.41 (s, 3 H).
Cpd 081 - En1	409.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 (dd, 1 H), 8.54 (d, 1 H), 7.86 (dt, 1 H), 7.57 (d, 1 H), 7.36 - 7.40 (m, 3 H), 6.76 (dd, 1 H), 5.31 – 5.32 (m, 1 H), 5.27 (s, 2 H), 3.97 – 3.99 (m, 1 H), 3.29 - 3.35 (m, 2 H), 2.50 (m, 3 H), 2.45 – 2.50 (m, 1 H), 2.30 – 2.36 (m, 1 H).
Cpd 081 - En2	409.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 (dd, 1 H), 8.54 (d, 1 H), 7.86 (dt, 1 H), 7.57 (d, 1 H), 7.36 - 7.40 (m, 3 H), 6.76 (dd, 1 H), 5.31 – 5.32 (m, 1 H), 5.27 (s, 2 H), 3.97 – 3.99 (m, 1 H), 3.29 - 3.35 (m, 2 H), 2.50 (m, 3 H), 2.45 – 2.50 (m, 1 H), 2.30 – 2.36 (m, 1 H).
Cpd 082 - En1	420.2	(400 MHz, DMSO-D_6) δ ppm: 8.60 (dd, 1H), 8.54 (dd, 1 H), 7.83 - 7.88 (m, 1 H), 7.60 (d, 1 H), 7.56 (d, 1 H), 7.36 - 7.39 (m, 1 H), 7.25 (d, 1 H), 6.75 – 6.77 (m, 1 H), 5.29 (s, 2 H), 4.46 - 4.53 (m, 1 H), 3.20 – 3.25 (m, 1 H), 3.01 – 3.10 (m, 2 H), 2.84 – 2.88 (m, 1 H), 2.67 - 2.71 (M, 2 H), 2.50 (s, 3 H)
Cpd 082 - En2	420.2	(400 MHz, DMSO-D_6) δ ppm: 8.60 (dd, 1H), 8.54 (dd, 1 H), 7.83 - 7.88 (m, 1 H), 7.60 (d, 1 H), 7.56 (d, 1 H), 7.36 - 7.39 (m, 1 H), 7.25 (d, 1 H), 6.75 – 6.77 (m, 1 H), 5.29 (s, 2 H), 4.46 - 4.53 (m, 1 H), 3.20 – 3.25 (m, 1 H), 3.01 – 3.10 (m, 2 H), 2.84 – 2.88 (m, 1 H), 2.67 - 2.71 (M, 2 H), 2.50 (s, 3 H)
Cpd 084 - En1	430.3	(400 MHz, DMSO-D_6) δ ppm: 8.54 -8.60 (m, 2 H), 7.83 - 8.87 (dt, 1 H), 7.56 (d, 1 H), 7.33 - 7.48 (m, 2 H), 6.84 (s, 1 H), 6.74 - 6.76 (dd, 1 H), 6.00 – 6.24 (m, 1 H), 5.23 - 5.30 (m, 2 H), 3.04 (d, 1H), 2.83 (d, 1H), 2.63 – 2.71 (m, 2 H), 2.47 -2.54 (m, 4 H), 2.36 (d, 1 H), 2.19 – 2.23 (m, 1 H), 1.35 – 1.52 (m, 3 H), 123 (s, 1 H),
Cpd 084 - En2	430.3	(400 MHz, DMSO-D_6) δ ppm: 8.54 -8.60 (m, 2 H), 7.82 - 8.87 (m, 1 H), 7.62 (d, 1 H), 7.44 (d, 1H), 7.35 - 7.38 (m, 1 H), 6.84 (s, 1 H), 6.74 - 6.76 (dd, 1 H), 6.00 – 6.23 (m, 1 H), 5.21 - 5.30 (m, 2 H), 3.04 (d, 1H), 2.83 (d, 1H), 2.63 – 2.71 (m, 2 H), 2.47 -2.54 (m, 4 H), 2.36 (d, 1 H), 2.19 – 2.23 (m, 1 H), 1.35 – 1.51 (m, 3 H), 1.23 (s, 1 H),
Cpd 087 - En1	407.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.54 (d, 1 H), 7.88 - 7.84 (m, 1 H), 7.58 - 7.56 (m, 2 H), 7.40- 7.36 (m, 3 H), 6.76 - 6.74 (dd, 1 H), 6.20 - 6.19 (d, 1 H), 5.27 (s, 2 H), 5.15 - 5.10 (q, 1 H), 4.85 (s, 1 H), 3.79 (s, 3 H), 3.71 (d, 2 H), 2.52 (s, 3 H).
Cpd 087 - En2	407.3	(400 MHz, DMSO-D_6) δ ppm: 8.61- 8.59 (m, 1 H), 8.54 (d, 1 H), 7.88 - 7.84 (m, 1 H), 7.58 - 7.56 (m, 2 H), 7.40 - 7.36 (m, 3 H), 6.76 - 6.74 (dd, 1 H), 6.20 - 6.19 (d, 1 H), 5.27 (s, 2 H), 5.15 - 5.10 (q, 1 H), 4.86 (s, 1 H), 3.79 (s, 3 H), 3.71 (d, 2 H), 2.52 (s, 3 H).
Cpd 088 - En1	418.3	(400 MHz, DMSO-D_6) δ ppm: 8.61 (d, 1 H), 8.48 - 8.52 (m, 2 H), 7.87 (t, 1 H), 7.69 (t, 1 H), 7.57 (d, 1 H), 7.38 (t, 1 H), 7.26 - 7.32 (m, 3 H), 7.18 – 7.21 (m, 1 H), 6.72 - 6.75 (m, 1 H), 5.25 (t, 2 H), 4.88 (t, 1 H), 4.36 - 4.38 (m, 1 H), 3.53 - 3.58 (m, 1 H), 3.31 - 3.43 (m, 1 H), 3.09 - 3.13 (m, 1 H), 2.97 – 3.03 (m, 1 H), 2.32 (s, 3 H).
Cpd 088 - En2	418.3	(400 MHz, DMSO-D_6) δ ppm: 8.61 (d, 1 H), 8.48 - 8.52 (m, 2 H), 7.87 (t, 1 H), 7.69 (t, 1 H), 7.57 (d, 1 H), 7.38 (t, 1 H), 7.26 - 7.32 (m, 3 H), 7.18 – 7.21 (m, 1 H), 6.72 - 6.75 (m, 1 H), 5.25 (t, 2 H),

		4.88 (t, 1 H), 4.36 - 4.38 (m, 1 H), 3.53 - 3.58 (m, 1 H), 3.31 - 3.43 (m, 1 H), 3.09 - 3.13 (m, 1 H), 2.97 – 3.03 (m, 1 H), 2.32 (s, 3 H).
Cpd 089 - En1	384.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.54 (d, 1 H), 7.86 (t, 1 H), 7.57 (d, 1 H), 7.50 (d, 1 H), 7.38 (t, 2 H), 7.26 (s, 1 H), 7.21 (s, 1 H), 6.78-6.75 (m, 1 H), 5.25 (s, 2 H), 5.11 (t, 1 H), 3.93-3.89 (m, 1 H), 3.76-3.72 (m, 1 H), 2.55 (s, 3 H), 1.51 (s, 3 H).
Cpd 089 - En2	384.3	(400 MHz, DMSO-D_6) δ ppm: 8.60 (d, 1 H), 8.54 (d, 1 H), 7.86 (t, 1 H), 7.57 (d, 1 H), 7.50 (d, 1 H), 7.38 (t, 2 H), 7.26 (s, 1 H), 7.21 (s, 1 H), 6.78-6.75 (m, 1 H), 5.26 (s, 2 H), 5.11 (t, 1 H), 3.93-3.89 (m, 1 H), 3.76-3.72 (m, 1 H), 2.55 (s, 3 H), 1.51 (s, 3 H).
Cpd 090 - En1	395.3	(400 MHz, DMSO-D_6) δ ppm: 8.59 - 8.60 (m, 1 H), 8.57 (s, 1 H), 7.86 (t, 1 H), 7.67 (d, 1 H), 7.56 (d, 1 H), 7.36 -7.39 (m, 1 H), 7.26 (d, 1 H), 6.79 (dd, 1 H), 5.27 (s, 2 H), 5.23 (s, 1 H), 4.77 - 4.81 (m, 1 H), 3.73 - 3.80 (m, 2 H), 2.50 (s, 3 H).
Cpd 090 - En2	395.2	(400 MHz, DMSO-D_6) δ ppm: 8.59 - 8.60 (m, 1 H), 8.57 (s, 1 H), 7.86 (t, 1 H), 7.67 (d, 1 H), 7.56 (d, 1 H), 7.36 - 7.39 (m, 1 H), 7.26 (d, 1 H), 6.79 (dd, 1 H), 5.27 (s, 2 H), 5.23 (s, 1 H), 4.77 - 4.81 (m, 1 H), 3.73 - 3.80 (m, 2 H), 2.50 (s, 3 H)
Cpd 091 - En1	396.3	(400 MHz, DMSO-D_6) δ ppm: 8.61 (d, 1 H), 8.55 (d, 1 H) 7.88 - 7.86 (m, 1 H), 7.75 (s, 1 H), 7.56 (d, 1 H), 7.39 - 7.37 (m, 2 H), 6.87 (s, 1 H), 6.77 - 6.75 (m, 1 H), 5.26 (s, 3 H), 3.64 - 3.56 (m, 2 H), 3.28 - 317 (m, 2 H), 2.63 - 2.43 (m, 3 H), 2.38 - 2.36 (m, 2 H);
Cpd 091 - En2	396.2	(400 MHz, DMSO-D_6) δ ppm: 8.61 (d, 1 H), 8.55 (d, 1 H) 7.88 - 7.86 (m, 1 H), 7.75 (s, 1 H), 7.56 (d, 1 H), 7.39 - 7.37 (m, 2 H), 6.87 (s, 1 H), 6.77 - 6.75 (m, 1 H), 5.26 - 5.23 (m, 3 H), 3.64 - 3.56 (m, 2 H), 3.28 - 317 (m, 2 H), 2.50 - 2.49 (m, 3 H), 2.49 - 2.43 (m, 2 H)

[0330] *Chiral analytical data*

Chiral SFC

Cpd Code	Column Name	co-solvent	co-solvent %	Flow [g/min]	RT [min]	*Purity [%]*
Cpd 011 - En1	(1)	MeOH	30	3	1.52	99.9
Cpd 011 - En2	(1)	MeOH	30	3	2.26	99.9
Cpd 017 - En1	(7)	MeOH	40	3	2.48	99.9
Cpd 017 - En2	(7)	MeOH	40	3	3.23	98.8
Cpd 018 - En1	(7)	0.5%DEA in EtOH	40	4	3.49	99.9
Cpd 018 - En2	(7)	0.5%DEA in EtOH	40	4	10.02	99.9
Cpd 024 - En1	(3)	0.5%DEA in MeOH	40	3	4.51	99.9
Cpd 024 - En2	(3)	0.5%DEA in MeOH	40	3	6.51	99.9
Cpd 025 - En1	(5)	MeOH	30	3	1.52	99.8
Cpd 025 - En2	(5)	MeOH	30	3	1.88	99.1

Cpd 026 - En1	(2)	30nM MeOHNH3 in IPA	20	3	7.13	99.7
Cpd 026 - En2	(2)	30nM MeOHNH3 in IPA	20	3	9.06	96.4
Cpd 028 - En1	(1)	0.5% IPAmine in IPA	20	3	4.66	98.7
Cpd 028 - En2	(1)	0.5% IPAmine in IPA	20	3	5.66	96.3
Cpd 029 - En1	(1)	0.5% IPAmine in IPA	20	3	4.56	99.4
Cpd 029 - En2	(1)	0.5% IPAmine in IPA	20	3	5.55	96.8
Cpd 031 - En1	(1)	IPA	20	3	3.45	98.7
Cpd 031 - En2	(1)	IPA	20	3	4.54	92.5
Cpd 032 - En1	(1)	IPA	25	3	2.17	99
Cpd 032 - En2	(1)	IPA	25	3	2.89	97.4
Cpd 037 - En1	(6)	MeOH	30	3	3.43	99.7
Cpd 037 - En2	(6)	MeOH	30	3	4.03	95.9
Cpd 038 - En1	(2)	MeOH	20	3	4.34	99.8
Cpd 038 - En2	(2)	MeOH	20	3	5.11	99.7
Cpd 050 - En1	(15)	MeOH	40	4	3.28	99.6
Cpd 050 - En2	(15)	MeOH	40	4	6.45	99.3
Cpd 051 - En1	(16)	MeOH	40	3	4.01	99.3
Cpd 051 - En2	(16)	MeOH	40	3	7.92	99.6
Cpd 052 - En1	(2)	0.5%DEA in MeOH	40	3	2.56	99.4
Cpd 052 - En2	(2)	0.5%DEA in MeOH	40	3	3.94	99.1
Cpd 053 - En 1	(3)	0.5%DEA in MeOH	30	3	5.07	99.2
Cpd 053 - En 2	(3)	0.5%DEA in MeOH	30	3	6.67	98.5
Cpd 054 - En1	(15)	0.5%DEA in MeOH	40	4	4.02	99.9
Cpd 054 - En2	(15)	0.5%DEA in MeOH	40	4	9.91	99.8
Cpd 058 - En1	(14)	MeOH	30	3	8.86	99.96
Cpd 058 - En2	(14)	MeOH	30	3	11.91	99.92
Cpd 059 - En1	(3)	MeOH	40	3	9.82	99.97

Cpd 059 - En2	(3)	MeOH	40	3	12.23	99.5
Cpd 061 - En1	(7)	MeOH	40	3	8.18	99.9
Cpd 061 - En2	(7)	MeOH	40	3	10.67	99.9
Cpd 062 - En1	(7)	MeOH	30	3	3.82	99.8
Cpd 062 - En2	(7)	MeOH	30	3	6.21	99.5
Cpd 063 - En1	(16)	MeOH	30	3	2.04	99.9
Cpd 063 - En2	(16)	MeOH	30	3	7.06	99.9
Cpd 064 - En1	(6)	MeOH	40	4	2.09	99.9
Cpd 064 - En2	(6)	MeOH	40	4	5.07	99.9
Cpd 066 - En1	(16)	MeOH	40	3	2.77	99.9
Cpd 066 - En2	(16)	MeOH	40	3	3.59	99.7
Cpd 068 - En1	(15)	0.5% IPAmine in IPA	30	3	5.31	99.6
Cpd 068 - En2	(15)	0.5% IPAmine in IPA	30	3	7.87	99.6
Cpd 072 - En1	(16)	MeOH	30	3	3.64	99.7
Cpd 072 - En2	(16)	MeOH	30	3	4.64	99.1
Cpd 074 - En1	(2)	0.5%DEA in MeOH	25	3	5.99	99.2
Cpd 074 - En2	(2)	0.5%DEA in MeOH	25	3	3.28	99.9
Cpd 075 - En1	(15)	MeOH	35	3	5.85	99.8
Cpd 075 - En2	(15)	MeOH	35	3	6.72	98.8
Cpd 076 - En1	(12)	0.5%DEA in MeOH	40	4	1.37	99.7
Cpd 076 - En2	(12)	0.5%DEA in MeOH	30	3	5.06	98.8
Cpd 077 - En1	(2)	MeOH	30	3	2.47	98.2
Cpd 077 - En2	(2)	MeOH	30	3	4.42	96.2
Cpd 079 - En 1	(2)	MeOH	50	3	4.57	99.9
Cpd 079 - En 2	(2)	MeOH	50	3	7.38	99.8
Cpd 081 - En1	(16)	0.5% IPAmine in IPA	30	3	8.71	99.9
Cpd 081 - En2	(16)	0.5% IPAmine in IPA	30	3	10.37	97.8

Cpd 082 - En1	(15)	0.5%DEA in MeOH	35	3	1.91	99.2
Cpd 082 - En2	(15)	0.5%DEA in MeOH	35	3	5.13	99.2
Cpd 084 - En1	(7)	0.5%DEA in EtOH	30	3	5.88	97.9
Cpd 084 - En2	(7)	0.5%DEA in EtOH	30	3	7.1	97.3
Cpd 087 - En1	(3)	MeOH	40	3	7.14	99.8
Cpd 087 - En2	(3)	MeOH	40	3	10.77	99.2
Cpd 088 - En1	(6)	MeOH	50	4	4.05	99.7
Cpd 088 - En2	(6)	MeOH	50	4	6.32	98.9
Cpd 089 - En1	(13)	0.5% IPAmine in IPA	40	3	5.7	99.6
Cpd 089 - En2	(13)	0.5% IPAmine in IPA	40	3	6.82	99.2
Cpd 090 - En1	(6)	MeOH	25	3	1.25	99.9
Cpd 090 - En2	(6)	MeOH	25	3	2.16	99.7
Cpd 091 - En1	(15)	MeOH	40	3	4.59	99.8
Cpd 091 - En2	(15)	MeOH	40	3	5.87	99.3

[0331] *Chiralpak AD-3(4.6*150mm)3.5µm = (1); Chiralpak AD-H(4.6*250 mm)5 µm = (2); Chiralpak IC (4.6*250mm)5µm = (3); Chiralpak IE-3(4.6*150mm)3µm = (4); Chiralpak IF-3(4.6*150mm)3µm = (5); Chiralpak IF (4.6*250mm)5µm = (6); Chiralpak IG-3(4.6*150 mm)3µm = (7); ChiralCel OD-3(4.6*150mm)3µm = (8); ChiralCel OH-3(4.6*150mm)3µm = (9); ChiralCel OZ-3(4.6*150mm)3µm = (10); C-AMYLOSE A = (11); (R,R) WHELK-01 (4.6*150mm)3.5µm = (12); Chiralpak IK (4.6*250mm)5µm = (13), CHIRALART Amylose C-NeO (4.6*250mm)5µm = (14); CHIRALCEL OX-3 (4.6*150mm) 3µm = (15); LUX CELLULOSE-4 (4.6*150mm)3µm = (16).*

Chiral HPLC						
Cpd Code	Column	Phase A/B	Ratio A/B	Flow [mL/min]	RT [min]	*Purity [%]*
Cpd 015 - En1	(3)	nHex / EtOH	70 / 30	1	10.03	99.9
Cpd 015 - En2	(3)	nHex / EtOH	70 / 30	1	12.32	98.8
Cpd 016 - En1	(3)	nHex / EtOH	50 / 50	1	8.8	99.9
Cpd 016 - En2	(3)	nHex / EtOH	50 / 50	1	10.33	99.9

Cpd 019 - En1	(3)	nHex / EtOH	50 / 50	1	9.27	99.4
Cpd 019 - En2	(3)	nHex / EtOH	50 / 50	1	10.36	97.7
Cpd 020 - En1	(3)	nHex / EtOH	60 / 40	1	13.6	99.7
Cpd 020 - En2	(3)	nHex / EtOH	60 / 40	1	16.52	97.6
Cpd 021 - En1	(3)	nHex / EtOH	50 / 50	1	22.61	99.9
Cpd 021 - En2	(3)	nHex / EtOH	50 / 50	1	34.91	99.7
Cpd 022 - En1	(1)	nHex / EtOH	70 / 30	1	14.15	99.8
Cpd 022 - En2	(1)	nHex / EtOH	70 / 30	1	15.32	98.4
Cpd 023 - En1	(1)	nHex/ IPA	80 / 20	1	12.41	99.2
Cpd 023 - En2	(1)	nHex/ IPA	80 / 20	1	15.93	95.6
Cpd 027 - En1	(5)	nHex / EtOH	40 / 60	3	19.17	99.8
Cpd 027 - En2	(5)	nHex / EtOH	40 / 60	3	23.29	98.4
Cpd 030 - En1	(1)	nHex / EtOH	70 / 30	1	7.13	99.7
Cpd 030 - En2	(1)	nHex / EtOH	70 / 30	1	12.61	95.6
Cpd 049 - En1	(3)	DIPA / MeOH	0.2 / 99.8	1	12.22	99.6
Cpd 049 - En2	(3)	DIPA / MeOH	0.2 / 99.8	1	18.03	99.4

[0332] Chiralpak AD-H (250x4.6 mm) 5 µm = (1) ; Chiralpak IA (4.6x250 mm) 5 µm = (2); Chiralpak IG (250x4.6 mm) 5 µm = (3); Lux Amylose-2 (250x4.6mm) 5 µm = (4); Lux Cellulose-2 (250x4.6mm) 5 µm = (5).

[0333] **Part B**

[0334] **Monitoring the TRPM3 ion channel driven Ca2+ uptake.**

[0335] In order to monitor the inhibition of the mouse TRPM3α2 (mTRPM3) ion channel by the compounds of the invention, a cellular system making use of an mTRPM3alpha2 or hTRPM3 overexpressing cell line (flip-in HEK293) was used. The TRPM3 channel was stimulated/opened with Pregnenolone sulfate (PS) (50µM) which results in Ca^{2+} influx.

[0336] For mTRPM3, the intracellular Ca^{2+} was measured with a Calcium responsive dye, Fluor-4 AM ester (Invitrogen). Cells were cultured until a confluence of 80-90%, washed with Versene (Invitrogen) and detached from the surface by a short incubation with 0.05% Trypsin (Invitrogen). The trypsination process was stopped by the addition of complete cell culture medium (DMEM, glutamax,10%FCS,NEAA,Pen-Strep). Cells were collected and resuspended

in Krebs buffer without Calcium at RT.

[0337] Prior the cell seeding (±2000 cells/well into a black, 384 well plate (Greiner)) the diluted compound was added in the assay plate, together with the PS dissolved in Krebs buffer containing Calcium. This resulted in a 2.4mM Ca^{2+} assay solution. Directly after cell addition the plates were read on an Envision fluorescence reader (Perkin Elmer) by an Excitation of 485nM and emission at 535nM.

[0338] Channel inhibition was calculated compared to a non-PS stimulated control versus a condition stimulated with PS (50µM) with vehicle. The ability of the compounds of the invention to inhibit this activity was determined as: Percentage inhibition = [1-((RFU determined for sample with test compound present – RFU determined for sample with positive control inhibitor) divided by (RFU determined in the presence of vehicle – RFU determined for sample with positive control inhibitor))] * 100.

[0339] The activities of the Example compounds **cpd 001-091** tested are depicted in the table below. All tested compounds show an activity in the Fluo-4 AM assay. The activity ranges A, B and C refer to IC50 values in the Fluo-4 AM assay as follows: "A": IC_{50} <1 µM; "B" : 1 µM ≤ IC_{50} ≤20 µM and "C" : IC_{50} > 20 µM.

Cpd Code	IC50
Cpd 001	A
Cpd 002	B
Cpd 003	A
Cpd 004	B
Cpd 005	B
Cpd 006	B
Cpd 007	A
Cpd 008	B
Cpd 009 - En1	B
Cpd 009 - En2	C
Cpd 010	B
Cpd 011 - En1	A
Cpd 011 - En2	B
Cpd 012	A

Cpd Code	IC50
Cpd 028 - En1	A
Cpd 028 - En2	B
Cpd 029 - En1	A
Cpd 029 - En2	A
Cpd 030 - En1	A
Cpd 030 - En2	B
Cpd 031 - En1	A
Cpd 031 - En2	A
Cpd 032 - En1	A
Cpd 032 - En2	B
Cpd 033	C
Cpd 034	C
Cpd 035	C
Cpd 036	C

Cpd Code	IC50
Cpd 059 - En1	C
Cpd 059 - En2	B
Cpd 061 - En1	C
Cpd 061 - En2	C
Cpd 062 - En1	B
Cpd 062 - En2	C
Cpd 063 - En1	C
Cpd 063 - En2	A
Cpd 064 - En1	B
Cpd 064 - En2	C
Cpd 066 - En1	C
Cpd 066 - En2	C
Cpd 068 - En1	B
Cpd 068 - En2	B

Cpd 013	B
Cpd 014	A
Cpd 015 - En1	B
Cpd 015 - En2	C
Cpd 016 - En1	A
Cpd 016 - En2	B
Cpd 017 - En1	B
Cpd 017 - En2	C
Cpd 018 - En1	B
Cpd 018 - En2	A
Cpd 019 - En1	A
Cpd 019 - En2	B
Cpd 020 - En1	A
Cpd 020 - En2	B
Cpd 021 - En1	B
Cpd 021 - En2	C
Cpd 022 - En1	A
Cpd 022 - En2	C
Cpd 023 - En1	A
Cpd 023 - En2	B
Cpd 024 - En1	B
Cpd 024 - En2	B
Cpd 025 - En1	B
Cpd 025 - En2	A
Cpd 026 - En1	A
Cpd 026 - En2	B
Cpd 027 - En1	B

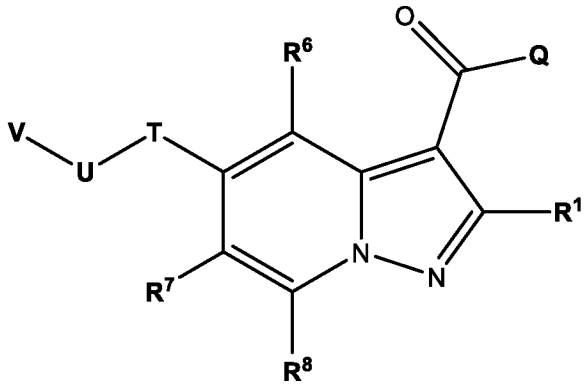
Cpd 037 - En1	B
Cpd 037 - En2	A
Cpd 038 - En1	B
Cpd 038 - En2	A
Cpd 042	C
Cpd 043	C
Cpd 044	B
Cpd 045	B
Cpd 046	C
Cpd 047	B
Cpd 048	C
Cpd 049 - En1	B
Cpd 049 - En2	C
Cpd 050 - En1	C
Cpd 050 - En2	B
Cpd 051 - En1	C
Cpd 051 - En2	B
Cpd 052 - En1	B
Cpd 052 - En2	C
Cpd 053 - En 1	C
Cpd 053 - En 2	B
Cpd 054 - En1	C
Cpd 054 - En2	B
Cpd 055	B
Cpd 056	C
Cpd 057	C
Cpd 058 - En1	C

Cpd 071	C
Cpd 072 - En1	B
Cpd 072 - En2	C
Cpd 074 - En1	B
Cpd 074 - En2	B
Cpd 075 - En1	C
Cpd 075 - En2	C
Cpd 076 - En1	C
Cpd 076 - En2	C
Cpd 077 - En1	C
Cpd 077 - En2	C
Cpd 079 - En 1	C
Cpd 079 - En 2	C
Cpd 081 - En1	C
Cpd 081 - En2	B
Cpd 082 - En1	B
Cpd 082 - En2	A
Cpd 087 - En1	C
Cpd 087 - En2	B
Cpd 088 - En1	B
Cpd 088 - En2	C
Cpd 089 - En1	C
Cpd 089 - En2	A
Cpd 090 - En1	B
Cpd 090 - En2	B
Cpd 091 - En1	A
Cpd 091 - En2	C

Cpd 027 - En2	B	Cpd 058 - En2	C		

CLAIMS

1. A compound of formula (I), a stereo-isomeric form, a physiologically acceptable salt, solvate and/or polymorph thereof



(I)

wherein

$\mathbf{R^1}$ represents -F, -Cl, -Br, -I, -CN, -$\mathbf{R^W}$, -O$\mathbf{R^W}$, -OC(=O)$\mathbf{R^W}$, -N$\mathbf{R^W R^X}$, -N$\mathbf{R^W}$C(=O)$\mathbf{R^X}$, -S$\mathbf{R^W}$, -S(=O)$\mathbf{R^W}$, -S(=O)$_2$$\mathbf{R^W}$, -C(=O)$\mathbf{R^W}$, -C(=O)O$\mathbf{R^W}$, or -C(=O)N$\mathbf{R^W R^X}$;

Q represents -O$\mathbf{R^2}$ or -N$\mathbf{R^3 R^4}$;

$\mathbf{R^2}$ represents -$\mathbf{R^Y}$;

$\mathbf{R^3}$ represents -OH or -$\mathbf{R^Y}$;

$\mathbf{R^4}$ represents -$\mathbf{R^Y}$ or -S(=O)$_2$$\mathbf{R^Y}$;

or $\mathbf{R^3}$ and $\mathbf{R^4}$ together form a 4, 5, 6, 7 or 8 membered heterocycle containing 1 to 3 heteroatoms selected from N, O and S, saturated or unsaturated, unsubstituted or mono- or polysubstituted;

T represents -O- and **U** represents -C$\mathbf{R^5 R^{5'}}$-; or **T** represents -C$\mathbf{R^5 R^{5'}}$- and **U** represents -O-;

$\mathbf{R^5}$ and $\mathbf{R^{5'}}$ independently of one another represent -$\mathbf{R^Y}$;

$\mathbf{R^6}$, $\mathbf{R^7}$ and $\mathbf{R^8}$ independently of one another represent -F, -Cl, -Br, -I, -CN, -NO_2, -SF_5, -$\mathbf{R^W}$, -O$\mathbf{R^W}$, -OC(=O)$\mathbf{R^W}$, -N$\mathbf{R^W R^X}$, -N$\mathbf{R^W}$C(=O)$\mathbf{R^X}$, -S$\mathbf{R^W}$, -S(=O)$\mathbf{R^W}$, -S(=O)$_2$$\mathbf{R^W}$, -C(=O)$\mathbf{R^W}$, -C(=O)O$\mathbf{R^W}$, or -C(=O)N$\mathbf{R^W R^X}$;

V represents 3-14-membered heterocycloalkyl, saturated or unsaturated; 3-14-membered cycloalkyl, saturated or unsaturated; 5-14-membered aryl; C_1-C_6 alkyl or 5-14-membered heteroaryl; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, -CF_3, -CF_2H, C_1-C_6 alkyl, -CN, -NO, -NO_2, =O, =S, -SF_5, -$\mathbf{R^Y}$, -O$\mathbf{R^Y}$, -OC(=O)$\mathbf{R^Y}$, -N$\mathbf{R^Y R^Z}$, -N$\mathbf{R^Y}$C(=O)$\mathbf{R^Z}$, -S$\mathbf{R^Y}$, -S(=O)$\mathbf{R^Y}$, -S(=O)$_2$$\mathbf{R^Y}$, -C(=O)$\mathbf{R^Y}$, -C(=O)O$\mathbf{R^Y}$, or -C(=O)N$\mathbf{R^Y R^Z}$;

wherein

R^W and R^X independently of one another and in each case independently represent
-H;
-C_1-C_6-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted; or
3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

R^Y and R^Z independently of one another and in each case independently represent
-H;
-C_1-C_6-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;
3-14-membered heterocycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;
6-14-membered aryl, unsubstituted, mono- or polysubstituted; wherein said 6-14-membered aryl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted; or
5-14-membered heteroaryl, unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted;

or R^Y and R^Z together form a 4, 5, 6, 7 or 8 membered heterocycle containing 1 to 3 heteroatoms selected from N, O and S, saturated or unsaturated, unsubstituted or mono- or polysubstituted;

and wherein "mono- or polysubstituted" in each case independently means substituted with one or more substituents independently of one another selected from -F, -Cl, -Br, -I, -CN, -C_{1-6}-alkyl, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-O-CF_3, -C_{1-6}-alkylene-O-CF_2H, -C_{1-6}-alkylene-O-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3, -C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-C(=O)-C_{1-6}-alkyl, -C(=O)OH, -C_{1-6}-alkylene-C(=O)-OH, -C(=O)-OC_{1-6}-alkyl, -C_{1-6}-alkylene-C(=O)-OC_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkylene-CF_3, -C(=O)-NH_2, -C_{1-6}-alkylene-C(=O)-NH_2, -C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-C(=O)-NH(C_{1-6}-alkyl), -C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-C(=O)-N(C_{1-6}-alkyl)$_2$, -C(=O)-NH(OH), -C_{1-6}-alkylene-C(=O)-NH(OH), -OH, -C_{1-6}-alkylene-OH, =O, -OCF_3, -OCF_2H, -$OCFH_2$, -OCF_2Cl, -$OCFCl_2$, -O-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -O-C_{1-6}-alkylene-O-C_{1-6}-alkyl, -O-C_{1-6}-alkylene-NH_2, -O-C_{1-6}-alkylene-NH-C_{1-6}-alkyl, -O-C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -O-C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C(=O)-C_{1-6}-alkyl, -O-C(=O)-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C(=O)-O-C_{1-6}-alkyl, -O-C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-O-C(=O)-NH(C_{1-6}-alkyl), -O-C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-O-C(=O)-N(C_{1-6}-alkyl)$_2$, -O-$S(=O)_2$-NH_2, -C_{1-6}-alkylene-O-$S(=O)_2$-NH_2, -O-$S(=O)_2$-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-O-$S(=O)_2$-NH(C_{1-6}-alkyl), -O-$S(=O)_2$-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-O-$S(=O)_2$-N(C_{1-6}-alkyl)$_2$, -NH_2, -NO, -NO_2, -C_{1-6}-alkylene-NH_2, -NH(C_{1-6}-alkyl), -N(3-14-membered cycloalkyl)(C_{1-6}-alkyl), -N(C_{1-6}-alkyl)-C_{1-6}-alkylene-OH, -N(H)-C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-NH(C_{1-6}-alkyl), -N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -NH-C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH-C(=O)-C_{1-6}-alkyl, -NH-C(=O)-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH-C(=O)-O-C_{1-6}-alkyl, -NH-C(=O)-NH_2, -C_{1-6}-alkylene-NH-C(=O)-NH_2, -NH-C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-NH-C(=O)-NH(C_{1-6}-alkyl), -NH-C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH-C(=O)-N(C_{1-6}-alkyl)$_2$, -N(C_{1-6}-alkyl)-C(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)-C(=O)-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)-C(=O)-NH_2, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-NH_2, -N(C_{1-6}-alkyl)-C(=O)-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-NH(C_{1-6}-alkyl), -N(C_{1-6}-alkyl)-C(=O)-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C(=O)-N(C_{1-6}-alkyl)$_2$, -NH-$S(=O)_2$OH, -C_{1-6}-alkylene-NH-$S(=O)_2$OH, -NH-$S(=O)_2$-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH-$S(=O)_2$-C_{1-6}-alkyl, -NH-$S(=O)_2$-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH-$S(=O)_2$-O-C_{1-6}-alkyl, -NH-$S(=O)_2$-NH_2, -C_{1-6}-alkylene-NH-$S(=O)_2$-NH_2, -NH-$S(=O)_2$-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-NH-$S(=O)_2$-NH(C_{1-6}-alkyl), -NH-$S(=O)_2$N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-NH-$S(=O)_2$N(C_{1-6}-alkyl)$_2$, -N(C_{1-6}-alkyl)-$S(=O)_2$-OH, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-$S(=O)_2$-OH, -N(C_{1-6}-alkyl)-$S(=O)_2$-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-$S(=O)_2$-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)-$S(=O)_2$-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-$S(=O)_2$-O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)-$S(=O)_2$-NH_2, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-$S(=O)_2$-NH_2, -N(C_{1-6}-alkyl)-$S(=O)_2$-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-

alkyl)-S(=O)$_2$-NH(C_{1-6}-alkyl), -N(C_{1-6}-alkyl)-S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, -SH, =S, -SF_5, -SCF_3, -SCF_2H, -$SCFH_2$, -S-C_{1-6}-alkyl, -C_{1-6}-alkylene-S-C_{1-6}-alkyl, -S(=O)-C_{1-6}-alkyl, -C_{1-6}-alkylene-S(=O)-C_{1-6}-alkyl, -S(=O)$_2$-C_{1-6}-alkyl, -C_{1-6}-alkylene-S(=O)$_2$-C_{1-6}-alkyl, -S(=O)$_2$-OH, -C_{1-6}-alkylene-S(=O)$_2$-OH, -S(=O)$_2$-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-S(=O)$_2$-O-C_{1-6}-alkyl, -S(=O)$_2$-NH_2, -C_{1-6}-alkylene-S(=O)$_2$-NH_2, -S(=O)$_2$-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-S(=O)$_2$-NH(C_{1-6}-alkyl), -S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, -C_{1-6}-alkylene-S(=O)$_2$-N(C_{1-6}-alkyl)$_2$, 3-14-membered cycloalkyl, -C_{1-6}-alkylene-(3-14-membered cycloalkyl), 3 to 14-membered heterocycloalkyl, -C_{1-6}-alkylene-(3 to 14-membered heterocycloalkyl), -phenyl, -C_{1-6}-alkylene-phenyl, 5 to 14-membered heteroaryl, -C_{1-6}-alkylene-(5 to 14-membered heteroaryl), -O-(3-14-membered cycloalkyl), -O-(3 to 14-membered heterocycloalkyl), -O-phenyl, -O-(5 to 14-membered heteroaryl), -C(=O)-(3-14-membered cycloalkyl), -C(=O)-(3 to 14-membered heterocycloalkyl), -C(=O)-phenyl, -C(=O)-(5 to 14-membered heteroaryl), -S(=O)$_2$-(3-14-membered cycloalkyl), -S(=O)$_2$-(3 to 14-membered heterocycloalkyl), -S(=O)$_2$-phenyl, -S(=O)$_2$-(5 to 14-membered heteroaryl).

2. The compound of claim 1, wherein **R^3** represents -H.

3. . The compound of claim 2, wherein **R^4** represents a residue other than -H.

4. The compound of any one of claims 1 to 3, wherein **R^1** represents -methyl or ethyl.

5. The compound of any one of claims 1 to 3, wherein **T** represents -O- and **U** represents -C**R^{5}R$^{5'}$**-.

6. The compound of any one of claims 1 to 5, wherein the **R^Y** representing each of **R^5** and **R$^{5'}$** is H.

7. The compound of one of claims 1 to 6, wherein **V** represents (i) 5-14-membered heteroaryl selected from benzimidazole, benzisoxazole, benzoazole, benzodioxole, benzofuran, benzothiadiazole, benzothiazole, benzothiophene, carbazole, cinnoline, dibenzofuran, furane, furazane, imidazole, imidazopyridine, indazole, indole, indolizine, isobenzofuran, isoindole, isoquinoline, isothiazole, isoxazole, naphthyridine, oxadiazole, oxazole, oxindole, phthalazine, purine, pyrazine, pyrazole, pyridazine, pyridine, pyrimidine, pyrrole, quinazoline, quinoline, quinoxaline, tetrazole, thiadiazole, thiazole, thiophene, triazine, triazole, and [1,2,4]triazolo[4,3-a]pyrimidine; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another

selected from -F, -Cl, -CN, -OH, =O, -C_{1-6}-alkyl, -CHF_2, -CF_3, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-CHF_2, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-cyclopropyl, -cyclopropyl, -O-cyclopropyl, -C_{1-6}-alkylene-NHC(=O)-O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)$_2$, -OC_{1-6}-alkyl, -OCF_3, -O-C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -S(=O)$_2$-C_{1-6}-alkyl, -azetidine, -C_{1-6}-alkylene-O-tetrahydropyran, or -piperazine substituted with -C_{1-6}-alkyl; particularly in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -CN, -OH, =O, -C_{1-6}-alkyl, -CHF_2, -CF_3, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NHC(=O)O-C_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-NHC(=O)-O-C_{1-6}-alkyl, -C(=O)O-C_{1-6}-alkyl, -N(C_{1-6}-alkyl)$_2$, -OC_{1-6}-alkyl, -OCF_3, -O-C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -S(=O)$_2$-C_{1-6}-alkyl, -azetidine, -C_{1-6}-alkylene-O-tetrahydropyran, or -piperazine substituted with -C_{1-6}-alkyl; or represents (ii) -oxetanyl, unsubstituted, mono- or polysubstituted.

8. The compound of any one of claims 1 to 6, wherein the 3-14-membered cycloalkyl, saturated or unsaturated within the definition of **V** is cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, cyclooctyl, cyclononyl, or cyclodecyl including unfused or unbridged, fused, or bridged cycloalkyls; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, , CF_3, -CF_2H, C_1-C_6 alkyl, -CN, -NO, -NO_2, =O, =S, -SF_5, -$\mathbf{R}^Y$, -O$\mathbf{R}^Y$, -OC(=O)$\mathbf{R}^Y$, -N$\mathbf{R}^Y\mathbf{R}^Z$, -N$\mathbf{R}^Y$C(=O)$\mathbf{R}^Z$, -S$\mathbf{R}^Y$, -S(=O)$\mathbf{R}^Y$, -S(=O)$_2\mathbf{R}^Y$, -C(=O)$\mathbf{R}^Y$, -C(=O)O$\mathbf{R}^Y$, or -C(=O)N$\mathbf{R}^Y\mathbf{R}^Z$.

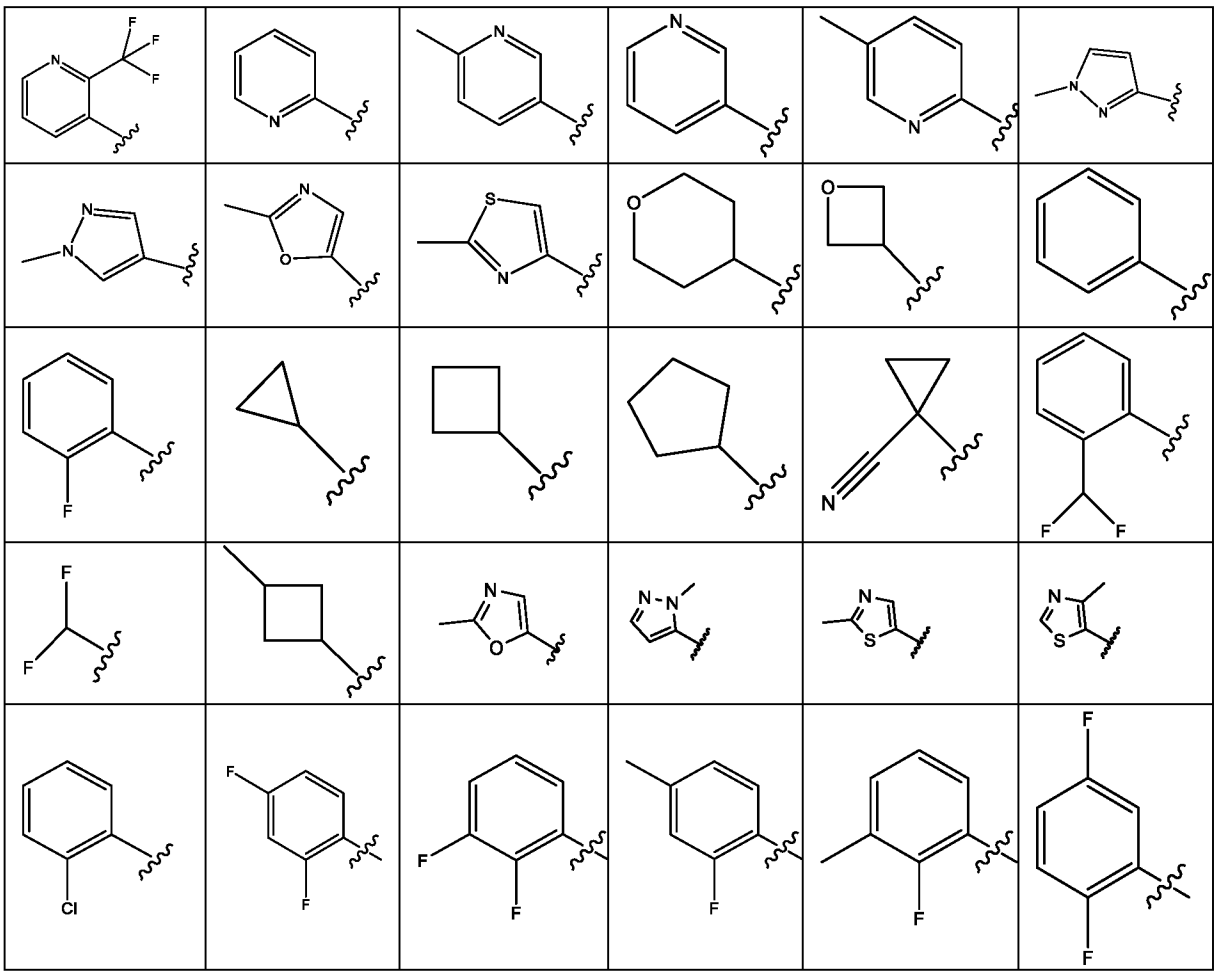
9. The compound of any one of claims 1 to 6 wherein the 5-14-membered aryl within the definition of **V** is phenyl or another 5-14-membered aryl, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, -CF_2H, C_1-C_6 alkyl, -CN, -NO, -NO_2, =O, =S, -SF_5, -$\mathbf{R}^Y$, -O$\mathbf{R}^Y$, -OC(=O)$\mathbf{R}^Y$, -N$\mathbf{R}^Y\mathbf{R}^Z$, -N$\mathbf{R}^Y$C(=O)$\mathbf{R}^Z$, -S$\mathbf{R}^Y$, -S(=O)$\mathbf{R}^Y$, -S(=O)$_2\mathbf{R}^Y$, -C(=O)$\mathbf{R}^Y$, -C(=O)O$\mathbf{R}^Y$, or -C(=O)N$\mathbf{R}^Y\mathbf{R}^Z$.

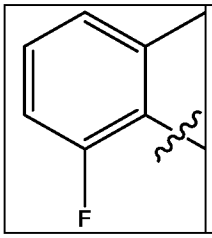
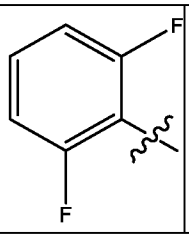
10. The compound of any one of claims 1 to 6 wherein the 3-14-membered heterocycloalkyl within the definition of **V** is selected from azepane, 1,4-oxazepane, azetane, azetidine, aziridine, azocane, diazepane, dioxane, dioxolane, dithiane, dithiolane, imidazolidine, isothiazolidine, isoxalidine, morpholine, oxazolidine, oxane, oxepane, oxetane, oxirane, piperazine, piperidine, pyrazolidine, pyrrolidine, quinuclidine, tetrahydrofurane, tetrahydropyrane, tetrahydrothiopyrane, thiazolidine, thietane, thiirane, thiolane, thiomorpholine, indoline, dihydrobenzofuran, dihydrobenzo-thiophene, 1,1-dioxothia-cyclohexane, 2-azaspiro[3.3]heptane, 2-oxaspiro[3.3]heptane, 7-azaspiro[3.5]nonane,

8-azabicyclo[3.2.1]octane, 9-azabicyclo[3.3.1]nonane, hexahydro-1H-pyrrolizine, hexahydro-cyclopenta[c]pyrrole, octahydro-cyclopenta[c]pyrrole, and octahydro-pyrrolo[1,2-a]pyrazine; in each case unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

11. The compound of any one of claims 1 to 6 wherein **V** represents C_1-C_6 alkyl or C_1-C_6 heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted with substituents independently of one another selected from -F, -Cl, -Br, -I, CF_3, $-CF_2H$, C_1-C_6 alkyl, -CN, -NO, $-NO_2$, =O, =S, $-SF_5$, $-\mathbf{R}^Y$, $-O\mathbf{R}^Y$, $-OC(=O)\mathbf{R}^Y$, $-N\mathbf{R}^Y\mathbf{R}^Z$, $-N\mathbf{R}^YC(=O)\mathbf{R}^Z$, $-S\mathbf{R}^Y$, $-S(=O)\mathbf{R}^Y$, $-S(=O)_2\mathbf{R}^Y$, $-C(=O)\mathbf{R}^Y$, $-C(=O)O\mathbf{R}^Y$, or $-C(=O)N\mathbf{R}^Y\mathbf{R}^Z$.

12. The compound of any one of claims 1 to 6 wherein **V** is a residue selected from the group consisting of:



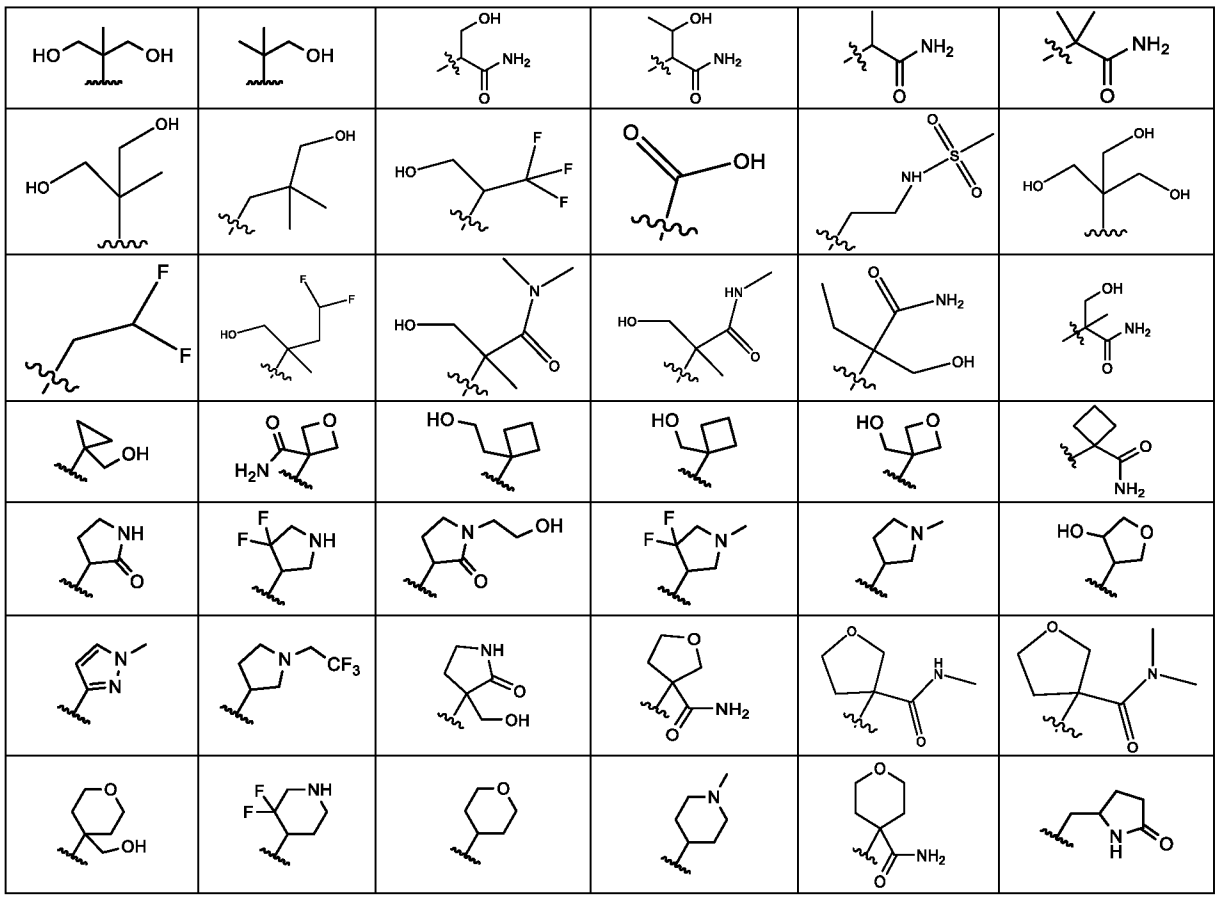
13. The compound according to claim 1 , wherein $\mathbf{R^1}$ represents -H, -F, -Cl, -Br, -I, -C_{1-6}-alkyl, -O-C_{1-6}-alkyl, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3, -C(=O)C_{1-6}-alkyl, -C(=O)OC_{1-6}-alkyl, -C(=O)NH_2, -C(=O)NHC_{1-6}-alkyl, -C(=O)N(C_{1-6}-alkyl)$_2$, -S(=O)-C_{1-6}-alkyl, -S(=O)$_2$-C_{1-6}-alkyl, -O-C_{1-6}-alkyl, -cyclopropyl unsubstituted, cyclobutyl unsubstituted, cyclopentyl unsubstituted or cyclohexyl unsubstituted.

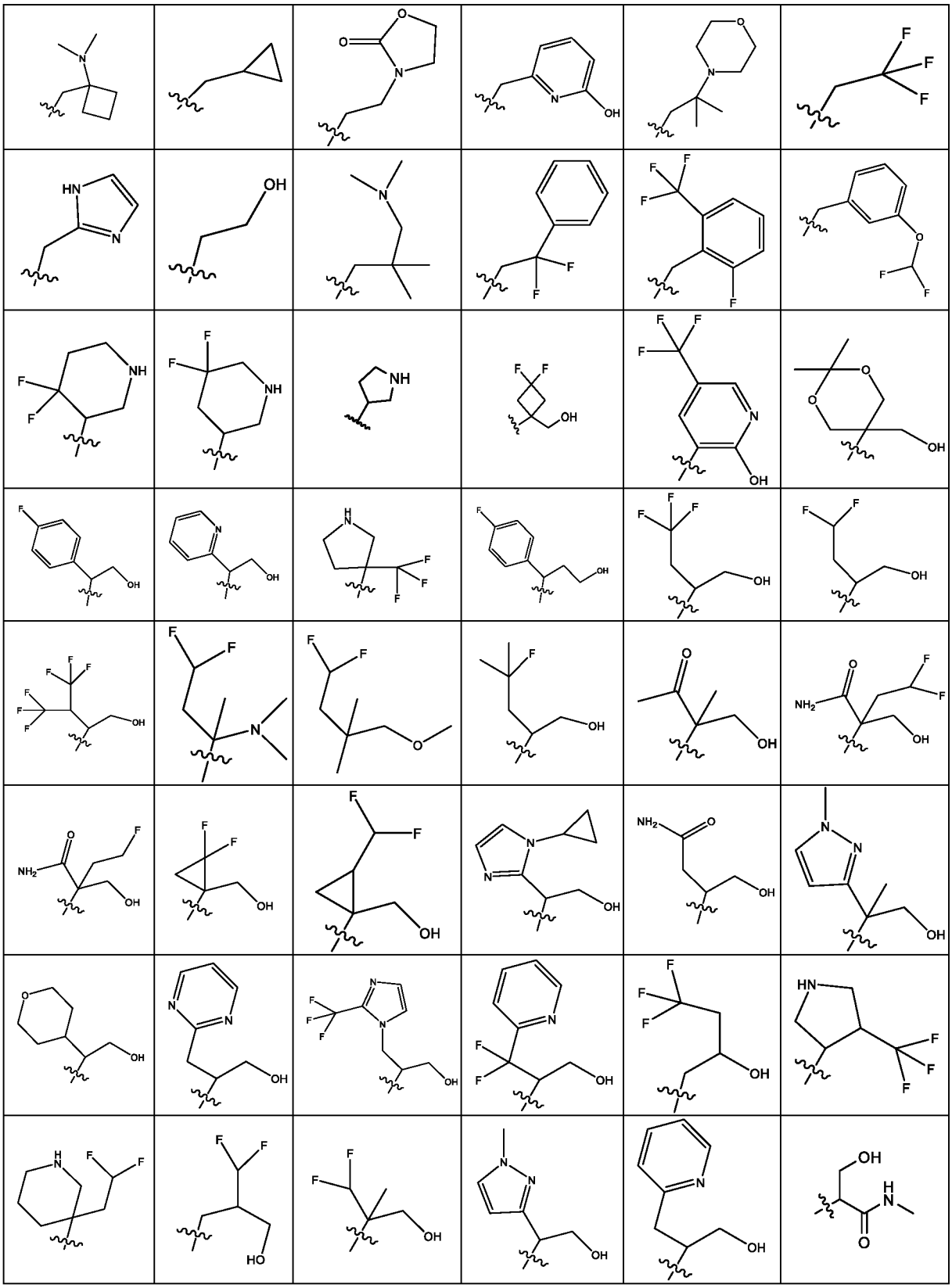
14. The compound according to claim 1 , wherein $\mathbf{R^3}$ represents -H, -OH, -C_{1-6}-alkyl, -C_{1-6}-alkylene-OH, -C_{1-6}-alkylene-O-C_{1-6}-alkyl, -C_{1-6}-alkylene-NH_2, -C_{1-6}-alkylene-NH(C_{1-6}-alkyl), -C_{1-6}-alkylene-N(C_{1-6}-alkyl)$_2$, -CF_3, -CF_2H, -CFH_2, -CF_2Cl, -$CFCl_2$, -C_{1-6}-alkylene-CF_3, -C_{1-6}-alkylene-CF_2H, -C_{1-6}-alkylene-CFH_2, -C_{1-6}-alkylene-NH-C_{1-6}-alkylene-CF_3, or -C_{1-6}-alkylene-N(C_{1-6}-alkyl)-C_{1-6}-alkylene-CF_3.

15. The compound according to any one of claims 1 to 14, wherein $\mathbf{R^4}$ represents
-H;
-S(=O)$_2$$C_{1-6}$-alkyl, saturated, unsubstituted, monosubstituted or polysubstituted with -F;
-S(=O)$_2$(3-14-membered cycloalkyl), saturated, unsubstituted;
-C_{1-6}-alkyl, saturated, unsubstituted mono- or polysubstituted ;
3-14-membered cycloalkyl or -C_{1-6}-alkylene-(3-14-membered cycloalkyl), each unsubstituted, mono- or polysubstituted;
3-14-membered heterocycloalkyl or -C_{1-6}-alkylene-(3-14-membered heterocycloalkyl), unsubstituted, mono- or polysubstituted;
-phenyl, or -C_{1-6}-alkylene-phenyl, each unsubstituted, mono- or polysubstituted; or
5-14-membered heteroaryl or -C_{1-6}-alkylene-(5-14-membered heteroaryl), each unsubstituted, mono- or polysubstituted.

16. The compound according to any one of claims 1 to 14 wherein $\mathbf{R^4}$ represents a 3-14-membered cycloalkyl (preferably a 3, 4, 5 or 6-membered cycloalkyl), saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is connected through -C_1-C_6-alkylene-, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 3-14-membered heterocycloalkyl (preferably a 4, 5 or 6-membered heterocycloalkyl), saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered heterocycloalkyl is connected through -C_1-C_6-alkylene-, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 6-14-membered aryl (preferably a 6-membered aryl), unsubstituted, mono- or polysubstituted; wherein said 6-14-membered aryl is connected through -C_1-C_6-alkylene-, saturated or unsaturated, unsubstituted, mono- or polysubstituted; or a 5-14-membered heteroaryl (preferably a 5 or 6-membered heteroaryl), unsubstituted, mono- or polysubstituted; wherein said 5-14-membered heteroaryl is connected through -C_1-C_6-alkylene-, saturated or unsaturated, unsubstituted, mono- or polysubstituted.

17. The compound according to any one of claims 1 to 16 wherein $\mathbf{R^3}$ is H and $\mathbf{R^4}$ is a residue selected from the group consisting of:





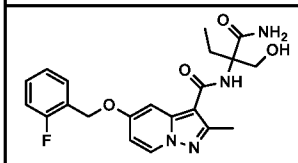
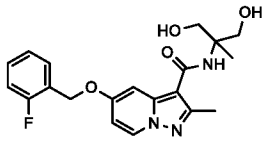
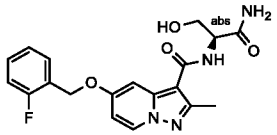
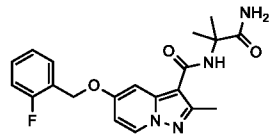
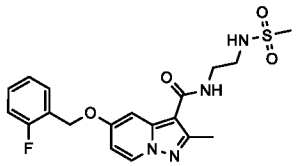
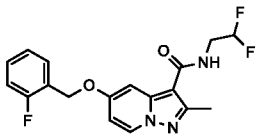
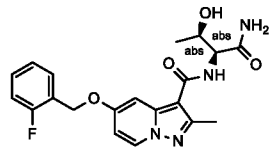
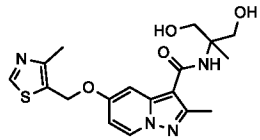
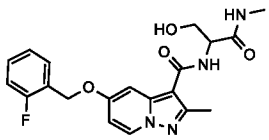
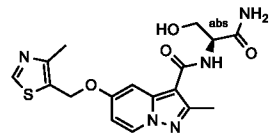
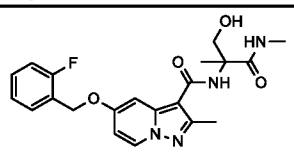
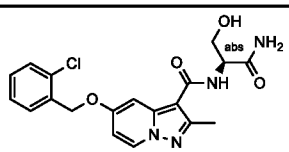
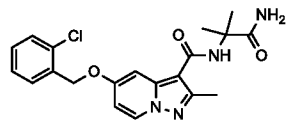
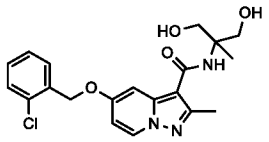
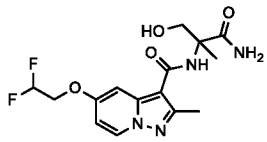
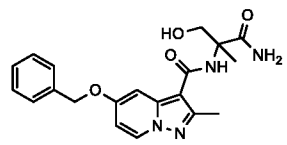
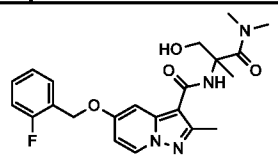
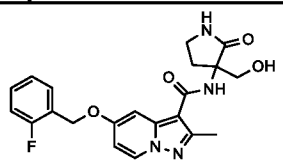
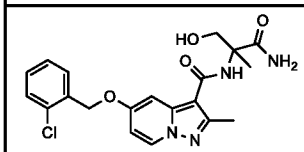
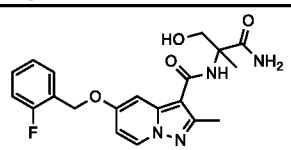
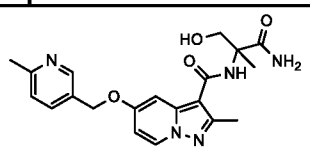
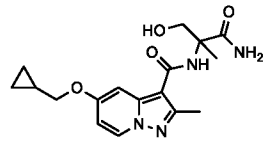
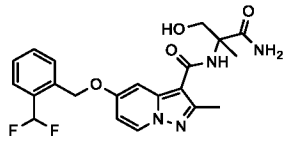
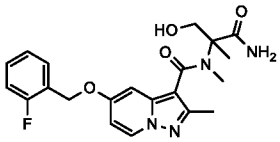
18. The compound of claim 1 wherein R^3 and R^4 together form a heterocycle selected from the group consisting of pyrrolidine, piperidine, morpholine, and piperazine, in each case

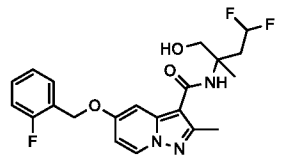
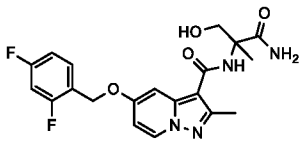
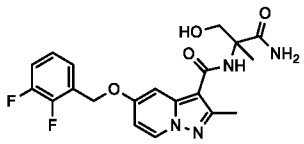
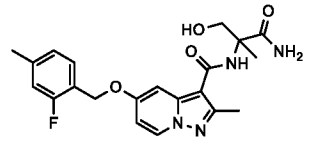
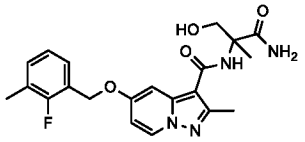
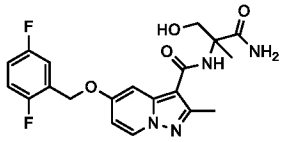
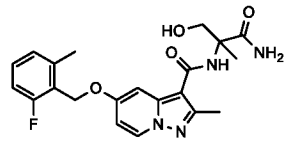
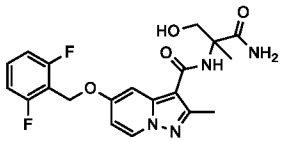
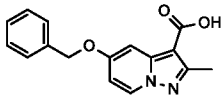
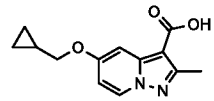
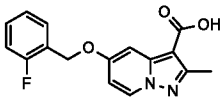
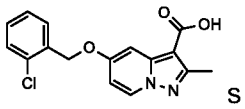
unsubstituted, mono- or polysubstituted with substituents independently of one another selected from the group consisting of -F, -C_{1-6}-alkyl, -NH_2, -$NHCH_3$, -$N(CH_3)_2$, -C(=O)NH-C_{1-6}-alkyl, -C(=O)N(C_{1-6}-alkyl)$_2$, -C(=O)O-C_{1-6}-alkyl, -NHC(=O)O-C_{1-6}-alkyl, -pyridyl unsubstituted, and 1,2,4-oxadiazole unsubstituted or monosubstituted with -C_{1-6}-alkyl.

19. The compound of claim 1, wherein **R^5** and **$R^{5'}$** independently of one another represent
-H;
-C_1-C_6-alkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
-C_1-C_6-heteroalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted;
3-14-membered cycloalkyl, saturated or unsaturated, unsubstituted, mono- or polysubstituted; wherein said 3-14-membered cycloalkyl is optionally connected through -C_1-C_6-alkylene- or -C_1-C_6-heteroalkylene-, in each case saturated or unsaturated, unsubstituted, mono- or polysubstituted.

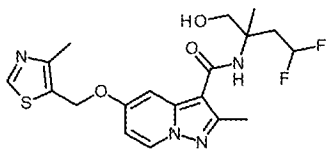
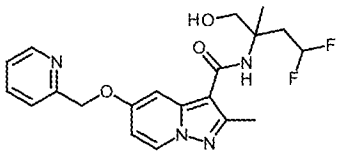
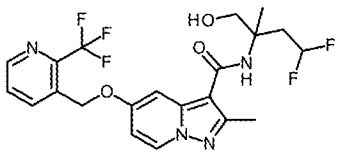
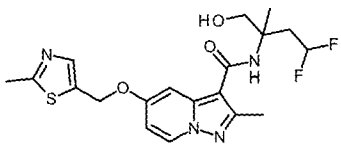
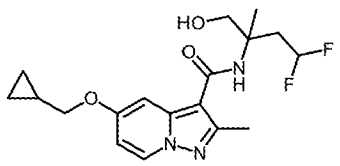
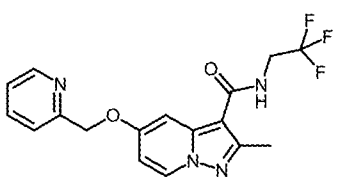
20. The compound according to any one of claims 1 to 19, wherein **R^6**, **R^7** and **R^8** independently of one another represent
-H, -F, -Cl, -Br, -I, -OH, -SH, -SF_5, -CN, -NO_2, -C(=O)OH, -NH_2,
-C_{1-6}-alkyl, -CF_3, -CHF_2, -CH_2F,
-O-C_{1-6}-alkyl, -OCF_3, -$OCHF_2$, -OCH_2F,
-NHC_{1-6}-alkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;
-N(C_{1-6}-alkyl)$_2$ unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;
-C(=O)OC_{1-6}-alkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;
-OC(=O)C_{1-6}-alkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2;
or
-C_{1-6}-heteroalkyl unsubstituted or substituted with one or more substituents independently of one another selected from -OH, =O, -F, -Cl, -Br, -I, -SH, =S, -CN, -CF_3, -CHF_2, -CH_2F, -OCF_3, -$OCHF_2$, -OCH_2F, SF_5, -NO_2, -C(=O)OH, -NH_2, and -C(=O)NH_2.

21. The compound of claim 1, which is selected from the group consisting of compounds 001 – 036 as shown in the table below:

Structure and **Compound CODE**	Structure and **Compound CODE**	Structure and **Compound CODE**
 **Cpd 001**	 **Cpd 002**	 **Cpd 003**
 **Cpd 004**	 **Cpd 005**	 **Cpd 006**
 **Cpd 007**	 **Cpd 008**	 **Cpd 009**
 **Cpd 010**	 **Cpd 011**	 **Cpd 012**
 **Cpd 013**	 **Cpd 014**	 **Cpd 015**
 **Cpd 016**	 **Cpd 017**	 **Cpd 018**
 **Cpd 019**	 **Cpd 020**	 **Cpd 021**
 **Cpd 022**	 **Cpd 023**	 **Cpd 024**

 Cpd 025	 Cpd 026	 Cpd 027
 Cpd 028	 Cpd 029	 Cpd 030
 Cpd 031	 Cpd 032	 Cpd 033
 Cpd 034	 Cpd 035	 Cpd 036

22. The compound of claim 1, which is selected from the group consisting of compounds 037 – 091 as shown in the table below:

Structure and **Compound CODE**	Structure and **Compound CODE**	Structure and **Compound CODE**
 **Cpd 037**	 **Cpd 038**	 **Cpd 039**
		

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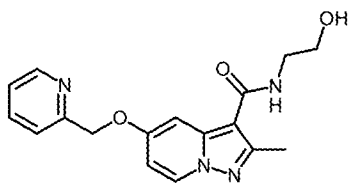	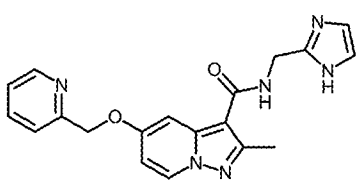	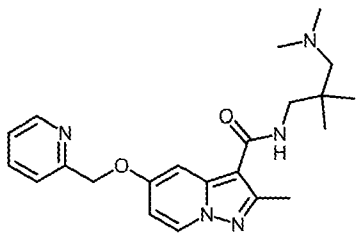
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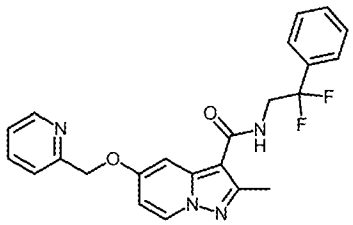	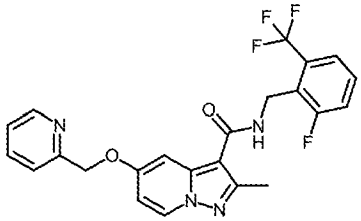	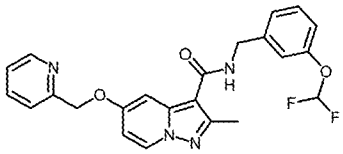
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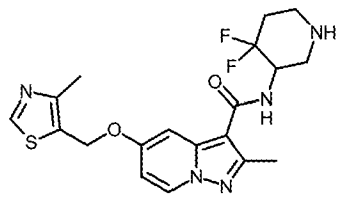	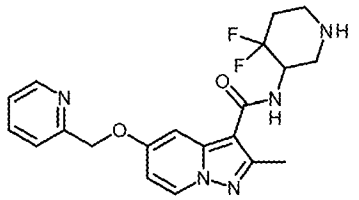	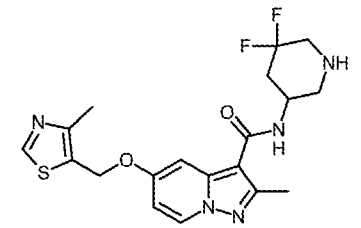
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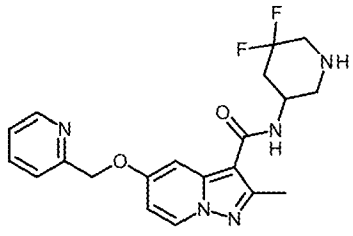	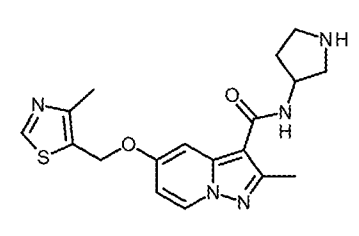	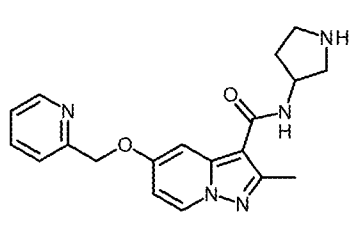
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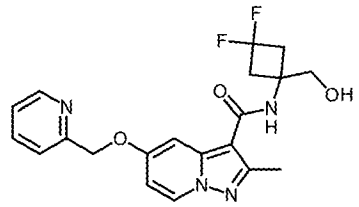
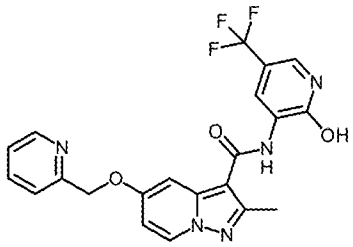
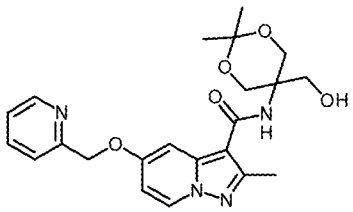
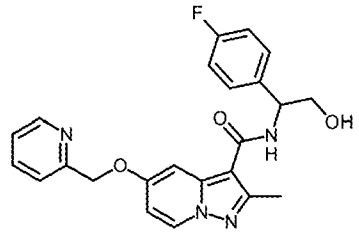
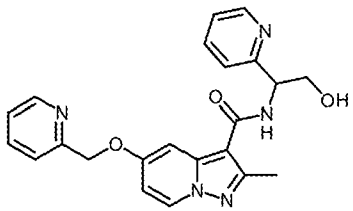
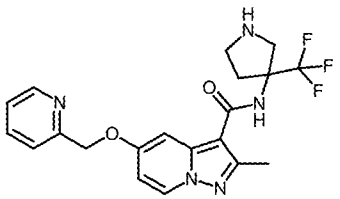
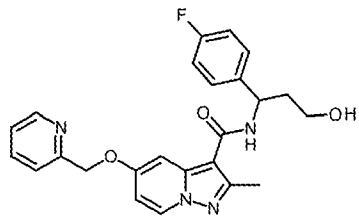
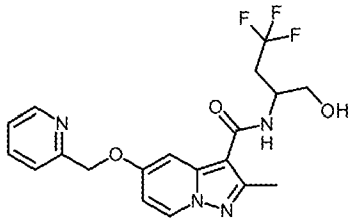
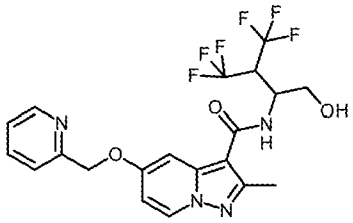
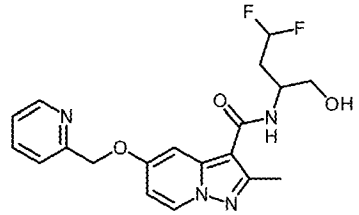
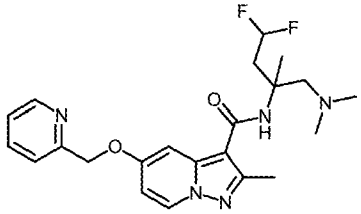
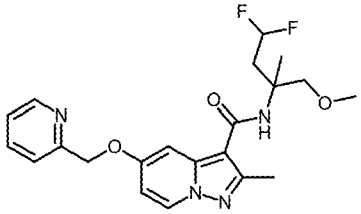
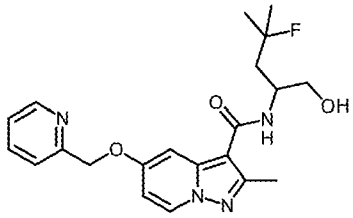
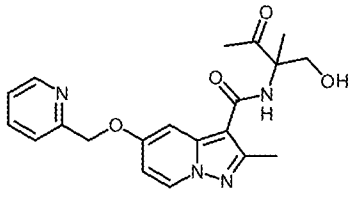
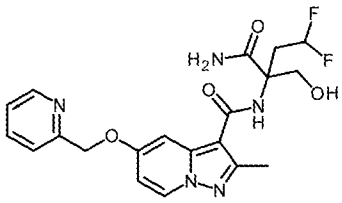
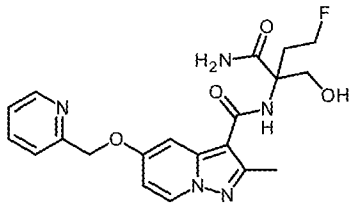
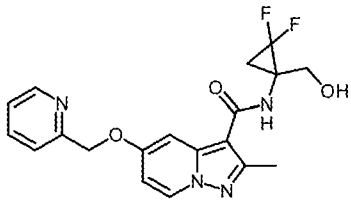
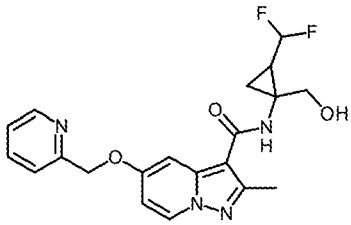
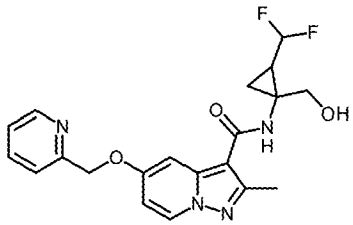
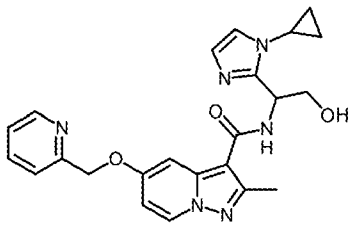
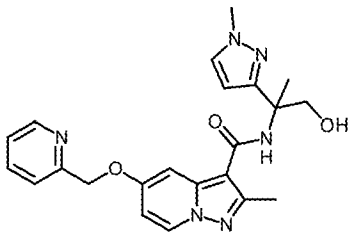
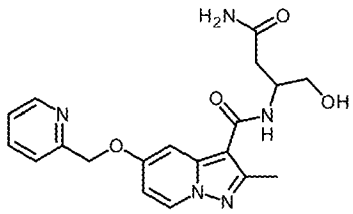
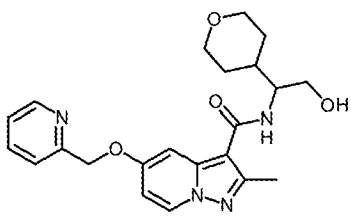
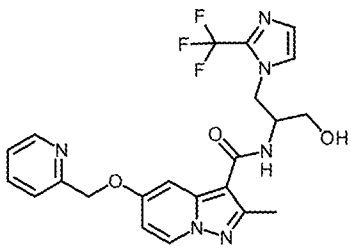
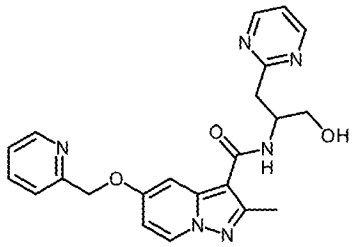
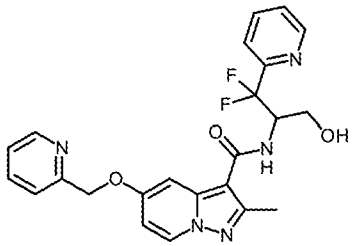
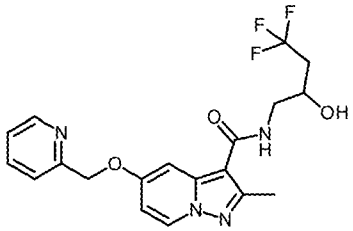
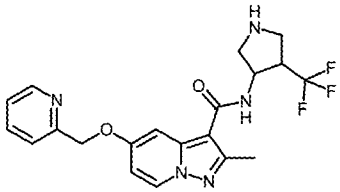
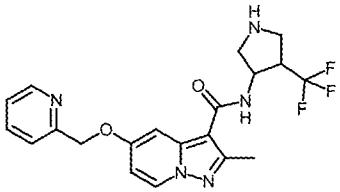
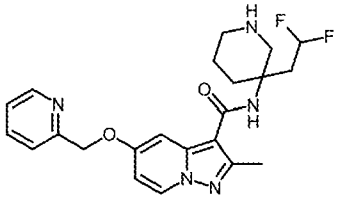
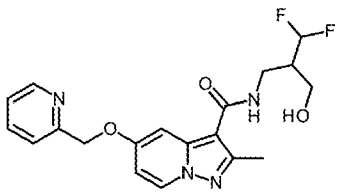
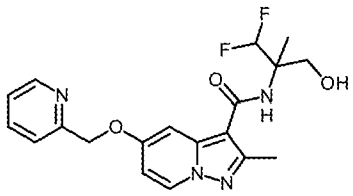
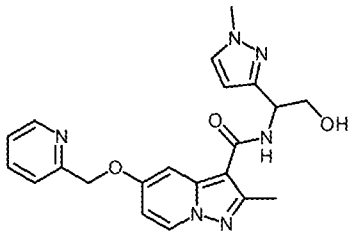
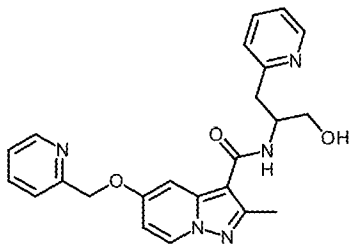
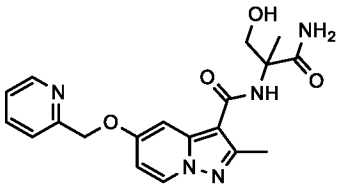
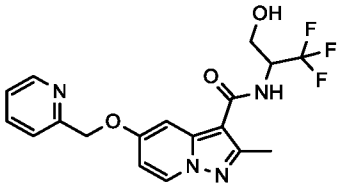
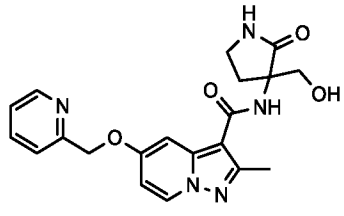
 Cpd 055	 Cpd 056	 Cpd 057
 Cpd 058	 Cpd 059	 Cpd 060
 Cpd 061	 Cpd 062	 Cpd 063
 Cpd 064	 Cpd 065	 Cpd 066

 Cpd 067	 Cpd 068	 Cpd 069
 Cpd 070	 Cpd 071	 Cpd 072
 Cpd 073	 Cpd 074	 Cpd 075
 Cpd 076	 Cpd 077	 Cpd 078

 Cpd 079	 Cpd 080	 Cpd 081
 Cpd 082	 Cpd 083	 Cpd 084
 Cpd 085	 Cpd 086	 Cpd 087
		

Cpd 088	Cpd 089	Cpd 090
 Cpd 091		

23. A pharmaceutical composition comprising a compound according to any one of claims 1 to 22.

24. The compound according to any one of claims 1 to 22 or the pharmaceutical composition according to claim 23, for use in the treatment of pain.

25. The compound or the pharmaceutical composition for use in the treatment of pain according to claim 24, wherein the pain is selected from nociceptive pain, inflammatory pain, and neuropathic pain; preferably post-operative pain.

26. A method of treating of pain comprising administering a compound according to any one of claims 1 – 22, or a pharmaceutical composition according to any one of claims 23 to 25, to a subject in need thereof.

27. The method of claim 26 wherein the pain is selected from nociceptive pain, inflammatory pain, and neuropathic pain; preferably post-operative pain.

28. The compound according to any one of claims 1 to 22 or the pharmaceutical composition according to claim 23, for use in the treatment of epilepsy.

29. A method of treating of epilepsy comprising administering a compound according to any one of claims 1 to 22, or a pharmaceutical composition according to claim 23, to a subject in need thereof.