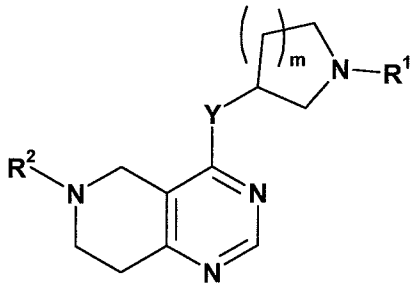
SUMMARY OF THE INVENTION

In a **first aspect**, the invention relates to tetrahydro-pyrido-pyrimidine compounds of the formula (I) and/or pharmaceutically acceptable salts and/or solvates thereof,



(I)

wherein

Y is selected from O or NR^3;

R^1 is selected from phenyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, 1,2,3-triazinyl, 1,2,4-triazinyl, 1,3,5-triazinyl,

or

C(O)-R^4

wherein

R^4 is selected from C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, C_1-C_8-alkoxy-C_1-C_8-alkyl, C_1-C_8-alkyl-sulfonyl-C_1-C_8-alkyl, heterocyclyl, heterocyclyl-oxy, heterocyclyl-C_1-C_8-alkyl, C_3-C_{12}-cycloalkyl, C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl, heteroaryl, heteroaryl-oxy, heteroaryl-C_1-C_8-alkyl, hydroxy, C_1-C_8-alkoxy, amino, N-C_1-C_8-alkyl-amino or N,N-di-C_1-C_8-alkyl-amino,

wherein 'C_1-C_8-alkyl' in N-C_1-C_8-alkyl-amino and N,N-di-C_1-C_8-alkyl-amino may be unsubstituted or substituted by halogen, hydroxy or C_1-C_4-alkoxy;

wherein 'C_3-C_{12}-cycloalkyl' in C_3-C_{12}-cycloalkyl and C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl may be unsubstituted or substituted by 1-5 substituents independently selected from oxo, halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;

wherein 'heterocyclyl' is selected from oxiranyl, aziridinyl, oxetanyl, thiethanyl, ~~acetitinyl~~azetidinyl, pyrrolidinyl, tetrahydrofuranyl, tetrahydrothiophenyl, 2,3-dihydrofuranyl, 2,5-dihydrofuranyl, 2,3-dihydrothiophenyl, 1-pyrrolinyl, 2-pyrrolinyl, 3-pyrrolinyl, tetrahydropyranyl, piperidinyl, tetrahydrothiopyranyl, morpholinyl, thiomorpholinyl, piperazinyl, azepanyl, thiepanyl or oxepanyl; each of which is unsubstituted or substituted by 1-5 substituents independently selected from oxo, halogen, C_1-C_8-alkyl,

The general terms used hereinbefore and hereinafter preferably have within the context of this disclosure the following meanings, unless otherwise indicated:

As used herein, the term "alkyl" refers to a fully saturated branched, including single or multiple branching, or unbranched hydrocarbon moiety having up to 20 carbon atoms. Unless otherwise provided, alkyl refers to hydrocarbon moieties having 1 to 16 carbon atoms, 1 to 10 carbon atoms, 1 to 7 carbon atoms, or 1 to 4 carbon atoms. Representative examples of alkyl include, but are not limited to, methyl, ethyl, *n*-propyl, *iso*-propyl, *n*-butyl, *sec*-butyl, *iso*-butyl, *tert*-butyl, *n*-pentyl, isopentyl, neopentyl, *n*-hexyl, 3-methylhexyl, 2,2- dimethylpentyl, 2,3-dimethylpentyl, *n*-heptyl, *n*-octyl, *n*-nonyl, *n*-decyl and the like. Typically, alkyl groups have 1-7, more preferably 1-4 carbons.

As used herein, the term "halo-alkyl" refers to an alkyl as defined herein, which is substituted by one or more halo groups as defined herein. The halo-alkyl can be mono-halo-alkyl, di-halo-alkyl or poly-halo-alkyl including per-halo-alkyl. A mono-halo-alkyl can have one iodo, bromo, chloro or fluoro within the alkyl group. Di-halo-alky and poly-halo-alkyl groups can have two or more of the same halo atoms or a combination of different halo groups within the alkyl. Typically the poly-halo-alkyl contains up to 12, or 10, or 8, or 6, or 4, or 3, or 2 halo groups. Non-limiting examples of halo-alkyl include fluoro-methyl, di-fluoro-methyl, tri-fluoro-methyl, chloro-methyl, di-chloro-methyl, tri-chloro-methyl, penta-fluoro-ethyl, hepta-fluoro-propyl, di-fluoro-chloro-methyl, di-chloro-fluoro-methyl, di-fluoro-ethyl, di-fluoro-propyl, di-chloro-ethyl and dichloro-propyl. A per-halo-alkyl refers to an alkyl having all hydrogen atoms replaced with halo atoms.

As used herein, the term "heterocyclyl" or "heterocyclic" refers to a 3 to 7 membered monocyclic or 7 to 10 membered saturated or partially saturated ring or ring system, which contains at least one heteroatom selected from N, O and S, where the N and S can also optionally be oxidized to various oxidation states. 'Heterocyclyl' can be attached at a heteroatom or a carbon atom. 'Heterocyclyl' can include fused or bridged rings as well as spirocyclic rings. Examples of heterocycles include oxiranyl, aziridinyl, oxetanyl, thiethanyl, ~~acetitinyl~~azetidinyl, pyrrolidinyl, tetrahydrofuranyl, tetrahydrothiophenyl, 2,3-dihydrofuranyl, 2,5-dihydrofuranyl, 2,3-dihydrothiophenyl, 1-pyrrolinyl, 2-pyrrolinyl, 3-pyrrolinyl, tetrahydropyranyl, piperidinyl, tetrahydrothiopyranyl, morpholinyl thiomorpholinyl, piperazinyl, azepanyl, thiepanyl and oxepanyl.

As used herein, the term "heteroaryl" refers to a 4-, 5-, 6-, or 7-membered monocyclic, 7-, 8-, 9-, 10-, 11-, or 12-membered bicyclic or 10-, 11-, 12-, 13-, 14- or 15-membered tricyclic unsaturated ring or ring system - carrying the highest possible number of conjugated double bonds in the ring(s), which contains at least one heteroatom selected from N, O and S,

(2,4-Dimethyl-oxazol-5-yl)-{(S)-3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

(2,4-Dimethyl-oxazol-5-yl)-{3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

Furan-3-yl-{(S)-3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

Furan-3-yl-{3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

~~Furan-3-yl-{(S)-3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;~~

~~Furan-3-yl-{3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;~~{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy-pyrrolidin-1-1-yl}-oxazol-5-yl-methanone;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-3H-imidazol-4-yl)-methanone;

{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-3H-imidazol-4-yl)-methanone;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2-methyl-oxazol-4-yl)-methanone;

{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2-methyl-oxazol-4-yl)-methanone;

(3-Methoxy-cyclobutyl)-{(S)-3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

(3-Methoxy-cyclobutyl)-{3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

({(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-4-yl-methanone;

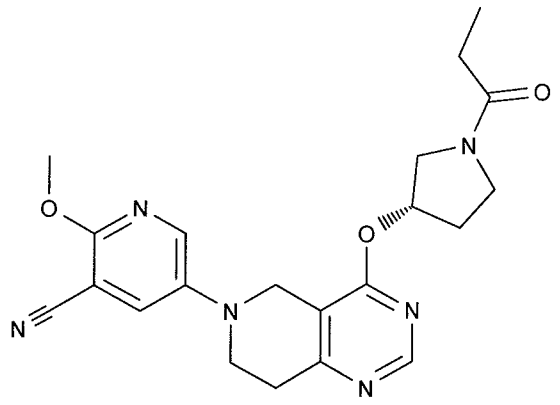
({3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-4-yl-methanone;

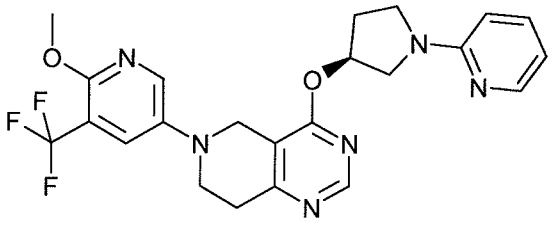
1-(4-{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidine-1-carbonyl}-piperidin-1-yl)-ethanone;

1-(4-{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidine-1-carbonyl}-piperidin-1-yl)-ethanone;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(4-methyl-oxazol-5-yl)-methanone;

{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(4-methyl-oxazol-5-yl)-methanone;

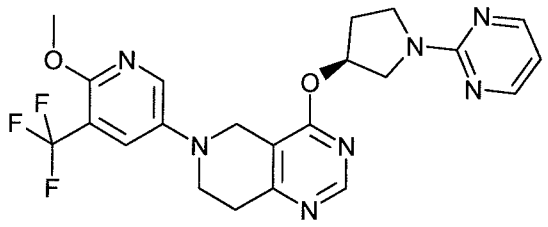
Example 64		Rt[1] (min.) 1.46	MS: [M+H]+ 409.2
Name: 2-Methoxy-5-[4-((S)-1-propionyl-pyrrolidin-3-yloxy)-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl]-nicotinonitrile			
Purification method: Reverse phase method A Prepared using step 3 of **example 59** and 5-bromo-2-methoxynicotinonitrile			
^{1}H NMR (400 MHz, DMSO-d6, 298K) δ ppm 0.95-1.02 (m, 3H) 2.10-2.35 (m, 5H) 2.89-2.98 (m, 2H) 3.40-3.90 (m, 5H) 3.93 (s, 3H) 4.16 (s, 2H) 5.58-5.71 (m, 1H) 8.08-8.10 (m, 1H) 8.24-8.28 (m, 1H) 8.61 (m, 1H).			



Examples 65: 6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-4-((*S*)-1-pyridin-2-yl-pyrrolidin-3-yloxy)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidine

To a glass vial was added 6-(6-methoxy-5-trifluoromethyl-pyridin-3-yl)-4-((*S*)-pyrrolidin-3-yloxy)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidine dihydrochloride (prepared using step 1 of **example 91** from **intermediate 13**) (75 mg, 0.16 mmol), 2-bromopyridine (1 mL, 10.25 mmol) and N,N-diisopropylethylamine (0.14 mL, 0.80 mmol). The vial was capped and the mixture heated in the microwave at 160°C for 20 min. Purification by reverse phase Gilson HPLC (Method A) and subsequent neutralization of the combined fractions over PL-HCO_3 MP to give 6-(6-methoxy-5-trifluoromethyl-pyridin-3-yl)-4-((*S*)-1-pyridin-2-yl-pyrrolidin-3-yloxy)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidine as a light brown solid (19 mg, 25% yield) ^{1}H NMR (400 MHz, DMSO-*d*6, 298K) δ ppm 2.24 - 2.44 (m, 2 H) 2.92 (t, 2 H) 3.47 - 3.69 (m, 5

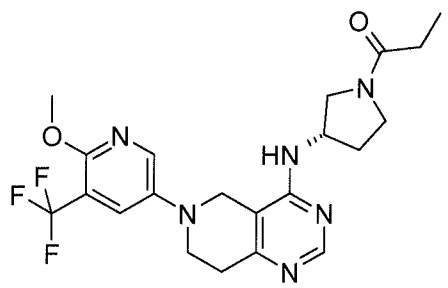
H) 3.77-3.85 (m, 1H) 3.88 – 3.93 (m, 3 H) 4.12 - 17 (m, 2 H) 5.73 – 5.81 (m, 1 H) 6.40 – 6.52 (d, 1 H) 6.56 – 6.58 (m, 1 H) 7.43 - 7.54 (m, 1 H) 7.77 – 7.84 (m, 1 H) 8.02 - 8.09 (m, 1 H) 8.13 – 8.20 (m, 1 H) 8.61 – 8.66 (m, 1 H) LCMS: [M+H]+=473.0, Rt [(4)]= 0.85 min.



Examples 66: 6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-4-((*S*)-1-pyrimidin-2-yl-pyrrolidin-3-yloxy)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidine

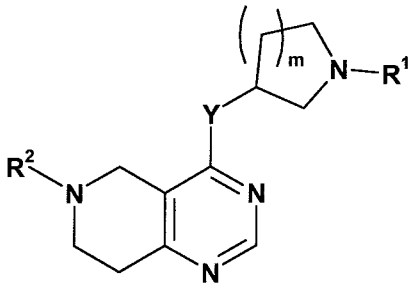
To a glass vial was added 6-(6-methoxy-5-trifluoromethyl-pyridin-3-yl)-4-((*S*)-pyrrolidin-3-yloxy)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidine dihydrochloride (prepared using step 1 of **example 91** from **intermediate 13)** (75 mg, 0.16 mmol), 2-bromopyrimidine (55 mg, 0.342 mmol) and N,N-diisopropylethylamine (0.15 mL, 0.85 mmol). The vial was capped and the mixture heated in the microwave at 160°C for 20 min. Purification by reverse phase Gilson HPLC (Method A) and subsequent neutralization of the combined fractions over PL-HCO_3 MP to give 6-(6-methoxy-5-trifluoromethyl-pyridin-3-yl)-4-((S)-1-pyrimidin-2-yl-pyrrolidin-3-yloxy)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidine as a brown solid (17 mg, 21% yield) ^{1}H NMR (400 MHz, DMSO-*d*6, 298K) δ ppm 2.23 - 2.43 (m, 2 H) 2.85 – 2.99 (t, 2 H) 3.22 – 3.94 (m, 9 H) 4.08 – 4.27 (m, 2 H) 5.70 – 5.80 (m, 1 H) 6.56 – 6.66 (t, 1 H) 7.76 – 7.87 (m, 1 H) 8.12 – 8.27 (m, 1 H) 8.28 – 8.42 (m, 2 H) 8.59 – 8.68 (m, 1 H) LCMS: [M+H]+=474.2, Rt [(1)]= 1.91 min.

Example 67 was prepared according the general procedure described in scheme 4



The following are further embodiments of the invention:

Embodiment 1: A tetrahydro-pyrido-pyrimidine derivative of the formula (I) and/or tautomers and/or N-oxides and/or pharmaceutically acceptable salts thereof,



(I)

wherein

Y is selected from O or NR^3;

R^1 is selected from phenyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, 1,2,3-triazinyl, 1,2,4-triazinyl, 1,3,5-triazinyl,

or

$-C(O)-R^4$

wherein

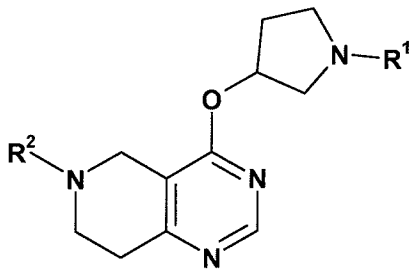
R^4 is selected from C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, C_1-C_8-alkoxy-C_1-C_8-alkyl, C_1-C_8-alkyl-sulfonyl-C_1-C_8-alkyl, heterocyclyl, heterocyclyl-oxy, heterocyclyl-C_1-C_8-alkyl, C_3-C_{12}-cycloalkyl, C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl, heteroaryl, heteroaryl-oxy, heteroaryl-C_1-C_8-alkyl, hydroxy, C_1-C_8-alkoxy, amino, N-C_1-C_8-alkyl-amino or N,N-di-C_1-C_8-alkyl-amino,

wherein 'C_1-C_8-alkyl' in N-C_1-C_8-alkyl-amino and N,N-di-C_1-C_8-alkyl-amino may be unsubstituted or substituted by halogen, hydroxy or C_1-C_4-alkoxy;

wherein 'C_3-C_{12}-cycloalkyl' in C_3-C_{12}-cycloalkyl and C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl may be unsubstituted or substituted by 1-5 substituents independently selected from oxo, halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;

wherein 'heterocyclyl' is selected from oxiranyl, aziridinyl, oxetanyl, thiethanyl, ~~acetitinyl~~azetidinyl, pyrrolidinyl, tetrahydrofuranyl, tetrahydrothiophenyl, 2,3-dihydrofuranyl, 2,5-dihydrofuranyl, 2,3-dihydrothiophenyl, 1-pyrrolinyl, 2-pyrrolinyl, 3-pyrrolinyl, tetrahydropyranyl, piperidinyl, tetrahydrothiopyranyl, morpholinyl, thiomorpholinyl, piperazinyl, azepanyl, thiepanyl or oxepanyl; each of which is unsubstituted or substituted by 1-5 substituents independently selected from oxo, halogen, C_1-C_8-alkyl,

Embodiment 2: A compound according to embodiment 1, of the formula (Ib) and/or tautomers and/or N-oxides and/or pharmaceutically acceptable salts thereof,



(Ib),

wherein

R^1 is selected from phenyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, 1,2,3-triazinyl, 1,2,4-triazinyl, 1,3,5-triazinyl,

or

$-C(O)-R^4$

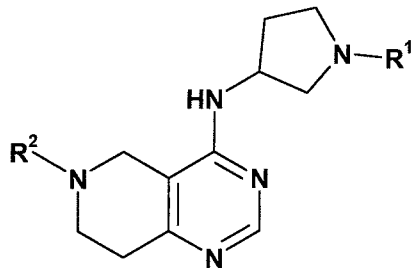
wherein

R^4 is selected from C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, C_1-C_8-alkoxy-C_1-C_8-alkyl, C_1-C_8-alkyl-sulfonyl-C_1-C_8-alkyl, heterocyclyl, heterocyclyl-oxy, heterocyclyl-C_1-C_8-alkyl, C_3-C_{12}-cycloalkyl, C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl, heteroaryl, heteroaryl-oxy, heteroaryl-C_1-C_8-alkyl, hydroxy, C_1-C_8-alkoxy, amino, N-C_1-C_8-alkyl-amino or N,N-di-C_1-C_8-alkyl-amino,

wherein 'C_1-C_8-alkyl' in N-C_1-C_8-alkyl-amino and N,N-di-C_1-C_8-alkyl-amino may be unsubstituted or substituted by halogen, hydroxy or C_1-C_4-alkoxy;

wherein 'C_3-C_{12}-cycloalkyl' in C_3-C_{12}-cycloalkyl and C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl may be unsubstituted or substituted by 1-5 substituents independently selected from oxo, halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;

wherein 'heterocyclyl' is selected from oxiranyl, aziridinyl, oxetanyl, thiethanyl, ~~acetitinyl~~azetidinyl, pyrrolidinyl, tetrahydrofuranyl, tetrahydrothiophenyl, 2,3-dihydrofuranyl, 2,5-dihydrofuranyl, 2,3-dihydrothiophenyl, 1-pyrrolinyl, 2-pyrrolinyl, 3-pyrrolinyl, tetrahydropyranyl, piperidinyl, tetrahydrothiopyranyl, morpholinyl, thiomorpholinyl, piperazinyl, azepanyl, thiepanyl or oxepanyl; each of which is unsubstituted or substituted by 1-5 substituents independently selected from oxo, halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;



(Ic),

wherein

R^1 is selected from phenyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, 1,2,3-triazinyl, 1,2,4-triazinyl, 1,3,5-triazinyl,

or

-C(O)-R^4

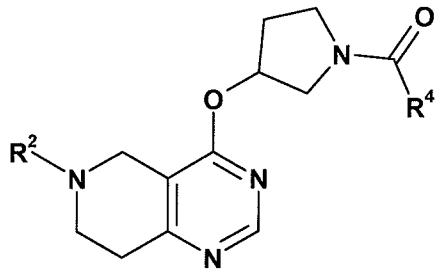
wherein

R^4 is selected from C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, C_1-C_8-alkoxy-C_1-C_8-alkyl, C_1-C_8-alkyl-sulfonyl-C_1-C_8-alkyl, heterocyclyl, heterocyclyl-oxy, heterocyclyl-C_1-C_8-alkyl, C_3-C_{12}-cycloalkyl, C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl, heteroaryl, heteroaryl-oxy, heteroaryl-C_1-C_8-alkyl, hydroxy, C_1-C_8-alkoxy, amino, N-C_1-C_8-alkyl-amino or N,N-di-C_1-C_8-alkyl-amino,

wherein 'C_1-C_8-alkyl' in N-C_1-C_8-alkyl-amino and N,N-di-C_1-C_8-alkyl-amino may be unsubstituted or substituted by halogen, hydroxy or C_1-C_4-alkoxy;

wherein 'C_3-C_{12}-cycloalkyl' in C_3-C_{12}-cycloalkyl and C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl may be unsubstituted or substituted by 1-5 substituents independently selected from oxo, halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;

wherein 'heterocyclyl' is selected from oxiranyl, aziridinyl, oxetanyl, thiethanyl, ~~acetitinyl~~azetidinyl, pyrrolidinyl, tetrahydrofuranyl, tetrahydrothiophenyl, 2,3-dihydrofuranyl, 2,5-dihydrofuranyl, 2,3-dihydrothiophenyl, 1-pyrrolinyl, 2-pyrrolinyl, 3-pyrrolinyl, tetrahydropyranyl, piperidinyl, tetrahydrothiopyranyl, morpholinyl, thiomorpholinyl, piperazinyl, azepanyl, thiepanyl or oxepanyl; each of which is unsubstituted or substituted by 1-5 substituents independently selected from oxo, halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;



(Id),

wherein

R^4 is selected from C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, C_1-C_8-alkoxy-C_1-C_8-alkyl, C_1-C_8-alkyl-sulfonyl-C_1-C_8-alkyl, heterocyclyl, heterocyclyl-oxy, heterocyclyl-C_1-C_8-alkyl, C_3-C_{12}-cycloalkyl, C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl, heteroaryl, heteroaryl-oxy, heteroaryl-C_1-C_8-alkyl, hydroxy, C_1-C_8-alkoxy, amino, N-C_1-C_8-alkyl-amino or N,N-di-C_1-C_8-alkyl-amino,

wherein 'C_1-C_8-alkyl' in N-C_1-C_8-alkyl-amino and N,N-di-C_1-C_8-alkyl-amino may be unsubstituted or substituted by halogen, hydroxy or C_1-C_4-alkoxy;

wherein 'C_3-C_{12}-cycloalkyl' in C_3-C_{12}-cycloalkyl and C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl may be unsubstituted or substituted by 1-5 substituents independently selected from oxo, halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;

wherein 'heterocyclyl' is selected from oxiranyl, aziridinyl, oxetanyl, thiethanyl, ~~a~~cetitinyl<u>azetidinyl</u>, pyrrolidinyl, tetrahydrofuranyl, tetrahydrothiophenyl, 2,3-dihydrofuranyl, 2,5-dihydrofuranyl, 2,3-dihydrothiophenyl, 1-pyrrolinyl, 2-pyrrolinyl, 3-pyrrolinyl, tetrahydropyranyl, piperidinyl, tetrahydrothiopyranyl, morpholinyl, thiomorpholinyl, piperazinyl, azepanyl, thiepanyl or oxepanyl; each of which is unsubstituted or substituted by 1-5 substituents independently selected from oxo, halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;

wherein 'heterocyclyl' can be attached at a heteroatom or a carbon atom and where the N and/or S heteroatoms can also optionally be oxidized to various oxidation states;

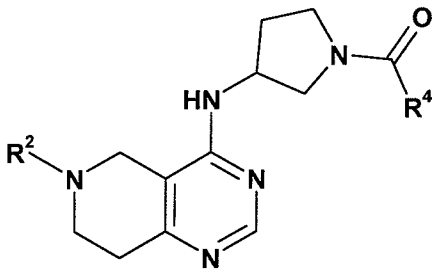
wherein 'heteroaryl' is selected from

furanyl, thiophenyl, pyrrolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxazolyl, isoxazolyl, 1,2,5-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,3-oxadiazolyl,1,3,4-oxadiazolyl, 1,2,5-thiadiazolyl, 1,2,4-thiadiazolyl, 1,2,3-thiadiazolyl,1,3,4-thiadiazolyl, 1,2,3-triazolyl, 1,2,4-triazolyl, 1,2,5-triazolyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, 1,2,3-triazinyl, 1,2,4-triazinyl or 1,3,5-triazinyl; each of which is unsubstituted or substituted by 1-5 substituents independently selected from halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-

alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl; wherein 'heteroaryl' can be attached at a heteroatom or a carbon atom and where the N and/or S heteroatoms can also optionally be oxidized to various oxidation states; and

R^2 is selected from phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, quinolinyl or isoquinolinyl, each of which is unsubstituted or substituted by 1-5 substituents independently selected from halogen, cyano, nitro, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl.

Embodiment 7: A compound according to embodiment 1, of the formula (Ie) and/or tautomers and/or N-oxides and/or pharmaceutically acceptable salts thereof,



(Ie),

wherein

R^4 is selected from C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, C_1-C_8-alkoxy-C_1-C_8-alkyl, C_1-C_8-alkyl-sulfonyl-C_1-C_8-alkyl, heterocyclyl, heterocyclyl-oxy, heterocyclyl-C_1-C_8-alkyl, C_3-C_{12}-cycloalkyl, C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl, heteroaryl, heteroaryl-oxy, heteroaryl-C_1-C_8-alkyl, hydroxy, C_1-C_8-alkoxy, amino, N-C_1-C_8-alkyl-amino or N,N-di-C_1-C_8-alkyl-amino,

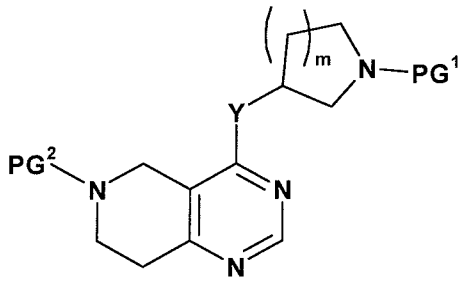
wherein 'C_1-C_8-alkyl' in N-C_1-C_8-alkyl-amino and N,N-di-C_1-C_8-alkyl-amino may be unsubstituted or substituted by halogen, hydroxy or C_1-C_4-alkoxy;

wherein 'C_3-C_{12}-cycloalkyl' in C_3-C_{12}-cycloalkyl and C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl may be unsubstituted or substituted by 1-5 substituents independently selected from oxo, halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;

wherein 'heterocyclyl' is selected from oxiranyl, aziridinyl, oxetanyl, thiethanyl, ~~a~~cetitinyl<u>azetidinyl</u>, pyrrolidinyl, tetrahydrofuranyl, tetrahydrothiophenyl, 2,3-dihydrofuranyl, 2,5-dihydrofuranyl, 2,3-dihydrothiophenyl, 1-pyrrolinyl, 2-pyrrolinyl, 3-pyrrolinyl, tetrahydropyranyl, piperidinyl, tetrahydrothiopyranyl, morpholinyl, thiomorpholinyl, piperazinyl, azepanyl, thiepanyl or oxepanyl; each of which is unsubstituted or substituted by 1-5 substituents independently

wherein compound of formula (D) is prepared comprising the step of

b) deprotecting PG^1 from the compound of formula (C),



(C)

wherein PG^1 represents a suitable protecting group, and the other substituents are as defined above,

c) followed by coupling reaction with

R^2-Hal,

wherein R^2 is as defined for a compound of formula (I) and Hal represents halogen, under customary Buchwald-Hartwig conditions using a ligand with a palladium catalyst, in the presence of a base, in an organic solvent;

wherein the compound of formula (C) is prepared as described above;

or, alternatively comprising the steps a), b) and c) of method B as defined above, starting from a compound of formula (B) wherein PG^1 represents R^1,

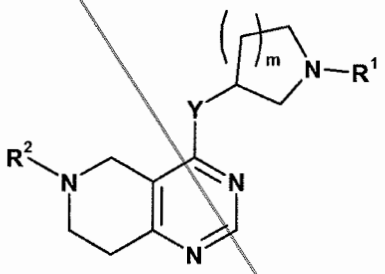
and, if desired, transforming a compound of formula (I) into a different compound of formula (I), transforming a salt of an obtainable compound of formula (I) into the free compound or a different salt, transforming an obtainable free compound of formula (I) into a salt thereof, and/or separating an obtainable mixture of isomers of a compound of formula I into individual isomers.

The reference in this specification to any prior publication (or information derived from it), or to any matter which is known, is not, and should not be taken as an acknowledgment or admission or any form of suggestion that that prior publication (or information derived from it) or known matter forms part of the common general knowledge in the field of endeavour to which this specification relates.

Throughout this specification and the claims which follow, unless the context requires otherwise, the word "comprise", and variations such as "comprises" and "comprising", will be understood to imply the inclusion of a stated integer or step or group of integers or steps but not the exclusion of any other integer or step or group of integers or steps.

Claims:

1. A tetrahydro-pyrido-pyrimidine derivative of the formula (I) and/or tautomers and/or N-oxides and/or pharmaceutically acceptable salts thereof,



(I)

wherein

Y is selected from O or NR^3;

R^1 is selected from phenyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, 1,2,3-triazinyl, 1,2,4-triazinyl, 1,3,5-triazinyl,

or

-C(O)-R^4

wherein

R^4 is selected from C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, C_1-C_8-alkoxy-C_1-C_8-alkyl, C_1-C_8-alkyl-sulfonyl-C_1-C_8-alkyl, heterocyclyl, heterocyclyl-oxy, heterocyclyl-C_1-C_8-alkyl, C_3-C_{12}-cycloalkyl, C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl, heteroaryl, heteroaryl-oxy, heteroaryl-C_1-C_8-alkyl, hydroxy, C_1-C_8-alkoxy, amino, N-C_1-C_8-alkyl-amino or N,N-di-C_1-C_8-alkyl-amino,

wherein 'C_1-C_8-alkyl' in N-C_1-C_8-alkyl-amino and N,N-di-C_1-C_8-alkyl-amino may be unsubstituted or substituted by halogen, hydroxy or C_1-C_4-alkoxy;

wherein 'C_3-C_{12}-cycloalkyl' in C_3-C_{12}-cycloalkyl and C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl may be unsubstituted or substituted by 1-5 substituents independently selected from oxo, halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;

wherein 'heterocyclyl' is selected from oxiranyl, aziridinyl, oxetanyl, thiethanyl, acetitinyl, pyrrolidinyl, tetrahydrofuranyl, tetrahydrothiophenyl, 2,3-dihydrofuranyl, 2,5-dihydrofuranyl, 2,3-dihydrothiophenyl, 1-pyrrolinyl, 2-pyrrolinyl, 3-pyrrolinyl, tetrahydropyranyl, piperidinyl, tetrahydrothiopyranyl, morpholinyl, thiomorpholinyl,

piperazinyl, azepanyl, thiepanyl or oxepanyl; each of which is unsubstituted or substituted by 1-5 substituents independently selected from oxo, halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;

wherein 'heterocyclyl' can be attached at a heteroatom or a carbon atom and where the N and/or S heteroatoms can also optionally be oxidized to various oxidation states;

wherein 'heteroaryl' is selected from

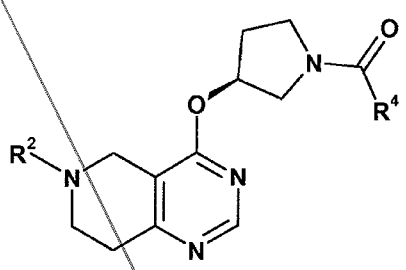
furanyl, thiophenyl, pyrrolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxazolyl, isoxazolyl, 1,2,5-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,3-oxadiazolyl,1,3,4-oxadiazolyl, 1,2,5-thiadiazolyl, 1,2,4-thiadiazolyl, 1,2,3-thiadiazolyl,1,3,4-thiadiazolyl, 1,2,3-triazolyl, 1,2,4-triazolyl, 1,2,5-triazolyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, 1,2,3-triazinyl, 1,2,4-triazinyl or 1,3,5-triazinyl; each of which is unsubstituted or substituted by 1-5 substituents independently selected from halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl; wherein 'heteroaryl' can be attached at a heteroatom or a carbon atom and where the N and/or S heteroatoms can also optionally be oxidized to various oxidation states;

R^2 is selected from phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, quinolinyl or isoquinolinyl, each of which is unsubstituted or substituted by 1-5 substituents independently selected from halogen, cyano, nitro, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;

R^3 is selected from H, C_1-C_4-alkyl or halo-C_1-C_4-alkyl; and

m is selected from 0 or 1.

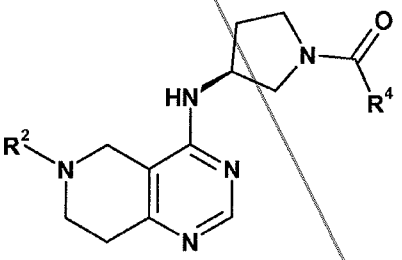
2. A compound according to claim 1, of the formula (Id')



(Id'),

and/or tautomers and/or N-oxides and/or pharmaceutically acceptable salts thereof.

3. A compound according to claim 1, of the formula (Ie')



(Ie'),

and/or tautomers and/or N-oxides and/or pharmaceutically acceptable salts thereof.

4. A compound according to any one of claims 1 to 3, wherein
R^2 is selected from naphthyl, pyridyl or pyrimidinyl; each of which is unsubstituted or substituted by 1-3 substituents independently selected from halogen, cyano, nitro, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl.

5. A compound according to any one of claims 1 to 4, wherein
R^1, if present, is -C(O)-R^4, wherein
R^4 is selected from heterocyclyl, C_4-C_8-cycloalkyl or heteroaryl;
wherein 'C_3-C_{12}-cycloalkyl' may be unsubstituted or substituted by 1-3 substituents independently selected from fluoro, C_1-C_4-alkyl, hydroxyl, C_1-C_4-alkoxy;
wherein 'heterocyclyl' is selected from pyrrolidinyl, tetrahydropyranyl, piperidinyl, tetrahydrothiopyranyl, morpholinyl or piperazinyl; each of which is unsubstituted or substituted by 1-3 substituents independently selected from oxo, halogen, C_1-C_4-alkyl, hydroxyl, C_1-C_4-alkyl-carbonyl;

wherein 'heterocyclyl' can be attached at a heteroatom or a carbon atom and where the N and/or S heteroatoms can also optionally be oxidized to various oxidation states;

wherein 'heteroaryl' is selected from

furanyl, imidazolyl, pyrazolyl, thiazolyl, oxazolyl, isoxazolyl, 1,3,4-oxadiazolyl, pyridyl, pyrazinyl; each of which is unsubstituted or substituted by 1-3 substituents independently selected from C_1-C_4-alkyl, hydroxyl;

wherein 'heteroaryl' can be attached at a heteroatom or a carbon atom and where the N and/or S heteroatoms can also optionally be oxidized to various oxidation states.

6. A compound according to any one of claims 1 to 4, wherein

R^1, if present, is -C(O)-R^4,and

R^4 is selected from C_1-C_8-alkyl, C_1-C_8-alkoxy-C_1-C_8-alkyl, C_1-C_8-alkoxy or N,N-di-C_1-C_8-alkyl-amino,

wherein 'C_1-C_8-alkyl' in N,N-di-C_1-C_8-alkyl-amino may be unsubstituted or substituted by halogen, hydroxy or C_1-C_4-alkoxy.

7. A compound according to claim 1, which is selected from the group consisting of

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;

{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;

{(S)-3-[6-(2,4-Dimethoxy-pyrimidin-5-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;

{3-[6-(2,4-Dimethoxy-pyrimidin-5-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;

2-Methoxy-5-{4-[(S)-1-(tetrahydro-pyran-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;

2-Methoxy-5-{4-[1-(tetrahydro-pyran-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;

1-{(S)-3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-propan-1-one;

1-{3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-propan-1-one;

{(S)-3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;

{3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;

2-Amino-5-{4-[(S)-1-(tetrahydro-pyran-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;

2-Amino-5-{4-[1-(tetrahydro-pyran-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;

(S)-(3-(6-(5-Fluoro-6-methoxypyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;

(3-(6-(5-Fluoro-6-methoxypyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;

(S)-2-Methoxy-5-(4-(1-(2-methoxyacetyl)pyrrolidin-3-yloxy)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)nicotinonitrile;

2-Methoxy-5-(4-(1-(2-methoxyacetyl)pyrrolidin-3-yloxy)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)nicotinonitrile;

(S)-5-(4-(1-(Cyclopentanecarbonyl)pyrrolidin-3-yloxy)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)-2-methoxynicotinonitrile;

5-(4-(1-(Cyclopentanecarbonyl)pyrrolidin-3-yloxy)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)-2-methoxynicotinonitrile;

(2,4-Dimethyl-oxazol-5-yl)-{(S)-3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

(2,4-Dimethyl-oxazol-5-yl)-{3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

Furan-3-yl-{(S)-3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

Furan-3-yl-{3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

Furan-3-yl-{(S)-3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

Furan-3-yl-{3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-3H-imidazol-4-yl)-methanone;

{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-3H-imidazol-4-yl)-methanone;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2-methyl-oxazol-4-yl)-methanone;

{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2-methyl-oxazol-4-yl)-methanone;

(3-Methoxy-cyclobutyl)-{(S)-3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

(3-Methoxy-cyclobutyl)-{3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

({(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-4-yl-methanone;

({3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-4-yl-methanone;

1-(4-{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidine-1-carbonyl}-piperidin-1-yl)-ethanone;

1-(4-{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidine-1-carbonyl}-piperidin-1-yl)-ethanone;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(4-methyl-oxazol-5-yl)-methanone;

{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(4-methyl-oxazol-5-yl)-methanone;

5-{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidine-1-carbonyl}-1H-pyridin-2-one;

5-{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidine-1-carbonyl}-1H-pyridin-2-one;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(1-methyl-1H-imidazol-4-yl)-methanone;

{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(1-methyl-1H-imidazol-4-yl)-methanone;

{(S)-3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-4-yl-methanone;

{3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-4-yl-methanone;

{(S)-3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-5-yl-methanone;

{3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-5-yl-methanone;

{(S)-3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2-methyl-oxazol-4-yl)-methanone;

{3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2-methyl-oxazol-4-yl)-methanone;

{(S)-3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2,2-dimethyl-tetrahydro-pyran-4-yl)-methanone;

{3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2,2-dimethyl-tetrahydro-pyran-4-yl)-methanone;

{(S)-3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2,4-dimethyl-oxazol-5-yl)-methanone;

{3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2,4-dimethyl-oxazol-5-yl)-methanone;

(4,4-Difluoro-cyclohexyl)-{(S)-3-[6-(5,6-dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

(4,4-Difluoro-cyclohexyl)-{3-[6-(5,6-dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

2-Methoxy-5-{4-[(S)-1-(2-tetrahydro-pyran-4-yl-acetyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;

2-Methoxy-5-{4-[1-(2-tetrahydro-pyran-4-yl-acetyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;

5-{4-[(S)-1-(2,4-Dimethyl-oxazole-5-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-2-methoxy-nicotinonitrile;

5-{4-[1-(2,4-Dimethyl-oxazole-5-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-2-methoxy-nicotinonitrile;

5-{4-[(S)-1-(2,2-Dimethyl-tetrahydro-pyran-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-2-methoxy-nicotinonitrile;

5-{4-[1-(2,2-Dimethyl-tetrahydro-pyran-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-2-methoxy-nicotinonitrile;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(5-methyl-oxazol-4-yl)-methanone;

{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(5-methyl-oxazol-4-yl)-methanone;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(5-methyl-isoxazol-4-yl)-methanone;

{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(5-methyl-isoxazol-4-yl)-methanone;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-isoxazol-4-yl)-methanone;

{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-isoxazol-4-yl)-methanone;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-isoxazol-4-yl)-methanone;

{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-isoxazol-4-yl)-methanone;

Isoxazol-3-yl-{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

Isoxazol-3-yl-{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

Isoxazol-5-yl-{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

Isoxazol-5-yl-{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

2-Methoxy-5-{4-[(S)-1-(thiazole-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;

2-Methoxy-5-{4-[1-(thiazole-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;

2-Methoxy-5-{4-[(S)-1-(1-methyl-1H-pyrazole-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;

2-Methoxy-5-{4-[1-(1-methyl-1H-pyrazole-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;

2-Methoxy-5-{4-[(S)-1-(1-methyl-1H-pyrazole-3-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;

2-Methoxy-5-{4-[1-(1-methyl-1H-pyrazole-3-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;

(2,2-Dimethyl-tetrahydro-pyran-4yl)-{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

(2,2-Dimethyl-tetrahydro-pyran-4yl)-{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

(1,1-Dioxo-hexahydro-1lambda*6*-thiopyran-4-yl)-{(S)-3-[6-(6-methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

(1,1-Dioxo-hexahydro-1lambda*6*-thiopyran-4-yl)-{3-[6-(6-methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

(S)-(2,4-Dimethyloxazol-5-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;

(2,4-Dimethyloxazol-5-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;

(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(thiazol-5-yl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(thiazol-5-yl)methanone;

(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(1-methyl-1H-pyrazol-5-yl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(1-methyl-1H-pyrazol-5-yl)methanone;

4-((S)-3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidine-1-carbonyl)pyrrolidin-2-one;

4-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidine-1-carbonyl)pyrrolidin-2-one;

(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(pyridin-3-yl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(pyridin-3-yl)methanone;

(S)-(1H-Imidazol-4-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;

(1H-Imidazol-4-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;

5-((S)-3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidine-1-carbonyl)pyrrolidin-2-one;

5-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidine-1-carbonyl)pyrrolidin-2-one;

(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(pyridin-4-yl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(pyridin-4-yl)methanone;

(S)-(1,3-Dimethyl-1H-pyrazol-4-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;

(1,3-Dimethyl-1H-pyrazol-4-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;

(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(1H-pyrazol-4-yl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(1H-pyrazol-4-yl)methanone;

(S)-(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(5-methyl-1,3,4-oxadiazol-2-yl)methanone;

(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(5-methyl-1,3,4-oxadiazol-2-yl)methanone;

(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(pyrazin-2-yl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(pyrazin-2-yl)methanone;

(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(1-methyl-1H-imidazol-4-yl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(1-methyl-1H-imidazol-4-yl)methanone;

{(S)-3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(1-methyl-1H-pyrazol-4-yl)-methanone;

{3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(1-methyl-1H-pyrazol-4-yl)-methanone;

{(S)-3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-thiazol-4-yl-methanone;

{3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-thiazol-4-yl-methanone;

{(S)-3-[6-(5-Chloro-6-methoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;

{3-[6-(5-Chloro-6-methoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;

(S)-(3-(6-(6-Amino-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;

(3-(6-(6-Amino-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)azetidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;

{(S)-3-[6-(2-Methoxy-pyrimidin-5-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;

{3-[6-(2-Methoxy-pyrimidin-5-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;

[(S)-3-(6-Quinolin-3-yl-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy)-pyrrolidin-1-yl]-(tetrahydro-pyran-4-yl)-methanone;

[3-(6-Quinolin-3-yl-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy)-pyrrolidin-1-yl]-(tetrahydro-pyran-4-yl)-methanone;

(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;

(S)-1-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)-3,3-dimethylbutan-1-one;

1-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)-3,3-dimethylbutan-1-one;

1-{(S)-3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-propan-1-one;

1-{3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-propan-1-one;

2-Methoxy-5-[4-((S)-1-propionyl-pyrrolidin-3-yloxy)-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl]-nicotinonitrile;

2-Methoxy-5-[4-(1-propionyl-pyrrolidin-3-yloxy)-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl]-nicotinonitrile;

(S)-6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-4-(1-(pyridin-2-yl)pyrrolidin-3-yloxy)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine;

6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-4-(1-(pyridin-2-yl)pyrrolidin-3-yloxy)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine;

(S)-6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-4-(1-(pyrimidin-2-yl)pyrrolidin-3-yloxy)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine;

6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-4-(1-(pyrimidin-2-yl)pyrrolidin-3-yloxy)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine;

(S)-1-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)propan-1-one;

1-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)propan-1-one;

(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;

(S)-2-Methoxy-5-(4-(1-(tetrahydro-2H-pyran-4-carbonyl)pyrrolidin-3-ylamino)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)nicotinonitrile;

2-Methoxy-5-(4-(1-(tetrahydro-2H-pyran-4-carbonyl)pyrrolidin-3-ylamino)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)nicotinonitrile;

(S)-1-(4-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidine-1-carbonyl)piperidin-1-yl)ethanone;

1-(4-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidine-1-carbonyl)piperidin-1-yl)ethanone;

(2,2-Dimethyltetrahydro-2H-pyran-4-yl)((S)-3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;

(2,2-Dimethyltetrahydro-2H-pyran-4-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;

(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(oxazol-5-yl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(oxazol-5-yl)methanone;

((S)-3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)((1s,4R)-4-methoxycyclohexyl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)((1s,4R)-4-methoxycyclohexyl)methanone;

((S)-3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)((1r,4S)-4-methoxycyclohexyl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)((1r,4S)-4-methoxycyclohexyl)methanone;

((1s,4R)-4-Hydroxycyclohexyl)((S)-3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;

((1s,4R)-4-Hydroxycyclohexyl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;

((1r,4S)-4-Hydroxycyclohexyl)((S)-3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;

((1r,4S)-4-Hydroxycyclohexyl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;

(S)-(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(1-methyl-1H-imidazol-4-yl)methanone;

(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(1-methyl-1H-imidazol-4-yl)methanone;

(S)-(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(oxazol-5-yl)methanone;
(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(oxazol-5-yl)methanone;
(S)-(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(oxazol-4-yl)methanone;
(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(oxazol-4-yl)methanone;
(2,2-Dimethyltetrahydro-2H-pyran-4-yl)((S)-3-(6-(6-methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;
(2,2-Dimethyltetrahydro-2H-pyran-4-yl)(3-(6-(6-methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;
(S)-1-(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)propan-1-one;
1-(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)propan-1-one;
(S)-(3-(6-(5-Chloro-6-methoxypyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(3-(6-(5-Chloro-6-methoxypyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(S)-(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(Tetrahydro-pyran-4-yl)-{(S)-3-{6-(5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl}-methanone;
(Tetrahydro-pyran-4-yl)-{3-{6-(5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl}-methanone;
(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(4-methylpiperazin-1-yl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(4-methylpiperazin-1-yl)methanone;
(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(morpholino)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(morpholino)methanone;

(S)-(4-Hydroxypiperidin-1-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;

4-Hydroxypiperidin-1-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;

(S)-N-(2-Hydroxyethyl)-3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)-N-methylpyrrolidine-1-carboxamide;

N-(2-Hydroxyethyl)-3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)-N-methylpyrrolidine-1-carboxamide;

(S)-1-(4-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidine-1-carbonyl)piperazin-1-yl)ethanone;

1-(4-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidine-1-carbonyl)piperazin-1-yl)ethanone;

(S)-2-Methoxy-5-(4-(1-(morpholine-4-carbonyl)pyrrolidin-3-yloxy)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)nicotinonitrile;

2-Methoxy-5-(4-(1-(morpholine-4-carbonyl)pyrrolidin-3-yloxy)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)nicotinonitrile;

(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(oxazol-4-yl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(oxazol-4-yl)methanone;

1-(4-{(S)-3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidine-1-carbonyl}-piperidin-1-yl)-ethanone;

1-(4-{3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidine-1-carbonyl}-piperidin-1-yl)-ethanone;

{(S)-3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-3H-imidazol-4-yl)-methanone;

{3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-3H-imidazol-4-yl)-methanone;

{(S)-3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-5-yl-methanone;

{3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-5-yl-methanone;

{(S)-3-[6-(6-Methoxy-pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone; and

{3-[6-(6-Methoxy-pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone.

8. A compound of the formula (I) as defined in anyone of claims 1 to 7 in form of a salt selected from

a) citrate, fumarate or napadisylate; or

b) phosphate, hydrochloride or hippurate.

9. A compound of the formula (I) as defined in anyone of claims 1 to 8, for use as pharmaceutical.

10. A combination comprising a therapeutically effective amount of a compound of formula (I) as defined in anyone of claims 1 to 8, and one or more therapeutically active agents.

11. Use of a compound of formula (I) as defined in anyone of claims 1 to 8, for the manufacture of a medicament for the treatment of a diseases or disorders which are mediated by the activity of the PI3K enzymes, preferably by the activity of the PI3Kδ isoform.

12. A pharmaceutical composition comprising a therapeutically effective amount of a compound of formula (I) as defined in anyone of claims 1 to 8, and one or more pharmaceutically acceptable carriers.

13. A method of modulating the activity of the PI3K enzymes, preferably of the PI3Kδ isoform , in a subject, comprising the step of administering to a subject a therapeutically effective amount of a compound of formula (I) as defined in anyone of claims 1 to 8.

14. A method for the treatment of a disorder or a disease mediated by the PI3K enzymes, preferably by the PI3Kδ isoform, comprising the step of administering to a subject a therapeutically effective amount of a compound of formula (I) as defied defined in anyone of claims 1 to 8.

15. A method according to claim 14, wherein the disorder or a disease is selected from rheumatoid arthritis (RA), pemphigus vulgaris (PV), idiopathic thrombocytopenia purpura (ITP), thrombotic thrombocytopenic purpura (TTP), autoimmune hemolytic anemia (AIHA), acquired hemophilia type A (AHA), systemic lupus erythematosus (SLE), multiple sclerosis (MS), myasthenia gravis (MG), Sjögren's syndrome (SS), ANCA-associated vasculitides, cryoglobulinemia, chronic autoimmune urticaria (CAU), allergy (atopic dermatitis, contact

dermatitis, allergic rhinitis) , goodpasture's syndrome, transplant rejection and cancers of haematopoietic origin.

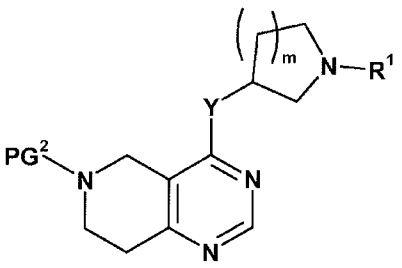
16. Use of a compound of formula (I) as defined in anyone of claims 1 to 8, for the treatment of a disorder or a disease in a subject mediated by the activity of the PI3K enzymes, preferably by the activity of the PI3Kδ isoform.

17. Use of a compound of formula (I) as defined in anyone of claims 1 to 8, for the treatment of a disorder or disease selected from rheumatoid arthritis (RA), pemphigus vulgaris (PV), idiopathic thrombocytopenia purpura (ITP), thrombotic thrombocytopenic purpura (TTP), autoimmune hemolytic anemia (AIHA), acquired hemophilia type A (AHA), systemic lupus erythematosus (SLE), multiple sclerosis (MS), myasthenia gravis (MG), Sjögren's syndrome (SS), ANCA-associated vasculitides, cryoglobulinemia, chronic autoimmune urticaria (CAU), allergy (atopic dermatitis, contact dermatitis, allergic rhinitis) , goodpasture's syndrome, transplant rejection and cancers of haematopoietic origin.

18. A process or method for the manufacture of a compound of the formula (I) according to claim 1,

comprising the steps of method A:

b) deprotecting the compound of formula (E),



(E)

wherein PG^2 represents a suitable protectiong group and R^1, Y and m are as defined for a compound of formula (I)

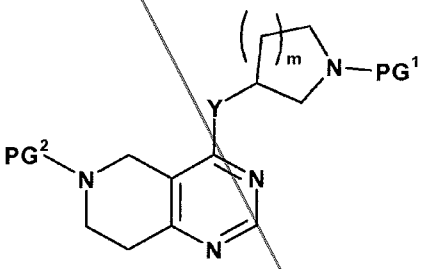
c) followed by reaction with

R^2-Hal,

wherein R^2 is as defined for a compound of formula (I) and Hal represents halogen, under customary Buchwald-Hartwig conditions using a ligand with a palladium catalyst, in the presence of a base, in an organic solvent;

wherein compound of formula (E) is prepared comprising the step of

d) deprotecting PG^1 from the compound of formula (C),



(C)

wherein PG^1 represents a suitable protecting group, and the other substituents are as defined above,

e) followed by coupling reaction with

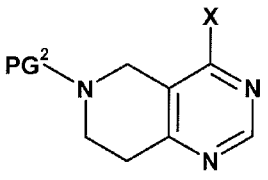
R^1-Act,

wherein when R^1 is $-C(O)-R^4$, wherein R^4 is as defined for a compound of formula (I), and Act represents an activating group or a hydroxy group, the coupling reaction is an amide, urea or carbamic ester formation, or;

wherein when R^1 is selected from phenyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, 1,2,3-triazinyl, 1,2,4-triazinyl or 1,3,5-triazinyl and Act represents halogen, the coupling reaction is carried out in the presence of an amine base or alternatively, the reaction is carried out under customary Buchwald-Hartwig conditions using a ligand with a palladium catalyst in the presence of a base;

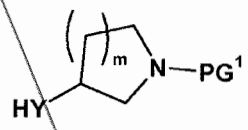
wherein the compound of formula (C) is prepared comprising the step of

a) coupling a compound of formula (A),



(A)

wherein X represents halogen and PG^2 is as defined above; with a compound of formula (B),



(B)

wherein the substituents are as defined above,

wherein when YH is OH and X represents halogen, the reaction takes place in the presence of a suitable base, or

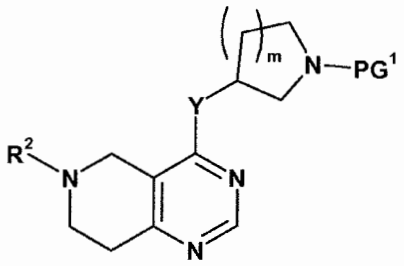
wherein when YH is NR^3H and and X represents halogen: The reaction takes place in the presence of a suitable base, or

wherein when YH is NR^3H and and X represents hydroxy: A base promoted phosphonium coupling reaction is employed;

or, alternatively comprising the steps of a), d) and e) of method A as defined above, starting from a compound of formula (A) wherein PG^2 represents R^2;

or, alternatively comprising the steps of method B:

d) deprotecting the compound of formula (D),



(D)

wherein PG^1 represents a suitable protecting group, and the other substituents are as defined above

e) followed by coupling reaction with

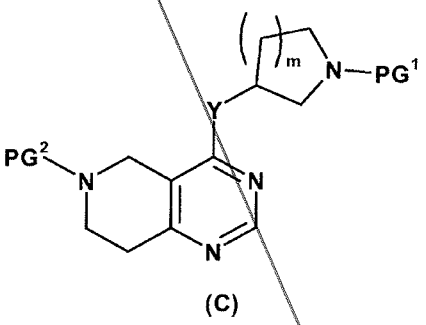
R^1-Act,

wherein when R^1 is -C(O)-R^4, wherein R^4 is as defined for a compound of formula (I), and Act represents an activating group or a hydroxy group, the coupling reaction is an amide, urea or carbamic ester formation, or;

wherein when R^1 is selected from phenyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, 1,2,3-triazinyl, 1,2,4-triazinyl or 1,3,5-triazinyl and Act represents halogen, the coupling reaction is carried out in the presence of an amine base or alternatively, the reaction is carried out under customary Buchwald-Hartwig conditions using a ligand with a palladium catalyst in the presence of a base;

wherein compound of formula (D) is prepared comprising the step of

b) deprotecting PG^1 from the compound of formula (C),



(C)

wherein PG^1 represents a suitable protecting group, and the other substituents are as defined above,

c) followed by coupling reaction with

R^2-Hal,

wherein R^2 is as defined for a compound of formula (I) and Hal represents halogen,

under customary Buchwald-Hartwig conditions using a ligand with a palladium catalyst, in the presence of a base, in an organic solvent;

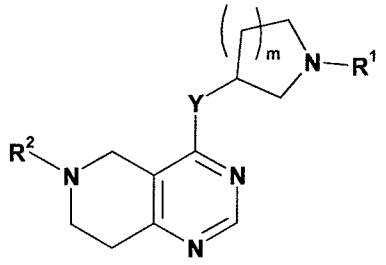
wherein the compound of formula (C) is prepared as described above;

or, alternatively comprising the steps a), b) and c) of method B as defined above, starting from a compound of formula (B) wherein PG^1 represents R^1,

and, if desired, transforming a compound of formula (I) into a different compound of formula (I), transforming a salt of an obtainable compound of formula (I) into the free compound or a different salt, transforming an obtainable free compound of formula (I) into a salt thereof, and/or separating an obtainable mixture of isomers of a compound of formula I into individual isomers.

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A tetrahydro-pyrido-pyrimidine derivative of the formula (I) and/or tautomers and/or N-oxides and/or pharmaceutically acceptable salts thereof,



(I)

wherein

Y is selected from O or NR^3;

R^1 is selected from phenyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, 1,2,3-triazinyl, 1,2,4-triazinyl, 1,3,5-triazinyl,

or

-C(O)-R^4

wherein

R^4 is selected from C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, C_1-C_8-alkoxy-C_1-C_8-alkyl, C_1-C_8-alkyl-sulfonyl-C_1-C_8-alkyl, heterocyclyl, heterocyclyl-oxy, heterocyclyl-C_1-C_8-alkyl, C_3-C_{12}-cycloalkyl, C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl, heteroaryl, heteroaryl-oxy, heteroaryl-C_1-C_8-alkyl, hydroxy, C_1-C_8-alkoxy, amino, N-C_1-C_8-alkyl-amino or N,N-di-C_1-C_8-alkyl-amino,

wherein 'C_1-C_8-alkyl' in N-C_1-C_8-alkyl-amino and N,N-di-C_1-C_8-alkyl-amino may be unsubstituted or substituted by halogen, hydroxy or C_1-C_4-alkoxy;

wherein 'C_3-C_{12}-cycloalkyl' in C_3-C_{12}-cycloalkyl and C_3-C_{12}-cycloalkyl-C_1-C_8-alkyl may be unsubstituted or substituted by 1-5 substituents independently selected from oxo, halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;

wherein 'heterocyclyl' is selected from oxiranyl, aziridinyl, oxetanyl, thiethanyl, azetidinyl, pyrrolidinyl, tetrahydrofuranyl, tetrahydrothiophenyl, 2,3-dihydrofuranyl, 2,5-dihydrofuranyl, 2,3-dihydrothiophenyl, 1-pyrrolinyl, 2-pyrrolinyl, 3-pyrrolinyl, tetrahydropyranyl, piperidinyl, tetrahydrothiopyranyl, morpholinyl, thiomorpholinyl, piperazinyl, azepanyl, thiepanyl or oxepanyl; each of which is unsubstituted or substituted by 1-5 substituents independently

selected from oxo, halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;

wherein 'heterocyclyl' can be attached at a heteroatom or a carbon atom and where the N and/or S heteroatoms can also optionally be oxidized to various oxidation states;

wherein 'heteroaryl' is selected from

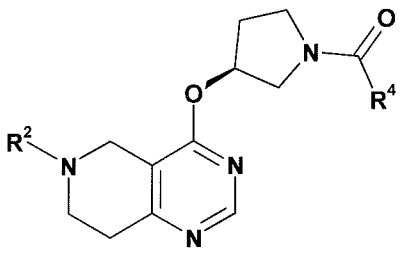
furanyl, thiophenyl, pyrrolyl, imidazolyl, pyrazolyl, thiazolyl, isothiazolyl, oxazolyl, isoxazolyl, 1,2,5-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,3-oxadiazolyl,1,3,4-oxadiazolyl, 1,2,5-thiadiazolyl, 1,2,4-thiadiazolyl, 1,2,3-thiadiazolyl,1,3,4-thiadiazolyl, 1,2,3-triazolyl, 1,2,4-triazolyl, 1,2,5-triazolyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, 1,2,3-triazinyl, 1,2,4-triazinyl or 1,3,5-triazinyl; each of which is unsubstituted or substituted by 1-5 substituents independently selected from halogen, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl; wherein 'heteroaryl' can be attached at a heteroatom or a carbon atom and where the N and/or S heteroatoms can also optionally be oxidized to various oxidation states;

R^2 is selected from phenyl, naphthyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, quinolinyl or isoquinolinyl, each of which is unsubstituted or substituted by 1-5 substituents independently selected from halogen, cyano, nitro, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl;

R^3 is selected from H, C_1-C_4-alkyl or halo-C_1-C_4-alkyl; and

m is selected from 0 or 1.

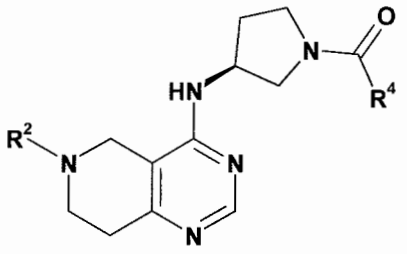
2. A compound according to claim 1, of the formula (Id')



(Id'),

and/or tautomers and/or N-oxides and/or pharmaceutically acceptable salts thereof.

3. A compound according to claim 1, of the formula (Ie')



(Ie'),

and/or tautomers and/or N-oxides and/or pharmaceutically acceptable salts thereof.

4. A compound according to any one of claims 1 to 3, wherein
R^2 is selected from naphthyl, pyridyl or pyrimidinyl; each of which is unsubstituted or substituted by 1-3 substituents independently selected from halogen, cyano, nitro, C_1-C_8-alkyl, halo-C_1-C_8-alkyl, hydroxy-C_1-C_8-alkyl, hydroxyl, C_1-C_8-alkoxy, C_1-C_8-alkoxy-C_1-C_8-alkyl, amino, N-C_1-C_8-alkyl-amino, N,N-di-C_1-C_8-alkyl-amino, C_1-C_8-alkyl-carbonyl, halo-C_1-C_8-alkyl-carbonyl, hydroxy-C_1-C_8-alkyl-carbonyl or C_1-C_8-alkoxy-C_1-C_8-alkyl-carbonyl.

5. A compound according to any one of claims 1 to 4, wherein
R^1, if present, is -C(O)-R^4, wherein
R^4 is selected from heterocyclyl, C_4-C_8-cycloalkyl or heteroaryl;
wherein 'C_3-C_{12}-cycloalkyl' may be unsubstituted or substituted by 1-3 substituents independently selected from fluoro, C_1-C_4-alkyl, hydroxyl, C_1-C_4-alkoxy;
wherein 'heterocyclyl' is selected from pyrrolidinyl, tetrahydropyranyl, piperidinyl, tetrahydrothiopyranyl, morpholinyl or piperazinyl; each of which is unsubstituted or substituted by 1-3 substituents independently selected from oxo, halogen, C_1-C_4-alkyl, hydroxyl, C_1-C_4-alkyl-carbonyl;
wherein 'heterocyclyl' can be attached at a heteroatom or a carbon atom and where the N and/or S heteroatoms can also optionally be oxidized to various oxidation states;
wherein 'heteroaryl' is selected from
furanyl, imidazolyl, pyrazolyl, thiazolyl, oxazolyl, isoxazolyl, 1,3,4-oxadiazolyl, pyridyl, pyrazinyl; each of which is unsubstituted or substituted by 1-3 substituents independently selected from C_1-C_4-alkyl, hydroxyl;
wherein 'heteroaryl' can be attached at a heteroatom or a carbon atom and where the N and/or S heteroatoms can also optionally be oxidized to various oxidation states.

6. A compound according to any one of claims 1 to 4, wherein
R^1, if present, is -C(O)-R^4,and

R^4 is selected from C_1-C_8-alkyl, C_1-C_8-alkoxy-C_1-C_8-alkyl, C_1-C_8-alkoxy or N,N-di-C_1-C_8-alkyl-amino,
wherein 'C_1-C_8-alkyl' in N,N-di-C_1-C_8-alkyl-amino may be unsubstituted or substituted by halogen, hydroxy or C_1-C_4-alkoxy.

7. A compound according to claim 1, which is selected from the group consisting of
{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;
{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;
{(S)-3-[6-(2,4-Dimethoxy-pyrimidin-5-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;
{3-[6-(2,4-Dimethoxy-pyrimidin-5-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;
2-Methoxy-5-{4-[(S)-1-(tetrahydro-pyran-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;
2-Methoxy-5-{4-[1-(tetrahydro-pyran-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;
1-{(S)-3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-propan-1-one;
1-{3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-propan-1-one;
{(S)-3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;
{3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;
2-Amino-5-{4-[(S)-1-(tetrahydro-pyran-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;
2-Amino-5-{4-[1-(tetrahydro-pyran-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;
(S)-(3-(6-(5-Fluoro-6-methoxypyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(3-(6-(5-Fluoro-6-methoxypyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(S)-2-Methoxy-5-(4-(1-(2-methoxyacetyl)pyrrolidin-3-yloxy)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)nicotinonitrile;

2-Methoxy-5-(4-(1-(2-methoxyacetyl)pyrrolidin-3-yloxy)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)nicotinonitrile;

(S)-5-(4-(1-(Cyclopentanecarbonyl)pyrrolidin-3-yloxy)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)-2-methoxynicotinonitrile;

5-(4-(1-(Cyclopentanecarbonyl)pyrrolidin-3-yloxy)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)-2-methoxynicotinonitrile;

(2,4-Dimethyl-oxazol-5-yl)-{(S)-3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

(2,4-Dimethyl-oxazol-5-yl)-{3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

Furan-3-yl-{(S)-3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

Furan-3-yl-{3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy-pyrrolidin-1-1-yl}-oxazol-5-yl-methanone;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-3H-imidazol-4-yl)-methanone;

{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-3H-imidazol-4-yl)-methanone;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2-methyl-oxazol-4-yl)-methanone;

{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2-methyl-oxazol-4-yl)-methanone;

(3-Methoxy-cyclobutyl)-{(S)-3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

(3-Methoxy-cyclobutyl)-{3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

({(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-4-yl-methanone;

({3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-4-yl-methanone;

1-(4-{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidine-1-carbonyl}-piperidin-1-yl)-ethanone;

1-(4-{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidine-1-carbonyl}-piperidin-1-yl)-ethanone;

{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(4-methyl-oxazol-5-yl)-methanone;
{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(4-methyl-oxazol-5-yl)-methanone;
5-{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidine-1-carbonyl}-1H-pyridin-2-one;
5-{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidine-1-carbonyl}-1H-pyridin-2-one;
{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(1-methyl-1H-imidazol-4-yl)-methanone;
{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(1-methyl-1H-imidazol-4-yl)-methanone;
{(S)-3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-4-yl-methanone;
{3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-4-yl-methanone;
{(S)-3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-5-yl-methanone;
{3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-5-yl-methanone;
{(S)-3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2-methyl-oxazol-4-yl)-methanone;
{3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2-methyl-oxazol-4-yl)-methanone;
{(S)-3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2,2-dimethyl-tetrahydro-pyran-4-yl)-methanone;
{3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2,2-dimethyl-tetrahydro-pyran-4-yl)-methanone;
{(S)-3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2,4-dimethyl-oxazol-5-yl)-methanone;
{3-[6-(5,6-Dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(2,4-dimethyl-oxazol-5-yl)-methanone;
(4,4-Difluoro-cyclohexyl)-{(S)-3-[6-(5,6-dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;
(4,4-Difluoro-cyclohexyl)-{3-[6-(5,6-dimethoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

2-Methoxy-5-{4-[(S)-1-(2-tetrahydro-pyran-4-yl-acetyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;
2-Methoxy-5-{4-[1-(2-tetrahydro-pyran-4-yl-acetyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;
5-{4-[(S)-1-(2,4-Dimethyl-oxazole-5-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-2-methoxy-nicotinonitrile;
5-{4-[1-(2,4-Dimethyl-oxazole-5-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-2-methoxy-nicotinonitrile;
5-{4-[(S)-1-(2,2-Dimethyl-tetrahydro-pyran-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-2-methoxy-nicotinonitrile;
5-{4-[1-(2,2-Dimethyl-tetrahydro-pyran-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-2-methoxy-nicotinonitrile;
{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(5-methyl-oxazol-4-yl)-methanone;
{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(5-methyl-oxazol-4-yl)-methanone;
{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(5-methyl-isoxazol-4-yl)-methanone;
{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(5-methyl-isoxazol-4-yl)-methanone;
{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-isoxazol-4-yl)-methanone;
{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-isoxazol-4-yl)-methanone;
{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-isoxazol-4-yl)-methanone;
{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-isoxazol-4-yl)-methanone;
Isoxazol-3-yl-{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;
Isoxazol-3-yl-{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;
Isoxazol-5-yl-{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;
Isoxazol-5-yl-{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;

2-Methoxy-5-{4-[(S)-1-(thiazole-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;
2-Methoxy-5-{4-[1-(thiazole-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;
2-Methoxy-5-{4-[(S)-1-(1-methyl-1H-pyrazole-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;
2-Methoxy-5-{4-[1-(1-methyl-1H-pyrazole-4-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;
2-Methoxy-5-{4-[(S)-1-(1-methyl-1H-pyrazole-3-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;
2-Methoxy-5-{4-[1-(1-methyl-1H-pyrazole-3-carbonyl)-pyrrolidin-3-yloxy]-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl}-nicotinonitrile;
(2,2-Dimethyl-tetrahydro-pyran-4yl)-{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;
(2,2-Dimethyl-tetrahydro-pyran-4yl)-{3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;
(1,1-Dioxo-hexahydro-1lambda*6*-thiopyran-4-yl)-{(S)-3-[6-(6-methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;
(1,1-Dioxo-hexahydro-1lambda*6*-thiopyran-4-yl)-{3-[6-(6-methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-methanone;
(S)-(2,4-Dimethyloxazol-5-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;
(2,4-Dimethyloxazol-5-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;
(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(thiazol-5-yl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(thiazol-5-yl)methanone;
(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(1-methyl-1H-pyrazol-5-yl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(1-methyl-1H-pyrazol-5-yl)methanone;
4-((S)-3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidine-1-carbonyl)pyrrolidin-2-one;
4-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidine-1-carbonyl)pyrrolidin-2-one;

(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(pyridin-3-yl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(pyridin-3-yl)methanone;
(S)-(1H-Imidazol-4-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;
(1H-Imidazol-4-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;
5-((S)-3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidine-1-carbonyl)pyrrolidin-2-one;
5-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidine-1-carbonyl)pyrrolidin-2-one;
(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(pyridin-4-yl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(pyridin-4-yl)methanone;
(S)-(1,3-Dimethyl-1H-pyrazol-4-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;
(1,3-Dimethyl-1H-pyrazol-4-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;
(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(1H-pyrazol-4-yl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(1H-pyrazol-4-yl)methanone;
(S)-(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(5-methyl-1,3,4-oxadiazol-2-yl)methanone;
(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(5-methyl-1,3,4-oxadiazol-2-yl)methanone;
(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(pyrazin-2-yl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(pyrazin-2-yl)methanone;
(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(1-methyl-1H-imidazol-4-yl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(1-methyl-1H-imidazol-4-yl)methanone;

{(S)-3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(1-methyl-1H-pyrazol-4-yl)-methanone;
{3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(1-methyl-1H-pyrazol-4-yl)-methanone;
{(S)-3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-thiazol-4-yl-methanone;
{3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-thiazol-4-yl-methanone;
{(S)-3-[6-(5-Chloro-6-methoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;
{3-[6-(5-Chloro-6-methoxy-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;
(S)-(3-(6-(6-Amino-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(3-(6-(6-Amino-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)azetidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
{(S)-3-[6-(2-Methoxy-pyrimidin-5-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;
{3-[6-(2-Methoxy-pyrimidin-5-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone;
[(S)-3-(6-Quinolin-3-yl-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy)-pyrrolidin-1-yl]-(tetrahydro-pyran-4-yl)-methanone;
[3-(6-Quinolin-3-yl-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy)-pyrrolidin-1-yl]-(tetrahydro-pyran-4-yl)-methanone;
(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(S)-1-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)-3,3-dimethylbutan-1-one;
1-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)-3,3-dimethylbutan-1-one;
1-{(S)-3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-propan-1-one;

1-{3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-propan-1-one;
2-Methoxy-5-[4-((S)-1-propionyl-pyrrolidin-3-yloxy)-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl]-nicotinonitrile;
2-Methoxy-5-[4-(1-propionyl-pyrrolidin-3-yloxy)-7,8-dihydro-5H-pyrido[4,3-d]pyrimidin-6-yl]-nicotinonitrile;
(S)-6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-4-(1-(pyridin-2-yl)pyrrolidin-3-yloxy)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine;
6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-4-(1-(pyridin-2-yl)pyrrolidin-3-yloxy)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine;
(S)-6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-4-(1-(pyrimidin-2-yl)pyrrolidin-3-yloxy)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine;
6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-4-(1-(pyrimidin-2-yl)pyrrolidin-3-yloxy)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidine;
(S)-1-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)propan-1-one;
1-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)propan-1-one;
(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(S)-2-Methoxy-5-(4-(1-(tetrahydro-2H-pyran-4-carbonyl)pyrrolidin-3-ylamino)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)nicotinonitrile;
2-Methoxy-5-(4-(1-(tetrahydro-2H-pyran-4-carbonyl)pyrrolidin-3-ylamino)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)nicotinonitrile;
(S)-1-(4-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidine-1-carbonyl)piperidin-1-yl)ethanone;
1-(4-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidine-1-carbonyl)piperidin-1-yl)ethanone;
(2,2-Dimethyltetrahydro-2H-pyran-4-yl)((S)-3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;
(2,2-Dimethyltetrahydro-2H-pyran-4-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;
(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(oxazol-5-yl)methanone;

(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(oxazol-5-yl)methanone;
((S)-3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)((1s,4R)-4-methoxycyclohexyl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)((1s,4R)-4-methoxycyclohexyl)methanone;
((S)-3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)((1r,4S)-4-methoxycyclohexyl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)((1r,4S)-4-methoxycyclohexyl)methanone;
((1s,4R)-4-Hydroxycyclohexyl)((S)-3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;
((1s,4R)-4-Hydroxycyclohexyl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;
((1r,4S)-4-Hydroxycyclohexyl)((S)-3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;
((1r,4S)-4-Hydroxycyclohexyl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;
(S)-(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(1-methyl-1H-imidazol-4-yl)methanone;
(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(1-methyl-1H-imidazol-4-yl)methanone;
(S)-(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(oxazol-5-yl)methanone;
(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(oxazol-5-yl)methanone;
(S)-(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(oxazol-4-yl)methanone;
(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(oxazol-4-yl)methanone;
(2,2-Dimethyltetrahydro-2H-pyran-4-yl)((S)-3-(6-(6-methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;
(2,2-Dimethyltetrahydro-2H-pyran-4-yl)(3-(6-(6-methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)methanone;
(S)-1-(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)propan-1-one;

1-(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)propan-1-one;
(S)-(3-(6-(5-Chloro-6-methoxypyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(3-(6-(5-Chloro-6-methoxypyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(S)-(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(3-(6-(6-Methoxy-5-methylpyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl)(tetrahydro-2H-pyran-4-yl)methanone;
(Tetrahydro-pyran-4-yl)-{(S)-3-{6-(5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl}-methanone;
(Tetrahydro-pyran-4-yl)-{3-{6-(5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-ylamino)pyrrolidin-1-yl}-methanone;
(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(4-methylpiperazin-1-yl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(4-methylpiperazin-1-yl)methanone;
(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(morpholino)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(morpholino)methanone;
(S)-(4-Hydroxypiperidin-1-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;
4-Hydroxypiperidin-1-yl)(3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)methanone;
(S)-N-(2-Hydroxyethyl)-3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)-N-methylpyrrolidine-1-carboxamide;
N-(2-Hydroxyethyl)-3-(6-(6-methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)-N-methylpyrrolidine-1-carboxamide;
(S)-1-(4-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidine-1-carbonyl)piperazin-1-yl)ethanone;
1-(4-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidine-1-carbonyl)piperazin-1-yl)ethanone;
(S)-2-Methoxy-5-(4-(1-(morpholine-4-carbonyl)pyrrolidin-3-yloxy)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)nicotinonitrile;

2-Methoxy-5-(4-(1-(morpholine-4-carbonyl)pyrrolidin-3-yloxy)-7,8-dihydropyrido[4,3-d]pyrimidin-6(5H)-yl)nicotinonitrile;
(S)-(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(oxazol-4-yl)methanone;
(3-(6-(6-Methoxy-5-(trifluoromethyl)pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl)(oxazol-4-yl)methanone;
1-(4-{(S)-3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidine-1-carbonyl}-piperidin-1-yl)-ethanone;
1-(4-{3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidine-1-carbonyl}-piperidin-1-yl)-ethanone;
{(S)-3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-3H-imidazol-4-yl)-methanone;
{3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(3-methyl-3H-imidazol-4-yl)-methanone;
{(S)-3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-5-yl-methanone;
{3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-oxazol-5-yl-methanone;
{(S)-3-[6-(6-Methoxy-pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone; and
{3-[6-(6-Methoxy-pyridin-3-yl)-5,6,7,8-tetrahydropyrido[4,3-d]pyrimidin-4-yloxy)pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone.

8. A compound which is {(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone, or a pharmaceutically acceptable salt thereof.

9. A compound which is {(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(1-methyl-1H-imidazol-4-yl)-methanone, or a pharmaceutically acceptable salt thereof.

10. A compound which is 1-{(S)-3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-ylamino]-pyrrolidin-1-yl}-propan-1-one, or a pharmaceutically acceptable salt thereof.

11. A compound which is {(S)-3-[6-(6-Methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-ylamino]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone, or a pharmaceutically acceptable salt thereof.

12. A compound which is 1-{(S)-3-[6-(6-Methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-ylamino]-pyrrolidin-1-yl}-propan-1-one, or a pharmaceutically acceptable salt thereof.

13. A compound of the formula (I) as defined in anyone of claims 1 to 12 in form of a salt selected from
a) citrate, fumarate or napadisylate; or
b) phosphate, hydrochloride or hippurate.

14. The citrate salt of {(S)-3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone.

15. The salt according to claim 14 in form of a monohydrate, characterized by an X-Ray powder diffraction pattern comprising the following peaks given at degrees 2-Theta +/- 0.2 degrees: 5.7, 11.5, 12.1, 14.3, 15.4, 17.2, 17.9, 19.3, 20.2, 20.7, 21.9, 23.3, 23.9, 25.5, 27.0, 27.7, 29.8 and 30.3.

16. The fumarate salt of {(S)-3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone.

17. The salt according to claim 16 in form of a monohydrate, characterized by an X-Ray powder diffraction pattern comprising the following peaks given at degrees 2-Theta +/- 0.2 degrees: 6.0, 6.5, 9.8, 12.3, 13.1, 15.6, 17.7, 19.1, 19.7, 23.9, 24.7, 24.9, 25.2, 26.4 and 27.0.

18. The napadisylate salt of {(S)-3-[6-(6-methoxy-5-methyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-yloxy]-pyrrolidin-1-yl}-(tetrahydro-pyran-4-yl)-methanone.

19. The salt according to claim 18 in form of a monohydrate, characterized by an X-Ray powder diffraction pattern comprising the following peaks given at degrees 2-Theta +/- 0.2 degrees: 4.3, 8.5, 9.4, 12.2, 12.9, 13.5, 15.0, 15.6, 16.0, 17.7, 18.9, 19.3, 20.0, 20.8, 21.2, 22.0, 23.0, 24.5 and 26.5.

20. The phosphate salt of 1-{(S)-3-[6-(6-methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-ylamino]-pyrrolidin-1-yl}-propan-1-one.

21. The salt according to claim 20 in anhydrous form, characterized by an X-Ray powder diffraction pattern comprising the following peaks given at degrees 2-Theta +/- 0.2 degrees: 5.2, 9.8, 10.3, 11.6, 14.9, 15.5, 15.9, 16.6, 19.5, 20.7, 21.5, 22.1, 23.3, 25.8, 26.4, 27.2 and 28.2..

22. The hydrochloride salt of 1-{(S)-3-[6-(6-methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-ylamino]-pyrrolidin-1-yl}-propan-1-one..

23. The salt according to claim 22 in anhydrous form, characterized by an X-Ray powder diffraction pattern comprising the following peaks given at degrees 2-Theta +/- 0.2 degrees: 5.6, 11.0, 11.3, 11.8, 14.7, 17.1, 18.7, 19.4, 22.0, 22.6, 23.1, 23.7, 24.9 and 25.5.

24. The hippurate salt of 1-{(S)-3-[6-(6-methoxy-5-trifluoromethyl-pyridin-3-yl)-5,6,7,8-tetrahydro-pyrido[4,3-d]pyrimidin-4-ylamino]-pyrrolidin-1-yl}-propan-1-one..

25. The salt according to claim 24 in anhydrous form, characterized by an X-Ray powder diffraction pattern comprising the following peaks given at degrees 2-Theta +/- 0.2 degrees: 5.2, 7.5, 10.3, 10.9, 11.8, 13.1, 16.1, 16.7, 17.7, 18.4, 21.2, 23.2, 24.2 and 26.2.

26. A compound of the formula (I) as defined in anyone of claims 1 to 25, for use as pharmaceutical.

27. A combination comprising a therapeutically effective amount of a compound of formula (I) as defined in anyone of claims 1 to 258, and one or more therapeutically active agents.

28. Use of a compound of formula (I) as defined in anyone of claims 1 to 25, for the manufacture of a medicament for the treatment of a diseases or disorders which are mediated by the activity of the PI3K enzymes, preferably by the activity of the PI3Kδ isoform.

29. Use according to claim 28, wherein the disorder or a disease is selected from rheumatoid arthritis (RA), pemphigus vulgaris (PV), idiopathic thrombocytopenia purpura (ITP), thrombotic thrombocytopenic purpura (TTP), autoimmune hemolytic anemia (AIHA), acquired hemophilia type A (AHA), systemic lupus erythematosus (SLE), multiple sclerosis (MS), myasthenia gravis (MG), Sjögren's syndrome (SS), ANCA-associated vasculitides, cryoglobulinemia, chronic

autoimmune urticaria (CAU), allergy (atopic dermatitis, contact dermatitis, allergic rhinitis) , goodpasture's syndrome, transplant rejection and cancers of haematopoietic origin.

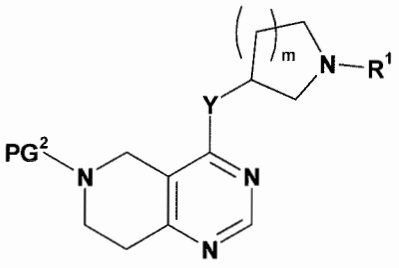
30. A pharmaceutical composition comprising a therapeutically effective amount of a compound of formula (I) as defined in anyone of claims 1 to 25, and one or more pharmaceutically acceptable carriers.

31. Use of a compound of formula (I) as defined in anyone of claims 1 to 25, for the treatment of a disorder or a disease in a subject mediated by the activity of the PI3K enzymes, preferably by the activity of the PI3Kδ isoform.

32. Use of a compound of formula (I) as defined in anyone of claims 1 to 25, for the treatment of a disorder or disease selected from rheumatoid arthritis (RA), pemphigus vulgaris (PV), idiopathic thrombocytopenia purpura (ITP), thrombotic thrombocytopenic purpura (TTP), autoimmune hemolytic anemia (AIHA), acquired hemophilia type A (AHA), systemic lupus erythematosus (SLE), multiple sclerosis (MS), myasthenia gravis (MG), Sjögren's syndrome (SS), ANCA-associated vasculitides, cryoglobulinemia, chronic autoimmune urticaria (CAU), allergy (atopic dermatitis, contact dermatitis, allergic rhinitis) , goodpasture's syndrome, transplant rejection and cancers of haematopoietic origin.

33. A process or method for the manufacture of a compound of the formula (I) according to claim 1,

comprising the steps of method A:
b) deprotecting the compound of formula (E),



(E)

wherein PG^2 represents a suitable protectiong group and R^1, Y and m are as defined for a compound of formula (I)

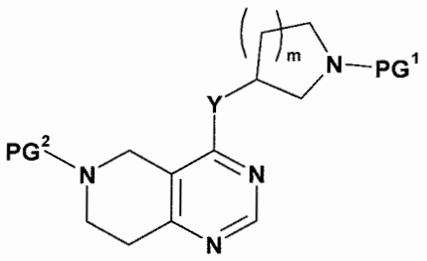
c) followed by reaction with

R^2-Hal,

wherein R^2 is as defined for a compound of formula (I) and Hal represents halogen, under customary Buchwald-Hartwig conditions using a ligand with a palladium catalyst, in the presence of a base, in an organic solvent;

wherein compound of formula (E) is prepared comprising the step of

d) deprotecting PG^1 from the compound of formula (C),



(C)

wherein PG^1 represents a suitable protecting group, and the other substituents are as defined above,

e) followed by coupling reaction with

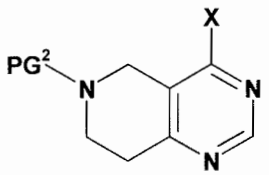
R^1-Act,

wherein when R^1 is -C(O)-R^4, wherein R^4 is as defined for a compound of formula (I), and Act represents an activating group or a hydroxy group, the coupling reaction is an amide, urea or carbamic ester formation, or;

wherein when R^1 is selected from phenyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, 1,2,3-triazinyl, 1,2,4-triazinyl or 1,3,5-triazinyl and Act represents halogen, the coupling reaction is carried out in the presence of an amine base or alternatively, the reaction is carried out under customary Buchwald-Hartwig conditions using a ligand with a palladium catalyst in the presence of a base;

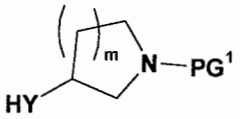
wherein the compound of formula (C) is prepared comprising the step of

a) coupling a compound of formula (A),



(A)

wherein X represents halogen and PG^2 is as defined above; with a compound of formula (B),



(B)

wherein the substituents are as defined above,

wherein when YH is OH and X represents halogen, the reaction takes place in the presence of a suitable base, or

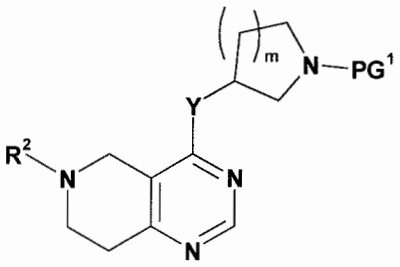
wherein when YH is NR^3H and and X represents halogen: The reaction takes place in the presence of a suitable base, or

wherein when YH is NR^3H and and X represents hydroxy: A base promoted phosphonium coupling reaction is employed;

or, alternatively comprising the steps of a), d) and e) of method A as defined above, starting from a compound of formula (A) wherein PG^2 represents R^2;

or, alternatively comprising the steps of method B:

d) deprotecting the compound of formula (D),



(D)

wherein PG^1 represents a suitable protecting group, and the other substituents are as defined above

e) followed by coupling reaction with

R^1-Act,

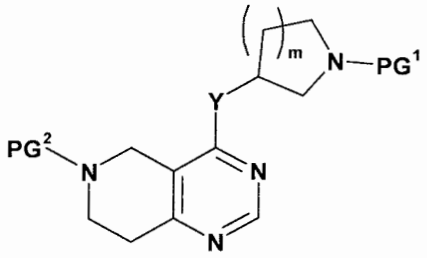
wherein when R^1 is -C(O)-R^4, wherein R^4 is as defined for a compound of formula (I), and Act represents an activating group or a hydroxy group, the coupling reaction is an amide, urea or carbamic ester formation, or;

wherein when R^1 is selected from phenyl, pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl, 1,2,3-triazinyl, 1,2,4-triazinyl or 1,3,5-triazinyl and Act represents halogen, the coupling reaction is

carried out in the presence of an amine base or alternatively, the reaction is carried out under customary Buchwald-Hartwig conditions using a ligand with a palladium catalyst in the presence of a base;

wherein compound of formula (D) is prepared comprising the step of

b) deprotecting PG^1 from the compound of formula (C),



(C)

wherein PG^1 represents a suitable protecting group, and the other substituents are as defined above,

c) followed by coupling reaction with

R^2-Hal,

wherein R^2 is as defined for a compound of formula (I) and Hal represents halogen, under customary Buchwald-Hartwig conditions using a ligand with a palladium catalyst, in the presence of a base, in an organic solvent;

wherein the compound of formula (C) is prepared as described above;

or, alternatively comprising the steps a), b) and c) of method B as defined above, starting from a compound of formula (B) wherein PG^1 represents R^1,

and, if desired, transforming a compound of formula (I) into a different compound of formula (I), transforming a salt of an obtainable compound of formula (I) into the free compound or a different salt, transforming an obtainable free compound of formula (I) into a salt thereof, and/or separating an obtainable mixture of isomers of a compound of formula I into individual isomers.