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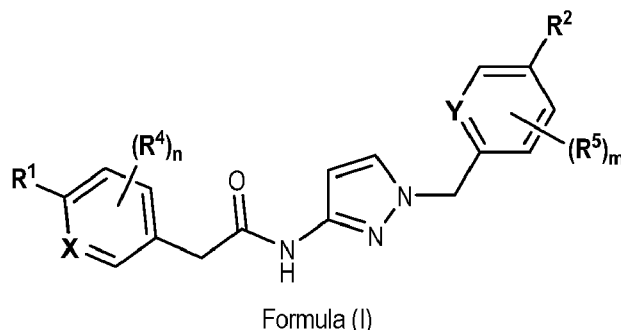
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(54) Title: PYRAZOLE COMPOUNDS AND THEIR USE AS T-TYPE CALCIUM CHANNEL BLOCKERS



(57) Abstract: The invention relates to compounds of formula (I) Formula (I) wherein X, Y, R¹, R², (R⁴)_n, and (R⁵)_m are as defined in the description, and to pharmaceutically acceptable salts of such compounds. These compounds are useful as calcium T-channel blockers.

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PYRAZOLE COMPOUNDS AND THEIR USE AS T-TYPE CALCIUM CHANNEL BLOCKERS

Pyrazole Compounds

The present invention relates to novel pyrazole compounds and their use as T-type calcium channel blockers in the treatment or prevention of various diseases or disorders where calcium T channels are involved, to pharmaceutical compositions containing these derivatives, and to processes for their preparation.

Intracellular calcium concentrations control important life processes such as signal transduction pathways, hormones and neurotransmitter release, muscular contraction, gene expression and cell division. Control of calcium influx across the cellular membrane is in part regulated by a family of transmembrane proteins termed voltage-gated calcium channels (VOCs). They are activated by changes in electrical potential difference across the membrane and have been further classified into different subtypes based on biophysical and pharmacological considerations: Cav1.x (L-type for Long-lasting), Cav2.x (N-, P/Q- and R-types; N for Neuronal, P for Purkinje cells, Q (after P) and R for Remaining or Resistant) and Cav3.x (T-type for Transient). The L, N, P and Q-type channels activate at more positive potentials (high voltage activated) and display diverse kinetics and voltage-dependent properties. The T-type class (or "low voltage-activated") is characterized by fast inactivation (transient) and small conductance (tiny) and is composed of three members due to the different main pore-forming $\alpha 1$ subunits: Cav3.1 ($\alpha 1$ G), Cav3.2 ($\alpha 1$ H) and Cav3.3 ($\alpha 1$ I).

Nearly all "excitable" cells, such as neurons of the central nervous system (CNS), peripheral nerve cells and muscle cells, including those of skeletal muscles, cardiac muscles, and venous and arterial smooth muscles, have voltage-dependent calcium channels. In consequence, calcium T channels have been linked to various human diseases and disorders, such as especially epilepsy, pain, neuropathic pain, sleep disorders, sleep disturbances, schizophrenia, essential tremors, Parkinson's disease, neurodegenerative disorders, depression, anxiety, psychosis, autism, drug addiction, hypertension, cardiac arrhythmias, heart block, cancer, diabetes, infertility and sexual dysfunction (Bourinet, E.; Alloui, A.; Monteil, A.; Barrere, C.; Couette, B.; Poirot, O.; Pages, A.; McRory, J.; Snutch, T. P.; Eschalier, A.; Nargeot, J., *EMBO J* **2005**, 24 (2), 315-324; Flatters, S.J.L., *Drugs Fut.* **2005**, 30(6), 573-580 ; Giordanetto, F.; Knerr, L.; Wallberg, A., *Expert Opin Ther Pat* **2011**, 21 (1), 85-101; Huguenard, J. R.; Prince, D. A., *J Neurosci* **1994**, 14 (9), 5485-502; Lory, P.; Mezghrani, A., *lDrugs* **2010**, 13 (7), 467-71; McGivern, J. G., *Drug Discov Today* **2006**, 11 (5-6), 245-53; Uslaner, J. M.; Vardigan, J. D.; Drott, J. M.; Uebele, V. N.; Renger, J. J.; Lee, A.; Li, Z.; Le, A. D.; Hutson, P. H., *Biol Psychiatry* **2010**, 68 (8), 712-8; Wildburger, N. C.; Lin-Ye, A.; Baird, M. A.; Lei, D.; Bao, J., *Mol Neurodegener* **2009**, 4, 44).

In the brain, T-type calcium channels are essential for regulating neuronal excitability and burst firing, both in the central and peripheral nervous system (Lambert, R. C.; Bessaih, T.; Crunelli, V.; Leresche, N., *Pflugers Arch* **2014**, 466 (3), 415-23.). They are linked to diseases or disorders where abnormal oscillatory activity occurs in the brain, as well as diseases or disorders where there is abnormal coupling of activity, particular

through the thalamus. They are particularly linked to an increasing number of neurological disorders such as the epilepsy disorders and neuropathic pain.

T-type calcium channels play a role in regulating neuronal firing patterns under normal physiological conditions, such as during sleep rhythms (Anderson, M. P.; Mochizuki, T.; Xie, J.; Fischler, W.; Manger, J. P.; Talley, E. M.; Scammell, T. E.; Tonegawa, S., *Proc Natl Acad Sci U S A* **2005**, *102* (5), 1743-8; Destexhe, A.; Contreras, D.; Sejnowski, T. J.; Steriade, M., *J Neurophysiol* **1994**, *72* (2), 803-18; Lee, J.; Kim, D.; Shin, H. S., *Proc Natl Acad Sci U S A* **2004**, *101* (52), 18195-9; Steriade, M., *Trends Neurosci* **2005**, *28* (6), 317-24.). However, T-type calcium channels are also involved in pathophysiological conditions such as epilepsy, autism, hypertension, atrial fibrillation, congenital heart failure, pain, psychoses and cancer (for review, see Iftinca, M. C., *J Med Life* **2011**, *4* (2), 126-38).

T-type calcium channels are critical players in the development of idiopathic generalized seizures in humans and animals (Cheong, E.; Shin, H. S., *Pflugers Arch* **2014**, *466* (4), 719-34; Khosravani, H.; Zamponi, G. W., *Physiol Rev* **2006**, *86* (3), 941-66; Zamponi, G. W.; Lory, P.; Perez-Reyes, E., *Pflugers Arch* **2010**, *460* (2), 395-403). In animals, knockout of Cav3.1 calcium channels protects mice from absence seizures (Kim, D.; Song, I.; Keum, S.; Lee, T.; Jeong, M. J.; Kim, S. S.; McEnery, M. W.; Shin, H. S., *Neuron* **2001**, *31* (1), 35-45; Song, I.; Kim, D.; Choi, S.; Sun, M.; Kim, Y.; Shin, H. S., *J Neurosci* **2004**, *24* (22), 5249-57). In rat models of absence epilepsy (GAERS or WAG/Rij), a gain of function mutation of the Cav3.2 gene has been reported (Powell, K. L.; Cain, S. M.; Ng, C.; Sirdesai, S.; David, L. S.; Kyi, M.; Garcia, E.; Tyson, J. R.; Reid, C. A.; Bahlo, M.; Foote, S. J.; Snutch, T. P.; O'Brien, T. J., *J Neurosci* **2009**, *29* (2), 371-80), as well as elevated levels of Cav3.1 and Cav3.2 mRNA and an increase in the amplitude of the T-type calcium current in comparison to normal rat strain (Broicher, T.; Kanyshkova, T.; Meuth, P.; Pape, H. C.; Budde, T., *Mol Cell Neurosci* **2008**, *39* (3), 384-99; Talley, E. M.; Solorzano, G.; Depaulis, A.; Perez-Reyes, E.; Bayliss, D. A., *Brain Res Mol Brain Res* **2000**, *75* (1), 159-65; Tsakiridou, E.; Bertolini, L.; de Curtis, M.; Avanzini, G.; Pape, H. C., *J Neurosci* **1995**, *15* (4), 3110-7; Powell, K. L.; Cain, S. M.; Ng, C.; Sirdesai, S.; David, L. S.; Kyi, M.; Garcia, E.; Tyson, J. R.; Reid, C. A.; Bahlo, M.; Foote, S. J.; Snutch, T. P.; O'Brien, T. J., *J Neurosci* **2009**, *29* (2), 371-80). In human, number of mutations have been described in Cav3.2 channels in patients with childhood absence and other forms of idiopathic generalized epilepsies (Heron, S. E.; Khosravani, H.; Varela, D.; Bladen, C.; Williams, T. C.; Newman, M. R.; Scheffer, I. E.; Berkovic, S. F.; Mulley, J. C.; Zamponi, G. W., *Ann Neurol* **2007**, *62* (6), 560-8; Khosravani, H.; Zamponi, G. W., *Physiol Rev* **2006**, *86* (3), 941-66; Zamponi, G. W.; Lory, P.; Perez-Reyes, E., *Pflugers Arch* **2010**, *460* (2), 395-403). Those mutations are predicted to cause a gain of function with increase in calcium current, or can trigger an alteration of the balance between excitatory and inhibitory neuronal elements. As direct consequence, it may result in an increased spiking behavior in neurons that exhibit this rebound bursting, thereby contributing to the generation of epileptiform discharges.

In another type of epilepsy, i.e. the temporal lobe epilepsy, it has been shown in the pilocarpine rodent model that T-type calcium currents were upregulated after status epilepticus and suggest a role of this channel in long-lasting modification of neuronal firing mode (regular to burst firing) and potential contribution to the development and expression of an epileptic condition after SE (Yaari, Y.; Yue, C.; Su, H., *J Physiol* **2007**, 580 (Pt. 2), 435-50; Becker, A. J.; Pitsch, J.; Sochivko, D.; Opitz, T.; Staniek, M.; Chen, C. C.; Campbell, K. P.; Schoch, S.; Yaari, Y.; Beck, H., *J Neurosci* **2008**, 28 (49), 13341-53; Graef, J. D.; Nordskog, B. K.; Wiggins, W. F.; Godwin, D. W., *J Neurosci* **2009**, 29 (14), 4430-41; Su, H.; Sochivko, D.; Becker, A.; Chen, J.; Jiang, Y.; Yaari, Y.; Beck, H., *J Neurosci* **2002**, 22 (9), 3645-55).

Increased activity of T-type calcium channel has been associated to neuropathic and inflammatory pain states (for review, see Todorovic, S. M.; Jevtovic-Todorovic, V., *Br J Pharmacol* **2011**, 163 (3), 484-95). When nociceptors are in an increased state of responsiveness, they often respond to normal sensory stimuli as if painful (allodynia) and to mildly painful stimuli as though they were acutely painful (hyperalgesia). The electrophysiological answer of these altered pain responses, include lower thresholds of activation, increased frequency of firing in response to suprathreshold stimuli and spontaneous firing (Coderre, T. J.; Katz, J.; Vaccarino, A. L.; Melzack, R., *Pain* **1993**, 52 (3), 259-85; Bhave, G.; Gereau, R. W. t., *J Neurobiol* **2004**, 61 (1), 88-106). T-type calcium channel are abundantly expressed in nociceptors, spinal dorsal horn and thalamic neurons (Talley, E. M.; Cribbs, L. L.; Lee, J. H.; Daud, A.; Perez-Reyes, E.; Bayliss, D. A., *J Neurosci* **1999**, 19 (6), 1895-911) and increased T-type channel activity has been linked to neuropathic and inflammatory pain states in animals and humans (Jagodic, M. M.; Pathirathna, S.; Nelson, M. T.; Mancuso, S.; Joksovic, P. M.; Rosenberg, E. R.; Bayliss, D. A.; Jevtovic-Todorovic, V.; Todorovic, S. M., *J Neurosci* **2007**, 27 (12), 3305-16; Todorovic, S. M.; Jevtovic-Todorovic, V., *Channels (Austin)* **2007**, 1 (4), 238-45; Jagodic, M. M.; Pathirathna, S.; Joksovic, P. M.; Lee, W.; Nelson, M. T.; Naik, A. K.; Su, P.; Jevtovic-Todorovic, V.; Todorovic, S. M., *J Neurophysiol* **2008**, 99 (6), 3151-6). T-channels may play a role in the decrease of the threshold for action potential firing in dorsal root ganglia (DRG) cells that express T-channels (Nelson, M. T.; Todorovic, S. M.; Perez-Reyes, E., *Curr Pharm Des* **2006**, 12 (18), 2189-97; Jagodic, M. M.; Pathirathna, S.; Nelson, M. T.; Mancuso, S.; Joksovic, P. M.; Rosenberg, E. R.; Bayliss, D. A.; Jevtovic-Todorovic, V.; Todorovic, S. M., *J Neurosci* **2007**, 27 (12), 3305-16). T-type calcium channels would play a role of amplifiers of peripheral pain signals. Pharmacological and molecular downregulation of the function of these channels in DRG neurons supports the notion that T-channels contribute to the chronic pain associated with peripheral axonal injury (Bourinet, E.; Alloui, A.; Monteil, A.; Barrere, C.; Couette, B.; Poirot, O.; Pages, A.; McRory, J.; Snutch, T. P.; Eschalier, A.; Nargeot, J., *EMBO J* **2005**, 24 (2), 315-24; Wen, X. J.; Li, Z. J.; Chen, Z. X.; Fang, Z. Y.; Yang, C. X.; Li, H.; Zeng, Y. M., *Acta Pharmacol Sin* **2006**, 27 (12), 1547-52) (or for review, see (Jevtovic-Todorovic, V.; Todorovic, S. M., *Cell Calcium* **2006**, 40 (2), 197-203)).

In addition, T-type calcium channel activity is upregulated during diabetic neuropathy (Hall, K. E.; Sima, A. A.; Wiley, J. W., *J Physiol* **1995**, 486 (2), 313-22; Jagodic, M. M.; Pathirathna, S.; Nelson, M. T.; Mancuso, S.;

- 4 -

Joksovic, P. M.; Rosenberg, E. R.; Bayliss, D. A.; Jevtovic-Todorovic, V.; Todorovic, S. M., *J Neurosci* **2007**, 27 (12), 3305-16). Selective knock-down of DRG Cav3.2 currents *in vivo* has effectively reversed mechanical and thermal hyperalgesia in STZ-induced diabetic neuropathy in rats (Messinger, R. B.; Naik, A. K.; Jagodic, M. M.; Nelson, M. T.; Lee, W. Y.; Choe, W. J.; Orestes, P.; Latham, J. R.; Todorovic, S. M.; Jevtovic-Todorovic, V., *Pain* **2009**, 145 (1-2), 184-95). Furthermore, significant up-regulation of Cav3.2 T-channel mRNA in DRG tissue homogenates and concomitant up-regulation of Cav3.2 T-currents in nociceptive DRG cells has been reported in another model of painful diabetic neuropathy, leptin-deficient ob/ob mice (Latham, J. R.; Pathirathna, S.; Jagodic, M. M.; Choe, W. J.; Levin, M. E.; Nelson, M. T.; Lee, W. Y.; Krishnan, K.; Covey, D. F.; Todorovic, S. M.; Jevtovic-Todorovic, V., *Diabetes* **2009**, 58 (11), 2656-65). In humans, extracellular recordings from the medial thalamus of patients with neurogenic pain have shown abnormalities of LTS-mediated bursts that could at least contribute to persistent pain (Jeanmonod, D.; Magnin, M.; Morel, A., *Brain* **1996**, 119 (2), 363-75).

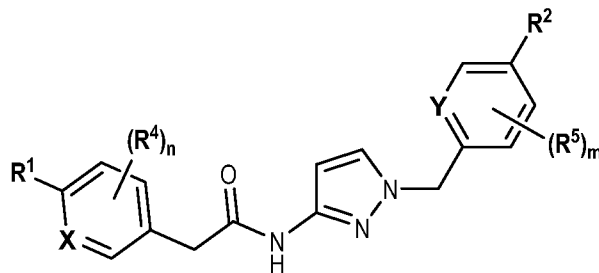
It has been shown that T-type calcium (Ca) channels in the CNS are closely associated with repetitive burst discharges or neuronal oscillations (Llinas, R.; Yarom, Y., *J Physiol* **1986**, 376, 163-82; Gutnick, M. J.; Yarom, Y., *J Neurosci Methods* **1989**, 28 (1-2), 93-9; Iftinca, M. C.; Zamponi, G. W., *Trends Pharmacol Sci* **2009**, 30 (1), 32-40). Tremor is a common encountered involuntary movements, and it is associated with various neurological diseases or pathological conditions such as essential tremor (ET) and Parkinson's disease (PD) and its related disorders. As tremor-related neuronal activities may be closely related to repetitive or oscillatory activities in the CNS, controlling T-type Ca channels may have therapeutic effects. This hypothesis is supported by neuro-anatomical and functional expression of expression of T-type calcium channels in area involved pathophysiological mechanisms underlying harmaline-induced tremor, a pharmacological model of ET in rodents (Llinas, R.; Yarom, Y., *J Physiol* **1986**, 376, 163-82; Cavalier, P.; Lohof, A. M.; Lonchamp, E.; Beekenkamp, H.; Mariani, J.; Bossu, J. L., *Neuroreport* **2008**, 19 (3), 299-303). Moreover, animal data involving selective knockdown of the Cav3.1 gene or mice lacking the Cav3.1 gene showed that Cav3.1 channels play a specific role in ET (Park, Y. G.; Park, H. Y.; Lee, C. J.; Choi, S.; Jo, S.; Choi, H.; Kim, Y. H.; Shin, H. S.; Llinas, R. R.; Kim, D., *Proc Natl Acad Sci U S A* **2010**, 107 (23), 10731-6). On the other hand, the role of the other isoform of the T-type calcium channels (Cav3.2 and Cav 3.3) in this pathology is not known but cannot be excluded (Miwa, H.; Kondo, T., *Cerebellum* **2011**, 10 (3), 563-9).

In Parkinson's disease (PD) patients, deep brain stimulation of the subthalamic nucleus has been shown to be an effective treatment for parkinsonian symptoms indicating a pivotal role of this area in the pathogenesis of PD: In patients, as well as in animal models of PD, this area seems to have an abnormal pattern of firing with an increase of the burst firing mode. And this burst firing mode has been shown to involve the T-type Ca²⁺ channels (for review, see Yang, Y. C.; Tai, C. H.; Pan, M. K.; Kuo, C. C., *Pflugers Arch* **2014**, 466 (4), 747-55).

- 5 -

The compounds of the present invention are potent calcium T channel blockers and therefore useful for the prevention or treatment of diseases or disorders where calcium T channels are involved.

1) A first aspect of the invention relates to novel compounds of the formula (I)



Formula (I)

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wherein

X represents a ring carbon or a ring nitrogen atom;

• R¹ represents

- (C₂₋₆)alkyl [in particular isopropyl, *tert.*-butyl, or isobutyl];
- (C₂₋₄)alkyl mono-substituted with cyano, or (C₁₋₃)alkoxy (especially methoxy); [in particular such group is 1-methoxy-ethyl, or 1-cyano-1-methyl-ethyl];
- (C₁₋₄)fluoroalkyl [in particular trifluoromethyl, 2,2,2-trifluoro-1,1-dimethyl-ethyl];
- (C₁₋₃)fluoroalkoxy [in particular trifluoromethoxy, 2,2,2-trifluoroethoxy, 3,3,3-trifluoropropoxy];
- pentafluoro-sulfanyl;
- (C₃₋₆)cycloalkyl-L¹- wherein
 - said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is unsubstituted, or mono-substituted with fluoro, (C₁₋₃)alkyl (especially methyl), (C₁₋₃)alkoxy (especially methoxy), hydroxy, cyano, or (C₁₋₃)fluoroalkyl (especially trifluoromethyl), or di-substituted with fluoro, or tri-substituted with two fluoro substituents and a substituent selected from (C₁₋₃)alkyl (especially methyl) and cyano; and
 - the linker L¹ represents a direct bond, (C₁₋₂)alkylene, oxygen, or (C₁₋₂)alkylene-oxy (which is attached to the rest of the molecule through the oxygen atom); [in particular such group (C₃₋₆)cycloalkyl-L¹- is cyclopropyl, 3-fluoro-oxetan-3-yl, 3-methoxy-oxetan-3-yl, 3-methyl-oxetan-3-yl, 3,3-difluoro-cyclobutyl, 1-cyano-3,3-difluoro-cyclobutyl, 1-trifluoromethyl-cyclopropyl, 2-trifluoromethyl-cyclopropyl, 1-methyl-cyclopropyl, 1-cyano-cyclopropyl, 1-hydroxy-cyclopropyl, 1-methoxy-cyclopropyl, or 3-hydroxy-oxetan-3-yl; or it is cyclopropyl-methyl; or it is cyclopropyl-oxy, oxetan-3-yl-oxy, cyclobutyl-oxy, or 3,3-difluoro-cyclobutyl-oxy; or it is cyclopropyl-methoxy, oxetan-3-yl-methoxy, (3-fluoro-oxetan-3-yl)-methoxy, (3,3-difluoro-cyclobutyl)-

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- 6 -

methoxy, (3-methyl-oxetan-3-yl)-methoxy, or (3,3-difluoro-1-methyl-cyclobutyl)-methoxy];

- 5- or 6-membered heteroaryl, independently optionally mono-substituted with (C₁₋₃)alkyl (especially methyl); [in particular oxadiazolyl, pyrazinyl, pyrimidinyl, or pyridinyl];

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- -NR¹¹R¹², wherein

- R¹¹ and R¹² independently represent hydrogen, (C₁₋₃)alkyl, (C₂₋₃)fluoroalkyl, (C₃₋₆)cycloalkyl, (C₃₋₆)cycloalkyl mono- or di-substituted with fluoro, (C₃₋₆)cycloalkyl-(C₁₋₃)alkyl, (C₁₋₃)alkoxy-(C₂₋₃)alkyl [in particular such group -NR¹¹R¹² is dimethylamino, ethyl-methyl-amino, diethylamino, cyclopropyl-methyl-amino, (2-methoxyethyl)-methyl-amino, (cyclopropylmethyl)-methyl-amino, or (2,2-difluoro-ethyl)-methyl-amino];

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- or R¹¹ and R¹², together with the nitrogen atom to which they are attached to, form a 4- to- 6 membered ring optionally mono- or di-substituted with fluoro; a 2-oxo-pyrrolidinyl group; or a morpholinyl group [in particular such group -NR¹¹R¹² is azetidiny, 3-fluoro-azetidiny, 3,3-difluoro-azetidiny, pyrrolidinyl, 3-fluoro-pyrrolidinyl, 3,3-difluoro-pyrrolidinyl, or 2-oxo-pyrrolidinyl];

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and (R⁴)_n represents one or two optional substituents (i.e. n represents the integer 0, 1, or 2) independently selected from (C₁₋₄)alkyl (especially methyl, ethyl), (C₃₋₆)cycloalkyl (especially cyclopropyl), (C₁₋₄)alkoxy (especially methoxy), (C₁₋₃)fluoroalkyl (especially trifluoromethyl), (C₁₋₃)fluoroalkoxy (especially trifluoromethoxy), halogen (especially fluoro), and cyano [especially (R⁴)_n is absent (i.e. n = 0); or (R⁴)_n represents one halogen or methyl substituent];

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- or R¹ together with (R⁴)_n forms a non-aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring; wherein said 5- or 6-membered ring optionally contains one or two heteroatoms independently selected from oxygen and nitrogen; wherein said fused 5- or 6-membered non-aromatic ring independently is optionally further mono-substituted with oxo or (C₁₋₃)alkyl (especially methyl); di-substituted with (C₁₋₃)alkyl (especially methyl); or di-, tri-, or tetra-substituted wherein one substituent is oxo and the remaining are (C₁₋₃)alkyl (especially methyl); [in particular such non-aromatic 5- or 6-membered ring fused to the phenyl / pyridine ring forms, together with the phenyl / pyridine ring, a group selected from 2-oxo-2,3-dihydro-benzooxazol-6-yl, 3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl, 4-methyl-3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl, 3-methyl-2-oxo-2,3-dihydro-benzooxazol-6-yl, 3,3-dimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl, 1,3,3-trimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl, 2,2-dimethyl-2,3-dihydro-benzofuran-6-yl, 2,2-dimethyl-2,3-dihydro-benzofuran-5-yl, 3,3-dimethyl-2,3-dihydro-benzofuran-5-yl, 3,3-dimethyl-2,3-dihydro-benzofuran-6-yl, or 3-methylchroman-7-yl];

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- or R¹ together with (R⁴)_n forms an aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring; wherein said 5- or 6-membered ring optionally contains one or two heteroatoms selected from nitrogen, wherein said fused 5- or 6-membered aromatic ring independently is optionally further mono- or di-substituted wherein the substituents are independently selected from (C₁₋₃)alkyl (especially methyl,

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- 7 -

- ethyl, isopropyl), (C₃₋₆)cycloalkyl (especially cyclobutyl), (C₁)fluoroalkyl (especially trifluoromethyl), or cyano [in particular such aromatic 5- or 6-membered ring fused to the phenyl / pyridine ring forms, together with the phenyl / pyridine ring, a group selected from 1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl, 1,3-dimethyl-1H-pyrrolo[2,3-b]pyridin-5-yl, 1H-indol-5-yl, 1H-indol-6-yl, 1-methyl-1H-indazol-5-yl, 1-methyl-1H-indazol-6-yl, 1-ethyl-1H-indazol-5-yl, 1-ethyl-1H-indazol-6-yl, 1,3-dimethyl-1H-indazol-5-yl, 1-methyl-1H-indol-5-yl, 1-methyl-1H-indol-6-yl, 1,3-dimethyl-1H-indol-5-yl, 1,3-dimethyl-1H-indol-6-yl, 3-cyano-1-methyl-1H-indol-5-yl, 3-isopropyl-1-methyl-1H-indol-5-yl, 3-cyclobutyl-1-methyl-1H-indol-5-yl, 1-methyl-3-trifluoromethyl-1H-indol-5-yl, quinoxalin-6-yl, 2-methyl-1H-benzoimidazol-6-yl, 1-methyl-1H-benzoimidazol-5-yl, 1-methyl-1H-benzoimidazol-6-yl, or quinolin-7-yl];
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- 10 • or R¹ represents methyl, or halogen (especially fluoro); and (R⁴)_n represents one substituent selected from (C₁₋₃)fluoroalkoxy (especially 2,2,2-trifluoroethoxy) which is attached to the phenyl / pyridinyl ring in *ortho* or *meta*-position to the point of attachment of the -CH₂-CO-NH- group;

Y represents a ring carbon or a ring nitrogen atom; and

- R² represents (C₁₋₄)alkyl (especially methyl, ethyl, isopropyl, isobutyl, *tert.*-butyl); (C₃₋₆)cycloalkyl (especially cyclopropyl); (C₁₋₄)alkoxy (especially methoxy, isopropoxy); (C₃₋₆)cycloalkyl-oxy (especially cyclopropyl-oxy); (C₁₋₃)fluoroalkyl (especially trifluoromethyl); (C₁₋₃)fluoroalkoxy (especially difluoromethoxy, trifluoromethoxy, 2,2,2-trifluoroethoxy); (C₁₋₃)alkoxy-(C₂₋₃)alkoxy (especially 2-methoxy-ethoxy); halogen; cyano; or -NR²¹R²², wherein R²¹ and R²² independently represent hydrogen, or (C₁₋₃)alkyl (especially dimethylamino), or R²¹ and R²², together with the nitrogen atom to which they are attached to, form a 4- to 6 membered ring optionally mono- or di-substituted with fluoro, or a morpholinyl group (especially azetidiny, pyrrolidinyl, 3-fluoropyrrolidinyl);
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and

- (R⁵)_m represents one or two optional substituents (i.e. m represents the integer 0, 1, or 2) independently selected from (C₁₋₄)alkyl (especially methyl, ethyl, isobutyl); (C₃₋₆)cycloalkyl (especially cyclopropyl); (C₁₋₄)alkoxy (especially methoxy, isopropoxy); halogen; cyano; (C₁₋₃)fluoroalkyl (especially difluoromethyl, trifluoromethyl); and (C₁₋₃)fluoroalkoxy (especially trifluoromethoxy, 2,2,2-trifluoroethoxy); [especially (R⁵)_m is absent (i.e. m = 0), or (R⁵)_m represents one halogen substituent; preferably (R⁵)_m is absent].
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The compounds of formula (I) may contain one or more stereogenic or asymmetric centers, such as one or more asymmetric carbon atoms. The compounds of formula (I) may thus be present as mixtures of stereoisomers or preferably as pure stereoisomers. Mixtures of stereoisomers may be separated in a manner known to a person skilled in the art.

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Furthermore, in some instances, the compounds of the present invention may be present in tautomeric forms. Any such tautomeric form is encompassed. For example, it is well understood that, in case a benzimidazole moiety is unsubstituted on the ring nitrogen having a free valency such benzimidazole moiety represents

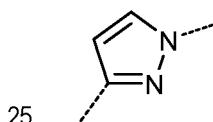
- 8 -

tautomeric forms. Thus, further substituents of the benzimidazole moiety may be attached in the position(s) *ortho* to the bridgehead atoms (i.e. attached in position(s) 4 and/or 7), and/or in the position(s) *meta* to the bridgehead atoms, (i.e. attached in position(s) 5 and/or 6). It is understood that the two *ortho*, and, respectively, the two *meta* positions are considered equivalent. For example, the group 4-methyl-1H-benzimidazol-2-yl is understood to signify the same group as 7-methyl-1H-benzimidazol-2-yl and 4-methyl-3H-benzimidazol-2-yl and 7-methyl-3H-benzimidazol-2-yl.

The present invention also includes isotopically labelled, especially ^2H (deuterium) labelled compounds of formula (I) according to embodiments 1) to 29), which compounds are identical to the compounds of formula (I) except that one or more atoms have each been replaced by an atom having the same atomic number but an atomic mass different from the atomic mass usually found in nature. Isotopically labelled, especially ^2H (deuterium) labelled compounds of formula (I) and salts thereof are within the scope of the present invention. Substitution of hydrogen with the heavier isotope ^2H (deuterium) may lead to greater metabolic stability, resulting e.g. in increased *in-vivo* half-life or reduced dosage requirements, or may lead to reduced inhibition of cytochrome P450 enzymes, resulting e.g. in an improved safety profile. In one embodiment of the invention, the compounds of formula (I) are not isotopically labelled, or they are labelled only with one or more deuterium atoms. In a sub-embodiment, the compounds of formula (I) are not isotopically labelled at all. Isotopically labelled compounds of formula (I) may be prepared in analogy to the methods described hereinafter, but using the appropriate isotopic variation of suitable reagents or starting materials.

In this patent application, variably attached bonds may be used for substituents or groups (e.g. $(\text{R}^4)_n$ and $(\text{R}^5)_m$). In such case it is meant that any such substituent or group may be attached to any carbon atom of the ring system to which the variable attached bond is drawn into, provided that said carbon atom is not already substituted.

In this patent application, a bond drawn as a dotted line shows the point of attachment of the radical drawn. For example, the radical drawn below



is a 1H-pyrazol-1,3-diyl group.

Where the plural form is used for compounds, salts, pharmaceutical compositions, diseases and the like, this is intended to mean also a single compound, salt, pharmaceutical composition, disease or the like.

Any reference to compounds of formula (I) according to embodiments 1) to 31) is to be understood as referring also to the salts (and especially the pharmaceutically acceptable salts) of such compounds, as appropriate and expedient.

The term "pharmaceutically acceptable salts" refers to salts that retain the desired biological activity of the subject compound and exhibit minimal undesired toxicological effects. Such salts include inorganic or organic acid and/or base addition salts depending on the presence of basic and/or acidic groups in the subject compound. For reference see for example "Handbook of Pharmaceutical Salts. Properties, Selection and Use.", P. Heinrich Stahl, Camille G. Wermuth (Eds.), Wiley-VCH, 2008; and "Pharmaceutical Salts and Co-crystals", Johan Wouters and Luc Quéré (Eds.), RSC Publishing, 2012.

Definitions provided herein are intended to apply uniformly to the compounds of formula (I), as defined in any one of embodiments 1) to 29), and, *mutatis mutandis*, throughout the description and the claims unless an otherwise expressly set out definition provides a broader or narrower definition. It is well understood that a definition or preferred definition of a term defines and may replace the respective term independently of (and in combination with) any definition or preferred definition of any or all other terms as defined herein.

The term "halogen" means fluorine, chlorine, bromine, or iodine, preferably fluorine or chlorine, especially fluorine.

The term "cyano" refers to a group -CN.

The term "alkyl", used alone or in combination, refers to a saturated straight or branched chain hydrocarbon group containing one to six (especially one to four) carbon atoms. The term "(C_{x-y})alkyl" (x and y each being an integer), refers to an alkyl group as defined before, containing x to y carbon atoms. In case a (C_{1-y})alkyl group (or, in general, a (C_{x-y})alkyl group) is used in combination with another substituent, the term means that said substituent is linked through a (C_{1-y})alkyl group (or a (C_{x-y})alkyl group, respectively) to the rest of the molecule. In some instances such group is also referred to as (C_{1-y})alkylene. For example a (C₁₋₆)alkyl group contains from one to six carbon atoms. Examples of (C₁₋₆)alkyl groups are the (C₁₋₄)alkyl groups methyl, ethyl, n-propyl, isopropyl, n-butyl, sec.-butyl, tert.-butyl, and isobutyl, as well as n-pentyl, and isopentyl. Preferred are methyl, ethyl, n-propyl, and isopropyl. Most preferred is methyl. For the substituent R¹ preferred examples of (C₂₋₆)alkyl are isopropyl, tert.-butyl, and isobutyl; especially tert.-butyl.

Examples of (C₂₋₄)alkyl groups which are mono-substituted with cyano, or (C₁₋₃)alkoxy as used for R¹ are 1-methoxy-ethyl, and 1-cyano-1-methyl-ethyl.

The term "alkoxy" means a group of the formula alkyl-O- in which the term alkyl has the previously given significance. The term "(C_{x-y})alkoxy" (x and y being an integer) refers to a straight or branched chain alkoxy group containing x to y carbon atoms. Examples of alkoxy groups are the (C₁₋₄)alkoxy groups methoxy, ethoxy, n-propoxy, isopropoxy, n-butoxy, isobutoxy, sec-butoxy and tert.-butoxy. Preferred is methoxy.

The term "fluoroalkyl" refers to an alkyl group as defined before containing one to three carbon atoms in which one or more (and possibly all) hydrogen atoms have been replaced with fluorine. The term "(C_{x-y})fluoroalkyl" (x and y each being an integer) refers to a fluoroalkyl group as defined before containing x to y carbon atoms. For example a (C₁₋₃)fluoroalkyl group contains from one to three carbon atoms in which one to seven

hydrogen atoms have been replaced with fluorine. A preferred example is trifluoromethyl. Examples of (C₂₋₃)fluoroalkyl groups include 2-fluoroethyl, 2,2-difluoroethyl and 2,2,2-trifluoroethyl (especially 2-fluoroethyl and 2,2,2-trifluoroethyl). In the specific case of (C₁₋₄)fluoroalkyl groups, the fluoroalkyl group contains from one to four carbon atoms in which one to nine hydrogen atoms have been replaced with fluorine. Examples of (C₁₋₄)fluoroalkyl groups as used for **R**¹ include trifluoromethyl, 2-fluoroethyl, 2,2-difluoroethyl, 2,2,2-trifluoroethyl, and 2,2,2-trifluoro-1,1-dimethyl-ethyl; especially trifluoromethyl, and 2,2,2-trifluoro-1,1-dimethyl-ethyl.

The term "fluoroalkoxy" refers to an alkoxy group as defined before containing one to three carbon atoms in which one or more (and possibly all) hydrogen atoms have been replaced with fluorine. The term "(C_{x-y})fluoroalkoxy" (x and y each being an integer) refers to a fluoroalkoxy group as defined before containing x to y carbon atoms. For example a (C₁₋₃)fluoroalkoxy group contains from one to three carbon atoms in which one to seven hydrogen atoms have been replaced with fluorine. Preferred examples are trifluoromethoxy, difluoromethoxy and 2,2,2-trifluoroethoxy. Representative examples of fluoroalkoxy groups as used for **R**¹ include trifluoromethoxy, difluoromethoxy, 2-fluoroethoxy, 2,2-difluoroethoxy and 2,2,2-trifluoroethoxy; especially 2,2,2-trifluoroethoxy. An additional example of (C₁₋₃)fluoroalkoxy groups as used for **R**¹ is 3,3,3-trifluoropropoxy.

The term "cycloalkyl" refers to a saturated mono- or bicyclic carbocyclic ring containing three to eight carbon atoms. The term "(C_{x-y})cycloalkyl" (x and y each being an integer), refers to a cycloalkyl group as defined before containing x to y carbon atoms. For example a (C₃₋₆)cycloalkyl group refers to a saturated monocyclic carbocyclic ring containing three to six carbon atoms. Examples of cycloalkyl groups are cyclopropyl, cyclobutyl, cyclopentyl, and cyclohexyl. Preferred is cyclopropyl.

The term "(C₃₋₆)cycloalkyl, wherein the cycloalkyl may optionally contain a ring oxygen atom", refers to a monocyclic cycloalkyl group as defined before. In addition, one ring carbon atom of said cycloalkyl may be replaced by an oxygen atom. For the substituent **R**¹, examples of such groups are especially cyclopropyl, cyclobutyl, and, in addition, oxetan-3-yl. Said groups are unsubstituted or substituted as explicitly defined.

The term "(C₃₋₆)cycloalkyl-(C₁₋₃)alkyl" refers to a (C₃₋₆)cycloalkyl group as explicitly defined which group is linked to the rest of the molecule through a (C₁₋₃)alkylene group as defined before. For the substituent **R**¹, the (C₁₋₂)alkylene group part of (C₃₋₆)cycloalkyl-(C₁₋₂)alkyl is in particular a methylene group.

The term "(C₃₋₆)cycloalkyl-oxy" refers to a (C₃₋₆)cycloalkyl group as explicitly defined which is linked to the rest of the molecule through an oxygen atom.

The term "(C₃₋₆)cycloalkyl-(C₁₋₂)alkylene-oxy" refers to a (C₃₋₆)cycloalkyl group as explicitly defined which is linked to the rest of the molecule through a -(CH₂)₁₋₂-O- group. For the substituent **R**¹, the -(C₁₋₂)alkylene-oxy group part of (C₃₋₆)cycloalkyl-(C₁₋₂)alkylene-oxy is in particular a -CH₂-O- group.

The term "(C₁₋₃)alkoxy-(C₂₋₃)alkoxy" refers to a (C₁₋₃)alkoxy-group as defined before which is attached to the rest of the molecule through a (C₂₋₃)alkoxy group as defined before. An example is 2-methoxy-ethoxy.

- 11 -

The term "(C₁₋₃)alkoxy-(C₂₋₃)alkyl" means a (C₁₋₃)alkoxy-group as defined before which is attached to the rest of the molecule through a (C₂₋₃)alkylene group as defined before. An example is 2-methoxy-ethyl.

The term "aryl", used alone or in combination, means phenyl or naphthyl, preferably phenyl. Likewise, an arylene group is an aryl group as defined before having two points of attachment to the respective rests of the molecule. The above-mentioned aryl / arylene groups are unsubstituted or substituted as explicitly defined.

The term "heteroaryl", used alone or in combination, means a 5- to 10-membered monocyclic or bicyclic aromatic ring containing one to a maximum of four heteroatoms, each independently selected from oxygen, nitrogen and sulfur. Examples of such heteroaryl groups are 5-membered heteroaryl such as furanyl, oxazolyl, isoxazolyl, oxadiazolyl, thiophenyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrrolyl, imidazolyl, pyrazolyl, triazolyl; 6-membered heteroaryl such as pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl; and bicyclic heteroaryl such as indolyl, isoindolyl, benzofuranyl, isobenzofuranyl, benzothiophenyl, indazolyl, benzimidazolyl, benzoxazolyl, benzisoxazolyl, benzothiazolyl, benzoisothiazolyl, benzotriazolyl, benzoxadiazolyl, benzothiadiazolyl, quinolinyl, isoquinolinyl, naphthyridinyl, cinnolinyl, quinazolinyl, quinoxaliny, phthalazinyl, pyrrolopyridinyl, pyrazolopyridinyl, pyrazolopyrimidinyl, pyrrolopyrazinyl, imidazopyridinyl, imidazopyridazinyl, and imidazothiazolyl. Examples of heteroaryl groups as used for R¹ are especially oxadiazolyl, pyrazinyl, pyrimidinyl, and pyridinyl. The above-mentioned heteroaryl groups are unsubstituted or substituted as explicitly defined.

In case two substituents form an aromatic 5- or 6-membered ring optionally containing one or two nitrogen atoms which ring is fused to a phenyl / pyridine ring, examples of such thus formed bicyclic heteroaryl rings are pyrrolo[2,3-b]pyridinyl, indolyl, indazolyl, quinoxaliny, benzoimidazolyl, and quinolinyl. The above-mentioned groups do not carry further substituents on the phenyl / pyridine part of the ring, whereas said aromatic 5- or 6-membered ring may be unsubstituted or substituted as explicitly defined.

In case two substituents form a non-aromatic 5- or 6-membered ring optionally containing one or two heteroatoms, which ring is fused to a phenyl / pyridine ring, examples of such thus formed bicyclic partially aromatic rings are 2,3-dihydro-benzooxazolyl, 3,4-dihydro-2H-benzo[1,4]oxazinyl, 2,3-dihydro-1H-indolyl, and 2,3-dihydro-benzofuranyl. A further example is chromanyl. The above-mentioned groups do not carry further substituents on the phenyl / pyridine part of the ring, whereas said non-aromatic 5- or 6-membered ring may be unsubstituted or substituted as explicitly defined.

Examples of -NR¹¹R¹² groups as used for R¹ are especially disubstituted amino groups wherein one substituent is methyl or ethyl, and the other is (C₁₋₃)alkyl, (C₂₋₃)fluoroalkyl, (C₃₋₆)cycloalkyl, (C₃₋₆)cycloalkyl mono- or di-substituted with fluoro, (C₃₋₆)cycloalkyl-(C₁₋₃)alkyl, (C₁₋₃)alkoxy-(C₂₋₃)alkyl. Examples are dimethylamino, ethyl-methyl-amino, diethylamino, cyclopropyl-methyl-amino, (2-methoxyethyl)-methyl-amino, (cyclopropylmethyl)-methyl-amino, and (2,2-difluoro-ethyl)-methyl-amino. Examples of -NR¹¹R¹² groups wherein R¹¹ and R¹², together with the nitrogen atom to which they are attached to, form a 4- to 6 membered

- 12 -

ring as used for R^1 are especially the four and five-membered rings azetidiny, 3-fluoro-azetidiny, 3,3-difluoro-azetidiny, pyrrolidiny, 3-fluoro-pyrrolidiny, 3,3-difluoro-pyrrolidiny.

An example of $-NR^{21}R^{22}$ groups as used for R^2 is dimethylamino. An example of $-NR^{21}R^{22}$ groups wherein R^{21} and R^{22} , together with the nitrogen atom to which they are attached to, form a 4- to 6 membered ring as used
5 for R^2 is 3-fluoro-pyrrolidiny. Further examples are azetidiny and pyrrolidiny.

Further embodiments of the invention are presented hereinafter:

2) A second embodiment relates to compounds according to embodiment 1), wherein

X represents a ring carbon or a ring nitrogen atom;

• R^1 represents

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- (C₂₋₆)alkyl [in particular isopropyl, *tert*-butyl, or isobutyl];
 - (C₂₋₄)alkyl mono-substituted with cyano, or (C₁₋₃)alkoxy (especially methoxy); [in particular such group is 1-methoxy-ethyl, or 1-cyano-1-methyl-ethyl];
 - (C₁₋₄)fluoroalkyl [in particular trifluoromethyl, 2,2,2-trifluoro-1,1-dimethyl-ethyl];
 - (C₁₋₃)fluoroalkoxy [in particular 2,2,2-trifluoroethoxy];

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 - pentafluoro-sulfanyl;
 - (C₃₋₆)cycloalkyl-L¹ wherein
 - said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is unsubstituted, or mono-substituted with fluoro, (C₁₋₃)alkyl (especially methyl), (C₁₋₃)alkoxy (especially methoxy), hydroxy, cyano, or (C₁₋₃)fluoroalkyl
20 (especially trifluoromethyl), or di-substituted with fluoro, or tri-substituted with two fluoro substituents and a (C₁₋₃)alkyl (especially methyl) substituent; and
 - the linker **L¹** represents a direct bond, (C₁₋₂)alkylene, oxygen, or (C₁₋₂)alkylene-oxy (which is attached to the rest of the molecule through the oxygen atom);
[in particular such group (C₃₋₆)cycloalkyl-L¹ is cyclopropyl, 3-fluoro-oxetan-3-yl, 3-methoxy-oxetan-3-yl, 3-methyl-oxetan-3-yl, 3,3-difluoro-cyclobutyl, 1-trifluoromethyl-cyclopropyl, 2-trifluoromethyl-cyclopropyl, 1-methyl-cyclopropyl, 1-cyano-cyclopropyl, 1-hydroxy-cyclopropyl, 1-cyano-cyclopropyl, or 3-hydroxy-oxetan-3-yl; or it is cyclopropyl-methyl; or it is cyclopropyl-oxy, oxetan-3-yl-oxy, cyclobutyl-oxy, or 3,3-difluoro-cyclobutyl-oxy; or it is oxetan-3-yl-methoxy, (3-fluoro-oxetan-3-yl)-methoxy, (3,3-difluoro-cyclobutyl)-methoxy, (3-methyl-oxetan-3-yl)-methoxy, or (3,3-difluoro-1-methyl-cyclobutyl)-methoxy];

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 - 5- or 6-membered heteroaryl, independently optionally mono-substituted with (C₁₋₃)alkyl (especially methyl); [in particular oxadiazolyl, pyrazinyl, pyrimidinyl, or pyridinyl];

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 - -NR¹¹R¹², wherein

- 13 -

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- R¹¹ and R¹² independently represent hydrogen, (C₁₋₃)alkyl, (C₂₋₃)fluoroalkyl, (C₃₋₆)cycloalkyl, (C₃₋₆)cycloalkyl mono- or di-substituted with fluoro, (C₃₋₆)cycloalkyl-(C₁₋₃)alkyl, (C₁₋₃)alkoxy-(C₂₋₃)alkyl [in particular such group -NR¹¹R¹² is dimethylamino, ethyl-methyl-amino, diethylamino, cyclopropyl-methyl-amino, (2-methoxyethyl)-methyl-amino, (cyclopropylmethyl)-methyl-amino, or (2,2-difluoro-ethyl)-methyl-amino];
 - or R¹¹ and R¹², together with the nitrogen atom to which they are attached to, form a 4- to- 6 membered ring optionally mono- or di-substituted with fluoro; a 2-oxo-pyrrolidinyl group; or a morpholinyl group [in particular such group -NR¹¹R¹² is azetidiny, 3-fluoro-azetidiny, 3,3-difluoro-azetidiny, pyrrolidinyl, 3-fluoro-pyrrolidinyl, 3,3-difluoro-pyrrolidinyl, or 2-oxo-pyrrolidinyl];
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and (R⁴)_n represents one or two optional substituents (i.e. n represents the integer 0, 1, or 2) independently selected from (C₁₋₄)alkyl (especially methyl), (C₁₋₄)alkoxy (especially methoxy), (C₁₋₃)fluoroalkyl (especially trifluoromethyl), (C₁₋₃)fluoroalkoxy (especially trifluoromethoxy), halogen (especially fluoro), and cyano [especially (R⁴)_n is absent (i.e. n = 0); or (R⁴)_n represents one halogen or methyl substituent];

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- or R¹ together with (R⁴)_n forms a non-aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring; wherein said 5- or 6-membered ring optionally contains one or two heteroatoms independently selected from oxygen and nitrogen; wherein said fused 5- or 6-membered non-aromatic ring independently is optionally further mono-substituted with oxo; or di-, tri-, or tetra-substituted wherein one substituent is oxo and the remaining are (C₁₋₃)alkyl (especially methyl); [in particular such non-aromatic 5- or 6-membered ring fused to the phenyl / pyridine ring forms, together with the phenyl / pyridine ring, a group selected from 2-oxo-2,3-dihydro-benzooxazol-6-yl, 3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl, 4-methyl-3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl, 3-methyl-2-oxo-2,3-dihydro-benzooxazol-6-yl, 3,3-dimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl, 1,3,3-trimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl, 2,2-dimethyl-2,3-dihydro-benzofuran-6-yl, 2,2-dimethyl-2,3-dihydro-benzofuran-5-yl, or 3,3-dimethyl-2,3-dihydro-benzofuran-5-yl];
 - or R¹ together with (R⁴)_n forms an aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring; wherein said 5- or 6-membered ring optionally contains one or two heteroatoms selected from nitrogen, wherein said fused 5- or 6-membered aromatic ring independently is optionally further mono- or di-substituted wherein the substituents are independently selected from (C₁₋₃)alkyl (especially methyl, isopropyl), (C₃₋₆)cycloalkyl (especially cyclobutyl), (C₁)fluoroalkyl (especially trifluoromethyl), or cyano [in particular such aromatic 5- or 6-membered ring fused to the phenyl / pyridine ring forms, together with the phenyl / pyridine ring, a group selected from 1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl, 1,3-dimethyl-1H-pyrrolo[2,3-b]pyridin-5-yl, 1H-indol-5-yl, 1H-indol-6-yl, 1-methyl-1H-indazol-5-yl, 1-methyl-1H-indazol-6-yl, 1-ethyl-1H-indazol-5-yl, 1-ethyl-1H-indazol-6-yl, 1,3-dimethyl-1H-indazol-5-yl, 1-methyl-1H-indol-5-yl, 1-methyl-1H-indol-6-yl, 1,3-dimethyl-1H-indol-5-yl, 1,3-dimethyl-1H-indol-6-yl, 3-cyano-1-methyl-1H-indol-5-
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- 14 -

yl, 3-isopropyl-1-methyl-1H-indol-5-yl, 3-cyclobutyl-1-methyl-1H-indol-5-yl, 1-methyl-3-trifluoromethyl-1H-indol-5-yl, quinoxalin-6-yl, 2-methyl-1H-benzimidazol-6-yl, 1-methyl-1H-benzimidazol-5-yl, 1-methyl-1H-benzimidazol-6-yl, or quinolin-7-yl];

- or **R**¹ represents methyl, or halogen (especially fluoro); and (**R**⁴)_n represents one substituent selected from (C₁₋₃)fluoroalkoxy (especially 2,2,2-trifluoroethoxy) which is attached to the phenyl / pyridinyl ring in *ortho* or *meta*-position to the point of attachment of the -CH₂-CO-NH- group;

Y represents a ring carbon or a ring nitrogen atom; and

R² represents (C₁₋₄)alkyl (especially methyl, ethyl, isopropyl, isobutyl, *tert.*-butyl); (C₃₋₆)cycloalkyl (especially cyclopropyl); (C₁₋₄)alkoxy (especially methoxy, isopropoxy); (C₃₋₆)cycloalkyl-oxy (especially cyclopropyl-oxy); (C₁₋₃)fluoroalkyl (especially trifluoromethyl); (C₁₋₃)fluoroalkoxy (especially difluoromethoxy, trifluoromethoxy, 2,2,2-trifluoroethoxy); (C₁₋₃)alkoxy-(C₂₋₃)alkoxy (especially 2-methoxy-ethoxy); halogen; cyano; or -NR²¹R²², wherein R²¹ and R²² independently represent hydrogen, or (C₁₋₃)alkyl (especially dimethylamino), or R²¹ and R²², together with the nitrogen atom to which they are attached to, form a 4- to 6 membered ring optionally mono- or di-substituted with fluoro, or a morpholinyl group (especially 3-fluoro-pyrrolidinyl);

and

(**R**⁵)_m represents one or two optional substituents (i.e. m represents the integer 0, 1, or 2) independently selected from (C₁₋₄)alkyl (especially methyl, ethyl, isobutyl); (C₃₋₆)cycloalkyl (especially cyclopropyl); (C₁₋₄)alkoxy (especially methoxy, isopropoxy); halogen; cyano; (C₁₋₃)fluoroalkyl (especially trifluoromethyl); and (C₁₋₃)fluoroalkoxy (especially trifluoromethoxy, 2,2,2-trifluoroethoxy); [especially (**R**⁵)_m is absent (i.e. m = 0), or (**R**⁵)_m represents one halogen substituent; preferably (**R**⁵)_m is absent].

3) Another embodiment relates to compounds according to any one of embodiments 1) or 2), wherein

X represents a ring carbon atom.

4) Another embodiment relates to compounds according to any one of embodiments 1) or 2), wherein

X represents a ring nitrogen atom.

5) Another embodiment relates to compounds according to any one of embodiments 1) to 4), wherein **R**¹ represents

- (C₂₋₆)alkyl [in particular isopropyl, *tert.*-butyl, or isobutyl];
- (C₂₋₄)alkyl mono-substituted with cyano, or (C₁₋₃)alkoxy (especially methoxy); [in particular such group is 1-methoxy-ethyl, or 1-cyano-1-methyl-ethyl];
- (C₁₋₄)fluoroalkyl [in particular trifluoromethyl, 2,2,2-trifluoro-1,1-dimethyl-ethyl];
- (C₁₋₃)fluoroalkoxy [in particular 2,2,2-trifluoroethoxy];
- pentafluoro-sulfanyl;
- (C₃₋₆)cycloalkyl-L¹- wherein

- 15 -

- 5
- said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is unsubstituted, or mono-substituted with fluoro, (C₁₋₃)alkyl (especially methyl), (C₁₋₃)alkoxy (especially methoxy), hydroxy, cyano, or (C₁₋₃)fluoroalkyl (especially trifluoromethyl), or di-substituted with fluoro, or tri-substituted with two fluoro substituents and a (C₁₋₃)alkyl (especially methyl) substituent; and
- 10
- the linker L¹ represents a direct bond, (C₁₋₂)alkylene, oxygen, or (C₁₋₂)alkylene-oxy (which is attached to the rest of the molecule through the oxygen atom);
[in particular such group (C₃₋₆)cycloalkyl-L¹ is cyclopropyl, 3-fluoro-oxetan-3-yl, 3-methoxy-oxetan-3-yl, 3-methyl-oxetan-3-yl, 3,3-difluoro-cyclobutyl, 1-trifluoromethyl-cyclopropyl, 2-trifluoromethyl-cyclopropyl, 1-methyl-cyclopropyl, 1-hydroxy-cyclopropyl, 1-cyano-cyclopropyl, or 3-hydroxy-oxetan-3-yl; or it is cyclopropyl-methyl; or it is cyclopropyl-oxy, oxetan-3-yl-oxy, cyclobutyl-oxy, or 3,3-difluoro-cyclobutyl-oxy; or it is oxetan-3-yl-methoxy, (3-fluoro-oxetan-3-yl)-methoxy, (3,3-difluoro-cyclobutyl)-methoxy, (3-methyl-oxetan-3-yl)-methoxy, or (3,3-difluoro-1-methyl-cyclobutyl)-methoxy];
- 15
- 5- or 6-membered heteroaryl selected from oxadiazolyl, pyrazinyl, pyrimidinyl, and pyridinyl; wherein said heteroaryl independently is optionally mono-substituted with (C₁₋₃)alkyl (especially methyl); or
 - -NR¹¹R¹², wherein
 - R¹¹ and R¹² independently represent hydrogen, (C₁₋₃)alkyl, (C₂₋₃)fluoroalkyl, (C₃₋₆)cycloalkyl, (C₃₋₆)cycloalkyl mono- or di-substituted with fluoro, (C₃₋₆)cycloalkyl-(C₁₋₃)alkyl, (C₁₋₃)alkoxy-(C₂₋₃)alkyl [in particular such group -NR¹¹R¹² is dimethylamino, ethyl-methyl-amino, diethylamino, cyclopropyl-methyl-amino, (2-methoxyethyl)-methyl-amino, (cyclopropylmethyl)-methyl-amino, or (2,2-difluoro-ethyl)-methyl-amino];
 - or R¹¹ and R¹², together with the nitrogen atom to which they are attached to, form an azetidiny or a pyrrolidinyl ring, both independently optionally mono- or di-substituted with fluoro; or a 2-oxo-pyrrolidinyl group; [in particular such group -NR¹¹R¹² is azetidiny, 3-fluoro-azetidiny, 3,3-difluoro-azetidiny, pyrrolidinyl, 3-fluoro-pyrrolidinyl, 3,3-difluoro-pyrrolidinyl, or 2-oxo-pyrrolidinyl];
- 20
- and (R⁴)_n represents one optional substituent (i.e. n represents the integer 0, or 1) selected from (C₁₋₄)alkyl (especially methyl), (C₁₋₄)alkoxy (especially methoxy), (C₁₋₃)fluoroalkyl (especially trifluoromethyl), (C₁₋₃)fluoroalkoxy (especially trifluoromethoxy), halogen (especially fluoro), and cyano [especially (R⁴)_n is absent (i.e. n = 0); or (R⁴)_n represents one halogen or methyl substituent];
- 25
- or R¹ together with (R⁴)_n forms a non-aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring to form a bicyclic ring system; wherein said bicyclic ring system is selected from 2,3-dihydro-benzooxazolyl, 3,4-dihydro-2H-benzo[1,4]oxazinyl, 2,3-dihydro-1H-indolyl, and 2,3-dihydro-benzofuranyl;
- 30
- 35
- wherein said non-aromatic 5- or 6-membered ring part of said bicyclic ring system independently is

- 16 -

optionally further mono-substituted with oxo; or di-, tri-, or tetra-substituted wherein one substituent is oxo and the remaining are (C₁₋₃)alkyl (especially methyl); [in particular such bicyclic ring system is a group selected from 2-oxo-2,3-dihydro-benzooxazol-6-yl, 3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl, 4-methyl-3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl, 3-methyl-2-oxo-2,3-dihydro-benzooxazol-6-yl, 3,3-dimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl, 1,3,3-trimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl, or 2,2-dimethyl-2,3-dihydro-benzofuran-6-yl, 2,2-dimethyl-2,3-dihydro-benzofuran-5-yl, or 3,3-dimethyl-2,3-dihydro-benzofuran-5-yl];

- or R¹ together with (R⁴)_n forms an aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring to form a bicyclic aromatic ring system selected from pyrrolo[2,3-b]pyridinyl, indolyl, indazolyl, quinoxalinyl, benzoimidazolyl, and quinolinyl (especially indolyl or indazolyl); wherein said fused 5- or 6-membered aromatic ring part of said aromatic bicyclic ring system independently is optionally further mono- or di-substituted wherein the substituents are independently selected from (C₁₋₃)alkyl (especially methyl, isopropyl), (C₃₋₆)cycloalkyl (especially cyclobutyl), (C₁)fluoroalkyl (especially trifluoromethyl), or cyano [in particular such aromatic part of said aromatic bicyclic ring system is a group selected from 1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl, 1,3-dimethyl-1H-pyrrolo[2,3-b]pyridin-5-yl, 1H-indol-5-yl, 1H-indol-6-yl, 1-methyl-1H-indazol-5-yl, 1-methyl-1H-indazol-6-yl, 1-ethyl-1H-indazol-5-yl, 1-ethyl-1H-indazol-6-yl, 1,3-dimethyl-1H-indazol-5-yl, 1-methyl-1H-indol-5-yl, 1-methyl-1H-indol-6-yl, 1,3-dimethyl-1H-indol-5-yl, 1,3-dimethyl-1H-indol-6-yl, 3-cyano-1-methyl-1H-indol-5-yl, 3-isopropyl-1-methyl-1H-indol-5-yl, 3-cyclobutyl-1-methyl-1H-indol-5-yl, 1-methyl-3-trifluoromethyl-1H-indol-5-yl, quinoxalin-6-yl, 2-methyl-1H-benzoimidazol-6-yl, 1-methyl-1H-benzoimidazol-5-yl, 1-methyl-1H-benzoimidazol-6-yl, or quinolin-7-yl];
- or R¹ represents methyl, or halogen (especially fluoro); and (R⁴)_n represents one substituent selected from (C₁₋₃)fluoroalkoxy (especially 2,2,2-trifluoroethoxy) which is attached to the phenyl / pyridinyl ring in *ortho* or *meta*-position to the point of attachment of the -CH₂-CO-NH- group.

6) Another embodiment relates to compounds according to any one of embodiments 1) to 4), wherein R¹ represents

- (C₂₋₆)alkyl [in particular isopropyl, *tert*-butyl, or isobutyl];
- (C₂₋₄)alkyl mono-substituted with cyano, or (C₁₋₃)alkoxy (especially methoxy); [in particular such group is 1-methoxy-ethyl, or 1-cyano-1-methyl-ethyl];
- (C₁₋₄)fluoroalkyl [in particular trifluoromethyl, 2,2,2-trifluoro-1,1-dimethyl-ethyl];
- (C₁₋₃)fluoroalkoxy [in particular 2,2,2-trifluoroethoxy];
- pentafluoro-sulfanyl;
- (C₃₋₆)cycloalkyl-L¹- wherein
 - said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is unsubstituted, or mono-substituted with fluoro, (C₁₋₃)alkyl (especially methyl), (C₁₋₃)alkoxy (especially methoxy), hydroxy, cyano, or (C₁₋₃)fluoroalkyl

- 17 -

(especially trifluoromethyl), or di-substituted with fluoro, or tri-substituted with two fluoro substituents and a (C₁₋₃)alkyl (especially methyl) substituent; and

- the linker L¹ represents a direct bond, (C₁₋₂)alkylene, oxygen, or (C₁₋₂)alkylene-oxy (which is attached to the rest of the molecule through the oxygen atom);

5 [in particular such group (C₃₋₆)cycloalkyl-L¹- is cyclopropyl, 3-fluoro-oxetan-3-yl, 3-methoxy-oxetan-3-yl, 3-methyl-oxetan-3-yl, 3,3-difluoro-cyclobutyl, 1-trifluoromethyl-cyclopropyl, 2-trifluoromethyl-cyclopropyl, 1-methyl-cyclopropyl, 1-hydroxy-cyclopropyl, 1-cyano-cyclopropyl, or 3-hydroxy-oxetan-3-yl; or it is cyclopropyl-methyl; or it is cyclopropyl-oxy, oxetan-3-yl-oxy, cyclobutyl-oxy, or 3,3-difluoro-cyclobutyl-oxy; or it is

10 oxetan-3-yl-methoxy, (3-fluoro-oxetan-3-yl)-methoxy, (3,3-difluoro-cyclobutyl)-methoxy, (3-methyl-oxetan-3-yl)-methoxy, or (3,3-difluoro-1-methyl-cyclobutyl)-methoxy];

- 5- or 6-membered heteroaryl selected from oxadiazolyl, pyrazinyl, pyrimidinyl, and pyridinyl; wherein said heteroaryl independently is optionally mono-substituted with (C₁₋₃)alkyl (especially methyl); or

15 ➤ -NR¹¹R¹², wherein

- R¹¹ and R¹² independently represent (C₁₋₃)alkyl, (C₂₋₃)fluoroalkyl, (C₃₋₆)cycloalkyl, (C₃₋₆)cycloalkyl mono- or di-substituted with fluoro, (C₃₋₆)cycloalkyl-(C₁₋₃)alkyl, (C₁₋₃)alkoxy-(C₂₋₃)alkyl [in particular such group -NR¹¹R¹² is dimethylamino, ethyl-methyl-amino, diethylamino, cyclopropyl-methyl-amino, (2-methoxyethyl)-methyl-amino, (cyclopropylmethyl)-methyl-amino, or (2,2-difluoro-ethyl)-methyl-amino];

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- or R¹¹ and R¹², together with the nitrogen atom to which they are attached to, form an azetidiny or a pyrrolidiny ring, both independently optionally mono- or di-substituted with fluoro; [in particular such group -NR¹¹R¹² is azetidiny, 3-fluoro-azetidiny, 3,3-difluoro-azetidiny, pyrrolidiny, 3-fluoro-pyrrolidiny, or 3,3-difluoro-pyrrolidiny];

25 and (R⁴)_n represents one optional substituent (i.e. n represents the integer 0, or 1) selected from (C₁₋₄)alkyl (especially methyl), (C₁₋₄)alkoxy (especially methoxy), (C₁₋₃)fluoroalkyl (especially trifluoromethyl), (C₁₋₃)fluoroalkoxy (especially trifluoromethoxy), halogen (especially fluoro), and cyano [especially (R⁴)_n is absent (i.e. n = 0); or (R⁴)_n represents one halogen or methyl substituent].

7) Another embodiment relates to compounds according to any one of embodiments 1) to 4), wherein R¹ represents

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- (C₂₋₆)alkyl [in particular isopropyl, *tert.*-butyl, or isobutyl];
- (C₁₋₄)fluoroalkyl [in particular trifluoromethyl, 2,2,2-trifluoro-1,1-dimethyl-ethyl];
- (C₁₋₃)fluoroalkoxy [in particular 2,2,2-trifluoroethoxy];
- (C₃₋₆)cycloalkyl-L¹- wherein

35 ▪ said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is unsubstituted, or mono-substituted with fluoro, (C₁₋₃)alkyl (especially

- 19 -

1-trifluoromethyl-cyclopropyl, 2-trifluoromethyl-cyclopropyl, 1-methyl-cyclopropyl, 1-hydroxy-cyclopropyl, 1-cyano-cyclopropyl, or 3-hydroxy-oxetan-3-yl];

➤ (C₃₋₆)cycloalkyl-(C₁₋₂)alkylene- [in particular cyclopropyl-methyl];

➤ (C₃₋₆)cycloalkyl-oxy- wherein

5 ▪ said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is unsubstituted, or mono- or di-substituted with fluoro; [in particular cyclopropyl-oxy, oxetan-3-yl-oxy, cyclobutyl-oxy, or 3,3-difluoro-cyclobutyl-oxy];

➤ (C₃₋₆)cycloalkyl-(C₁₋₂)alkylene-oxy- wherein

10 ▪ said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is unsubstituted, or mono-substituted with fluoro, or (C₁₋₃)alkyl (especially methyl), or di-substituted with fluoro; [in particular oxetan-3-yl-methoxy, (3-fluoro-oxetan-3-yl)-methoxy, (3,3-difluoro-cyclobutyl)-methoxy, or (3-methyl-oxetan-3-yl)-methoxy];

➤ 5- or 6-membered heteroaryl selected from oxadiazolyl, pyrazinyl, pyrimidinyl, and pyridinyl (especially oxadiazolyl, pyridinyl); wherein said heteroaryl independently is optionally mono-substituted with (C₁₋₃)alkyl (especially methyl); or

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➤ -NR¹¹R¹², wherein

▪ R¹¹ and R¹², together with the nitrogen atom to which they are attached to, form a pyrrolidinyl ring optionally mono- or di-substituted with fluoro [in particular pyrrolidinyl, 3-fluoro-pyrrolidinyl, 3,3-difluoro-pyrrolidinyl];

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and (R⁴)_n represents one optional substituent (i.e. n represents the integer 0, or 1) selected from (C₁₋₄)alkyl (especially methyl), (C₁₋₄)alkoxy (especially methoxy), (C₁₋₃)fluoroalkyl (especially trifluoromethyl), (C₁₋₃)fluoroalkoxy (especially trifluoromethoxy), halogen (especially fluoro), and cyano [especially (R⁴)_n is absent (i.e. n = 0); or (R⁴)_n represents one halogen or methyl substituent].

25 9) Another embodiment relates to compounds according to any one of embodiments 1) to 4), wherein R¹ represents

➤ (C₂₋₆)alkyl [in particular isopropyl, *tert.*-butyl, or isobutyl, preferably *tert.*-butyl];

➤ (C₁₋₄)fluoroalkyl [in particular trifluoromethyl, 2,2,2-trifluoro-1,1-dimethyl-ethyl; preferably 2,2,2-trifluoro-1,1-dimethyl-ethyl];

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➤ (C₁₋₃)fluoroalkoxy [in particular 2,2,2-trifluoroethoxy];

➤ (C₃₋₆)cycloalkyl wherein

▪ said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is mono-substituted with fluoro or (C₁₋₃)fluoroalkyl (especially trifluoromethyl), or di-substituted with fluoro; [in particular 3-fluoro-oxetan-3-yl, 3,3-difluoro-cyclobutyl, 1-trifluoromethyl-cyclopropyl, or 2-trifluoromethyl-cyclopropyl];

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- 20 -

especially 3-fluoro-oxetan-3-yl, 3,3-difluoro-cyclobutyl, or 1-trifluoromethyl-cyclopropyl; preferably 1-trifluoromethyl-cyclopropyl]; or

➤ (C₃₋₆)cycloalkyl-oxy- wherein

- said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is unsubstituted, or di-substituted with fluoro; [in particular cyclopropyl-oxy, oxetan-3-yl-oxy, cyclobutyl-oxy, or 3,3-difluoro-cyclobutyl-oxy, especially 3,3-difluoro-cyclobutyl-oxy];

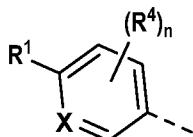
and (R⁴)_n represents one optional substituent (i.e. n represents the integer 0, or 1) selected from (C₁₋₄)alkyl (especially methyl), or halogen (especially fluoro) [especially (R⁴)_n is absent (i.e. n = 0); or (R⁴)_n represents one halogen or methyl substituent].

10) Another embodiment relates to compounds according to any one of embodiments 1) to 4), wherein

- R¹ together with (R⁴)_n forms a non-aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring to form a bicyclic ring system; wherein said bicyclic ring system is selected from 2,3-dihydro-benzooxazolyl, 3,4-dihydro-2H-benzo[1,4]oxazinyl, 2,3-dihydro-1H-indolyl, and 2,3-dihydro-benzofuranyl; wherein said non-aromatic 5- or 6-membered ring part of said bicyclic ring system independently is optionally further mono-substituted with oxo; or di-, tri-, or tetra-substituted wherein one substituent is oxo and the remaining are (C₁₋₃)alkyl (especially methyl); [in particular such bicyclic ring system is a group selected from 2-oxo-2,3-dihydro-benzooxazol-6-yl, 3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl, 4-methyl-3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl, 3-methyl-2-oxo-2,3-dihydro-benzooxazol-6-yl, 3,3-dimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl, 1,3,3-trimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl, 2,2-dimethyl-2,3-dihydro-benzofuran-6-yl, 2,2-dimethyl-2,3-dihydro-benzofuran-5-yl, or 3,3-dimethyl-2,3-dihydro-benzofuran-5-yl];
- or (notably) R¹ together with (R⁴)_n forms an aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring to form a bicyclic aromatic ring system selected from pyrrolo[2,3-b]pyridinyl, indolyl, indazolyl, quinoxalinyl, benzoimidazolyl, and quinolinyl; wherein said fused 5- or 6-membered aromatic ring part of said aromatic bicyclic ring system independently is optionally further mono- or di-substituted wherein the substituents are independently selected from (C₁₋₃)alkyl (especially methyl, isopropyl), (C₃₋₆)cycloalkyl (especially cyclobutyl), (C₁)fluoroalkyl (especially trifluoromethyl), or cyano [especially such aromatic bicyclic ring system is indolyl or indazolyl, both mono-substituted with methyl; in particular such aromatic bicyclic ring system is a group selected from 1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl, 1,3-dimethyl-1H-pyrrolo[2,3-b]pyridin-5-yl, 1H-indol-5-yl, 1H-indol-6-yl, 1-methyl-1H-indazol-5-yl, 1-methyl-1H-indazol-6-yl, 1-ethyl-1H-indazol-5-yl, 1-ethyl-1H-indazol-6-yl, 1,3-dimethyl-1H-indazol-5-yl, 1-methyl-1H-indol-5-yl, 1-methyl-1H-indol-6-yl, 1,3-dimethyl-1H-indol-5-yl, 1,3-dimethyl-1H-indol-6-yl, 3-cyano-1-methyl-1H-indol-5-yl, 3-isopropyl-1-methyl-1H-indol-5-yl, 3-cyclobutyl-1-methyl-1H-indol-5-yl, 1-methyl-3-trifluoromethyl-1H-indol-5-yl, quinoxalin-6-yl, 2-methyl-1H-benzoimidazol-6-yl, 1-methyl-1H-benzoimidazol-5-yl, 1-methyl-1H-benzoimidazol-6-yl, or quinolin-7-yl].

11) Another embodiment relates to compounds according to any one of embodiments 1) to 4), wherein R^1 represents methyl, or halogen (especially fluoro); and $(R^4)_n$ represents one substituent selected from (C_1-3) fluoroalkoxy (especially 2,2,2-trifluoroethoxy) which is attached to the phenyl / pyridinyl ring in *ortho* or *meta*-position to the point of attachment of the $-CH_2-CO-NH-$ group.

5 12) Another embodiment relates to compounds according to any one of embodiments 1) to 4), wherein the fragment



represents 4-cyclopropyl-phenyl, 4-isopropyl-phenyl, 4- dimethylamino -phenyl, 4- trifluoromethyl -phenyl, 4-
tert.-butyl -phenyl, 4- isobutyl -phenyl, 4-(1-methoxy-ethyl)-phenyl, 4-(1-methyl-cyclopropyl)-phenyl, 4-
 10 (cyclopropyl-methyl)-phenyl, 4-(1-hydroxy-cyclopropyl)-phenyl, 4-(cyclopropyl-oxy)-phenyl, 4-(azetidin-1-yl)-
 phenyl, 4-(oxetan-3-yl-oxy)-phenyl, 4-(3-hydroxy-oxetan-3-yl)-phenyl, 4-(3-fluoro-oxetan-3-yl)-phenyl, 4-
 (cyclobutyl-oxy)-phenyl, 4-(3-methyl-oxetan-3-yl)-phenyl, 4-([1,2,4]oxadiazol-3-yl)-phenyl, 4-(5-methyl-
 [1,2,4]oxadiazol-3-yl)-phenyl, 4-(3-fluoro-azetidin-1-yl)-phenyl, 4-(1-cyano-cyclopropyl)-phenyl, 4-(1-cyano-1-
 methyl-ethyl)-phenyl, 4-(diethylamino)-phenyl, 4-(pentafluoro-sulfanyl)-phenyl, 4-(2,2,2-trifluoroethoxy)-phenyl,
 15 3-methyl-4-(2,2,2-trifluoroethoxy)-phenyl, 3-fluoro-4-(2,2,2-trifluoroethoxy)-phenyl, 4-((2-methoxyethyl)-methyl-
 amino)-phenyl, 4-(3,3-difluoro-cyclobutyl)-phenyl, 4-(3-methoxy-oxetan-3-yl)-phenyl, 4-(oxetan-3-yl-methoxy)-
 phenyl, 4-(pyrazin-2-yl)-phenyl, 4-(3-methyl-pyrazin-2-yl)-phenyl, 4-(pyrimidin-4-yl)-phenyl, 4-(5-methyl-
 pyrimidin-4-yl)-phenyl, 4-(pyrimidin-2-yl)-phenyl, 4-(pyrimidin-5-yl)-phenyl, 4-(pyridin-4-yl)-phenyl, 4-(pyridin-3-
 yl)-phenyl, 4-(pyridin-2-yl)-phenyl, 4-(3-fluoro-pyrrolidin-1-yl)-phenyl, 4-(3,3-difluoro-azetidin-1-yl)-phenyl, 4-(2-
 20 oxo-pyrrolidin-1-yl)-phenyl, 4-(2-trifluoromethyl-cyclopropyl)-phenyl, 4-(1-trifluoromethyl-cyclopropyl)-phenyl,
 4-((3-fluoro-oxetan-3-yl)-methoxy)-phenyl, 4-(3,3-difluoro-cyclobutyl-oxy)-phenyl, 4-(2,2,2-trifluoro-1,1-
 dimethyl-ethyl)-phenyl, 4-((3,3-difluoro-cyclobutyl)-methoxy)-phenyl, 4-((3,3-difluoro-1-methyl-cyclobutyl)-
 methoxy)-phenyl; 2-cyclopropyl-pyridin-5-yl, 2-dimethylamino-pyridin-5-yl, 2-isopropyl-pyridin-5-yl, 2-(ethyl-
 methyl-amino)-pyridin-5-yl, 2-(3-fluoro-azetidin-1-yl)-pyridin-5-yl, 2-(pyrrolidin-1-yl)-pyridin-5-yl, 2-(cyclopropyl-
 25 methyl-amino)-pyridin-5-yl, 2-(3-fluoro-oxetan-3-yl)-pyridin-5-yl, 2-(diethylamino)-pyridin-5-yl, 2-((2,2-difluoro-
 ethyl)-methyl-amino)-pyridin-5-yl, 2-((2-methoxyethyl)-methyl-amino)-pyridin-5-yl, 2-(2,2,2-trifluoroethoxy)-
 pyridin-5-yl, 3-fluoro-2-(2,2,2-trifluoroethoxy)-pyridin-5-yl, 3-fluoro-2-(pyrrolidin-1-yl)-pyridin-5-yl, 2-(3-fluoro-
 pyrrolidin-1-yl)-pyridin-5-yl, 2-((cyclopropylmethyl)-methyl-amino)-pyridin-5-yl, 2-(3,3-difluoro-azetidin-1-yl)-
 pyridin-5-yl, 2-(3-methoxy-oxetan-3-yl)-pyridin-5-yl, 2-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-5-yl; 2-oxo-2,3-
 30 dihydro-benzooxazol-6-yl, 3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl, 4-methyl-3-oxo-3,4-dihydro-2H-
 benzo[1,4]oxazin-7-yl, 3-methyl-2-oxo-2,3-dihydro-benzooxazol-6-yl, 3,3-dimethyl-2-oxo-2,3-dihydro-1H-indol-
 5-yl, 1,3,3-trimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl, 2,2-dimethyl-2,3-dihydro-benzofuran-6-yl, 2,2-dimethyl-
 2,3-dihydro-benzofuran-5-yl, 3,3-dimethyl-2,3-dihydro-benzofuran-5-yl; 1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl,

- 22 -

1,3-dimethyl-1H-pyrrolo[2,3-b]pyridin-5-yl, 1H-indol-5-yl, 1H-indol-6-yl, 1-methyl-1H-indazol-5-yl, 1-methyl-1H-indazol-6-yl, 1-ethyl-1H-indazol-5-yl, 1-ethyl-1H-indazol-6-yl, 1,3-dimethyl-1H-indazol-5-yl, 1-methyl-1H-indol-5-yl, 1-methyl-1H-indol-6-yl, 1,3-dimethyl-1H-indol-5-yl, 1,3-dimethyl-1H-indol-6-yl, 3-cyano-1-methyl-1H-indol-5-yl, 3-isopropyl-1-methyl-1H-indol-5-yl, 3-cyclobutyl-1-methyl-1H-indol-5-yl, 1-methyl-3-trifluoromethyl-1H-indol-5-yl, quinoxalin-6-yl, 2-methyl-1H-benzimidazol-6-yl, 1-methyl-1H-benzimidazol-5-yl, 1-methyl-1H-benzimidazol-6-yl, quinolin-7-yl; 4-methyl-3-(2,2,2-trifluoroethoxy)-phenyl; or 4-fluoro-2-(2,2,2-trifluoroethoxy)-phenyl.

13) Another embodiment relates to compounds according to any one of embodiments 1) to 12), wherein

- Y represents a ring nitrogen atom; and
 - R^2 represents (C_{1-4})alkyl (especially methyl, ethyl, isopropyl, isobutyl, *tert.*-butyl); (C_{3-6})cycloalkyl (especially cyclopropyl); (C_{1-4})alkoxy (especially methoxy, isopropoxy); (C_{3-6})cycloalkyl-oxy (especially cyclopropyl-oxy); (C_{1-3})fluoroalkyl (especially trifluoromethyl); (C_{1-3})fluoroalkoxy (especially difluoromethoxy, trifluoromethoxy, 2,2,2-trifluoroethoxy); (C_{1-3})alkoxy-(C_{2-3})alkoxy (especially 2-methoxy-ethoxy); halogen (especially fluoro); cyano; or -NR²¹R²², wherein R²¹ and R²² independently represent (C_{1-3})alkyl (especially dimethylamino), or R²¹ and R²², together with the nitrogen atom to which they are attached to, form a ring selected from azetidiny optionally mono- or di-substituted with fluoro, pyrrolidiny optionally mono- or di-substituted with fluoro, or piperidiny optionally mono- or di-substituted with fluoro; and
 - (R^5)_m represents one or two optional substituents (i.e. m represents the integer 0, 1, or 2) independently selected from the group consisting of (C_{1-4})alkyl (especially methyl, ethyl, isobutyl); (C_{3-6})cycloalkyl (especially cyclopropyl); (C_{1-4})alkoxy (especially methoxy, isopropoxy); halogen (especially fluoro); cyano; (C_{1-3})fluoroalkyl (especially trifluoromethyl); and (C_{1-3})fluoroalkoxy (especially trifluoromethoxy, 2,2,2-trifluoroethoxy); [especially (R^5)_m is absent (i.e. m = 0), or (R^5)_m represents one halogen substituent, preferably (R^5)_m is absent]; or
- Y represents a ring carbon atom; and
 - R^2 represents (C_{1-4})alkyl (especially methyl, ethyl, isopropyl, *tert.*-butyl); (C_{3-6})cycloalkyl (especially cyclopropyl); (C_{1-4})alkoxy (especially methoxy); (C_{3-6})cycloalkyl-oxy (especially cyclopropyl-oxy); (C_{1-3})fluoroalkyl (especially trifluoromethyl); (C_{1-3})fluoroalkoxy (especially difluoromethoxy, trifluoromethoxy); halogen (especially fluoro); or cyano; and
 - (R^5)_m represents one or two optional substituents (i.e. m represents the integer 0, 1, or 2) independently selected from the group consisting of (C_{1-4})alkyl (especially methyl); (C_{3-6})cycloalkyl (especially cyclopropyl); (C_{1-4})alkoxy (especially methoxy); halogen (especially fluoro); cyano; (C_{1-3})fluoroalkyl (especially trifluoromethyl); and (C_{1-3})fluoroalkoxy (especially trifluoromethoxy); [especially (R^5)_m is absent (i.e. m = 0), or (R^5)_m represents one halogen substituent, preferably (R^5)_m is absent].

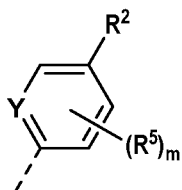
- 23 -

- 14) Another embodiment relates to compounds according to any one of embodiments 1) to 12), wherein
- **Y** represents a ring nitrogen atom; and
 - **R²** represents (C₁₋₄)alkyl (especially methyl, ethyl, isobutyl); (C₃₋₆)cycloalkyl (especially cyclopropyl); (C₁₋₄)alkoxy (especially methoxy, isopropoxy); (C₁₋₃)fluoroalkyl (especially trifluoromethyl); (C₁₋₃)fluoroalkoxy (especially 2,2,2-trifluoroethoxy); (C₁₋₃)alkoxy-(C₂₋₃)alkoxy (especially 2-methoxy-ethoxy); halogen (especially fluoro); or cyano; [in particular **R²** represents fluoro or cyano]; and
 - (**R⁵**)_m represents one optional substituent (i.e. m represents the integer 0, or 1) independently selected from the group consisting of (C₁₋₄)alkyl (especially methyl, ethyl, isobutyl); (C₃₋₆)cycloalkyl (especially cyclopropyl); (C₁₋₄)alkoxy (especially methoxy, isopropoxy); halogen (especially fluoro); cyano; (C₁₋₃)fluoroalkyl (especially difluoromethyl, trifluoromethyl); and (C₁₋₃)fluoroalkoxy (especially trifluoromethoxy, 2,2,2-trifluoroethoxy); [especially (**R⁵**)_m is absent (i.e. m = 0), or (**R⁵**)_m represents one halogen substituent, preferably (**R⁵**)_m is absent]; or
 - **Y** represents a ring carbon atom; and
 - **R²** represents (C₁₋₄)alkyl (especially methyl, ethyl, isopropyl, *tert.*-butyl); (C₃₋₆)cycloalkyl (especially cyclopropyl); (C₁₋₄)alkoxy (especially methoxy); (C₃₋₆)cycloalkyl-oxy (especially cyclopropyl-oxy); (C₁₋₃)fluoroalkyl (especially trifluoromethyl); (C₁₋₃)fluoroalkoxy (especially difluoromethoxy, trifluoromethoxy); halogen (especially fluoro); or cyano; and
 - (**R⁵**)_m represents one or two optional substituents (i.e. m represents the integer 0, 1, or 2) independently selected from the group consisting of (C₁₋₄)alkyl (especially methyl); (C₁₋₄)alkoxy (especially methoxy); halogen (especially fluoro); cyano; (C₁₋₃)fluoroalkyl (especially trifluoromethyl), and (C₁₋₃)fluoroalkoxy (especially trifluoromethoxy) [especially (**R⁵**)_m is absent (i.e. m = 0), or (**R⁵**)_m represents one halogen substituent, preferably (**R⁵**)_m is absent].
- 15) Another embodiment relates to compounds according to any one of embodiments 1) to 12), wherein
- **Y** represents a ring nitrogen atom; and
 - **R²** represents (C₁₋₄)alkyl (especially methyl, ethyl, isopropyl, isobutyl, *tert.*-butyl); (C₃₋₆)cycloalkyl (especially cyclopropyl); (C₁₋₄)alkoxy (especially methoxy, isopropoxy); (C₁₋₃)fluoroalkyl (especially trifluoromethyl); (C₁₋₃)fluoroalkoxy (especially difluoromethoxy, trifluoromethoxy, 2,2,2-trifluoroethoxy); (C₁₋₃)alkoxy-(C₂₋₃)alkoxy (especially 2-methoxy-ethoxy); halogen (especially fluoro); or (preferably) cyano; [in particular **R²** represents fluoro or cyano]; and
 - (**R⁵**)_m represents one optional substituent (i.e. m represents the integer 0, or 1) independently selected from the group consisting of (C₁₋₄)alkyl (especially methyl, ethyl, isobutyl); (C₃₋₆)cycloalkyl (especially cyclopropyl); (C₁₋₄)alkoxy (especially methoxy, isopropoxy); halogen (especially fluoro); cyano; (C₁₋₃)fluoroalkyl (especially difluoromethyl, trifluoromethyl), and (C₁₋

- 24 -

₃fluoroalkoxy (especially trifluoromethoxy, 2,2,2-trifluoroethoxy) [especially $(R^5)_m$ is absent (i.e. $m = 0$), or $(R^5)_m$ represents one halogen substituent, preferably $(R^5)_m$ is absent].

16) Another embodiment relates to compounds according to any one of embodiments 1) to 12), wherein the fragment



10 represents 4-fluorophenyl, 4-chlorophenyl, 4-bromophenyl, 4-methylphenyl, 4-ethylphenyl, 3-fluoro-4-methylphenyl, 4-fluoro-3-methylphenyl, 4-fluoro-3-cyano-phenyl, 4-fluoro-3,5-dimethylphenyl, 4-chloro-3-fluorophenyl, 3-chloro-4-fluorophenyl, 3,4-difluorophenyl, 3,5-difluoro-4-methoxy-phenyl, 4-cyano-3,5-difluorophenyl, 4-methoxyphenyl, 4-cyanophenyl, 4-cyclopropyl-phenyl, 3,4,5-trifluorophenyl, 4-*tert*-butyl-phenyl, 4-isopropyl-phenyl, 4-(cyclopropyl-oxy)-phenyl, 4-chloro-3-trifluoromethyl-phenyl, 4-fluoro-3-trifluoromethylphenyl, 4-methoxy-3-trifluoromethyl-phenyl, 4-difluoromethoxy-phenyl, 4-trifluoromethoxy-phenyl, 4-chloro-3-trifluoromethoxy-phenyl, 4-fluoro-3-trifluoromethoxy-phenyl; 5-fluoro-pyridin-2-yl, 5-bromo-pyridin-2-yl, 5-cyano-pyridin-2-yl, 5-methyl-pyridin-2-yl, 5-ethyl-pyridin-2-yl, 5-methoxy-pyridin-2-yl, 6-chloro-5-fluoro-pyridin-2-yl, 5-cyclopropyl-pyridin-2-yl, 6-cyano-5-fluoro-pyridin-2-yl, 5-cyano-6-fluoro-pyridin-2-yl, 6-chloro-5-cyano-pyridin-2-yl, 5-chloro-6-cyano-pyridin-2-yl, 5-cyano-6-methyl-pyridin-2-yl, 5-cyano-4-methyl-pyridin-2-yl, 6-cyano-5-methyl-pyridin-2-yl, 5-cyano-6-isobutyl-pyridin-2-yl, 5-cyano-6-methoxy-pyridin-2-yl, 5-cyano-6-isopropoxy-pyridin-2-yl, 5-trifluoromethyl-pyridin-2-yl, 5-(2,2,2-trifluoroethoxy)-pyridin-2-yl, 5-cyano-6-(2,2,2-trifluoroethoxy)-pyridin-2-yl, 5-isobutyl-pyridin-2-yl, 5-isopropoxy-pyridin-2-yl, 5-dimethylamino-pyridine-2-yl, 4-cyclopropyl-5-cyano-pyridin-2-yl, 5-(2-methoxy-ethoxy)-pyridin-2-yl, or 5-(3-fluoropyrrolidin-1-yl)-pyridin-2-yl.

20 17) Another embodiment relates to compounds according to embodiment 1), wherein

X represents a ring carbon or a ring nitrogen atom;

• **R¹** represents

- (C₂₋₆)alkyl [in particular isopropyl, *tert*-butyl, or isobutyl];
 - (C₂₋₄)alkyl mono-substituted with cyano or (C₁₋₃)alkoxy (especially methoxy); [in particular such group is 1-methoxy-ethyl, or 1-cyano-1-methyl-ethyl];
 - (C₁₋₄)fluoroalkyl [in particular trifluoromethyl, 2,2,2-trifluoro-1,1-dimethyl-ethyl];
 - (C₁₋₃)fluoroalkoxy [in particular trifluoromethoxy, 2,2,2-trifluoroethoxy, 3,3,3-trifluoropropoxy];
 - (C₃₋₆)cycloalkyl-**L¹**- wherein
 - said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is unsubstituted, or mono-substituted with fluoro, (C₁₋₃)alkyl (especially methyl), (C₁₋₃)alkoxy (especially methoxy), hydroxy, cyano, or (C₁₋₃)fluoroalkyl (especially trifluoromethyl), or di-substituted with fluoro; and
- 25
- 30

- 26 -

Y represents a ring carbon or a ring nitrogen atom; and

R^2 represents (C_{1-4})alkyl (especially methyl, ethyl, isopropyl, isobutyl, *tert.*-butyl); (C_{3-6})cycloalkyl (especially cyclopropyl); (C_{1-4})alkoxy (especially methoxy, isopropoxy); (C_{3-6})cycloalkyl-oxy (especially cyclopropyl-oxy); (C_{1-3})fluoroalkyl (especially trifluoromethyl); (C_{1-3})fluoroalkoxy (especially difluoromethoxy, trifluoromethoxy, 2,2,2-trifluoroethoxy); halogen; or cyano;

and

$(R^5)_m$ represents one or two optional substituents (i.e. m represents the integer 0, 1, or 2) independently selected from (C_{1-4})alkyl (especially methyl, ethyl, isobutyl); (C_{3-6})cycloalkyl (especially cyclopropyl); (C_{1-4})alkoxy (especially methoxy, isopropoxy); halogen; cyano; (C_{1-3})fluoroalkyl (especially difluoromethyl, trifluoromethyl); and (C_{1-3})fluoroalkoxy (especially trifluoromethoxy, 2,2,2-trifluoroethoxy); [especially $(R^5)_m$ is absent (i.e. m = 0), or $(R^5)_m$ represents one halogen substituent; preferably $(R^5)_m$ is absent].

18) Another embodiment relates to compounds according to embodiment 1), wherein

X represents a ring carbon or a ring nitrogen atom;

• R^1 represents

- (C_{2-6})alkyl [in particular isopropyl, *tert.*-butyl, or isobutyl];
- (C_{2-4})alkyl mono-substituted with cyano; [in particular such group is 1-cyano-1-methyl-ethyl];
- (C_{1-4})fluoroalkyl [in particular trifluoromethyl, 2,2,2-trifluoro-1,1-dimethyl-ethyl];
- (C_{3-6})cycloalkyl- L^1 - wherein
 - said (C_{3-6})cycloalkyl optionally contains one ring oxygen atom; wherein said (C_{3-6})cycloalkyl is unsubstituted, or mono-substituted with fluoro, (C_{1-3})alkyl (especially methyl), (C_{1-3})alkoxy (especially methoxy), hydroxy, cyano, or (C_{1-3})fluoroalkyl (especially trifluoromethyl), or di-substituted with fluoro; and
 - the linker L^1 represents a direct bond, or (C_{1-2})alkylene; [in particular such group (C_{3-6})cycloalkyl- L^1 - is cyclopropyl, 3-fluoro-oxetan-3-yl, 3-methoxy-oxetan-3-yl, 3-methyl-oxetan-3-yl, 3,3-difluoro-cyclobutyl, 1-trifluoromethyl-cyclopropyl, 2-trifluoromethyl-cyclopropyl, 1-methyl-cyclopropyl, 1-cyano-cyclopropyl, 1-hydroxy-cyclopropyl, 1-methoxy-cyclopropyl, or 3-hydroxy-oxetan-3-yl; or it is cyclopropyl-methyl];
- 5- or 6-membered heteroaryl, independently optionally mono-substituted with (C_{1-3})alkyl (especially methyl); [in particular oxadiazolyl, pyrazinyl, pyrimidinyl, or pyridinyl];

and $(R^4)_n$ represents one or two optional substituents (i.e. n represents the integer 0, 1, or 2) independently selected from (C_{1-4})alkyl (especially methyl, ethyl), (C_{3-6})cycloalkyl (especially cyclopropyl), (C_{1-3})fluoroalkyl (especially trifluoromethyl), halogen (especially fluoro), and cyano [especially $(R^4)_n$ is absent (i.e. n = 0); or $(R^4)_n$ represents one halogen or methyl substituent];

- 27 -

- or R^1 together with $(R^4)_n$ forms an aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring to form a bicyclic aromatic ring system selected from indolyl, indazolyl and quinolinyl; wherein said fused 5- or 6-membered aromatic ring part of said aromatic bicyclic ring system independently is optionally further mono- or di-substituted wherein the substituents are independently selected from (C₁₋₃)alkyl (especially methyl, ethyl, isopropyl), (C₃₋₆)cycloalkyl (especially cyclobutyl), (C₁)fluoroalkyl (especially trifluoromethyl), or cyano [in particular such aromatic 5- or 6-membered ring fused to the phenyl / pyridine ring forms, together with the phenyl / pyridine ring, a group selected from 1H-indol-5-yl, 1H-indol-6-yl, 1-methyl-1H-indazol-5-yl, 1-methyl-1H-indazol-6-yl, 1-ethyl-1H-indazol-5-yl, 1,3-dimethyl-1H-indazol-5-yl, 1-methyl-1H-indol-5-yl, 1-methyl-1H-indol-6-yl, 1,3-dimethyl-1H-indol-5-yl, 1,3-dimethyl-1H-indol-6-yl, 3-cyano-1-methyl-1H-indol-5-yl, 3-isopropyl-1-methyl-1H-indol-5-yl, 3-cyclobutyl-1-methyl-1H-indol-5-yl, 1-methyl-3-trifluoromethyl-1H-indol-5-yl, or quinolin-7-yl];

Y represents a ring carbon or a ring nitrogen atom; and

R^2 represents (C₁₋₄)alkyl (especially methyl, ethyl, isopropyl, isobutyl, *tert.*-butyl); (C₃₋₆)cycloalkyl (especially cyclopropyl); (C₁₋₄)alkoxy (especially methoxy, isopropoxy); (C₃₋₆)cycloalkyl-oxy (especially cyclopropyl-oxy); (C₁₋₃)fluoroalkyl (especially trifluoromethyl); (C₁₋₃)fluoroalkoxy (especially difluoromethoxy, trifluoromethoxy, 2,2,2-trifluoroethoxy); halogen; or cyano;

and

$(R^5)_m$ represents one or two optional substituents (i.e. m represents the integer 0, 1, or 2) independently selected from (C₁₋₄)alkyl (especially methyl, ethyl, isobutyl); (C₃₋₆)cycloalkyl (especially cyclopropyl); (C₁₋₄)alkoxy (especially methoxy, isopropoxy); halogen; cyano; (C₁₋₃)fluoroalkyl (especially difluoromethyl, trifluoromethyl); and (C₁₋₃)fluoroalkoxy (especially trifluoromethoxy, 2,2,2-trifluoroethoxy); [especially $(R^5)_m$ is absent (i.e. $m = 0$), or $(R^5)_m$ represents one halogen substituent; preferably $(R^5)_m$ is absent].

19) Another embodiment relates to compounds according to any one of embodiments 17) or 18), wherein

X represents a ring carbon atom.

20) Another embodiment relates to compounds according to any one of embodiments 17) or 18), wherein

X represents a ring nitrogen atom.

21) Another embodiment relates to compounds according to any one of embodiments 1) to 4), 13) to 17), 19) or 20), wherein

R^1 represents (C₃₋₆)cycloalkyl- L^1 - wherein said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is unsubstituted, or mono-substituted with fluoro, (C₁₋₃)alkyl (especially methyl), (C₁₋₃)alkoxy (especially methoxy), hydroxy, cyano, or (C₁₋₃)fluoroalkyl (especially trifluoromethyl), or di-substituted with fluoro; and the linker L^1 represents a direct bond, (C₁₋₂)alkylene, or oxygen;

[in particular such group (C₃₋₆)cycloalkyl- L^1 - is cyclopropyl, 3-fluoro-oxetan-3-yl, 3-methoxy-oxetan-3-yl, 3-methyl-oxetan-3-yl, 3,3-difluoro-cyclobutyl, 1-trifluoromethyl-cyclopropyl, 2-trifluoromethyl-cyclopropyl, 1-

- 28 -

methyl-cyclopropyl, 1-cyano-cyclopropyl, 1-hydroxy-cyclopropyl, 1-methoxy-cyclopropyl, or 3-hydroxy-oxetan-3-yl; or it is cyclopropyl-methyl; or it is cyclopropyl-oxy, oxetan-3-yl-oxy, cyclobutyl-oxy, or 3,3-difluoro-cyclobutyl-oxy].

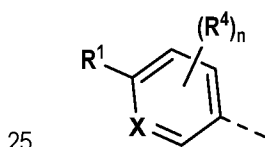
22) Another embodiment relates to compounds according to any one of embodiments 1) to 4) or 13) to 20),
5 wherein

R¹ represents cyclopropyl wherein said cyclopropyl is unsubstituted, or mono-substituted with (C₁₋₃)alkyl (especially methyl), (C₁₋₃)alkoxy (especially methoxy), cyano, or (C₁₋₃)fluoroalkyl (especially trifluoromethyl); [in particular cyclopropyl, 1-trifluoromethyl-cyclopropyl, 2-trifluoromethyl-cyclopropyl, 1-methyl-cyclopropyl, 1-cyano-cyclopropyl, or 1-methoxy-cyclopropyl].

10 23) Another embodiment relates to compounds according to any one of embodiments 1) to 4) or 13) to 20), wherein

R¹ together with (**R⁴**)_n forms an aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring to form a bicyclic aromatic ring system selected from indolyl, indazolyl and quinolinyl; wherein said fused 5- or 6-membered aromatic ring part of said aromatic bicyclic ring system independently is optionally further mono- or
15 di-substituted wherein the substituents are independently selected from (C₁₋₃)alkyl (especially methyl, ethyl, isopropyl), (C₃₋₆)cycloalkyl (especially cyclobutyl), (C₁)fluoroalkyl (especially trifluoromethyl), or cyano [in particular such aromatic 5- or 6-membered ring fused to the phenyl / pyridine ring forms, together with the phenyl / pyridine ring, a group selected from 1H-indol-5-yl, 1H-indol-6-yl, 1-methyl-1H-indazol-5-yl, 1-methyl-1H-indazol-6-yl, 1-ethyl-1H-indazol-5-yl, 1,3-dimethyl-1H-indazol-5-yl, 1-methyl-1H-indol-5-yl, 1-methyl-1H-
20 indol-6-yl, 1,3-dimethyl-1H-indol-5-yl, 1,3-dimethyl-1H-indol-6-yl, 3-cyano-1-methyl-1H-indol-5-yl, 3-isopropyl-1-methyl-1H-indol-5-yl, 3-cyclobutyl-1-methyl-1H-indol-5-yl, 1-methyl-3-trifluoromethyl-1H-indol-5-yl, or quinolin-7-yl].

24) Another embodiment relates to compounds according to any one of embodiments 1), 3), 4) or 13) to 16), wherein the fragment



represents 4-(1-methoxy-cyclopropyl)-phenyl, 4-(1-cyano-cyclopropyl)-3-trifluoromethyl-phenyl, 4-(1-cyano-3,3-difluoro-cyclobutyl)-phenyl, 4-cyclopropylmethoxy-3-trifluoromethoxy-phenyl, 3-cyano-4-*iso*-butyl-phenyl, 3-methyl-4-trifluoromethoxy-phenyl, 3,5-dimethyl-4-(2,2,2-trifluoroethoxy)-phenyl, 3-ethyl-4-(2,2,2-trifluoroethoxy)-phenyl, 3-methyl-4-(3,3,3-trifluoropropoxy)-phenyl, 3-cyclopropyl-4-(2,2,2-trifluoroethoxy)-
30 phenyl, 5-methyl-6-(2,2,2-trifluoroethoxy)-pyridin-3-yl, 3,3-dimethyl-2,3-dihydro-benzofuran-6-yl, or 3-methylchroman-7-yl.

- 29 -

25) Another embodiment relates to compounds according to any one of embodiments 1) to 12) or 17) to 24), wherein

Y represents a ring nitrogen atom;

R² represents (C₁₋₄)alkyl (especially methyl, ethyl, isopropyl, isobutyl, *tert.*-butyl); (C₃₋₆)cycloalkyl (especially cyclopropyl); (C₁₋₄)alkoxy (especially methoxy, isopropoxy); (C₁₋₃)fluoroalkyl (especially trifluoromethyl); (C₁₋₃)fluoroalkoxy (especially difluoromethoxy, trifluoromethoxy, 2,2,2-trifluoroethoxy); halogen (especially fluoro); or cyano; and

(R⁵)_m represents one optional substituent (i.e. *m* represents the integer 0, or 1) selected from the group consisting of (C₁₋₄)alkyl (especially methyl, ethyl, isobutyl); (C₃₋₆)cycloalkyl (especially cyclopropyl); (C₁₋₄)alkoxy (especially methoxy, isopropoxy); halogen (especially fluoro); cyano; (C₁₋₃)fluoroalkyl (especially difluoromethyl); and (C₁₋₃)fluoroalkoxy (especially trifluoromethoxy, 2,2,2-trifluoroethoxy); [especially **(R⁵)_m** is absent (i.e. *m* = 0), or **(R⁵)_m** represents one halogen substituent, preferably **(R⁵)_m** is absent].

26) Another embodiment relates to compounds according to any one of embodiments 1) to 12) or 17) to 24), wherein

Y represents a ring carbon atom;

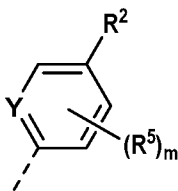
R² represents (C₁₋₄)alkyl (especially methyl, ethyl, isopropyl, *tert.*-butyl); (C₃₋₆)cycloalkyl (especially cyclopropyl); (C₁₋₄)alkoxy (especially methoxy); (C₃₋₆)cycloalkyl-oxy (especially cyclopropyl-oxy); (C₁₋₃)fluoroalkyl (especially trifluoromethyl); (C₁₋₃)fluoroalkoxy (especially difluoromethoxy, trifluoromethoxy); halogen (especially fluoro); or cyano; and

(R⁵)_m represents one or two optional substituents (i.e. *m* represents the integer 0, 1, or 2) independently selected from the group consisting of (C₁₋₄)alkyl (especially methyl); halogen (especially fluoro); cyano; (C₁₋₃)fluoroalkyl (especially trifluoromethyl); and (C₁₋₃)fluoroalkoxy (especially trifluoromethoxy); [especially **(R⁵)_m** is absent (i.e. *m* = 0), or **(R⁵)_m** represents one halogen substituent, preferably **(R⁵)_m** is absent].

27) Another embodiment relates to compounds according to any one of embodiments 1) to 15) or 17) to 26),

wherein **(R⁵)_m** is absent (i.e. *m* = 0).

28) Another embodiment relates to compounds according to any one of embodiments 1) to 12) or 21) to 24), wherein the fragment



represents 5-cyano-3-fluoro-pyridin-2-yl, 4-cyano-5-fluoro-pyridin-2-yl, 5-cyano-6-difluoromethyl-pyridin-2-yl, 5-cyano-4-difluoromethyl-pyridin-2-yl, 5-(azetidin-1-yl)-pyridin-2-yl, 5-(pyrrolidin-1-yl)-pyridin-2-yl, or 5-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-2-yl.

29) The invention, thus, relates to compounds of the formula (I) as defined in embodiment 1), or to such compounds further limited by the characteristics of any one of embodiments 2) to 28), under consideration of their respective dependencies; to pharmaceutically acceptable salts thereof; and to the use of such compounds as medicaments especially in the treatment of diseases or disorders where calcium T channels are involved as described herein below. For avoidance of any doubt, especially the following embodiments relating to the compounds of formula (I) are thus possible and intended and herewith specifically disclosed in individualized form:

1, 2+1, 3+1, 3+2+1, 4+1, 4+2+1, 5+2+1, 5+3+2+1, 5+4+2+1, 6+2+1, 6+3+2+1, 6+4+2+1, 7+2+1, 7+3+2+1, 7+4+2+1, 8+2+1, 8+3+2+1, 8+4+2+1, 9+2+1, 9+3+2+1, 9+4+2+1, 10+2+1, 10+3+2+1, 10+4+2+1, 11+2+1, 11+3+2+1, 11+4+2+1, 12+2+1, 12+3+2+1, 12+4+2+1, 13+1, 13+2+1, 13+3+1, 13+3+2+1, 13+4+1, 13+4+2+1, 13+5+2+1, 13+5+3+2+1, 13+5+4+2+1, 13+6+2+1, 13+6+3+2+1, 13+6+4+2+1, 13+7+2+1, 13+7+3+2+1, 13+7+4+2+1, 13+8+2+1, 13+8+3+2+1, 13+8+4+2+1, 13+9+2+1, 13+9+3+2+1, 13+9+4+2+1, 13+10+2+1, 13+10+3+2+1, 13+10+4+2+1, 13+11+2+1, 13+11+3+2+1, 13+11+4+2+1, 13+12+2+1, 13+12+3+2+1, 13+12+4+2+1, 14+1, 14+2+1, 14+3+1, 14+3+2+1, 14+4+1, 14+4+2+1, 14+5+2+1, 14+5+3+2+1, 14+5+4+2+1, 14+6+2+1, 14+6+3+2+1, 14+6+4+2+1, 14+7+2+1, 14+7+3+2+1, 14+7+4+2+1, 14+8+2+1, 14+8+3+2+1, 14+8+4+2+1, 14+9+2+1, 14+9+3+2+1, 14+9+4+2+1, 14+10+2+1, 14+10+3+2+1, 14+10+4+2+1, 14+11+2+1, 14+11+3+2+1, 14+11+4+2+1, 14+12+2+1, 14+12+3+2+1, 14+12+4+2+1, 15+1, 15+2+1, 15+3+1, 15+3+2+1, 15+4+1, 15+4+2+1, 15+5+2+1, 15+5+3+2+1, 15+5+4+2+1, 15+6+2+1, 15+6+3+2+1, 15+6+4+2+1, 15+7+2+1, 15+7+3+2+1, 15+7+4+2+1, 15+8+2+1, 15+8+3+2+1, 15+8+4+2+1, 15+9+2+1, 15+9+3+2+1, 15+9+4+2+1, 15+10+2+1, 15+10+3+2+1, 15+10+4+2+1, 15+11+2+1, 15+11+3+2+1, 15+11+4+2+1, 15+12+2+1, 15+12+3+2+1, 15+12+4+2+1, 16+1, 16+2+1, 16+3+1, 16+3+2+1, 16+4+1, 16+4+2+1, 16+5+2+1, 16+5+3+2+1, 16+5+4+2+1, 16+6+2+1, 16+6+3+2+1, 16+6+4+2+1, 16+7+2+1, 16+7+3+2+1, 16+7+4+2+1, 16+8+2+1, 16+8+3+2+1, 16+8+4+2+1, 16+9+2+1, 16+9+3+2+1, 16+9+4+2+1, 16+10+2+1, 16+10+3+2+1, 16+10+4+2+1, 16+11+2+1, 16+11+3+2+1, 16+11+4+2+1, 16+12+2+1, 16+12+3+2+1, 16+12+4+2+1, 17+1, 18+1, 19+17+1, 19+18+1, 20+17+1, 20+18+1, 21+1, 21+17+1, 21+19+17+1, 21+20+17+1, 22+1, 22+17+1, 22+18+1, 22+19+17+1, 22+19+18+1, 22+20+17+1, 22+20+18+1, 23+1, 23+17+1, 23+18+1, 23+19+17+1, 23+19+18+1, 23+20+17+1, 23+20+18+1, 24+1, 25+1, 25+17+1, 25+18+1, 25+19+17+1, 25+19+18+1, 25+20+17+1, 25+20+18+1, 25+21+1, 25+21+17+1, 25+21+19+17+1, 25+21+20+17+1, 25+22+1, 25+22+17+1, 25+22+18+1, 25+22+19+17+1, 25+22+19+18+1, 25+22+20+17+1, 25+22+20+18+1, 25+23+1, 25+23+17+1, 25+23+18+1, 25+23+19+17+1, 25+23+19+18+1, 25+23+20+17+1, 25+23+20+18+1, 25+24+1, 26+1, 26+17+1, 26+18+1, 26+19+17+1, 26+19+18+1, 26+20+17+1, 26+20+18+1, 26+21+1, 26+21+17+1, 26+21+19+17+1, 26+21+20+17+1, 26+22+1, 26+22+17+1, 26+22+18+1, 26+22+19+17+1, 26+22+19+18+1, 26+22+20+17+1, 26+22+20+18+1, 26+23+1, 26+23+17+1, 26+23+18+1, 26+23+19+17+1, 26+23+19+18+1, 26+23+20+17+1, 26+23+20+18+1, 26+24+1, 27+1, 27+17+1, 27+18+1, 27+19+17+1, 27+19+18+1, 27+20+17+1, 27+20+18+1, 27+21+1, 27+21+17+1, 27+21+19+17+1, 27+21+20+17+1, 27+22+1, 27+22+17+1, 27+22+18+1, 27+22+19+17+1, 27+22+19+18+1,

27+22+20+17+1, 27+22+20+18+1, 27+23+1, 27+23+17+1, 27+23+18+1, 27+23+19+17+1, 27+23+19+18+1,
 27+23+20+17+1, 27+23+20+18+1, 27+24+1, 27+25+1, 27+25+17+1, 27+25+18+1, 27+25+19+17+1,
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 27+25+21+19+18+1, 27+25+21+20+17+1, 27+25+21+20+18+1, 27+25+22+1, 27+25+22+17+1,
 5 27+25+22+18+1, 27+25+22+19+17+1, 27+25+22+19+18+1, 27+25+22+20+17+1, 27+25+22+20+18+1,
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 27+26+21+19+17+1, 27+26+21+20+17+1, 27+26+22+1, 27+26+22+17+1, 27+26+22+18+1,
 10 27+26+22+19+17+1, 27+26+22+19+18+1, 27+26+22+20+17+1, 27+26+22+20+18+1, 27+26+23+1,
 27+26+23+17+1, 27+26+23+18+1, 27+26+23+19+17+1, 27+26+23+19+18+1, 27+26+23+20+17+1,
 27+26+23+20+18+1, 27+26+24+1, 28+1, 28+21+1, 28+22+1, 28+23+1, 28+24+1; in the list above the
 numbers refer to the embodiments according to their numbering provided hereinabove whereas "+" indicates
 the dependency from another embodiment. The different individualized embodiments are separated by
 15 commas. In other words, "15+11+2+1" for example refers to embodiment 15) depending on embodiment 11),
 depending on embodiment 2), depending on embodiment 1), i.e. embodiment "15+11+2+1" corresponds to
 the compounds of formula (I) according to embodiment 1) further limited by all the features of the
 embodiments 2), 11), and 15).

30) A further embodiment relates to compounds of formula (I) which are selected from:

- 20 N-[1-(4-Chloro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
 N-[1-(4-Chloro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
 2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
 N-[1-(4-Chloro-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide;
 N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
 25 2-(4-Isopropyl-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
 2-(4-Dimethylamino-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
 2-(4-Isopropyl-phenyl)-N-[1-(4-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
 2-(4-Dimethylamino-phenyl)-N-[1-(4-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
 N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
 30 N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
 2-(4-Dimethylamino-phenyl)-N-[1-(4-ethyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
 2-(4-Dimethylamino-phenyl)-N-[1-(4-isopropyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
 N-[1-(4-tert-Butyl-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
 N-[1-(4-Difluoromethoxy-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
 35 2-(4-Dimethylamino-phenyl)-N-[1-(4-trifluoromethoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;

- 2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-3-trifluoromethoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-3-trifluoromethyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(3,4,5-trifluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-3,5-dimethyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 5 N-[1-(4-Chloro-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
N-[1-(4-Chloro-3-trifluoromethyl-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
N-[1-(3,5-Difluoro-4-methoxy-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(4-methoxy-3-trifluoromethyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-3-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 10 N-[1-(3-Chloro-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(3-fluoro-4-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(4-ethyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(4-trifluoromethoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(3-fluoro-4-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 15 2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(4-fluoro-3-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(3-Chloro-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide;
2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(3,4,5-trifluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Chloro-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide;
N-[1-(4-Methoxy-benzyl)-1H-pyrazol-3-yl]-2-[4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- 20 N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
2-[4-(3,3-Difluoro-azetidin-1-yl)-phenyl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-azetidin-1-yl)-phenyl]-acetamide;
2-[4-(3,3-Difluoro-azetidin-1-yl)-phenyl]-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 25 2-[4-(3,3-Difluoro-azetidin-1-yl)-phenyl]-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Azetidin-1-yl-phenyl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Azetidin-1-yl-phenyl)-N-[1-(4-cyano-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Azetidin-1-yl-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide;
- 30 N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
2-(4-Azetidin-1-yl-phenyl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((S)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-azetidin-1-yl)-phenyl]-acetamide;
2-(4-Cyclopropoxy-phenyl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 35 2-(4-Cyclopropoxy-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Cyclopropoxy-phenyl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;

- N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((R)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-((R)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((R)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
- 5 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-azetidin-1-yl)-phenyl]-acetamide;
2-[4-(3-Fluoro-azetidin-1-yl)-phenyl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-((S)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((S)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
- 10 N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
2-[4-(3,3-Difluoro-pyrrolidin-1-yl)-phenyl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-pyridin-2-yl-phenyl)-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-pyridin-3-yl-phenyl)-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-pyridin-4-yl-phenyl)-acetamide;
- 15 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-((R)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(5-methyl-pyrimidin-4-yl)-phenyl]-acetamide;
2-(4-Isopropyl-phenyl)-N-[1-[5-(2,2,2-trifluoro-ethoxy)-pyridin-2-ylmethyl]-1H-pyrazol-3-yl]-acetamide;
N-[1-(5-Bromo-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
- 20 N-[1-(5-Cyclopropyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
2-(4-Isopropyl-phenyl)-N-[1-(5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(5-Isobutyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
2-(6-Azetidin-1-yl-pyridin-3-yl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(5-Ethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
- 25 N-[1-(5-Isopropoxy-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(5-Fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
2-(4-Isopropyl-phenyl)-N-[1-(5-trifluoromethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(6-Chloro-5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
2-(4-Diethylamino-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 30 2-(4-Diethylamino-phenyl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(4-diethylamino-phenyl)-acetamide;
N-[1-(5-Cyano-6-ethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
- 35 2-[6-(3,3-Difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(6-Diethylamino-pyridin-3-yl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;

- N-[1-(4-Methoxy-benzyl)-1H-pyrazol-3-yl]-2-{4-[(2-methoxy-ethyl)-methyl-amino]-phenyl}-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-{4-[(2-methoxy-ethyl)-methyl-amino]-phenyl}-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-{4-[(2-methoxy-ethyl)-methyl-amino]-phenyl}-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-{4-[(2-methoxy-ethyl)-methyl-amino]-phenyl}-acetamide;
- 5 N-[1-(5-Cyano-6-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-((R)-3-fluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-((R)-3-fluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
2-[6-(3,3-Difluoro-azetid-1-yl)-pyridin-3-yl]-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-[6-(3,3-Difluoro-azetid-1-yl)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 10 N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isobutyl-phenyl)-acetamide;
N-[1-(5-Cyano-6-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-((S)-3-fluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-((S)-3-fluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
N-[1-(4-Chloro-5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
- 15 2-(4-Cyclopropylmethyl-phenyl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3-fluoro-azetid-1-yl)-pyridin-3-yl]-acetamide;
2-[6-(3-Fluoro-azetid-1-yl)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-[6-(Cyclopropyl(methyl)amino)-pyridin-3-yl]-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-[6-(Cyclopropyl(methyl)amino)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 20 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(ethyl-methyl-amino)-pyridin-3-yl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-[(2-methoxy-ethyl)-methyl-amino]-pyridin-3-yl]-acetamide;
- 25 N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-[(2-methoxy-ethyl)-methyl-amino]-pyridin-3-yl]-acetamide;
2-[6-(Cyclopropylmethyl-methyl-amino)-pyridin-3-yl]-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[6-(cyclopropylmethyl-methyl-amino)-pyridin-3-yl]-acetamide;
2-[6-(Cyclopropylmethyl-methyl-amino)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-[6-(Cyclopropylmethyl-methyl-amino)-pyridin-3-yl]-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 30 2-(6-Diethylamino-pyridin-3-yl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(3-Chloro-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-cyclopropyl-pyridin-3-yl)-acetamide;
N-[1-(4-Cyclopropoxy-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(4-cyclobutoxy-phenyl)-acetamide;
2-(4-Cyclobutoxy-phenyl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 35 2-(4-Cyclobutoxy-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Cyclobutoxy-phenyl)-N-[1-(5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;

- N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-methoxy-ethyl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-methoxy-ethyl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-quinolin-7-yl-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1H-indol-6-yl)-acetamide;
- 5 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-methyl-3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl)-acetamide;
N-[1-(6-Cyano-5-fluoro-pyridin-2-yl)methyl]-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(6-Chloro-5-fluoro-pyridin-2-yl)methyl]-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-acetamide;
- 10 N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(3-methyl-2-oxo-2,3-dihydro-benzooxazol-6-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1H-indol-5-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide;
- 15 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-5-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-6-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-yl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-hydroxy-oxetan-3-yl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-yl)-phenyl]-acetamide;
- 20 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(3,3-dimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3,3-trimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methoxy-oxetan-3-yl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((R)-1-methoxy-ethyl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((S)-1-methoxy-ethyl)-phenyl]-acetamide;
- 25 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(5-methyl-[1,2,4]oxadiazol-3-yl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-[1,2,4]oxadiazol-3-yl-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-yloxy)-phenyl]-acetamide;
- 30 N-[1-(4-Bromo-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-ylmethoxy)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-ylmethoxy)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-1-methyl-cyclobutylmethoxy)-phenyl]-acetamide;
- 35 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-ylmethoxy)-phenyl]-acetamide;

- N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-5-yl)-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-yl)-phenyl]-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-5-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-6-yl)-acetamide;
5 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-5-yl)-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide;
2-(4-tert-Butyl-phenyl)-N-[1-(4-cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
10 N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-5-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-yl)-phenyl]-acetamide;
2-(4-tert-Butyl-phenyl)-N-[1-(4-cyano-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-tert-Butyl-phenyl)-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide;
15 N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
20 2-(4-tert-Butyl-phenyl)-N-[1-(3-cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-1-methyl-cyclobutylmethoxy)-phenyl]-
acetamide;
25 N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide;
30 N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-1-methyl-cyclobutylmethoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide;
35 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-1-methyl-cyclobutylmethoxy)-phenyl]-
acetamide;

- N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide;
5 N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-yl)-phenyl]-acetamide;
10 N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-yl)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-methoxy-ethyl)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-cyclobutyl-1-methyl-1H-indol-5-yl)-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-isopropyl-1-methyl-1H-indol-5-yl)-acetamide;
15 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1-methyl-3-trifluoromethyl-1H-indol-5-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(3-cyclobutyl-1-methyl-1H-indol-5-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(3-isopropyl-1-methyl-1H-indol-5-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-6-yl)-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-6-yl)-acetamide;
20 N-(1-(3-cyano-4-fluorobenzyl)-1H-pyrazol-3-yl)-2-(4-(pentafluoro- λ^6 -sulfanyl)phenyl)acetamide ;
2-[4-(Cyano-dimethyl-methyl)-phenyl]-N-[1-(3-cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-(1-((5-cyanopyridin-2-yl)methyl)-1H-pyrazol-3-yl)-2-(4-(pentafluoro- λ^6 -sulfanyl)phenyl)acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-trifluoromethyl-phenyl)-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
25 N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(5-fluoro-6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(5-fluoro-6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-trifluoromethyl-phenyl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide;
30 N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indazol-5-yl)-acetamide;
N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
2-(4-tert-Butyl-phenyl)-N-[1-(4-cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
35 2-[4-(1-Cyano-cyclopropyl)-phenyl]-N-[1-(3-cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-ethyl-1H-indazol-5-yl)-acetamide;

- 38 -

- N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-5-yl)-acetamide;
 N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide;
 N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;
- 5 N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
 2-(4-tert-Butyl-phenyl)-N-[1-(6-cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
 N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;
- 10 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-methyl-cyclopropyl)-phenyl]-acetamide;
 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(2,2,2-trifluoro-1,1-dimethyl-ethyl)-phenyl]-acetamide;
 N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-methyl-cyclopropyl)-phenyl]-acetamide;
 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-methyl-3-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
 and
- 15 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-((1S*,2S*)-2-trifluoromethyl-cyclopropyl)-phenyl]-acetamide.
- 31) A further embodiment relates to compounds of formula (I) which are selected from:
- N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-methoxy-cyclopropyl)-phenyl]-acetamide;
 N-[1-(5-Cyano-6-difluoromethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
- 20 N-[1-(5-cyano-4-difluoromethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3,3-dimethyl-2,3-dihydro-benzofuran-6-yl)-acetamide;
 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-methyl-chroman-7-yl)-acetamide;
 N-[1-(5-Cyano-3-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;
- 25 2-[4-(1-Cyano-3,3-difluoro-cyclobutyl)-phenyl]-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
 N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
 2-(3-Cyano-4-isobutyl-phenyl)-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
 2-(3-Cyano-4-isobutyl-phenyl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 30 N-[1-(5-Azetidin-1-yl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
 2-(4-Isopropyl-phenyl)-N-[1-(5-pyrrolidin-1-yl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
 N-[1-[5-(3,3-Difluoro-pyrrolidin-1-yl)-pyridin-2-ylmethyl]-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-cyclopropylmethoxy-3-trifluoromethoxy-phenyl)-acetamide;
- 35 2-(4-Cyclopropylmethoxy-3-trifluoromethoxy-phenyl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;

- 39 -

- N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- 2-(4-tert-Butyl-phenyl)-N-[1-(4-cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
- N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
- 5 N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;
- 2-[4-(1-Cyano-cyclopropyl)-3-trifluoromethyl-phenyl]-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
- 2-[4-(1-Cyano-cyclopropyl)-3-trifluoromethyl-phenyl]-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 10 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(3,3,3-trifluoro-propoxy)-phenyl]-acetamide;
- N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-cyclopropyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-methyl-4-trifluoromethoxy-phenyl)-acetamide;
- N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-cyclopropyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- 15 N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-cyclopropyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-methyl-4-trifluoromethoxy-phenyl)-acetamide;
- N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-ethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- 20 N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-ethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-ethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3,5-dimethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- 25 N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3,5-dimethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3,5-dimethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- 30 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[5-methyl-6-(2,2,2-trifluoro-ethoxy)-pyridin-3-yl]-acetamide;
- N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[5-methyl-6-(2,2,2-trifluoro-ethoxy)-pyridin-3-yl]-acetamide;
- N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(3,3,3-trifluoro-propoxy)-phenyl]-acetamide; and
- 35

N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(3,3,3-trifluoro-propoxy)-phenyl]-acetamide.

It is to be understood, that a stereogenic center in a compound disclosed above, which stereogenic center is not specifically assigned, may be in absolute (*R*)- or absolute (*S*)-configuration; for example a compound listed as N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-methyl-chroman-7-yl)-acetamide may be N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-((*R*)-3-methyl-chroman-7-yl)-acetamide, N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-((*S*)-3-methyl-chroman-7-yl)-acetamide or any mixture thereof.

The compounds of formula (I) according to embodiments 1) to 31) and their pharmaceutically acceptable salts can be used as medicaments, e.g. in the form of pharmaceutical compositions for enteral (such especially oral) or parenteral administration (including topical application or inhalation).

The production of the pharmaceutical compositions can be effected in a manner which will be familiar to any person skilled in the art (see for example Remington, *The Science and Practice of Pharmacy*, 21st Edition (2005), Part 5, "Pharmaceutical Manufacturing" [published by Lippincott Williams & Wilkins]) by bringing the described compounds of formula (I), or their pharmaceutically acceptable salts, optionally in combination with other therapeutically valuable substances, into a galenical administration form together with suitable, non-toxic, inert, therapeutically compatible solid or liquid carrier materials and, if desired, usual pharmaceutical adjuvants.

The present invention also relates to a method for the prevention or treatment of a disease or disorder mentioned herein comprising administering to a subject a pharmaceutically active amount of a compound of formula (I) as defined in any one of embodiments 1) to 31).

In a preferred embodiment of the invention, the administered amount is comprised between 1 mg and 1000 mg per day, particularly between 5 mg and 500 mg per day, more particularly between 25 mg and 400 mg per day, especially between 50 mg and 200 mg per day.

Whenever the word "between" is used to describe a numerical range, it is to be understood that the end points of the indicated range are explicitly included in the range. For example: if a temperature range is described to be between 40 °C and 80 °C, this means that the end points 40 °C and 80 °C are included in the range; or if a variable is defined as being an integer between 1 and 4, this means that the variable is the integer 1, 2, 3, or 4.

Unless used regarding temperatures, the term "about" (or alternatively the term "around") placed before a numerical value "X" refers in the current application to an interval extending from X minus 10% of X to X plus 10% of X, and preferably to an interval extending from X minus 5% of X to X plus 5% of X. In the particular case of temperatures, the term "about" placed before a temperature "Y" refers in the current application to an interval extending from the temperature Y minus 10 °C to Y plus 10 °C, and preferably to an interval extending from Y minus 5 °C to Y plus 5 °C.

- 41 -

For avoidance of any doubt, if compounds are described as useful for the prevention or treatment of certain diseases, such compounds are likewise suitable for use in the preparation of a medicament for the prevention or treatment of said diseases.

The compounds of formula (I) as defined in any one of embodiments 1) to 31) are useful for the prevention or
5 treatment of diseases or disorders where calcium T channels are involved.

Such diseases or disorders where calcium T channels are involved may be defined as including especially:

- epilepsy (notably absence epilepsy, childhood absence and other forms of idiopathic generalized epilepsies, temporal lobe epilepsy);
- sleep disorders and sleep disturbances;
- 10 • pain (notably inflammatory pain, neuropathic pain, peripheral pain, chronic pain associated with peripheral axonal injury);
- neurological diseases and disorders (notably essential tremors, Parkinson's disease, schizophrenia, depression, anxiety, psychosis, neurodegenerative disorders, autism, drug addiction);
- cardiovascular diseases and disorders (notably hypertension, cardiac arrhythmias, atrial fibrillation,
15 congenital heart failure, heart block);
- cancer;
- diabetes and diabetic neuropathy; and
- infertility and sexual dysfunction.

Notably such diseases or disorders where calcium T channels are involved refer to epilepsy, neurological
20 disorders, and pain. Preferably such diseases or disorders refer to epilepsy and pain.

The term "epilepsy" describes recurrent unprovoked seizures wherein the term "seizure" refers to an excessive and/or hypersynchronous electrical neuronal activity. Different types of "epilepsy" are disclosed for example in [Berg et al., *Epilepsia*. **2010**; 51(4): 676-685], which reference is herewith incorporated by
25 reference. The term "epilepsy" as used herein preferably refers to absence epilepsy, childhood absence and other forms of idiopathic generalized epilepsies, temporal lobe epilepsy.

The term "pain" preferably refers to inflammatory pain, neuropathic pain, peripheral pain, and chronic pain associated with peripheral axonal injury.

The term "neurological diseases and disorders" preferably refers to essential tremors, Parkinson's disease, schizophrenia, depression, anxiety, psychosis, neurodegenerative disorders, autism, drug addiction.

30 The term "cardiovascular diseases and disorders" preferably refers to hypertension, cardiac arrhythmias, atrial fibrillation, congenital heart failure, heart block.

The compounds of formula (I) as defined in embodiments 1) to 31) are also useful in a method of reducing the concentration of calcium in a neuronal cell, and wherein said reduction in calcium is achieved by blocking the

- 42 -

calcium T-channel present in such neuronal cell; said method comprising the administration of a compound of formula (I) as defined in embodiments 1) to 31).

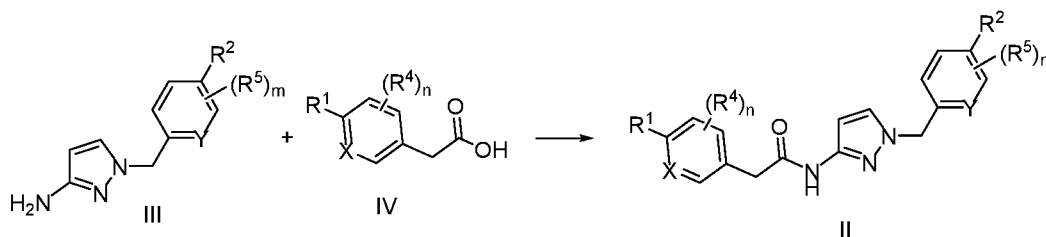
The compounds of formula (I) as defined in embodiments 1) to 31) are also useful in a method of decreasing burst firing discharges in a neuronal cell and wherein said decrease of burst firing is achieved by blocking the calcium T-channel; said method comprising the administration of a compound of formula (I) as defined in
5 embodiments 1) to 31).

Preparation of compounds of formula (I):

The compounds of formula (I) can be prepared by the methods given below, by the methods given in the experimental part below or by analogous methods. Optimum reaction conditions may vary with the particular
10 reactants or solvents used, but such conditions can be determined by a person skilled in the art by routine optimisation procedures. In the schemes below, the generic groups X, Y, R¹, R², (R⁴)_n, and (R⁵)_m are as defined for the compounds of formula (I). In some instances the generic groups R¹, R², (R⁴)_n, and (R⁵)_m may be incompatible with the assembly illustrated in the schemes and so will require the use of protecting groups (PG). The use of protecting groups is well known in the art (see for example "Protective Groups in Organic
15 Synthesis", T.W. Greene, P.G.M. Wuts, Wiley-Interscience, 1999). For the purposes of this discussion, it will be assumed that such protecting groups as necessary are in place. In some cases the final product may be further modified, for example, by manipulation of substituents to give a new final product. These manipulations may include, but are not limited to, reduction, oxidation, alkylation, acylation, and hydrolysis reactions which are commonly known to those skilled in the art. The compounds obtained may also be converted into salts,
20 especially pharmaceutically acceptable salts in a manner known *per se*.

Compounds of general formula (II) can be prepared via an amide coupling as final step (Scheme 1). Generally, the corresponding carboxylic acid (IV) can be activated to the corresponding acid chloride, typically with oxalyl chloride. Alternatively, the carboxylic acid (IV) can be directly coupled to the amine (III) using a coupling reagent, typically HATU or HBTU. In certain instances two coupling products can be formed and are
25 separated by preparative HPLC.

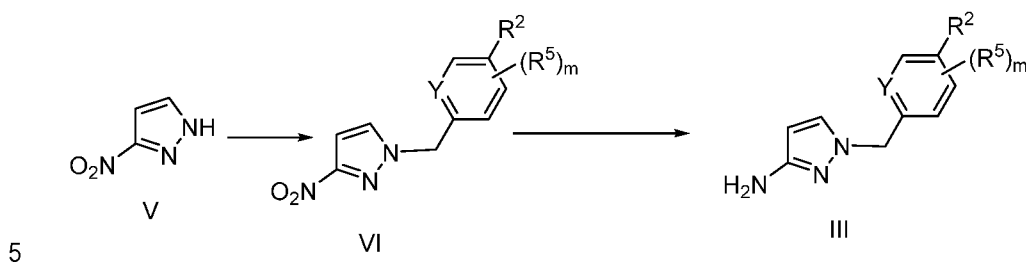
Scheme 1



- 43 -

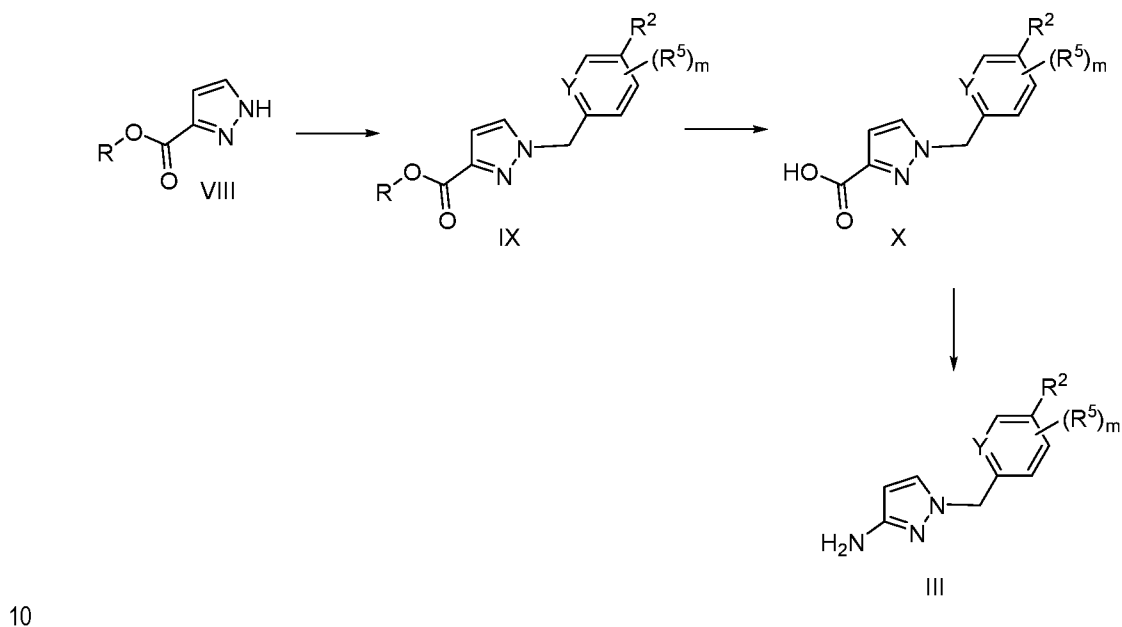
The desired primary aminopyrazole (III) can be prepared from nitropyrazole (V) through an alkylation (compound of type (VI)) and a reduction step. For the reduction step, zinc, iron or palladium are preferentially used.

Scheme 2



Aminopyrazoles of type (III) can be prepared via a Curtius rearrangement as well (Scheme 3). A suitable ester from the pyrazole-3-carboxylic acid (VIII) can be alkylated to compound (IX). Saponification leads to carboxylic acid (X), and subsequent Curtius rearrangement leads to the aminopyrazole (III).

Scheme 3



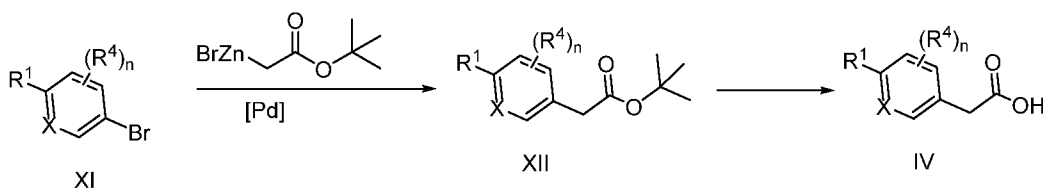
The corresponding benzyl chlorides, benzyl bromides, or benzyl mesylates necessary for the alkylation steps described in Schemes 2 (V → VI) and 3 (VIII → IX) can be prepared according to standard literature procedures or as described in the examples below.

The carboxylic acids of type (IV) can be prepared according to known procedures. In particular, a Negishi coupling (Scheme 4), or a similar carbon-carbon coupling between an (hetero)aryl bromide of type (XI) and (2-(tert-butoxy)-2-oxoethyl)zinc(II) bromide leads to the ester of type (XII): Hydrolysis, generally under acidic

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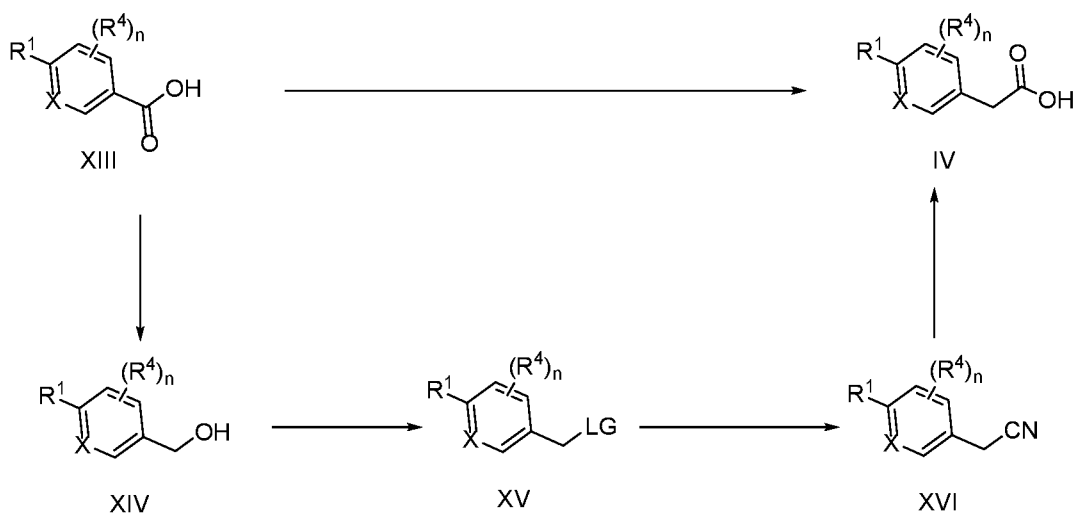
conditions, leads to the acid of type (IV). Bromide of type (XI) is either commercially available, or can be prepared according to known procedures (see experimental part).

Scheme 4



5 Alternatively, a benzoic acid of type (XIII) can be transformed into an acid of type (IV) via a Wolff rearrangement (Scheme 5). The acid of type (XIII) can be reduced to an alcohol of type (XIV). This alcohol can then be activated to a compound of type (XV), wherein LG represents a leaving group such as chloride, bromide, mesylate or tosylate, and homologated to nitrile of type (XVI): Hydrolysis would then lead to an acid of type (IV).

10 Scheme 5



Whenever the compounds of formula (I) are obtained in the form of mixtures of enantiomers, the enantiomers can be separated using methods known to one skilled in the art: e.g. by formation and separation of diastereomeric salts or by HPLC over a chiral stationary phase such as a Regis Whelk-O1(R,R) (10 μm) column, a Daicel ChiralCel OD-H (5-10 μm) column, or a Daicel ChiralPak IA (10 μm), IC (5 μm) or AD-H (5 μm) column. Typical conditions of chiral HPLC are an isocratic mixture of eluent A (EtOH, in presence or absence of an amine such as triethylamine or diethylamine) and eluent B (heptane), at a flow rate of 0.8 to 150 mL/min.

EXPERIMENTAL PART

The following examples illustrate the invention but do not at all limit the scope thereof.

Abbreviations: (as used herein and in the description above)

	Ac	Acetyl
5	aq.	Aqueous
	Bn	Benzyl
	Bu	Butyl
	CAS	Chemical abstract system
	comb.	Combined
10	conc.	Concentrated
	DavePhos	2-Dicyclohexylphosphino-2'-(N,N-dimethylamino)biphenyl (CAS 213697-53-1)
	dba	Dibenzylideneacetone
	DBU	1,8-Diazabicyclo[5.4.0]undec-7-ene
	DIBAL	Diisobutylaluminium hydride
15	DIPEA	Diisopropylethylamine
	Di-tBuXPhos	2-Di-tert-butylphosphino-2',4',6'-triisopropylbiphenyl (CAS 564483-19-8)
	DMEM	Dulbecco's modified eagle's medium
	DMF	N,N-Dimethylformamide
	DMSO	Dimethylsulfoxide
20	EDTA	Ethylenediaminetetraacetic acid
	eq.	Equivalent
	Et	Ethyl
	FC	Flash chromatography
	h	Hour
25	HATU	1-[Bis(dimethylamino)methylene]-1H-1,2,3-triazolo[4,5-b]pyridinium 3-oxid hexafluorophosphate (CAS 148893-10-1)
	HBTU	O-Benzotriazole-N,N,N',N'-tetramethyl-uronium-hexafluoro-phosphate (CAS 94790-37-1)
	HPLC	High performance liquid chromatography
	ⁱ Bu	iso-butyl
30	ⁱ Pr	iso-propyl
	LC	Liquid chromatography
	Me	Methyl
	MH+	Mass of the protonated molecule
	min	Minute
35	MS	Mass spectroscopy

- 46 -

	NMR	Nuclear magnetic resonance
	org.	Organic
	PBS	Phosphate Buffered Saline
5	PEPPSI-IPr	1,3-Bis(2,6-diisopropylphenyl)imidazolidene)-(3-chloropyridyl)palladium(II)dichloride (CAS 905459-27-0)
	Ph	Phenyl
	Q-Phos	1,2,3,4,5-Pentaphenyl-1'-(di-tert-butylphosphino)ferrocene (CAS 312959-24-3)
	rt	Room temperature
	RuPhos	2-Dicyclohexylphosphino-2',6'-diisopropoxybiphenyl (CAS 787618-22-8)
10	sat.	saturated
	sol	Solution
	TBDMS	tert-Butyldimethylsilyl
	tBu	tert-Butyl
	TEA	Triethylamine
15	TFA	Trifluoroacetic acid
	THF	tetrahydrofuran
	TLC	Thin layer chromatography
	t _R	Retention time
	Xantphos	4,5-Bis(diphenylphosphino)-9,9-dimethylxanthene (CAS 161265-03-8)
20	X-Phos	2-Dicyclohexylphosphino-2',4',6'-triisopropylbiphenyl (CAS 564483-18-7)

Preparation of Examples

General procedures

General procedure 1 for the preparation of acid chlorides. The desired carboxylic acid (1 eq.) is dissolved in 25 toluene (5 mL/mmol). DMF (about 1 drop/mmol) and oxalyl chloride (1.5 eq.) are added, and the mixture is stirred at rt for 2 h. The solvents are removed under reduced pressure. The excess oxalyl chloride is removed azeotropically with toluene several times under reduced pressure. The residue is dried under high vacuum to yield the desired crude acid chloride.

General procedure 2 for an amide coupling. To a sol. of the desired amine (1 eq.) in dioxane (5 mL/mmol) is 30 added the acid chloride (crude, 1.1 eq.) The mixture is heated to 60 °C to 90 °C for 1 h (or longer if the reaction is not complete). The mixture is allowed to cool to rt and the solvents are removed under reduced pressure. The residue is directly purified by automated FC, or by HPLC, to yield the desired product. Alternatively, the product can be isolated by crystallization.

- 47 -

General procedure 3 for an amide coupling. Unless indicated otherwise, a mixture of the desired carboxylic acid (1 eq.), the desired amine (1.5 eq), N-methylmorpholine (4 eq.) and HBTU (2 eq.) in DMF (around 20 mL / eq.) is stirred until the reaction is complete (a few hours to overnight). Other bases, coupling reagents and / or solvents can be used as well, see experimental details. The solvents are removed under reduced pressure.

5 An aq. work-up (basic and / or acidic) is optionally realized. The residue is purified by automated FC, or by HPLC, to yield the desired product. Alternatively, the product can be isolated by crystallization.

General procedure 4 for the N-alkylation of 5-nitro-1H-pyrazole. K₂CO₃ or NaH is added to a sol. of 5-nitro-1H-pyrazole in acetone or DMF or THF. The mixture is stirred for 15-30 min. The desired electrophile and Bu₄NBr are added. The mixture is stirred efficiently at rt until the reaction is complete. The mixture is optionally filtered
10 (if K₂CO₃ is used) or quenched with water (if NaH is used), and the filtrate is evaporated under reduced pressure. The residue is partitioned between water and EtOAc. The org. layer is dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by automated FC or by HPLC yields the desired product.

General procedure 5 for the reduction of a nitro group. Fe or Zn is added to a sol. of the starting material in
15 EtOH or acetone with aq. sat. NH₄Cl. The mixture is heated to 75 °C and stirred at this temperature until the reaction is complete (about 1 h). The mixture is allowed to cool to rt and filtered through Celite®. The solvents were removed under reduced pressure to yield the desired crude product.

General procedure 6 for a Negishi coupling. A sol. of bromoaryl / bromoheteroaryl, (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O), palladium catalyst, and optionally a ligand in THF is stirred between
20 rt and 90 °C until the starting materials are consumed. The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. Chromatographic purification yields the desired compound.

General procedure 7 for the hydrolysis of a tert-butyl ester. A sol. of the ester and an acid with optionally CH₂Cl₂ is prepared at 0 °C. This mixture is stirred between at 0 °C, optionally warming up to rt, until consumption of the starting material. The solvents are removed under reduced pressure to yield the crude
25 desired compound.

General procedure 9 for the N-alkylation of a pyridine. A mixture of 2,5-dibromopyridine, an amine, and DBU in DMSO is stirred at 80 °C until the reaction is complete. The amine and DBU may have to be added several times. The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. Purification of the crude by FC yields the desired product.

30 **Analytical conditions for LC-MS**

Unless notified otherwise, the following conditions were used for analytical LC-MS data:

Conditions 1: Ascentis Express C18 2.7µm 2.1 x 30mm, 5% CH₃CN / 95% H₂O with 0.05% NH₄OH → 95% CH₃CN over 2.0 min, 1.4 mL/min.

- 48 -

Conditions 2: Waters Atlantis T3 column, C18, 5 μ m, 4.6 x 30 mm, 5% CH₃CN / 95% H₂O with 0.04% TFA → 100% CH₃CN over 1.0 min, 4.5 mL/min.

Conditions 3: Zorbax SB-Aq column, 3.5 μ m, 4.6 x 50 mm, 5% CH₃CN / 95% H₂O with 0.04% TFA → 100% CH₃CN over 1.0 min, 4.5 mL/min.

- 5 Conditions 4: Waters XBridge C18, 2.5 μ m, 4.6 x 30 mm, 5% CH₃CN / 95% H₂O with 0.04% TFA → 100% CH₃CN over 1.0 min, 4.5 mL/min.

Preparative HPLC

Reaction mixture can often be separated by preparative HPLC. A person skilled in the art will find suitable conditions for each separation.

10 Automated FC

Classical flash chromatography is often replaced by automated systems. This does not change the separation process *per se*. A person skilled in the art will be able to replace a classical FC process by an automated one, and *vice versa*. Typical automated systems can be used, as they are provided by Büchi, Isco (Combiflash), or Biotage for instance.

- 15 *tert*-Butyl 2-(6-(dimethylamino)pyridin-3-yl)acetate. According to *general procedure 6*, with 5-bromo-2-(dimethylamino)pyridine (600 mg, 3.00 mmol), 2-*tert*-butoxy-2-oxoethylzinc chloride (0.5M in Et₂O, 9.0 mL, 4.5 mmol), Pd₂(dba)₃ (275 mg, 0.300 mmol), and Q-Phos (215 mg, 0.30 mmol) in THF (6.00 mL). The reaction is complete after 4 h at 70 °C. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 0.51 min, MH⁺ = 237.09 (conditions 2).

2-(6-(Dimethylamino)pyridin-3-yl)acetic acid. According to *general procedure 7* with *tert*-butyl 2-(6-(dimethylamino)pyridin-3-yl)acetate (570 mg, 2.41 mmol), HCl (4M in dioxane, 10 mL) and CH₂Cl₂ (10 mL) at 0 °C. The mixture is stirred for 30 min at 0 °C, and for 9 h at rt. Removal of the solvents under reduced pressure yields the crude title compound. LC-MS: t_R = 0.27 min, MH⁺ = 181.17 (conditions 2).

- 25 1-(4-Methoxybenzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* from K₂CO₃ (2.07 g, 15.0 mmol), 1-(chloromethyl)-4-methoxybenzene (0.405 mL, 3.00 mmol), 5-nitro-1H-pyrazole (339 mg, 3.00 mmol), and Bu₄NBr (197 mg, 0.60 mmol) in acetone (15 mL). The reaction is complete after 3.5 h. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title product. LC-MS: t_R = 0.81 min (conditions 3).
- 30 1-(4-Methoxybenzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* from Fe (powder, 592 mg, 10.7 mmol), 1-(3-methoxybenzyl)-3-nitro-1H-pyrazole (250 mg, 1.07 mmol), EtOH (10 mL), and aq. sat. NH₄Cl (1 mL). The reaction is complete after 4 h. This yields the crude title compound. LC-MS: t_R = 0.53 min, MH⁺ = 204.47 (conditions 3).

1-(4-Methylbenzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* from K₂CO₃ (2.07 g, 15.0 mmol), 1-(chloromethyl)-4-methylbenzene (0.398 mL, 3.00 mmol), 5-nitro-1H-pyrazole (339 mg, 3.00 mmol), and Bu₄NBr (197 mg, 0.600 mmol) in acetone (15 mL). The reaction is complete after 3.5 h. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title product. LC-MS: t_R = 0.85 min (conditions 3).

1-(4-Methylbenzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* from Fe (powder, 592 mg, 10.7 mmol), 1-(4-methylbenzyl)-3-nitro-1H-pyrazole (233 mg, 1.07 mmol), EtOH (10 mL), and aq. sat. NH₄Cl (1 mL). The reaction is complete after 1 h. This yields the title compound. LC-MS: t_R = 0.57 min, MH⁺ = 188.48 (conditions 3).

10 4-((3-Nitro-1H-pyrazol-1-yl)methyl)benzotrile. Prepared according to *general procedure 4* from K₂CO₃ (2.07 g, 15.0 mmol), 4-(bromomethyl)benzotrile (588 mg, 3.00 mmol), 5-nitro-1H-pyrazole (339 mg, 3.00 mmol), and Bu₄NBr (197 mg, 0.60 mmol) in acetone (15 mL). The reaction is complete after 3.5 h. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title product. LC-MS: t_R = 0.77 min (conditions 3).

15 4-((3-Amino-1H-pyrazol-1-yl)methyl)benzotrile. Prepared according to *general procedure 5* from Fe (powder, 592 mg, 10.7 mmol), 4-((3-nitro-1H-pyrazol-1-yl)methyl)benzotrile (245 mg, 1.07 mmol), EtOH (10 mL), and aq. sat. NH₄Cl (1 mL). The reaction is complete after 2.5 h. This yields the title compound. LC-MS: t_R = 0.51 min, MH⁺ = 199.46 (conditions 3).

20 1-(4-Ethylbenzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* with K₂CO₃ (4.47 g, 32.3 mmol), 4-ethylbenzyl chloride (0.962 mL, 6.47 mmol), 5-nitro-1H-pyrazole (731 mg, 6.47 mmol), and Bu₄NBr (425 mg, 1.29 mmol) in acetone (45 mL). The reaction is complete after 24 h. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 0.89 min (conditions 3).

25 1-(4-Ethylbenzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (2.56 g, 46.3 mmol) and 1-(4-ethylbenzyl)-3-nitro-1H-pyrazole (1.07 g, 4.63 mmol) in EtOH (30 mL), and aq. sat. NH₄Cl (4 mL). The reaction is complete after 20 h and yields the crude title compound. LC-MS: t_R = 0.63 min, MH⁺ = 202.29 (conditions 3).

30 1-(4-Isopropylbenzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* with K₂CO₃ (4.47 g, 32.3 mmol), 4-isopropylbenzyl chloride (0.718 mL, 6.47 mmol), 5-nitro-1H-pyrazole (731 mg, 6.47 mmol), and Bu₄NBr (425 mg, 1.29 mmol) in acetone (45 mL). The reaction is complete after 24 h. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 0.92 min (conditions 3).

1-(4-Isopropylbenzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (1.83 g, 33.0 mmol) and 1-(4-isopropylbenzyl)-3-nitro-1H-pyrazole (810 mg, 3.30 mmol) in EtOH (30 mL), and aq. sat.

- 50 -

NH₄Cl (4 mL). The reaction is complete after 20 h and yields the crude title compound. LC-MS: t_R = 0.67 min, MH⁺ = 216.28 (conditions 3).

5 *1-(4-(tert-Butyl)benzyl)-3-nitro-1H-pyrazole*. Prepared according to *general procedure 4* with K₂CO₃ (4.47 g, 32.3 mmol), 4-tert-butylbenzyl chloride (1.25 mL, 6.47 mmol), 5-nitro-1H-pyrazole (731 mg, 6.47 mmol), and Bu₄NBr (425 mg, 1.29 mmol) in acetone (45 mL). The reaction is complete after 24 h. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 0.95 min (conditions 3).

10 *1-(4-(tert-Butyl)benzyl)-1H-pyrazol-3-amine*. Prepared according to *general procedure 5* with Fe (2.67 g, 48.2 mmol) and 1-(4-(tert-butyl)benzyl)-3-nitro-1H-pyrazole (1.25 g, 4.82 mmol) in EtOH (40 mL), and aq. sat. NH₄Cl (5 mL). The reaction is complete after 20 h and yields the crude title compound. LC-MS: t_R = 0.71 min, MH⁺ = 230.21 (conditions 3).

15 *1-(4-(Difluoromethoxy)benzyl)-3-nitro-1H-pyrazole*. Prepared according to *general procedure 4* with K₂CO₃ (4.47 g, 32.3 mmol), 4-difluoromethoxybenzyl chloride (1.25 mL, 6.47 mmol), 5-nitro-1H-pyrazole (731 mg, 6.47 mmol), and Bu₄NBr (425 mg, 1.29 mmol) in acetone (45 mL). The reaction is complete after 5 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 0.85 min (conditions 3).

20 *1-(4-(Difluoromethoxy)benzyl)-1H-pyrazol-3-amine*. Prepared according to *general procedure 5* with Fe (2.77 g, 50.1 mmol) and 1-(4-(difluoromethoxy)benzyl)-3-nitro-1H-pyrazole (1.35 g, 5.01 mmol) in EtOH (40 mL), and aq. sat. NH₄Cl (5 mL). The reaction is complete after 45 min and yields the crude title compound. LC-MS: t_R = 0.60 min, MH⁺ = 240.09 (conditions 3).

25 *3-Nitro-1-(4-(trifluoromethoxy)benzyl)-1H-pyrazole*. Prepared according to *general procedure 4* with K₂CO₃ (4.47 g, 32.3 mmol), 4-trifluoromethoxybenzyl chloride (1.36 g, 6.47 mmol), 5-nitro-1H-pyrazole (731 mg, 6.47 mmol), and Bu₄NBr (425 mg, 1.29 mmol) in acetone (45 mL). The reaction is complete after 24 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 0.90 min (conditions 3).

1-(4-(Trifluoromethoxy)benzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (2.25 g, 40.7 mmol) and 3-nitro-1-(4-(trifluoromethoxy)benzyl)-1H-pyrazole (1.17 g, 4.07 mmol) in EtOH (40 mL), and aq. sat. NH₄Cl (5 mL). The reaction is complete after 20 h at 75 °C and yields the crude title compound. LC-MS: t_R = 0.67 min, MH⁺ = 257.94 (conditions 3).

30 *1-(3,4-Difluorobenzyl)-3-nitro-1H-pyrazole*. Prepared according to *general procedure 4* with K₂CO₃ (4.47 g, 32.3 mmol), 4-(chloromethyl)-1,2-difluorobenzene (1.05 g, 6.47 mmol), 5-nitro-1H-pyrazole (731 mg, 6.47 mmol), and Bu₄NBr (425 mg, 1.29 mmol) in acetone (45 mL). The reaction is complete after 3 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 0.83 min (conditions 3).

- 1-(3,4-Difluorobenzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (2.73 g, 49.3 mmol) and 1-(3,4-difluorobenzyl)-3-nitro-1H-pyrazole (1.18 g, 4.93 mmol) in EtOH (40 mL), and aq. sat. NH₄Cl (4 mL). The reaction is complete after 5 days at 75 °C and yields the crude title compound. LC-MS: t_R = 0.56 min, MH⁺ = 210.23 (conditions 3).
- 5 1-(3-Fluoro-4-(trifluoromethoxy)benzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* with K₂CO₃ (2.53 g, 18.3 mmol), 4-(bromomethyl)-2-fluoro-1-(trifluoromethoxy)benzene (1.00 g, 3.66 mmol), 5-nitro-1H-pyrazole (414 mg, 3.66 mmol), and Bu₄NBr (241 mg, 0.733 mmol) in acetone (45 mL). The reaction is complete after 5 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 10 0.90 min (conditions 3).
- 1-(3-Fluoro-4-(trifluoromethoxy)benzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (1.70 g, 30.8 mmol) and 1-(3-fluoro-4-(trifluoromethoxy)benzyl)-3-nitro-1H-pyrazole (940 mg, 3.08 mmol) in EtOH (40 mL), and aq. sat. NH₄Cl (4 mL). The reaction is complete after 4 h at 75 °C and yields the crude title compound. LC-MS: t_R = 0.69 min, MH⁺ = 276.13 (conditions 3).
- 15 1-(3-Fluoro-4-(trifluoromethyl)benzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* with K₂CO₃ (4.47 g, 32.4 mmol), 4-(chloromethyl)-2-fluoro-1-(trifluoromethyl)benzene (1.38 g, 6.47 mmol), 5-nitro-1H-pyrazole (732 mg, 6.47 mmol), and Bu₄NBr (426 mg, 1.29 mmol) in acetone (45 mL). The reaction is complete after 24 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 20 0.89 min (conditions 3).
- 1-(3-Fluoro-4-(trifluoromethyl)benzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (2.33 g, 42.2 mmol) and 1-(3-fluoro-4-(trifluoromethyl)benzyl)-3-nitro-1H-pyrazole (1.22 g, 4.22 mmol) in EtOH (40 mL), and aq. sat. NH₄Cl (4 mL). The reaction is complete after 6 h at 75 °C and yields the crude title compound. LC-MS: t_R = 0.67 min, MH⁺ = 260.11 (conditions 3).
- 25 3-Nitro-1-(3,4,5-trifluorobenzyl)-1H-pyrazole. Prepared according to *general procedure 4* with K₂CO₃ (4.47 g, 32.4 mmol), 3,4,5-trifluorobenzyl chloride (1.17 g, 6.47 mmol), 5-nitro-1H-pyrazole (732 mg, 6.47 mmol), and Bu₄NBr (426 mg, 1.29 mmol) in acetone (45 mL). The reaction is complete after 24 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 0.85 min (conditions 3).
- 30 1-(3,4,5-Trifluorobenzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (2.45 g, 44.3 mmol) and 3-nitro-1-(3,4,5-trifluorobenzyl)-1H-pyrazole (1.14 g, 4.43 mmol) in EtOH (40 mL), and aq. sat. NH₄Cl (4 mL). The reaction is complete after 6 h at 75 °C and yields the crude title compound. LC-MS: t_R = 0.60 min, MH⁺ = 228.16 (conditions 3).

1-(4-Fluoro-3,5-dimethylbenzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* with K_2CO_3 (3.18 g, 23.0 mmol), 4-fluoro-3,5-dimethylbenzyl bromide (1.00 g, 4.61 mmol), 5-nitro-1H-pyrazole (521 mg, 4.61 mmol), and Bu_4NBr (303 mg, 0.921 mmol) in acetone (45 mL). The reaction is complete after 30 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: $t_R = 0.90$ min (conditions 3).

1-(4-Fluoro-3,5-dimethylbenzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (2.44 g, 44.1 mmol) and 1-(4-fluoro-3,5-dimethylbenzyl)-3-nitro-1H-pyrazole (1.10 g, 4.41 mmol) in EtOH (40 mL), and aq. sat. NH_4Cl (4 mL). The reaction is complete after 30 h at 75 °C and yields the crude title compound. LC-MS: $t_R = 0.64$ min, $MH^+ = 220.24$ (conditions 3).

10 1-(4-Chloro-3-fluorobenzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* with K_2CO_3 (1.55 g, 11.2 mmol), 4-chloro-3-fluorobenzyl bromide (500 mg, 2.24 mmol), 5-nitro-1H-pyrazole (253 mg, 2.24 mmol), and Bu_4NBr (147 mg, 0.447 mmol) in acetone (11 mL). The reaction is complete after 4 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: $t_R = 0.86$ min (conditions 2).

15 1-(4-Chloro-3-fluorobenzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (876 mg, 15.8 mmol) and 1-(4-chloro-3-fluorobenzyl)-3-nitro-1H-pyrazole (405 mg, 1.58 mmol) in EtOH (30 mL), and aq. sat. NH_4Cl (4 mL). The reaction is complete after 18 h at 75 °C and yields the crude title compound. LC-MS: $t_R = 0.61$ min, $MH^+ = 226.13$ (conditions 3).

20 1-(4-Chloro-3-(trifluoromethoxy)benzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* with K_2CO_3 (1.55 g, 11.2 mmol), 4-chloro-3-trifluoromethoxybenzyl bromide (648 mg, 2.24 mmol), 5-nitro-1H-pyrazole (253 mg, 2.24 mmol), and Bu_4NBr (147 mg, 0.447 mmol) in acetone (11 mL). The reaction is complete after 4 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: $t_R = 0.95$ min (conditions 2).

25 1-(4-Chloro-3-(trifluoromethoxy)benzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (1.01 g, 18.3 mmol) and 1-(4-chloro-3-(trifluoromethoxy)benzyl)-3-nitro-1H-pyrazole (587 mg, 1.83 mmol) in EtOH (30 mL), and aq. sat. NH_4Cl (4 mL). The reaction is complete after 18 h at 75 °C and yields the crude title compound. LC-MS: $t_R = 0.73$ min, $MH^+ = 292.16$ (conditions 3).

30 1-(4-Chloro-3-(trifluoromethyl)benzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* with K_2CO_3 (1.55 g, 11.2 mmol), 4-chloro-3-trifluoromethylbenzyl bromide (612 mg, 2.24 mmol), 5-nitro-1H-pyrazole (253 mg, 2.24 mmol), and Bu_4NBr (147 mg, 0.447 mmol) in acetone (11 mL). The reaction is complete after 4 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: $t_R = 0.92$ min (conditions 2).

- 1-(4-Chloro-3-(trifluoromethyl)benzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (1.24 g, 22.4 mmol) and 1-(4-chloro-3-(trifluoromethyl)benzyl)-3-nitro-1H-pyrazole (684 mg, 2.24 mmol) in EtOH (30 mL), and aq. sat. NH₄Cl (4 mL). The reaction is complete after 18 h at 75 °C and yields the crude title compound. LC-MS: t_R = 0.71 min, MH⁺ = 276.12 (conditions 3).
- 5 1-(3,5-Difluoro-4-methoxybenzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* with K₂CO₃ (1.55 g, 11.2 mmol), 3,5-difluoro-4-methoxybenzyl bromide (530 mg, 2.24 mmol), 5-nitro-1H-pyrazole (253 mg, 2.24 mmol), and Bu₄NBr (147 mg, 0.447 mmol) in acetone (11 mL). The reaction is complete after 4 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 0.83 min (conditions 2).
- 10 2).
- 1-(3,5-Difluoro-4-methoxybenzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (980 mg, 17.7 mmol) and 1-(3,5-difluoro-4-methoxybenzyl)-3-nitro-1H-pyrazole (477 mg, 1.77 mmol) in EtOH (30 mL), and aq. sat. NH₄Cl (4 mL). The reaction is complete after 4 h at 75 °C and yields the crude title compound. LC-MS: t_R = 0.59 min, MH⁺ = 240.11 (conditions 3).
- 15 1-(4-Methoxy-3-(trifluoromethyl)benzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* with K₂CO₃ (1.55 g, 11.2 mmol), 4-methoxy-3-trifluorobenzyl bromide (530 mg, 2.24 mmol), 5-nitro-1H-pyrazole (253 mg, 2.24 mmol), and Bu₄NBr (147 mg, 0.447 mmol) in acetone (11 mL). The reaction is complete after 17 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 0.87 min (conditions 2).
- 20 (conditions 2).
- 1-(4-Methoxy-3-(trifluoromethyl)benzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (947 mg, 17.1 mmol) and 1-(4-methoxy-3-(trifluoromethyl)benzyl)-3-nitro-1H-pyrazole (516 mg, 1.71 mmol) in EtOH (30 mL), and aq. sat. NH₄Cl (4 mL). The reaction is complete after 1 h at 75 °C and yields the crude title compound. LC-MS: t_R = 0.66 min, MH⁺ = 272.16 (conditions 3).
- 25 1-(4-Fluoro-3-methylbenzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* with K₂CO₃ (3.51 g, 25.4 mmol), 4-fluoro-3-methylbenzyl bromide (1.03 g, 5.08 mmol), 5-nitro-1H-pyrazole (574 mg, 5.08 mmol), and Bu₄NBr (334 mg, 1.02 mmol) in acetone (45 mL). The reaction is complete after 8 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 0.86 min (conditions 3).
- 30 1-(4-Fluoro-3-methylbenzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (2.45 g, 44.2 mmol) and 1-(4-fluoro-3-methylbenzyl)-3-nitro-1H-pyrazole (1.04 g, 4.42 mmol) in EtOH (40 mL), and aq. sat. NH₄Cl (4 mL). The reaction is complete after 20 h at 75 °C and yields the crude title compound. LC-MS: t_R = 0.59 min, MH⁺ = 206.27 (conditions 3).

1-(3-Chloro-4-fluorobenzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* with K_2CO_3 (3.51 g, 25.4 mmol), 3-chloro-4-fluorobenzyl chloride (909 mg, 5.08 mmol), 5-nitro-1H-pyrazole (574 mg, 5.08 mmol), and Bu_4NBr (334 mg, 1.02 mmol) in acetone (45 mL). The reaction is complete after 8 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: $t_R = 0.86$ min (conditions 3).

1-(3-Chloro-4-fluorobenzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (433 mg, 7.82 mmol) and 1-(3-chloro-4-fluorobenzyl)-3-nitro-1H-pyrazole (200 mg, 0.782 mmol) in EtOH (20 mL), and aq. sat. NH_4Cl (2 mL). The reaction is complete after 20 h at 75 °C and yields the crude title compound. LC-MS: $t_R = 0.61$ min, $MH^+ = 226.12$ (conditions 3).

10 1-(3-Fluoro-4-methylbenzyl)-3-nitro-1H-pyrazole. Prepared according to *general procedure 4* with K_2CO_3 (3.51 g, 25.4 mmol), 3-fluoro-4-methylbenzyl chloride (805 mg, 5.08 mmol), 5-nitro-1H-pyrazole (574 mg, 5.08 mmol), and Bu_4NBr (334 mg, 1.02 mmol) in acetone (45 mL). The reaction is complete after 3 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: $t_R = 0.86$ min (conditions 3).

15 1-(3-Fluoro-4-methylbenzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (2.21 g, 40.0 mmol) and 1-(3-fluoro-4-methylbenzyl)-3-nitro-1H-pyrazole (940 mg, 4.00 mmol) in EtOH (40 mL), and aq. sat. NH_4Cl (4 mL). The reaction is complete after 2 h at 75 °C and yields the crude title compound. LC-MS: $t_R = 0.59$ min, $MH^+ = 206.26$ (conditions 3).

20 6-((3-Nitro-1H-pyrazol-1-yl)methyl)nicotinonitrile. Prepared according to *general procedure 4* with K_2CO_3 (3.51 g, 25.4 mmol), 6-(bromomethyl)nicotinonitrile (1000 mg, 5.08 mmol), 5-nitro-1H-pyrazole (574 mg, 5.08 mmol), and Bu_4NBr (334 mg, 1.02 mmol) in acetone (45 mL). The reaction is complete after 3 days at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: $t_R = 0.67$ min (conditions 3).

25 6-((3-Amino-1H-pyrazol-1-yl)methyl)nicotinonitrile. Prepared according to *general procedure 5* with Fe (1.05 g, 18.5 mmol) and 6-((3-nitro-1H-pyrazol-1-yl)methyl)nicotinonitrile (425 mg, 1.85 mmol) in EtOH (30 mL), and aq. sat. NH_4Cl (3 mL). The reaction is complete after 1 h at 75 °C and yields the crude title compound. LC-MS: $t_R = 0.40$ min, $MH^+ = 200.28$ (conditions 3).

30 5-Methoxy-2-((3-nitro-1H-pyrazol-1-yl)methyl)pyridine. Prepared according to *general procedure 4* with K_2CO_3 (4.39 g, 31.7 mmol), 2-(chloromethyl)-5-methoxypyridine (1000 mg, 6.35 mmol), 5-nitro-1H-pyrazole (717 mg, 6.35 mmol), and Bu_4NBr (417 mg, 1.27 mmol) in acetone (45 mL). The reaction is complete after 3 days at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: $t_R = 0.66$ min (conditions 3).

1-((5-Methoxypyridin-2-yl)methyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (1.36 g, 24.6 mmol) and 5-methoxy-2-((3-nitro-1H-pyrazol-1-yl)methyl)pyridine (575 mg, 2.46 mmol) in EtOH

- 55 -

(20 mL), and aq. sat. NH₄Cl (3 mL). The reaction is complete after 18 h at 75 °C and yields the crude title compound. LC-MS: t_R = 0.38 min, MH⁺ = 205.28 (conditions 3).

The following examples were prepared according to general procedures 1 and 2, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t _R ; MH ⁺ ; conditions)
1	N-[1-(4-Chloro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide	1.42 min; 368.16; conditions 1
2	N-[1-(4-Chloro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide	1.22 min; 369.15; conditions 1
3	2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	1.13 min; 353.18; conditions 1
4	2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.53 min; 354.18; conditions 2
5	N-[1-(4-Chloro-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide	0.57 min; 370.11; conditions 2
6	N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide	1.33 min; 352.18; conditions 1
7	2-(4-Isopropyl-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.92 min; 364.30; conditions 3
8	2-(4-Dimethylamino-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.62 min; 365.25; conditions 3
9	2-(4-Isopropyl-phenyl)-N-[1-(4-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide	0.95 min; 348.30; conditions 3
10	2-(4-Dimethylamino-phenyl)-N-[1-(4-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide	0.65 min; 349.30; conditions 3
11	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide	0.90 min; 359.26; conditions 3
12	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide	0.59 min; 360.31; conditions 3

13	2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(4-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide	0.64 min; 350.26; conditions 3
14	2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.61 min; 366.32; conditions 3
15	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide	0.59 min; 361.28; conditions 3
16	2-(4-Dimethylamino-phenyl)-N-[1-(4-ethyl-benzyl)-1H-pyrazol-3-yl]-acetamide	0.69 min; 363.19; conditions 3
17	2-(4-Dimethylamino-phenyl)-N-[1-(4-isopropyl-benzyl)-1H-pyrazol-3-yl]-acetamide	0.72 min; 377.16; conditions 3
18	N-[1-(4-tert-Butyl-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide	0.75 min; 391.21; conditions 3
19	N-[1-(4-Difluoromethoxy-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide	0.67 min; 401.07; conditions 3
20	2-(4-Dimethylamino-phenyl)-N-[1-(4-trifluoromethoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.71 min; 419.18; conditions 3
21	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide	0.64 min; 371.12; conditions 3
22	2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-3-trifluoromethoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.72 min; 437.17; conditions 3
23	2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-3-trifluoromethyl-benzyl)-1H-pyrazol-3-yl]-acetamide	0.70 min; 421.17; conditions 3
24	2-(4-Dimethylamino-phenyl)-N-[1-(3,4,5-trifluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.66 min; 389.10; conditions 3
25	2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-3,5-dimethyl-benzyl)-1H-pyrazol-3-yl]-acetamide	0.70 min; 381.15; conditions 3
26	N-[1-(4-Chloro-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide	0.67 min; 387.04; conditions 3
27	N-[1-(4-Chloro-3-trifluoromethyl-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide	0.72 min; 437.18; conditions 3

28	N-[1-(3,5-Difluoro-4-methoxy-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide	0.65 min; 401.08; conditions 3
29	2-(4-Dimethylamino-phenyl)-N-[1-(4-methoxy-3-trifluoromethyl-benzyl)-1H-pyrazol-3-yl]-acetamide	0.70 min; 433.16; conditions 3
30	2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-3-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide	0.66 min; 367.1; conditions 3
31	N-[1-(3-Chloro-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide	0.67 min; 387.11; conditions 3
32	2-(4-Dimethylamino-phenyl)-N-[1-(3-fluoro-4-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide	0.66 min; 367.13; conditions 3
33	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide	0.53 min; 361.07; conditions 3
34	N-[1-(4-Chloro-3-trifluoromethoxy-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide	0.74 min; 453.17; conditions 3
35	2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(4-ethyl-benzyl)-1H-pyrazol-3-yl]-acetamide	0.68 min; 364.18; conditions 3
36	N-[1-(4-Difluoromethoxy-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide	0.66 min; 401.95; conditions 3
37	2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(4-trifluoromethoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.70 min; 420.16; conditions 3
38	2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(3-fluoro-4-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide	0.66 min; 368.13; conditions 3
39	2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(4-fluoro-3-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide	0.65 min; 368.13; conditions 3
40	N-[1-(3-Chloro-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide	0.66 min; 388.08; conditions 3
41	2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(3,4,5-trifluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.65 min; 390.09; conditions 3
42	N-[1-(4-Chloro-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide	0.66 min; 388.06; conditions 3

43	N-[1-(3,5-Difluoro-4-methoxy-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide	0.65 min; 401.91; conditions 3
44	2-(4-Dimethylamino-phenyl)-N-[1-(5-methoxy-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	0.51 min; 366.12; conditions 3
45	N-[1-(4-Methoxy-benzyl)-1H-pyrazol-3-yl]-2-[4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.90 min; 420.16; conditions 3
46	N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.90 min; 408.10; conditions 3
47	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.88 min; 415.15; conditions 3

2-(6-Bromopyridin-3-yl)acetic acid. 2-(6-Bromopyridin-3-yl)acetonitrile (370 mg, 1.88 mmol) is diluted in conc. aq. HCl (2.8 mL), and the mixture was stirred at 100 °C for 90 min. The mixture is allowed to cool to rt and was thoroughly evaporated under reduced pressure. Water is added. The mixture is filtered to isolate the crude title product. LC-MS: t_R = 0.54 min, MH^+ = 214.96 (conditions 3).

2-(6-Bromopyridin-3-yl)-N-(1-(4-fluorobenzyl)-1H-pyrazol-3-yl)acetamide was prepared according to general procedure 3, starting from 2-(6-bromopyridin-3-yl)acetic acid (286 mg, 1.32 mmol) and 1-(4-fluorobenzyl)-1H-pyrazol-3-amine (253 mg, 1.32 mmol). LC-MS: t_R = 0.80 min, MH^+ = 388.96 (conditions 3).

Example 48, 2-[6-(Ethyl-methyl-amino)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide. 2-(6-Bromopyridin-3-yl)-N-(1-(4-fluorobenzyl)-1H-pyrazol-3-yl)acetamide (50 mg, 0.13 mmol) is dissolved in toluene (3.0 mL), and the sol. is heated to 100 °C. $Pd_2(dba)_3$ (2.4 mg, 0.0026 mmol), chloro(2-dicyclohexylphosphino-2',6'-di-*i*-propoxy-1,1'-biphenyl)[2-(2-aminoethylphenyl)]palladium(II), methyl-*t*-butylether adduct (CAS 1028206-60-1, 37 mg, 0.051 mmol), NaO^{*t*}Bu (19 mg, 0.19 mmol) and a sol. of ethylmethylamine (9.1 mg, 0.15 mmol) in toluene (1.0 mL) are added. The mixture is stirred at 100 °C for 1.5 h, and is allowed to cool to rt. The solvents are removed under reduced pressure, and the residue is mixed with CH₃CN (1.0 mL), water (2 drops) and Et₃N (2 drops). The mixture is filtered, and the filtrate is purified by HPLC to yield Example 48. LC-MS: t_R = 0.64 min, MH^+ = 368.01 (conditions 3).

Ethyl 2-(4-(3,3-difluoroazetidin-1-yl)phenyl)acetate. Xantphos (24 mg, 0.041 mmol), Pd(OAc)₂ (7 mg, 0.03 mmol) and Cs₂CO₃ (670 mg, 2.06 mmol) are added to a sol. of ethyl 4-bromophenylacetate (250 mg, 1.03 mmol) in toluene (8 mL). The mixture is heated rapidly to 100 °C, and 3,3-difluoroazetidine hydrochloride (266 mg, 2.06 mmol) is added. The mixture is stirred for 18 h at 100 °C, and is allowed to cool to rt. The mixture is filtered through Celite®, and the solvents are removed under reduced pressure. Purification of the crude by

- 59 -

automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 0.89 min, MH^+ = 297.22 (conditions 3).

2-(4-(3,3-Difluoroazetidin-1-yl)phenyl)acetic acid. A sol. of ethyl 2-(4-(3,3-difluoroazetidin-1-yl)phenyl)acetate (115 mg, 0.451 mmol) in EtOH (2 mL) and aq. 2.5M NaOH (2 mL) is stirred at rt for 18 h. The solvents are partially removed under reduced pressure, and the residue is suspended in CH_2Cl_2 (50 mL). This mixture is washed with aq. 1M HCl, and the phases are separated. The org. layer is dried over $MgSO_4$, filtered, and the solvents are removed under reduced pressure to yield the crude, title compound. LC-MS: t_R = 0.72 min, MH^+ = 269.16 (conditions 3).

Ethyl 2-(4-(azetidin-1-yl)phenyl)acetate. Xantphos (48 mg, 0.082 mmol), $Pd(OAc)_2$ (14 mg, 0.062 mmol) and Cs_2CO_3 (1.34 g, 4.11 mmol) are added to a sol. of ethyl 4-bromophenylacetate (500 mg, 2.06 mmol) in toluene (8 mL). The mixture is heated rapidly to 100 °C, and azetidine hydrochloride (0.28 mL, 4.11 mmol) is added. The mixture is stirred for 4 h at 100 °C, and is allowed to cool to rt. The mixture is filtered through Celite®, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 0.60 min, MH^+ = 220.26 (conditions 3).

2-(4-(Azetidin-1-yl)phenyl)acetic acid. A sol. of ethyl 2-(4-(azetidin-1-yl)phenyl)acetate (150 mg, 0.684 mmol) in EtOH (1 mL) and aq. 2.5M NaOH (1 mL) is stirred at rt for 18 h. The solvents are partially removed under reduced pressure, and the residue is suspended in CH_2Cl_2 (50 mL). This mixture is washed with aq. 1M HCl, and the phases are separated. The org. layer is dried over $MgSO_4$, filtered, and the solvents are removed under reduced pressure to yield the crude, title compound. LC-MS: t_R = 0.40 min (conditions 3).

2-Fluoro-4-((3-nitro-1H-pyrazol-1-yl)methyl)benzotrile. Prepared according to *general procedure 4* with K_2CO_3 (3.23 g, 23.4 mmol), 4-cyano-3-fluorobenzylbromide (1000 mg, 4.67 mmol), 5-nitro-1H-pyrazole (528 mg, 4.67 mmol), and Bu_4NBr (301 mg, 0.934 mmol) in acetone (40 mL). The reaction is complete after 20 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 5:95 → 10:90 → 15:85 → 25:75 → 35:65, 20 g silicagel, flow 20 mL/min) yields the title compound. LC-MS: t_R = 0.79 min (conditions 3).

4-((3-Amino-1H-pyrazol-1-yl)methyl)-2-fluorobenzotrile. Prepared according to *general procedure 5* with Fe (2.00 g, 36.1 mmol) and 2-fluoro-4-((3-nitro-1H-pyrazol-1-yl)methyl)benzotrile (890 mg, 3.61 mmol) in EtOH (40 mL), and aq. sat. NH_4Cl (8 mL). The reaction is complete after 1 h at 75 °C and yields the crude title compound. LC-MS: t_R = 0.55 min, MH^+ = 217.24 (conditions 3).

2-(6-(2,2,2-Trifluoroethoxy)pyridin-3-yl)acetic acid. 2-Chloropyridine-5-acetic acid (343 mg, 2.00 mmol) is added to a solution of NaH (65% in oil, 400 mg, about 10 mmol) in trifluoroethanol (4 mL). The mixture is stirred in a microwave oven at 160 °C for 7 h, and is allowed to cool to rt. The mixture is diluted with water

- 60 -

and the pH is adjusted to 3. Removing the solvents under reduced pressure and drying the residue under high vacuum yields the crude title product. LC-MS: $t_R = 0.62$ min, $MH^+ = 236.18$ (conditions 2).

(S)-Ethyl 2-(4-(3-fluoropyrrolidin-1-yl)phenyl)acetate. Xantphos (29 mg, 0.049 mmol), $Pd(OAc)_2$ (9 mg, 0.04 mmol) and Cs_2CO_3 (1.20 g, 3.7 mmol) are added to a sol. of ethyl 4-bromophenylacetate (300 mg, 1.23 mmol) in toluene (10 mL) at rt. The mixture is rapidly heated to 100 °C, and (S)-3-fluoropyrrolidine (310 mg, 2.47 mmol) is added. The mixture is stirred for 3 h at 100 °C, and is allowed to cool to rt. The mixture is filtered through Celite®, and the solvents are removed under reduced pressure. Purification of the residue by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 20 g silicagel, flow 16 mL/min) yields the title compound. LC-MS: $t_R = 0.88$ min, $MH^+ = 252.14$ (conditions 3).

10 *(S)-2-(4-(3-Fluoropyrrolidin-1-yl)phenyl)acetic acid*. A mixture of (S)-ethyl 2-(4-(3-fluoropyrrolidin-1-yl)phenyl)acetate (76 mg, 0.302 mmol) in EtOH (2.0 mL) and aq. 1M NaOH (1.0 mL) is stirred at rt for 2 h. The solvents are removed under reduced pressure, and the residue is diluted with CH_2Cl_2 . The mixture is cooled to 0 °C, and aq. 1M HCl is added to pH3. The phases are separated in a Separator® (Biotage) to yield the crude title product. LC-MS: $t_R = 0.70$ min, $MH^+ = 224.22$ (conditions 3).

15 *Ethyl 2-(4-(3-fluoroazetid-1-yl)phenyl)acetate*. Xantphos (29 mg, 0.049 mmol), $Pd(OAc)_2$ (9 mg, 0.04 mmol) and Cs_2CO_3 (1.20 g, 3.70 mmol) are added to a sol. of ethyl 4-bromophenylacetate (300 mg, 1.23 mmol) in toluene (10 mL) at rt. The mixture is rapidly heated to 100 °C, and 3-fluoroazetid-1-yl hydrochloride (275 mg, 2.47 mmol) is added. The mixture is stirred for 24 h at 100 °C, and is allowed to cool to rt. The mixture is filtered through Celite, and the solvents are removed under reduced pressure. Purification of the residue by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 20 g silicagel, flow 16 mL/min) yields the title compound. LC-MS: $t_R = 0.84$ min, $MH^+ = 238.14$ (conditions 3).

20 *2-(4-(3-Fluoroazetid-1-yl)phenyl)acetic acid*. A mixture of ethyl 2-(4-(3-fluoroazetid-1-yl)phenyl)acetate (130 mg, 0.548 mmol) in EtOH (2.0 mL) and aq. 1M NaOH (1.0 mL) is stirred at rt for 2 h. The solvents are removed under reduced pressure, and the residue is diluted with CH_2Cl_2 . The mixture is cooled to 0 °C, and aq. 1M HCl is added to pH3. The phases are separated in a Separator® (Biotage) to yield the crude title product. LC-MS: $t_R = 0.64$ min, $MH^+ = 210.32$ (conditions 3).

25 *Methyl 2-(4-(vinylloxy)phenyl)acetate*. A mixture of methyl-4-hydroxyphenylacetate (1.66 g, 10 mmol), vinyl acetate (1.84 mL, 20.0 mmol), chloro(1,5-cyclooctadiene)iridium(I) dimer (133 mg, 0.20 mmol), and Na_2CO_3 (636 mg, 6.00 mmol) in toluene (10 mL) is stirred at 100 °C for 2.5 h. Subsequently, water is added, and the mixture is extracted with EtOAc. The combined org. layers are washed with brine, dried over $MgSO_4$, and concentrated under reduced pressure. Purification by automated FC (Biotage, 50 g silicagel, EtOAc / heptane 1:9 → 4:6, 50 mL/min) yields the title compound. LC-MS: $t_R = 0.83$ min (conditions 3).

30 *Methyl 2-(4-cyclopropoxyphenyl)acetate*. At -5°C Et_2Zn (1.0 M in hexanes, 4.8 mL, 4.8 mmol) is added to a sol. of methyl 2-(4-(vinylloxy)phenyl)acetate (384 mg, 2.00 mmol) and CH_2Cl_2 (0.525 mL, 7.20 mmol) in CH_2Cl_2

(15.2 mL). The mixture is stirred between -5 °C and 0 °C for 4 h, and is quenched with aq. sat. NH₄Cl. The mixture is extracted with EtOAc. The combined org. layers are washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Biotage, 25 g silicagel, EtOAc / heptane 1:19 → 4:6, 25 mL/min) yields the title compound. LC-MS: t_R = 0.84 min (conditions 3).

5 *2-(4-Cyclopropoxyphenyl)acetic acid*. A sol. of methyl 2-(4-cyclopropoxyphenyl)acetate (364 mg, 1.76 mmol) and LiOH·H₂O (111 mg, 2.65 mmol) in THF / MeOH / H₂O (3:1:1) (10 ml) is stirred at 0 °C for 3 h. The mixture is acidified with aq. 1 M HCl to pH 3 and extracted with EtOAc. The combined org. layers are washed with brine, dried over MgSO₄, and filtered. Removing the solvents under reduced pressure yields the crude title
10 compound. LC-MS: t_R = 0.71 min (conditions 3).

Ethyl 2-(4-(3,3-difluoropyrrolidin-1-yl)phenyl)acetate. Xantphos (29 mg, 0.049 mmol), Pd(OAc)₂ (9 mg, 0.04 mmol) and Cs₂CO₃ (1.20 g, 3.70 mmol) are added to a sol. of ethyl 4-bromophenylacetate (300 mg, 1.23 mmol) in toluene (10 mL) at rt. The mixture is rapidly heated to 100 °C, and 3,3-difluoropyrrolidine (354 mg, 2.47 mmol) is added. The mixture is stirred for 48 h at 100 °C, and is allowed to cool to rt. The mixture is
15 filtered through Celite®, and the solvents are removed under reduced pressure. Purification of the residue by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 20 g silicagel, flow 16 mL/min) yields the title compound. LC-MS: t_R = 0.92 min, MH⁺ = 270.20 (conditions 3).

2-(4-(3,3-Difluoropyrrolidin-1-yl)phenyl)acetic acid. A mixture of ethyl 2-(4-(3,3-difluoropyrrolidin-1-yl)phenyl)acetate (68 mg, 0.25 mmol) in EtOH (2.0 mL) and aq. 1M NaOH (1.0 mL) is stirred at rt for 1 h. The
20 solvents are removed under reduced pressure, and the residue is diluted with CH₂Cl₂. The mixture is cooled to 0 °C, and aq. 1M HCl is added to pH3. The phases are separated in a Separator® (Biotage) to yield the crude title product. LC-MS: t_R = 0.77 min, MH⁺ = 241.92 (conditions 3).

(R)-Ethyl 2-(4-(3-fluoropyrrolidin-1-yl)phenyl)acetate. Xantphos (29 mg, 0.049 mmol), Pd(OAc)₂ (9 mg, 0.04 mmol) and Cs₂CO₃ (1.20 g, 3.70 mmol) are added to a sol. of ethyl 4-bromophenylacetate (300 mg, 1.23
25 mmol) in toluene (10 mL) at rt. The mixture is rapidly heated to 100 °C, and (R)-3-fluoropyrrolidine (310 mg, 2.47 mmol) is added. The mixture is stirred for 18 h at 100 °C, and is allowed to cool to rt. The mixture is filtered through Celite®, and the solvents are removed under reduced pressure. Purification of the residue by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 20 g silicagel, flow 16 mL/min) yields the title compound. LC-MS: t_R = 0.88 min, MH⁺ = 252.18 (conditions 3).

30 *(R)-2-(4-(3-Fluoropyrrolidin-1-yl)phenyl)acetic acid*. A mixture of (R)-ethyl 2-(4-(3-fluoropyrrolidin-1-yl)phenyl)acetate (250 mg, 1.00 mmol) in EtOH (2.0 mL) and aq. 1M NaOH (1.0 mL) is stirred at rt for 2 h. The solvents are removed under reduced pressure, and the residue is diluted with CH₂Cl₂. The mixture is cooled to 0 °C, and aq. 1M HCl is added to pH3. The phases are separated in a Separator® (Biotage) to yield the crude title product. LC-MS: t_R = 0.70 min, MH⁺ = 224.25 (conditions 3).

The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t _R ; MH ⁺ ; conditions)
49	2-[4-(3,3-Difluoro-azetidin-1-yl)-phenyl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.88 min; 401.05; conditions 3
50	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-azetidin-1-yl)-phenyl]-acetamide	0.86 min; 408.16; conditions 3
51	2-[4-(3,3-Difluoro-azetidin-1-yl)-phenyl]-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.88 min; 413.18; conditions 3
52	2-[4-(3,3-Difluoro-azetidin-1-yl)-phenyl]-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.90 min; 419.17; conditions 3
53	2-(4-Azetidin-1-yl-phenyl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.67 min; 365.15; conditions 3
54	2-(4-Azetidin-1-yl-phenyl)-N-[1-(4-cyano-benzyl)-1H-pyrazol-3-yl]-acetamide	0.64 min; 372.12; conditions 3
55	2-(4-Azetidin-1-yl-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.67 min; 377.05; conditions 3
56	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide	0.63 min; 372.09; conditions 3
57	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide	0.62 min; 378.11; conditions 3
58	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide	0.61 min; 379.07; conditions 3
59	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(2,2,2-trifluoro-ethoxy)-pyridin-3-yl]-acetamide	0.81 min; 427.09; conditions 2
60	2-(4-Azetidin-1-yl-phenyl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.69 min; 383.07; conditions 3
61	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((S)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide	0.89 min; 415.16; conditions 3

62	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-azetidin-1-yl)-phenyl]-acetamide	0.86 min; 401.03; conditions 3
63	2-(4-Cyclopropoxy-phenyl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.79 min; 366.31; conditions 2
64	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(4-cyclopropoxy-phenyl)-acetamide	0.75 min; 373.34; conditions 2
65	2-(4-Cyclopropoxy-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.78 min; 378.35; conditions 2
66	2-(4-Cyclopropoxy-phenyl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.81 min; 384.32; conditions 2
67	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-pyrrolidin-1-yl)-phenyl]-acetamide	0.92 min; 433.06; conditions 3
68	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((R)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide	0.89 min; 415.16; conditions 3
69	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-((R)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide	0.85 min; 404.16; conditions 3
70	N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((R)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide	0.88 min; 397.12; conditions 3
71	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide	0.83 min; 360.04; conditions 2
72	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-azetidin-1-yl)-phenyl]-acetamide	0.82 min; 389.86; conditions 3
73	2-[4-(3-Fluoro-azetidin-1-yl)-phenyl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.85 min; 383.13; conditions 3
74	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-((S)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide	0.86 min; 403.98; conditions 3
75	N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((S)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide	0.88 min; 397.26; conditions 3
76	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-pyrrolidin-1-yl)-phenyl]-acetamide	0.89 min; 421.99; conditions 3

77	2-[4-(3,3-Difluoro-pyrrolidin-1-yl)-phenyl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.91 min; 414.84; conditions 3
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2-(4-Cyclopropylphenyl)acetyl chloride. Prepared according to *general procedure 1* from 2-(4-cyclopropylphenyl)acetic acid (Reger, T. S.; Yang, Z.-Q.; Schlegel, K.-A. S.; Shu, Y.; Mattern, C.; Cube, R.; Rittle, K. E.; McGaughey, G. B.; Hartman, G. D.; T., Cuyue; et al., *Bioorg. Med. Chem. Lett.*, **2011**, 21, 1692; 5 260 mg, 1.48 mmol) and oxalyl chloride (0.192 mL, 2.21 mmol) to yield to the crude, title compound.

Example 78: N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-cyclopropyl-phenyl)-acetamide. Prepared according to *general procedure 2* from 2-(4-cyclopropylphenyl)acetyl chloride (41 mg, 0.21 mmol) and 6-((3-amino-1H-pyrazol-1-yl)methyl)nicotinonitrile (35 mg, 0.18 mmol). The reaction is complete after 17 h. Purification by HPLC yields example 78. LC-MS: $t_R = 0.79$ min, $MH^+ = 358.07$ (conditions 3).

10 *2-(6-Chloropyridin-3-yl)-N-(1-(3,4-difluorobenzyl)-1H-pyrazol-3-yl)acetamide.* Prepared according to *general procedure 3* from 2-(6-chloropyridin-3-yl)acetic acid (257 mg, 1.50 mmol), 1-(3,4-difluorobenzyl)-1H-pyrazol-3-amine (314 mg, 1.50 mmol), HATU (856 mg, 2.25 mmol), and DIPEA (1.28 mL, 7.50 mmol) in DMF (5 mL). The reaction is complete after 1 h. The mixture is partitioned between EtOAc and aq. sat. $NaHCO_3$. The combined org. layers are washed with brine, dried over $MgSO_4$, filtered and evaporated. The crude is purified 15 by automated FC (Biotage, $CH_2Cl_2/0.5\%$ Et_3N in MeOH, 50g silicagel). Another purification by HPLC yields the title compound. LC-MS: $t_R = 0.70$ min, $MH^+ = 363.07$ (conditions 4).

Example 79: 2-(6-Cyclopropyl-pyridin-3-yl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide. A mixture of 2-(6-chloropyridin-3-yl)-N-(1-(3,4-difluorobenzyl)-1H-pyrazol-3-yl)acetamide (100 mg, 0.273 mmol), cyclopropylboronic acid (117 mg, 1.36 mmol), PEPPSI-IPr (27.9 mg, 0.0409 mmol) and K_3PO_4 (290 mg, 1.36 20 mmol) is prepared in toluene (3.4 ml). The mixture is purged and filled with Ar 3x. Then the mixture is stirred at 100°C overnight. The mixture is filtered and evaporated. The residue is directly purified by HPLC to yield example 79. LC-MS: $t_R = 0.54$ min, $MH^+ = 369.07$ (conditions 4).

N-(1-(4-fluorobenzyl)-1H-pyrazol-3-yl)-2-(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl)acetamide. 1-(4-Fluoro-benzyl)-1H-pyrazol-3-ylamine (300 mg, 1.57 mmol) is dissolved in DMF (3.00 mL). 2-(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl)acetic acid (411 mg, 1.57 mmol), EDC-HCl (361 mg, 1.88 mmol), 25 HOBt (256 mg, 1.88 mmol) and DIPEA (1.05 ml, 6.12 mmol) are successively added. The mixture is stirred for 3 h at rt, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Combiflash RF200, column 20 g silicagel, flow rate 35 mL/min, EtOAc / heptane 0:100 → 5:95 → 10:90) yields the title product. LC-MS: $t_R = 0.94$ min, $MH^+ = 436.18$ (conditions 2).

30 *Example 80: N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-pyrazin-2-yl)-phenyl]-acetamide.* N-(1-(4-Fluorobenzyl)-1H-pyrazol-3-yl)-2-(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl)acetamide (90 mg, 0.207 mmol) is dissolved in dioxane (0.55 mL). 2-Chloro-3-methylpyrazine (31.9 mg, 0.248 mmol),

- 65 -

tricyclohexylphosphine (1.45 mg, 0.00517 mmol), Pd₂(dba)₃ (1.89 mg, 0.00207 mmol) and aq. 1.7M potassium phosphate (0.28 ml, 0.48 mmol) are added. The resulting mixture is degassed for 10 min, and is heated in a microwave oven at 150 °C for 30 min. The mixture is allowed to cool to rt. EtOAc is added, and the mixture is washed with brine. The org. layer is dried over MgSO₄, filtered, the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 80. LC-MS: t_R = 0.74 min, MH⁺ = 401.97 (conditions 2).

Example 81: N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-pyrazin-2-yl-phenyl)-acetamide. N-(1-(4-Fluorobenzyl)-1H-pyrazol-3-yl)-2-(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl)acetamide (90 mg, 0.207 mmol) is dissolved in dioxane (0.55 mL). 2-Chloropyrazine (23.7 mg, 0.248 mmol), tricyclohexylphosphine (1.45 mg, 0.00517 mmol), Pd₂(dba)₃ (1.89 mg, 0.00207 mmol) and aq. 1.7M potassium phosphate (0.28 ml, 0.48 mmol) are added. The resulting mixture is degassed for 10 min, and is heated in a microwave oven at 150 °C for 30 min. The mixture is allowed to cool to rt. EtOAc is added, and the mixture is washed with brine. The org. layer is dried over MgSO₄, filtered, the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 81. LC-MS: t_R = 0.76 min, MH⁺ = 387.87 (conditions 2).

Example 82: N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-pyridin-2-yl-phenyl)-acetamide. N-(1-(4-Fluorobenzyl)-1H-pyrazol-3-yl)-2-(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl)acetamide (90 mg, 0.207 mmol) is dissolved in dioxane (0.55 mL). 2-Chloropyridine (23.5 mg, 0.248 mmol), tricyclohexylphosphine (1.45 mg, 0.00517 mmol), Pd₂(dba)₃ (1.89 mg, 0.00207 mmol) and aq. 1.7M potassium phosphate (0.28 ml, 0.48 mmol) are added. The resulting mixture is degassed for 10 min, and is heated in a microwave oven at 150 °C for 30 min. The mixture is allowed to cool to rt. EtOAc is added, and the mixture is washed with brine. The org. layer is dried over MgSO₄, filtered, the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 82. LC-MS: t_R = 0.60 min, MH⁺ = 386.86 (conditions 2).

Example 83: N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-pyridin-3-yl-phenyl)-acetamide. N-(1-(4-Fluorobenzyl)-1H-pyrazol-3-yl)-2-(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl)acetamide (90 mg, 0.207 mmol) is dissolved in dioxane (0.55 mL). 3-Chloropyridine (23.5 mg, 0.248 mmol), tricyclohexylphosphine (1.45 mg, 0.00517 mmol), Pd₂(dba)₃ (1.89 mg, 0.00207 mmol) and aq. 1.7M potassium phosphate (0.28 ml, 0.48 mmol) are added. The resulting mixture is degassed for 10 min, and is heated in a microwave oven at 150 °C for 30 min. The mixture is allowed to cool to rt. EtOAc is added, and the mixture is washed with brine. The org. layer is dried over MgSO₄, filtered, the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 83. LC-MS: t_R = 0.58 min, MH⁺ = 386.92 (conditions 2).

Example 84: N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-pyridin-4-yl-phenyl)-acetamide. N-(1-(4-Fluorobenzyl)-1H-pyrazol-3-yl)-2-(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl)acetamide (90 mg,

- 66 -

0.207 mmol) is dissolved in dioxane (0.55 mL). 4-Chloropyridine (23.5 mg, 0.248 mmol), tricyclohexylphosphine (1.45 mg, 0.00517 mmol), Pd₂(dba)₃ (1.89 mg, 0.00207 mmol) and aq.1.7M potassium phosphate (0.28 ml, 0.48 mmol) are added. The resulting mixture is degassed for 10 min, and is heated in a microwave oven at 150 °C for 30 min. The mixture is allowed to cool to rt. EtOAc is added, and the mixture is washed with brine. The org. layer is dried over MgSO₄, filtered, the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 84. LC-MS: t_R = 0.57 min, MH⁺ = 386.92 (conditions 2).

Example 85: N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-pyrimidin-2-yl-phenyl)-acetamide. N-(1-(4-Fluorobenzyl)-1H-pyrazol-3-yl)-2-(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl)acetamide (90 mg, 0.207 mmol) is dissolved in dioxane (0.55 mL). 2-Chloropyrimidine (23.7 mg, 0.248 mmol), tricyclohexylphosphine (1.45 mg, 0.00517 mmol), Pd₂(dba)₃ (1.89 mg, 0.00207 mmol) and aq.1.7M potassium phosphate (0.28 ml, 0.48 mmol) are added. The resulting mixture is degassed for 10 min, and is heated in a microwave oven at 150 °C for 30 min. The mixture is allowed to cool to rt. EtOAc is added, and the mixture is washed with brine. The org. layer is dried over MgSO₄, filtered, the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 85. LC-MS: t_R = 0.71 min, MH⁺ = 387.87 (conditions 2).

Example 86: N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-pyrimidin-5-yl-phenyl)-acetamide. N-(1-(4-Fluorobenzyl)-1H-pyrazol-3-yl)-2-(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl)acetamide (90 mg, 0.207 mmol) is dissolved in dioxane (0.55 mL). 5-Bromopyrimidine (32.9 mg, 0.248 mmol), tricyclohexylphosphine (1.45 mg, 0.00517 mmol), Pd₂(dba)₃ (1.89 mg, 0.00207 mmol) and aq.1.7M potassium phosphate (0.28 ml, 0.48 mmol) are added. The resulting mixture is degassed for 10 min, and is heated in a microwave oven at 150 °C for 30 min. The mixture is allowed to cool to rt. EtOAc is added, and the mixture is washed with brine. The org. layer is dried over MgSO₄, filtered, the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 86. LC-MS: t_R = 0.71 min, MH⁺ = 387.94 (conditions 2).

Example 87: N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-pyrimidin-4-yl-phenyl)-acetamide. N-(1-(4-Fluorobenzyl)-1H-pyrazol-3-yl)-2-(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl)acetamide (90 mg, 0.207 mmol) is dissolved in dioxane (0.55 mL). 4-Chloropyrimidine (23.7 mg, 0.248 mmol), tricyclohexylphosphine (1.45 mg, 0.00517 mmol), Pd₂(dba)₃ (1.89 mg, 0.00207 mmol) and aq.1.7M potassium phosphate (0.28 ml, 0.48 mmol) are added. The resulting mixture is degassed for 10 min, and is heated in a microwave oven at 150 °C for 30 min. The mixture is allowed to cool to rt. EtOAc is added, and the mixture is washed with brine. The org. layer is dried over MgSO₄, filtered, the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 87. LC-MS: t_R = 0.72 min, MH⁺ = 387.96 (conditions 2).

Example 88: *N*-[1-(3,4-Difluoro-benzyl)-1*H*-pyrazol-3-yl]-2-(6-isopropyl-pyridin-3-yl)-acetamide. A mixture of 2-(6-chloropyridin-3-yl)-*N*-(1-(3,4-difluorobenzyl)-1*H*-pyrazol-3-yl)acetamide (95.6 mg, 0.261 mmol), iron(III) acetylacetonate (5 mg, 0.0142 mmol), 1-methyl-2-pyrrolidone (0.174 mL) in toluene (0.9 mL) and THF (0.9 mL) is stirred for 5 min under Ar. ⁱPrMgCl (2M in THF, 0.52 ml, 1.04 mmol) is added dropwise at rt. The mixture is stirred for further 1 h. ⁱPrMgCl (2M in THF, 0.26 ml, 0.52 mmol) is added again, and the mixture is stirred for 40 min. ⁱPrMgCl (2M in THF, 0.26 ml, 0.52 mmol) is added again, and the mixture is stirred overnight. The mixture is quenched with aq. 1M HCl, and the pH is adjusted to 8. The aq. layer is extracted with EtOAc (3x). The combined org. layers are washed with brine, dried over MgSO₄, filtered and evaporated under reduced pressure. Purification of the crude by HPLC yields the title compound. LC-MS: t_R = 0.56 min, MH⁺ = 371.13; conditions 4.

The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t _R ; MH ⁺ ; conditions)
89	<i>N</i> -[1-(5-Cyano-pyridin-2-ylmethyl)-1 <i>H</i> -pyrazol-3-yl]-2-[4-((<i>R</i>)-3-fluoropyrrolidin-1-yl)-phenyl]-acetamide	0.80 min; 404.92; conditions 3
90	<i>N</i> -[1-(5-Cyano-pyridin-2-ylmethyl)-1 <i>H</i> -pyrazol-3-yl]-2-[4-((<i>S</i>)-3-fluoropyrrolidin-1-yl)-phenyl]-acetamide	0.80 min; 404.92; conditions 3
91	<i>N</i> -[1-(5-Cyano-pyridin-2-ylmethyl)-1 <i>H</i> -pyrazol-3-yl]-2-[4-(3,3-difluoropyrrolidin-1-yl)-phenyl]-acetamide	0.84 min; 422.91; conditions 3

Example 92: *N*-[1-(4-Fluoro-benzyl)-1*H*-pyrazol-3-yl]-2-[4-(5-methyl-pyrimidin-4-yl)-phenyl]-acetamide. *N*-(1-(4-Fluorobenzyl)-1*H*-pyrazol-3-yl)-2-(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl)acetamide (90 mg, 0.207 mmol) is dissolved in dioxane (0.55 mL). 4-Chloro-5-methylpyrimidine (31.7 mg, 0.248 mmol), tricyclohexylphosphine (1.45 mg, 0.00517 mmol), Pd₂(dba)₃ (1.89 mg, 0.00207 mmol) and aq. 1.7M potassium phosphate (0.28 ml, 0.48 mmol) are added. The resulting mixture is degassed for 10 min, and is heated in a microwave oven at 150 °C for 30 min. The mixture is allowed to cool to rt. EtOAc is added, and the mixture is washed with brine. The org. layer is dried over MgSO₄, filtered, the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 92. LC-MS: t_R = 0.79 min, MH⁺ = 401.98 (conditions 2).

Methyl 5-((*tert*-butyldimethylsilyl)oxy)picolinate. At 0 °C, *tert*-butyldimethylsilyl chloride (2.71 g, 18.0 mmol) is added to a sol. of methyl 5-hydroxypyridine-2-carboxylate (2.30 g, 15.0 mmol) and imidazole (1.53 g, 22.5 mmol) in DMF (30 mL). The mixture is allowed to warm to rt, and is stirred overnight. More imidazole (11.3 mmol) and TBDMS-Cl (9.00 mmol) are added, and the mixture is stirred at rt for 2 h. The mixture is quenched

- 68 -

with aq. sat. NaHCO₃, and is extracted with EtOAc. The comb. org. layers are washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by FC (EtOAc/heptane 10:90 → 60:40) yields the title compound. LC-MS: t_R = 0.96 min, MH⁺ = 268.34 (conditions 3).

5 *5-((tert-Butyldimethylsilyloxy)pyridin-2-yl)methanol*. At 0 °C, DIBAL (20 wt% solution in toluene, 1.2 M, 28.6 mL, 34.1 mmol) is slowly added to a sol. of methyl 5-((tert-butylidimethylsilyloxy)picolinate (3.65 g, 13.6 mmol) in CH₂Cl₂ (68 mL). The mixture is stirred at 0 °C for 2 h. More DIBAL (11.4 mL) is added and the mixture is stirred at 0 °C for an additional hour. More DIBAL (5.7 mL) is added and the mixture is stirred at 0 °C for an additional hour. Water (2.24 mL), followed by aq. 15% NaOH (2.24 mL) and water (5.6 mL) are added, along
10 some THF, and the mixture is stirred at rt for 30 min. MgSO₄ was added, the mixture is stirred for 20 min, filtrated, and the filtrate is concentrated under reduced pressure to yield the crude title product. LC-MS: t_R = 0.68 min, MH⁺ = 240.35 (conditions 3).

5-((tert-Butyldimethylsilyloxy)pyridin-2-yl)methyl methanesulfonate. At 0 °C, Et₃N (0.835 mL, 6.00 mmol) and methansulfonyl chloride (0.341 mL, 4.40 mmol) are added to a sol. of (5-((tert-butylidimethylsilyloxy)pyridin-2-yl)methanol (958 mg, 4.00 mmol) in CH₂Cl₂ (20 mL). The mixture is stirred at 0 °C for 20 min. Aq. sat. NaHCO₃ is added, and the mixture is extracted with EtOAc. The comb. org. layers are washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title compound.

5-((tert-Butyldimethylsilyloxy)-2-((3-nitro-1H-pyrazol-1-yl)methyl)pyridine. Prepared according to *general procedure 4* with NaH (60% in oil, 76.5 mg, 3.19 mmol), (5-((tert-butylidimethylsilyloxy)pyridin-2-yl)methyl methanesulfonate (1.06 g, 3.34 mmol), and 5-nitro-1H-pyrazole (343 mg, 3.03 mmol) in DMF (15 mL). The reaction is complete after 3 h at rt. Purification of the crude by FC (EtOAc / heptane 20:80 → 80:20) yields the title compound. LC-MS: t_R = 0.97 min, MH⁺ = 337.24 (conditions 3).

1-((5-((tert-Butyldimethylsilyloxy)pyridin-2-yl)methyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Zn (163 mg, 2.50 mmol) and 5-((tert-butylidimethylsilyloxy)-2-((3-nitro-1H-pyrazol-1-yl)methyl)pyridine (83.6 mg, 0.25 mmol) in acetone (2.5 mL) and aq. sat. NH₄Cl (0.5 mL). The reaction is complete after 20 min at rt and yields the crude title compound. LC-MS: t_R = 0.75 min, MH⁺ = 305.24 (conditions 3).

N-(1-((5-((tert-Butyldimethylsilyloxy)pyridin-2-yl)methyl)-1H-pyrazol-3-yl)-2-(4-isopropylphenyl)acetamide.
30 Prepared according to *general procedure 3*, starting from 2-(4-isopropylphenyl)acetic acid (234 mg, 1.31 mmol) and 1-((5-((tert-butylidimethylsilyloxy)pyridin-2-yl)methyl)-1H-pyrazol-3-amine (400 mg, 1.31 mmol). LC-MS: t_R = 1.02 min, MH⁺ = 465.25 (conditions 3).

N-(1-((5-Hydroxypyridin-2-yl)methyl)-1H-pyrazol-3-yl)-2-(4-isopropylphenyl)acetamide. At 0 °C, a sol. of TBAF (1 M in THF, 0.545 mL, 0.545 mmol) is added to a sol. of N-(1-((5-((tert-butylidimethylsilyloxy)pyridin-2-

- 69 -

yl)methyl)-1H-pyrazol-3-yl)-2-(4-isopropylphenyl)acetamide (211 mg, 0.454 mmol) in THF (4.5 mL). The mixture is stirred at 0 °C for 20 min, quenched with aq. sat. NaHCO₃ and extracted with EtOAc. The combined org. layers are washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by FC (MeOH / CH₂Cl₂ 2:98 → 5:95) yields the title compound. LC-MS: t_R = 0.71 min, MH⁺ = 351.32 (conditions 3).

Example 93: 2-(4-Isopropyl-phenyl)-N-{1-[5-(2,2,2-trifluoro-ethoxy)-pyridin-2-ylmethyl]-1H-pyrazol-3-yl}-acetamide. A mixture of N-(1-((5-hydroxypyridin-2-yl)methyl)-1H-pyrazol-3-yl)-2-(4-isopropylphenyl)acetamide (28 mg, 0.08 mmol), Cs₂CO₃ (39.1 mg, 0.12 mmol) and 1,1,1-trifluoro-2-iodoethane (0.00946 mL, 0.096 mmol) in CH₃CN (1 mL) is stirred at 70 °C, and for 20 min at 100 °C in a microwave oven. The solvents are removed under reduced pressure. Purification of the residue by HPLC yields example 93. LC-MS: t_R = 0.91 min, MH⁺ = 333.20 (conditions 3).

(5-Bromopyridin-2-yl)methyl methanesulfonate. To a sol. of 5-bromo-2-(hydroxymethyl)pyridine (2.50 g, 13.3 mmol) and Et₃N (2.78 mL, 19.9 mmol) in CH₂Cl₂ (67 mL) is added at 0 °C methansulfonyl chloride (1.14 mL, 14.6 mmol). The mixture is stirred at 0 °C for 15 min. Aq. sat. NaHCO₃ is added, and the phases are separated. The org. layer is washed with brine, dried over Na₂SO₄, filtered, and the solvents are evaporated under reduced pressure. Purification of the crude was purified by automated FC (Biotage, 100g KP column, EtOAc / heptane 0 → 30%) yields the title product. LC-MS: t_R = 0.57 min, MH⁺ = 268.15 (conditions 4).

5-Bromo-2-((3-nitro-1H-pyrazol-1-yl)methyl)pyridine. Prepared according to *general procedure 4* with NaH (60% in oil, 378 mg, 9.45 mmol), (5-bromopyridin-2-yl)methyl methanesulfonate (2.90 g, 10.8 mmol), and 5-nitro-1H-pyrazole (1.07 g, 9.00 mmol) in DMF (25 mL). The reaction is complete after 2 h at rt. Purification of the crude by FC (EtOAc / heptane 0:100 → 50:50) yields the title compound. LC-MS: t_R = 0.66 min, MH⁺ = 285.02 (conditions 4).

1-((5-Bromopyridin-2-yl)methyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (2.42 g, 43.8 mmol) and 5-bromo-2-((3-nitro-1H-pyrazol-1-yl)methyl)pyridine (1.24 g, 4.38 mmol) in EtOH (50 mL), and aq. sat. NH₄Cl (6.0 mL). The reaction is complete overnight at 70 °C, and yields the crude title compound. LC-MS: t_R = 0.39 min, MH⁺ = 253.09 (conditions 4).

Example 94: N-[1-(5-Bromo-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. Prepared according to *general procedure 3*, starting from 2-(4-isopropylphenyl)acetic acid (232 mg, 1.30 mmol) and 1-((5-bromopyridin-2-yl)methyl)-1H-pyrazol-3-amine (329 mg, 1.30 mmol). LC-MS: t_R = 0.83 min, MH⁺ = 413.08 (conditions 4).

tert-Butyl 2-(5,6-difluoropyridin-3-yl)acetate. According to *general procedure 6*, from 5-bromo-2,3-difluoropyridine (1.16 g, 6.00 mmol), 2-tert-butoxy-2-oxoethylzinc chloride (0.5M in Et₂O, 14.4 mL, 7.20 mmol), Q-Phos (432 mg, 0.60 mmol), and Pd₂(dba)₃ (173 mg, 0.30 mmol) in THF (18 mL). Purification of the crude by

- 70 -

automated FC(Biotage, EtOAc / heptane 20:80 → 40:60), and subsequent purification by HPLC, yields the title product. LC-MS: t_R = 0.81 min (conditions 4).

2-(5-Fluoro-6-(2,2,2-trifluoroethoxy)pyridin-3-yl)acetic acid. NaH (60% in oil, 69.1 mg, 1.73 mmol) is added to 2,2,2-trifluoroethanol (8 mL) at 0 °C, and the mixture is stirred for 15min at rt. tert-Butyl 2-(5,6-difluoropyridin-3-yl)acetate (200 mg, 0.864 mmol) is added, and the mixture is stirred at 120 °C for 3 h, and at 140 °C (microwave) for 1h. The mixture was allowed to cool to rt, and LiOH·H₂O (18.1 mg, 0.432 mmol) and water (2 mL) were added. The mixture is stirred at rt for 1 h, and water is added. The mixture is washed with CH₂Cl₂. The water layer is adjust to pH 1-3 with aq. HCl, and is extracted 3x with CH₂Cl₂. The combined org. layers are dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure. The crude is purified by prep. HPLC, and the combined product-containing fractions are partitioned between water and CH₂Cl₂. The combined org. layers are dried over Na₂SO₄, filtered and evaporated under reduced pressure to yield the title compound. LC-MS: t_R = 0.67 min, MH⁺ = 254.08 (conditions 3).

Example 95: *N*-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[5-fluoro-6-(2,2,2-trifluoro-ethoxy)-pyridin-3-yl]-acetamide. Prepared according to *general procedure 3*, starting from 2-(5,6-difluoropyridin-3-yl)acetic acid (50.6 mg, 0.20 mmol) and 1-(3,4-difluorobenzyl)-1H-pyrazol-3-amine (41.8 mg, 0.20 mmol). LC-MS: t_R = 0.84 min, MH⁺ = 445.11 (conditions 4).

Example 96: *N*-[1-(5-Cyclopropyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. A mixture of example 94 (104 mg, 0.25 mmol), cyclopropylboronic acid (64.4 mg, 0.75 mmol), K₂CO₃ (51.8 mg, 0.375 mmol) and Pd(PPh₃)₄ (28.9 mg, 0.025 mmol) in dioxane (1 mL) is degased and is stirred in a closed vial at 110 °C overnight. The mixture is allowed to cool to rt, and is diluted with water and extracted with EtOAc. The org. layer is washed with brine, dried over MgSO₄, filtered, and the solvents are evaporated under reduced pressure. The crude was purified by prep. HPLC to yield example 96. LC-MS: t_R = 0.72 min, MH⁺ = 375.18 (conditions 4).

Example 97: 2-(4-Isopropyl-phenyl)-*N*-[1-(5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide. A mixture of example 94 (104 mg, 0.25 mmol), trimethylboroxine (31.4 mg, 0.25 mmol), K₂CO₃ (51.8 mg, 0.375 mmol) and Pd(PPh₃)₄ (28.9 mg, 0.025 mmol) in dioxane (1 mL) is degased and is stirred in a closed vial at 110 °C overnight. The mixture is allowed to cool to rt, and is diluted with water and extracted with EtOAc. The org. layer is washed with brine, dried over MgSO₄, filtered, and the solvents are evaporated under reduced pressure. The crude was purified by prep. HPLC to yield example 97. LC-MS: t_R = 0.67 min, MH⁺ = 349.15 (conditions 4).

Example 98: *N*-[1-(5-Isobutyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. A mixture of example 94 (60 mg, 0.144 mmol), (2-methylpropyl)boronic acid (44 mg, 0.431 mmol), K₂CO₃ (30 mg, 0.22 mmol) and Pd(PPh₃)₄ (16.6 mg, 0.0144 mmol) in dioxane (0.8 mL) is degased and is stirred in a closed vial at 110 °C overnight. The mixture is allowed to cool to rt, and is diluted with water and extracted with EtOAc. The

- 71 -

org. layer is washed with brine, dried over MgSO₄, filtered, and the solvents are evaporated under reduced pressure. The crude was purified by prep. HPLC to yield example 98. LC-MS: t_R = 0.80 min, MH⁺ = 391.38 (conditions 4).

5 *tert-Butyl 2-(6-(azetidin-1-yl)pyridin-3-yl)acetate*. According to *general procedure 6*, from 2-(azetidin-1-yl)-5-bromopyridine (WO 2010139731, 545 mg, 1.56 mmol), 2-*tert*-butoxy-2-oxoethylzinc chloride (0.5M in diethyl ether, 5.62 ml, 2.81 mmol), Pd₂(dba)₃ (117 mg, 0.13 mmol) and Q-PHOS (182 mg, 0.26 mmol) in THF (10.0 mL). The reaction is complete after 1 h at 80 °C. Purification of the crude by automated FC (CombiFlash, column 20 g, flow rate 35 mL/min, EtOAc / heptane 0 / 100 → 10:90 → 30 → 70) yields the title product. LC-MS: t_R = 0.60 min, MH⁺ = 249.10 (conditions 3).

10 *2-(6-(Azetidin-1-yl)pyridin-3-yl)acetic acid*. According to *general procedure 7*, from *tert*-butyl 2-(6-(azetidin-1-yl)pyridin-3-yl)acetate (480 mg, 1.93 mmol) and HCl (4M in dioxane, 15 mL) in CH₂Cl₂ (10 mL). The reaction is complete after 2 days at rt to yield the crude title product.

15 *Example 99: 2-(6-Azetidin-1-yl-pyridin-3-yl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide*. Prepared according to *general procedure 3*, starting from 2-(6-(azetidin-1-yl)pyridin-3-yl)acetic acid (371 mg, 1.93 mmol) and 1-(3,4-difluorobenzyl)-1H-pyrazol-3-amine (474 mg, 2.03 mmol). LC-MS: t_R = 0.64 min, MH⁺ = 383.95 (conditions 3).

20 *Example 100: N-[1-(5-Ethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide*. A mixture of example 94 (60 mg, 0.144 mmol), ethylboronic acid (31.9 mg, 0.431 mmol), K₂CO₃ (30 mg, 0.22 mmol) and Pd(PPh₃)₄ (16.6 mg, 0.0144 mmol) in dioxane (0.8 mL) is degassed and is stirred in a closed vial at 110 °C overnight. Ethylboronic acid (31.9 mg, 0.431 mmol), K₂CO₃ (29.8 mg, 0.216 mmol) and Pd(PPh₃)₄ (16.6 mg, 0.0144 mmol) are added again, and the mixture is stirred at 110 °C for 7 h. The mixture is allowed to cool to rt, and is diluted with water and extracted with EtOAc. The org. layer is washed with brine, dried over MgSO₄, filtered, and the solvents are evaporated under reduced pressure. The crude was purified by prep. HPLC to yield example 100. LC-MS: t_R = 0.71 min, MH⁺ = 363.35 (conditions 4).

25 The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t _R ; MH ⁺ ; conditions)
101	2-(6-Azetidin-1-yl-pyridin-3-yl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.61 min; 377.85; conditions 3
102	2-(6-Azetidin-1-yl-pyridin-3-yl)-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	0.53 min; 373.99; conditions 3

103	2-(6-Azetidin-1-yl-pyridin-3-yl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.62 min; 365.98; conditions 3
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Example 104: 2-(4-Isopropyl-phenyl)-N-{1-[5-(2-methoxy-ethoxy)-pyridin-2-ylmethyl]-1H-pyrazol-3-yl}-acetamide. A mixture of N-(1-((5-hydroxypyridin-2-yl)methyl)-1H-pyrazol-3-yl)-2-(4-isopropylphenyl)acetamide (35 mg, 0.10 mmol), 2-methoxyethanol (0.0118 mL, 0.15 mmol), and PPh₃ (39.3 mg, 0.15 mmol) in THF (2 mL) at 0 °C is treated with diisopropyl azodicarboxylate (0.0295 mL, 0.15 mmol). The mixture is allowed to warm to rt and is stirred overnight. The mixture is conc. and purified by prep. HPLC to yield example 104. LC-MS: t_R = 0.72 min, MH⁺ = 409.34 (conditions 4).

Example 105: N-[1-(5-Isopropoxy-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. A mixture of N-(1-((5-hydroxypyridin-2-yl)methyl)-1H-pyrazol-3-yl)-2-(4-isopropylphenyl)acetamide (35 mg, 0.10 mmol), 2-propanol (0.0115 mL, 0.15 mmol), and PPh₃ (39.3 mg, 0.15 mmol) in THF (2 mL) at 0 °C is treated with diisopropyl azodicarboxylate (0.0295 mL, 0.15 mmol). The mixture is allowed to warm to rt and is stirred overnight. The mixture is conc. and purified by prep. HPLC to yield example 105. LC-MS: t_R = 0.79 min, MH⁺ = 393.36 (conditions 4).

(5-Fluoropyridin-2-yl)methyl methanesulfonate. To a sol. of (5-fluoropyridin-2-yl)methanol (339 mg, 2.64 mmol) and Et₃N (0.551 mL, 3.96 mmol) in CH₂Cl₂ (13 mL) is added at 0 °C methansulfonyl chloride (225 μL, 2.9 mmol). The mixture is stirred at 0 °C for 10 min. Aq. sat. NaHCO₃ is added, and the phases are separated. The aq. layer is extracted with CH₂Cl₂ several times. The combined org. layers are washed with brine, dried over Na₂SO₄, filtered and evaporated under reduced pressure to yield the example 106. LC-MS: t_R = 0.45 min, MH⁺ = 206.22 (conditions 4).

5-Fluoro-2-((3-nitro-1H-pyrazol-1-yl)methyl)pyridine. Prepared according to *general procedure 4* with NaH (60% in oil, 100 mg, 2.51 mmol), (5-fluoropyridin-2-yl)methyl methanesulfonate (589 mg, 2.87 mmol), and 5-nitro-1H-pyrazole (285 mg, 2.39 mmol) in DMF (6.4 mL). The reaction is complete after 2 h. Purification of the crude by automated FC (Biotage, EtOAc / heptane 0:100 → 50:50, 100 g silicagel) yields the title compound. LC-MS: t_R = 0.56 min, MH⁺ = 223.20 (conditions 4).

1-((5-Fluoropyridin-2-yl)methyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (1.32 g, 23.9 mmol) and 5-fluoro-2-((3-nitro-1H-pyrazol-1-yl)methyl)pyridine (531 mg, 2.39 mmol) in EtOH (27 mL), and aq. sat. NH₄Cl (3.3 mL). The reaction is complete after 5 h at 75 °C, and yields the crude title compound. LC-MS: t_R = 0.29 min, MH⁺ = 193.32 (conditions 4).

Example 106: N-[1-(5-Fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. Prepared according to general procedures 1 and 2, starting from 2-(4-isopropylphenyl)acetic acid (154 mg, 0.84 mmol) and 1-((5-fluoropyridin-2-yl)methyl)-1H-pyrazol-3-amine (145 mg, 0.747 mmol). LC-MS: t_R = 0.86 min, MH⁺ = 353.02 (conditions 3).

- 73 -

Example 107: N-[1-(5-Dimethylamino-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide.

To a degassed mixture of Example 94 (62.6 mg, 0.15 mmol), Pd₂(dba)₃ (6.87 mg, 0.0075 mmol), RuPhos (7 mg, 0.015 mmol), ^tBuONa (28.8 mg, 0.3 mmol), and molecular sieve (4Å powder, a spatula) in toluene (2 mL) is added Me₂NH (2M in THF, 0.375 ml, 0.75 mmol). The mixture is stirred in a closed vial at 110°C overnight.

5 The mixture is cooled to rt. The mixture is partitioned between EtOAc and aq. sat. NaHCO₃, and the org. layer is washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 107. LC-MS: t_R = 0.65 min, MH⁺ = 378.20 (conditions 4).

Example 108: N-{1-[5-((S)-3-Fluoro-pyrrolidin-1-yl)-pyridin-2-ylmethyl]-1H-pyrazol-3-yl}-2-(4-isopropyl-phenyl)-acetamide. To a degassed mixture of Example 94 (62.6 mg, 0.15 mmol), Pd₂(dba)₃ (6.87 mg, 0.0075 mmol),

10 RuPhos (7 mg, 0.015 mmol), ^tBuONa (28.8 mg, 0.3 mmol), and molecular sieve (4Å powder, a spatula) in toluene (2 mL) is added (S)-3-fluoropyrrolidine (48.5 mg, 0.375 mmol). The mixture is stirred in a closed vial at 110°C overnight. The mixture is cooled to rt. The mixture is partitioned between EtOAc and aq. sat. NaHCO₃, and the org. layer is washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 108. LC-MS: t_R = 0.68 min, MH⁺ = 422.22
15 (conditions 4).

(5-(Trifluoromethyl)pyridin-2-yl)methyl methanesulfonate. To a sol. of (5-(trifluoromethyl)pyridin-2-yl)methanol (480 mg, 2.71 mmol) and Et₃N (0.566 mL, 4.06 mmol) in CH₂Cl₂ (13 mL) is added at 0 °C methansulfonyl chloride (231 μL, 2.98 mmol). The mixture is stirred at 0 °C for 10 min. Aq. sat. NaHCO₃ is added, and the phases are separated. The aq. layer is extracted with CH₂Cl₂ several times. The combined org. layers are
20 washed with brine, dried over Na₂SO₄, filtered and evaporated under reduced pressure to yield the title crude product. LC-MS: t_R = 0.63 min, MH⁺ = 256.08 (conditions 4).

2-((3-Nitro-1H-pyrazol-1-yl)methyl)-5-(trifluoromethyl)pyridine. Prepared according to *general procedure 4* with NaH (60% in oil, 94.6 mg, 2.36 mmol), (5-(trifluoromethyl)pyridin-2-yl)methyl methanesulfonate (690 mg, 2.70 mmol), and 5-nitro-1H-pyrazole (268 mg, 2.25 mmol) in DMF (6.0 mL). The reaction is complete after 2 h.
25 Purification of the crude by automated FC (Biotage, EtOAc / heptane 0:100 → 50:50, 100 g silicagel) yields the title compound. LC-MS: t_R = 0.70 min, MH⁺ = 273.10 (conditions 4).

1-((5-(Trifluoromethyl)pyridin-2-yl)methyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* with Fe (1.10 g, 20.0 mmol) and 2-((3-nitro-1H-pyrazol-1-yl)methyl)-5-(trifluoromethyl)pyridine (544 mg, 2.00 mmol) in EtOH (23 mL), and aq. sat. NH₄Cl (2.8 mL). The reaction is complete overnight at 75 °C, and yields
30 the crude title compound. LC-MS: t_R = 0.44 min, MH⁺ = 243.12 (conditions 4).

Example 109: 2-(4-Isopropyl-phenyl)-N-[1-(5-trifluoromethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide. Prepared according to *general procedures 1 and 2*, starting from 2-(4-isopropylphenyl)acetic acid (35.6 mg, 0.20 mmol) and 1-((5-(trifluoromethyl)pyridin-2-yl)methyl)-1H-pyrazol-3-amine (48.4 mg, 0.20 mmol). LC-MS: t_R = 0.86 min, MH⁺ = 403.14 (conditions 4).

- 74 -

2-Chloro-6-(hydroxymethyl)nicotinonitrile. Conc. H₂SO₄ (3 drops) is added to a sol. of 2-chloro-3-cyano-6-methylpyridine 1-oxide (Kiss, L. E.; Ferreira, H. S.; Torrao, L.; Bonifacio, M. J.; Palma, P. N.; Soares-da-Silva, P.; Learmonth, D. A., *J. Med. Chem.*, **2010**, 53, 3396, 512 g, 30.4 mmol) in Ac₂O (59.7 mL, 626 mmol) at rt. The mixture is stirred at 110 °C for 1h and is allowed to cool to rt. The mixture is poured slowly on ice water and stirred with aq. sat. NaHCO₃ for 15min. The aq. layer is extracted with EtOAc (3x), and the combined org. layers are washed with brine, dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure. The crude is taken up in MeOH (75 mL), water (38 mL), and K₂CO₃ (13.8 g, 100 mmol) is added. The mixture is stirred at rt for 30 min. The solvents are removed under reduced pressure. The residue is diluted with CH₂Cl₂ (400mL) and dried over Na₂SO₄ under stirring for 60min. The mixture is filtered, washed with MeOH, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Biotage, 100g KP column, MeOH / CH₂Cl₂ 1:99 → 3:97) yields the title product. LC-MS: t_R = 0.42 min, MH⁺ = 199.00 (conditions 4).

(6-Chloro-5-cyanopyridin-2-yl)methyl methanesulfonate. To a sol. of 2-chloro-6-(hydroxymethyl)nicotinonitrile (1.95 g, 11.5 mmol) and Et₃N (2.41 mL, 17.3 mmol) in CH₂Cl₂ (60 mL) is added at 0 °C methansulfonyl chloride (0.986 mL, 12.7 mmol). The mixture is stirred at 0 °C for 10 min. Aq. sat. NaHCO₃ is added, and the phases are separated. The aq. layer is extracted with CH₂Cl₂ several times. The combined org. layers are washed with brine, dried over Na₂SO₄, filtered and evaporated under reduced pressure to yield the title crude product. LC-MS: t_R = 0.58 min (conditions 4).

2-Chloro-6-((3-nitro-1H-pyrazol-1-yl)methyl)nicotinonitrile. Prepared according to *general procedure 4* with NaH (60% in oil, 402 mg, 10.1 mmol), (6-chloro-5-cyanopyridin-2-yl)methyl methanesulfonate (2.84 g, 11.5 mmol), and 5-nitro-1H-pyrazole (1.08 g, 9.58 mmol) in DMF (25 mL). The reaction is complete after 2 h. Purification of the crude by automated FC (Biotage, EtOAc / heptane 5:95 → 80:20, 100 g silicagel) yields the title compound. LC-MS: t_R = 0.66 min (conditions 4).

6-((3-Amino-1H-pyrazol-1-yl)methyl)-2-chloronicotinonitrile. Prepared according to *general procedure 5* with Fe (3.96 g, 71.6 mmol) and 2-chloro-6-((3-nitro-1H-pyrazol-1-yl)methyl)nicotinonitrile (1.89 g, 7.16 mmol) in EtOH (82 mL), and aq. sat. NH₄Cl (10 mL). The reaction is complete overnight at 75 °C, and yields the crude title compound. LC-MS: t_R = 0.41 min, MH⁺ = 234.16 (conditions 4).

Example 110: N-[1-(6-Chloro-5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. Prepared according to general procedures 1 and 2, starting from 2-(4-isopropylphenyl)acetic acid (831 mg, 4.66 mmol) and 6-((3-amino-1H-pyrazol-1-yl)methyl)-2-chloronicotinonitrile (1.09 g, 4.66 mmol). LC-MS: t_R = 0.83 min, MH⁺ = 394.08 (conditions 3).

Ethyl 2-(4-(diethylamino)phenyl)acetate. A mixture of ethyl 4-bromophenylacetate (500 mg, 2.06 mmol) Et₂NH (181 mg, 2.47 mmol), DavePhos (64.8 mg, 0.165 mmol), K₃PO₄ (611 mg, 2.88 mmol) and Pd₂(dba)₃ (94.2 mg, 0.103 mmol) in 1,2-dimethoxyethane (3 mL) is heated to 120 °C for 20 min in a microwave oven. The mixture

- 75 -

is allowed to cool to rt, and Et₂NH (181 mg, 2.47 mmol), DavePhos (64.8 mg, 0.165 mmol), K₃PO₄ (611 mg, 2.88 mmol) and Pd₂(dba)₃ (94.2 mg, 0.103 mmol) are added again. The mixture is stirred at 120 °C for 54 h, and is allowed to cool to rt. The suspension is filtered through Celite®, and the precipitate is washed with CH₂Cl₂. The solvents are removed under reduced pressure. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 0.54 min, MH⁺ = 236.34 (conditions 3).

2-(4-(Diethylamino)phenyl)acetic acid. Aq. 2.5M NaOH (0.5 mL) is added to a sol. of ethyl 2-(4-(diethylamino)phenyl)acetate (73 mg, 0.31 mmol) in EtOH (1 mL). The mixture is stirred for 1 h at rt, and the solvents are partially removed under reduced pressure. The residue is diluted in CH₂Cl₂, and aq. 1M HCl is added to adjust the pH to 3. Separation of the phases with a Separator® (Biotage), and removing the solvents under reduced pressure yields to title product. LC-MS: t_R = 0.42 min, MH⁺ = 208.15 (conditions 3).

The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t _R ; MH ⁺ ; conditions)
111	2-(6-Azetidin-1-yl-pyridin-3-yl)-N-[1-(4-cyano-benzyl)-1H-pyrazol-3-yl]-acetamide	0.60 min; 373.01; conditions 3
112	2-(4-Diethylamino-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.64 min; 392.89; conditions 3
113	2-(4-Diethylamino-phenyl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.66 min; 398.98; conditions 3
114	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(4-diethylamino-phenyl)-acetamide	0.62 min; 388.00; conditions 3

Example 115: N-[1-(5-Cyano-6-ethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide.

Example 110 (80 mg, 0.203 mmol) is mixed with ethylboronic acid (45 mg, 0.61 mmol), K₂CO₃ (42.1 mg, 0.305 mmol) and Pd(PPh₃)₄ (23.5 mg, 0.0203 mmol) in dioxane (1 mL), and the mixture is degassed. The mixture is stirred in a closed vial at 110 °C overnight, and is allowed to cool to rt. The mixture is diluted with water and extracted with EtOAc. The org. layer is washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. The crude is mixed again with ethylboronic acid (45 mg, 0.609 mmol), K₂CO₃ (42.1 mg, 0.305 mmol), and Pd(PPh₃)₄ (23.5 mg, 0.0203 mmol) in dioxane (1 mL), and the mixture is degassed. The mixture is stirred in a closed vial at 110 °C overnight, and is allowed to cool to rt. The mixture is diluted with water and extracted with EtOAc. The org. layer is washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 115. LC-MS: t_R = 0.85 min, MH⁺ = 388.13 (conditions 4).

- 76 -

Example 116: *N*-[1-(5-Cyano-6-methoxy-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. To a suspension of NaH (60% in oil, 11.6 mg, 0.289 mmol) in MeOH (1.5 mL) at 0 °C is added Example 110 (80 mg, 0.19 mmol). The mixture is stirred for 3 h at 0 °C, and is warmed to 50 °C. The mixture is stirred at 50 °C overnight. The mixture is partitioned between water and EtOAc, and the org. layer is washed with brine, dried over MgSO₄, filtered and evaporated under reduced pressure. Purification of the crude by HPLC yields example 116. LC-MS: t_R = 0.84 min, MH⁺ = 390.13 (conditions 4).

Example 117: *N*-[1-[5-Cyano-6-(2,2,2-trifluoro-ethoxy)-pyridin-2-ylmethyl]-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. To a suspension of NaH (60% in oil, 11.6 mg, 0.289 mmol) in CF₃CH₂OH (1.5 mL) at 0 °C is added Example 110 (80 mg, 0.193 mmol). The mixture is stirred for 3 h at 0 °C, and is warmed to 50 °C. The mixture is stirred at 50 °C overnight. The mixture is partitioned between water and EtOAc, and the org. layer is washed with brine, dried over MgSO₄, filtered and evaporated under reduced pressure. Purification of the crude by HPLC yields example 117. LC-MS: t_R = 0.89 min, MH⁺ = 458.13 (conditions 4).

Example 118: *N*-[1-(5-Cyano-6-isopropoxy-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. To a suspension of NaH (60% in oil, 11.6 mg, 0.289 mmol) in *i*PrOH (1.5 mL) at 0 °C is added Example 110 (80 mg, 0.193 mmol). The mixture is stirred for 3 h at 0 °C, and is warmed to 50 °C. The mixture is stirred at 50 °C overnight. The mixture is partitioned between water and EtOAc, and the org. layer is washed with brine, dried over MgSO₄, filtered and evaporated under reduced pressure. Purification of the crude by HPLC yields example 118. LC-MS: t_R = 0.90 min, MH⁺ = 417.93 (conditions 4).

5-Bromo-2-(3,3-difluoropyrrolidin-1-yl)pyridine. A mixture of 2,5-dibromopyridine (1.00 g, 4.22 mmol), 3,3-difluoropyrrolidine hydrochloride (1.33 g, 9.04 mmol) and DBU (2.70 mL, 18.1 mmol) in DMSO (30 mL) is stirred at 80 °C for 72 h. The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Büchi, 20 g silicagel, EtOAc / heptane 2:98 → 3:97 → 5:95 → 10:90 → 15:85) yields the title product. LC-MS: t_R = 0.78 min, MH⁺ = 264.91 (conditions 3).

tert-Butyl 2-(6-(3,3-difluoropyrrolidin-1-yl)pyridin-3-yl)acetate. According to *general procedure 6*, from 5-bromo-2-(3,3-difluoropyrrolidin-1-yl)pyridine (300 mg, 1.14 mmol), 2-*tert*-butoxy-2-oxoethylzinc chloride (0.5M in diethyl ether, 3.1 mL, 1.25 mmol), Pd₂(dba)₃ (52.2 mg, 0.057 mmol) and Q-PHOS (81 mg, 0.114 mmol) in THF (3 mL). The reaction is complete after 3 h at 90 °C. Purification of the crude by automated FC (Büchi, 10 g silicagel, flow 10 mL/min, EtOAc / heptane 2:98 → 5:95 → 10:90) yields the title product. LC-MS: t_R = 0.65 min, MH⁺ = 299.17 (conditions 3).

2-(6-(3,3-Difluoropyrrolidin-1-yl)pyridin-3-yl)acetic acid. According to *general procedure 7*, *tert*-butyl 2-(6-(3,3-difluoropyrrolidin-1-yl)pyridin-3-yl)acetate (50 mg, 0.168 mmol) and HCl (4M in dioxane, 1 mL) in CH₂Cl₂ (1 mL). The reaction is complete after 50 h at rt. Removing the solvents under reduced pressure leads to the title crude product. LC-MS: t_R = 0.42 min, MH⁺ = 242.90 (conditions 3).

- 77 -

5 *5-Bromo-N,N-diethylpyridin-2-amine*. A mixture of 2,5-dibromopyridine (1.00 g, 4.22 mmol), diethylamine (0.469 mL, 4.52 mmol) and DBU (0.674 mL, 4.52 mmol) in DMSO (30 mL) is stirred at 80 °C for 2 weeks, whereas diethylamine (0.469 mL, 4.52 mmol) and DBU (0.674 mL, 4.52 mmol) are added every 2 days. The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Büchi, 20 g silicagel, EtOAc / heptane 2:98 → 3:97 → 5:95 → 10:90 → 15:85 → 20:80) yields the title product. LC-MS: t_R = 0.53 min, MH^+ = 231.00 (conditions 3).

10 *tert-Butyl 2-(6-(diethylamino)pyridin-3-yl)acetate*. According to *general procedure 6* from 5-bromo-N,N-diethylpyridin-2-amine (178 mg, 0.726 mmol), 2-tert-butoxy-2-oxoethylzinc chloride (0.5M in diethyl ether, 3.1 mL, 1.25 mmol), $Pd_2(dba)_3$ (33.2 mg, 0.0363 mmol) and Q-PHOS (51.6 mg, 0.726 mmol) in THF (3 mL). The reaction is complete after 90 min at 75 °C. Purification of the crude by automated FC (Büchi, 10 g silicagel, flow 10 mL/min, EtOAc / heptane 2:98 → 5:95 → 10:90 → 20:80) yields the title product. LC-MS: t_R = 0.66 min, MH^+ = 265.17 (conditions 3).

15 *2-(6-(Diethylamino)pyridin-3-yl)acetic acid*. According to *general procedure 7*, from tert-butyl 2-(6-(diethylamino)pyridin-3-yl)acetate (53.3 mg, 0.179 mmol) and HCl (4M in dioxane, 3 mL) in CH_2Cl_2 (2 mL). The reaction is complete after 40 h at rt. Removing the solvents under reduced pressure leads to the title crude product.

20 *Ethyl 2-(4-((2-methoxyethyl)(methyl)amino)phenyl)acetate*. A mixture of ethyl-4-bromophenylacetate (500 mg, 2.06 mmol), N-(2-methoxyethyl)methylamine (0.45 mL, 4.11 mmol) and K_3PO_4 (1.75 g, 8.23 mmol) in 1,2-dimethoxyethane (4 mL) is degassed with nitrogen. DavePhos (130 mg, 0.329 mmol) and $Pd_2(dba)_3$ (188 mg, 0.206 mmol) are added, and the mixture is heated to 120 °C. The mixture is stirred at 120 °C for 48 h, and is allowed to cool to rt. The mixture is filtered through Celite®, and the filtrate is evaporated under reduced pressure. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 0.57 min, MH^+ = 252.07 (conditions 3).

25 *2-(4-((2-Methoxyethyl)(methyl)amino)phenyl)acetic acid*. A mixture of ethyl 2-(4-((2-methoxyethyl)(methyl)amino)phenyl)acetate (215 mg, 0.855 mmol) in EtOH (1 ml) and aq. 2.5M NaOH (0.5 mL) is stirred at rt for 1 h. The solvents are removed under reduced pressure and the residue is diluted with CH_2Cl_2 . Aq. 1M HCl is added to adjust pH to 3, and phases are separated in a Separator® (Biotage). The org. layer is dried over $MgSO_4$, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.41 min, MH^+ = 242.76 (conditions 3).

30 *Ethyl 2-(4-(ethyl(methyl)amino)phenyl)acetate*. A mixture of ethyl 4-bromophenylacetate (500 mg, 2.06 mmol), methylethylamine (0.358 mL, 4.11 mmol), 2-dicyclohexylphosphino-2'-(N,N-dimethylamino)biphenyl (130 mg, 0.33 mmol) K_3PO_4 (1.75 g, 8.23 mmol) and $Pd_2(dba)_3$ (188 mg, 0.206 mmol) in 1,2-dimethoxyethane (4 mL) is heated at 120 °C for 2 days, and is allowed to cool to rt. The mixture is filtered through Celite®, and

- 78 -

the cake is washed with CH₂Cl₂. The filtrate is evaporated under reduced pressure. Purification of the crude by HPLC yields the title compound. LC-MS: t_R = 0.53 min, MH⁺ = 222.22 (conditions 3).

2-(4-(Ethyl(methyl)amino)phenyl)acetic acid. A mixture of ethyl 2-(6-(ethyl(methyl)amino)pyridin-3-yl)acetate (49 mg, 0.22 mmol) in EtOH (1 mL) and aq. 2.5M NaOH (0.5 mL) is stirred at rt for 1 h. The solvents are partially removed under reduced pressure, and the residue is cooled to 0 °C. CH₂Cl₂ is added, and the mixture is acidified to pH 3 with aq. 1M HCl. The phases are separated in a Separator[®] (Biotage) to yield the crude title product. LC-MS: t_R = 0.39 min, MH⁺ = 194.12 (conditions 3).

The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t _R ; MH ⁺ ; conditions)
119	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide	0.57 min; 423.97; conditions 3
120	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide	0.68 min; 433.71; conditions 3
121	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide	0.64 min; 422.94; conditions 3
122	2-[6-(3,3-Difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.66 min; 416.22; conditions 3
123	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(6-diethylamino-pyridin-3-yl)-acetamide	0.58 min; 390.02; conditions 3
124	2-(6-Diethylamino-pyridin-3-yl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.68 min; 400.07; conditions 3
125	N-[1-(4-Methoxy-benzyl)-1H-pyrazol-3-yl]-2-[4-[(2-methoxy-ethyl)-methyl-amino]-phenyl]-acetamide	0.65 min; 409.05; conditions 3
126	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-[(2-methoxy-ethyl)-methyl-amino]-phenyl]-acetamide	0.68 min; 415.00; conditions 3
127	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-[(2-methoxy-ethyl)-methyl-amino]-phenyl]-acetamide	0.63 min; 403.96; conditions 3

128	N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-[(2-methoxy-ethyl)-methyl-amino]-phenyl]-acetamide	0.66 min; 397.04; conditions 3
129	2-[4-(Ethyl-methyl-amino)-phenyl]-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.62 min; 379.02; conditions 3
130	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(ethyl-methyl-amino)-phenyl]-acetamide	0.64 min; 384.92; conditions 3
131	2-(4-Isopropyl-phenyl)-N-[1-(5-methoxy-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	0.72 min; 365.09; conditions 4

Example 132: N-[1-(5-Cyano-6-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide.

A mixture of Example 110 (100 mg, 0.254 mmol), trimethylboroxine (32 mg, 0.25 mmol), K₂CO₃ (53 mg, 0.38 mmol), and Pd(PPh₃)₄ (29 mg, 0.025 mmol) in dioxane (1 mL) is stirred at 110 °C overnight. The mixture is allowed to cool to rt, and is diluted with water. The phases are separated, and the aq. layer is extracted with EtOAc. The combined org. layers are washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 132. LC-MS: t_R = 0.80 min, MH⁺ = 374.12 (conditions 4).

Example 133: N-[1-(5-Cyano-6-cyclopropyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide.

A mixture of Example 110 (80 mg, 0.20 mmol), cyclopropylboronic acid (52 mg, 0.60 mmol), K₂CO₃ (42 mg, 0.30 mmol), and Pd(PPh₃)₄ (24 mg, 0.020 mmol) in dioxane (1 mL) is stirred at 110 °C overnight. The mixture is allowed to cool to rt, and is diluted with water. The phases are separated, and the aq. layer is extracted with EtOAc. The combined org. layers are washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 133. LC-MS: t_R = 0.89 min, MH⁺ = 400.16 (conditions 4).

Example 134: N-[1-(5-Cyano-6-isobutyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide.

A mixture of Example 110 (80 mg, 0.20 mmol), 2-methylpropyl boronic acid (62 mg, 0.60 mmol), K₂CO₃ (42 mg, 0.30 mmol), and Pd(PPh₃)₄ (24 mg, 0.020 mmol) in dioxane (1 mL) is stirred at 110 °C overnight. The mixture is allowed to cool to rt, and is diluted with water. The phases are separated, and the aq. layer is extracted with EtOAc. The combined org. layers are washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 134. LC-MS: t_R = 0.91 min, MH⁺ = 416.18 (conditions 4).

(R)-5-Bromo-2-(3-fluoropyrrolidin-1-yl)pyridine. Prepared according to *general procedure 9* from 2,5-

dibromopyridine (350 mg, 1.48 mmol), (R)-3-fluoropyrrolidine hydrochloride (199 mg, 1.58 mmol), and DBU (0.472 mL, 3.16 mmol) in DMSO (20 mL). After the same amounts of (R)-3-fluoropyrrolidine hydrochloride and

- 80 -

DBU are added again, and the reaction is complete after 72 h. Purification of the crude by automated FC (Büchi, EtOAc / heptane 2:98 → 3:97 → 5:95 → 10:90 → 15:85, 20 g silicagel, flow 13 mL/min) yields the title product. LC-MS: t_R = 0.52 min, MH^+ = 244.96 (conditions 3).

5 (R)-tert-Butyl 2-(6-(3-fluoropyrrolidin-1-yl)pyridin-3-yl)acetate. Prepared according to *general procedure 6* from (R)-5-bromo-2-(3-fluoropyrrolidin-1-yl)pyridine (110 mg, 0.449 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 1.00 mL, 0.50 mmol), Pd₂(dba)₃ (21 mg, 0.024 mmol) and Q-Phos (32 mg, 0.045 mmol) in THF (3 mL). The reaction is complete overnight. Purification of the crude by automated FC (Büchi, EtOAc / heptane 2:98 → 5:95 → 10:90, 10 g silicagel, flow 10 mL/min) yields the title product. LC-MS: t_R = 0.61 min, MH^+ = 281.16 (conditions 3).

10 (R)-2-(6-(3-Fluoropyrrolidin-1-yl)pyridin-3-yl)acetic acid. Prepared according to *general procedure 7* from (R)-tert-butyl 2-(6-(3-fluoropyrrolidin-1-yl)pyridin-3-yl)acetate (54 mg, 0.193 mmol) and HCl (4M in dioxane, 3 mL) in CH₂Cl₂ (2 mL). The reaction is complete after 2 days. Removing the solvents under reduced pressure yields the crude title product.

15 5-Bromo-2-(3,3-difluoroazetid-1-yl)pyridine. Prepared according to *general procedure 9* from 2,5-dibromopyridine (1.00 g, 4.22 mmol), 3,3-difluoroazetid-1-ylpyridine hydrochloride (485 mg, 4.52 mmol), and DBU (1.35 mL, 9.03 mmol) in DMSO (30 mL). The same amounts of 3,3-difluoroazetid-1-ylpyridine hydrochloride, and DBU are added again each day, and the reaction is complete after 3 days. Purification of the crude by automated FC (Büchi, EtOAc / heptane 2:98 → 3:97 → 5:95 → 10:90 → 15:85, 20 g silicagel, flow 13 mL/min) yields the title product. LC-MS: t_R = 0.78 min, MH^+ = 250.88 (conditions 3).

20 tert-Butyl 2-(6-(3,3-difluoroazetid-1-yl)pyridin-3-yl)acetate. Prepared according to *general procedure 6* from 5-bromo-2-(3,3-difluoroazetid-1-yl)pyridine (473 mg, 1.90 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 4.20 mL, 2.10 mmol), Pd₂(dba)₃ (87 mg, 0.095 mmol) and Q-Phos (135 mg, 0.190 mmol) in THF (3 mL). The reaction is complete after 2 h. Purification of the crude by automated FC (Büchi, EtOAc / heptane 2:98 → 5:95 → 10:90, 10 g silicagel, flow 10 mL/min) yields the title product. LC-MS: t_R = 0.64 min,
25 MH^+ = 285.18 (conditions 3).

2-(6-(3,3-Difluoroazetid-1-yl)pyridin-3-yl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(6-(3,3-difluoroazetid-1-yl)pyridin-3-yl)acetate (300 mg, 1.06 mmol) and HCl (4M in dioxane, 12 mL) in CH₂Cl₂ (10 mL). The reaction is complete overnight. Removing the solvents under reduced pressure yields the crude title product.

30 The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t _R ; MH ⁺ ; conditions)
135	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(2-methyl-3H-benzoimidazol-5-yl)-acetamide	0.62 min; 381.99; conditions 3
136	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(2-methyl-3H-benzoimidazol-5-yl)-acetamide	0.58 min; 370.77; conditions 3
137	N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(2-methyl-3H-benzoimidazol-5-yl)-acetamide	0.61 min; 363.93; conditions 3
138	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[6-((R)-3-fluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide	0.60 min; 406.00; conditions 3
139	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-((R)-3-fluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide	0.65 min; 416.04; conditions 3
140	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[6-((R)-3-fluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide	0.61 min; 405.01; conditions 3
141	N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-((R)-3-fluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide	0.64 min; 397.90; conditions 3
142	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-azetidin-1-yl)-pyridin-3-yl]-acetamide	0.56 min; 409.99; conditions 3
143	2-[6-(3,3-Difluoro-azetidin-1-yl)-pyridin-3-yl]-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.68 min; 420.01; conditions 3
144	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-azetidin-1-yl)-pyridin-3-yl]-acetamide	0.63 min; 409.03; conditions 3
145	2-[6-(3,3-Difluoro-azetidin-1-yl)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.66 min; 401.69; conditions 3
146	2-[6-(3,3-Difluoro-azetidin-1-yl)-pyridin-3-yl]-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.65 min; 414.04; conditions 3

2-(4-Bromophenyl)-N-(1-(4-fluorobenzyl)-1H-pyrazol-3-yl)acetamide. Prepared according to *general procedure 3* from 2-(4-bromophenyl)acetic acid (1.20 g, 5.58 mmol), 1-(4-fluorobenzyl)-1H-pyrazol-3-amine (1.07 g, 5.58 mmol), HATU (3.18 g, 8.37 mmol), and DIPEA (4.78 mL, 27.9 mmol) in DMF (15 mL). The

- 82 -

reaction is complete overnight. The mixture is partitioned between aq. sat. NaHCO₃ and EtOAc. The org. layer is washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Biotage, 50 g silicagel, EtOAc / heptane 0:100 → 90:10) yields the title product. LC-MS: t_R = 0.81 min, MH⁺ = 387.98 (conditions 4).

5 *Example 147. N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isobutyl-phenyl)-acetamide.* A mixture of 2-(4-bromophenyl)-N-(1-(4-fluorobenzyl)-1H-pyrazol-3-yl)acetamide (60 mg, 0.15 mmol), (2-methylpropyl)boronic acid (47 mg, 0.46 mmol), K₂CO₃ (32 mg, 0.23 mmol) and Pd(PPh₃)₄ (18 mg, 0.016 mmol) in dioxane (1.0 mL) is stirred in a closed vial at 110 °C overnight. The mixture is allowed to cool to rt, and is diluted with water and extracted with EtOAc. The org. layer is washed with brine, dried over MgSO₄, filtered, and the solvents are evaporated under reduced pressure. Purification of the crude by HPLC yields example 147. LC-MS: t_R = 0.92
10 min, MH⁺ = 366.09 (conditions 4).

Example 148: N-[1-(5-Cyano-6-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. A mixture of Example 110 (30 mg, 0.075 mmol), KF (13 mg, 0.23 mmol), and 4,7,13,16,21,24-hexaoxa-1,10-diazabicyclo[8.8.8]-hexacosane (42 mg, 0.11 mmol) in DMSO (1 mL) is stirred at 60 °C for 2 h. The mixture is
15 diluted with H₂O, and is extracted with EtOAc. The comb. org. layers are dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 148. LC-MS: t_R = 0.82 min, MH⁺ = 378.31 (conditions 4).

5-Bromo-N-(2,2-difluoroethyl)-N-methylpyridin-2-amine. Prepared according to *general procedure 9* from 2,5-dibromopyridine (1.00 g, 4.22 mmol), (2,2-difluoroethyl)(methyl)amine hydrochloride (2.78 g, 21.1 mmol), and
20 DBU (6.30 mL, 42.2 mmol) in DMSO (30 mL). The reaction is complete after 6 days. Purification of the crude by automated FC (Büchi, EtOAc / heptane 2:98 → 3:97 → 5:95 → 10:90 → 15:85, 20 g silicagel, flow 13 mL/min) yields the title product. LC-MS: t_R = 0.38 min (conditions 3).

tert-Butyl 2-(6-((2,2-difluoroethyl)(methyl)amino)pyridin-3-yl)acetate. Prepared according to *general procedure 6* from 5-bromo-N-(2,2-difluoroethyl)-N-methylpyridin-2-amine (255 mg, 1.02 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 2.24 mL, 1.12 mmol), Pd₂(dba)₃ (47 mg, 0.051 mmol) and Q-Phos (72
25 mg, 0.102 mmol) in THF (3 mL). The reaction is complete after 7 days. Purification of the crude by automated FC (Büchi, EtOAc / heptane 2:98 → 5:95 → 10:90, 10 g silicagel, flow 10 mL/min) yields the title product. LC-MS: t_R = 0.64 min, MH⁺ = 287.06 (conditions 3).

2-(6-((2,2-Difluoroethyl)(methyl)amino)pyridin-3-yl)acetic acid. Prepared according to *general procedure 7*
30 from tert-butyl 2-(6-((2,2-difluoroethyl)(methyl)amino)pyridin-3-yl)acetate (40 mg, 0.14 mmol) and HCl (4M in dioxane, 3 mL) in CH₂Cl₂ (3 mL). The reaction is complete overnight. Removing the solvents under reduced pressure yields the crude title product.

(S)-5-Bromo-2-(3-fluoropyrrolidin-1-yl)pyridine. Prepared according to *general procedure 9* from 2,5-dibromopyridine (1.00 g, 4.22 mmol), (S)-3-fluoropyrrolidine hydrochloride (567 mg, 4.52 mmol), and DBU

(1.35 mL, 9.03 mmol) in DMSO (30 mL). The same amounts of (S)-3-fluoropyrrolidine hydrochloride, and DBU are added again after 24 h, and the reaction is complete after 6 days. Purification of the crude by automated FC (Büchi, EtOAc / heptane 2:98 → 3:97 → 5:95 → 10:90 → 15:85, 20 g silicagel, flow 13 mL/min) yields the title product. LC-MS: t_R = 0.52 min, MH^+ = 244.96 (conditions 3).

- 5 (S)-tert-Butyl 2-(6-(3-fluoropyrrolidin-1-yl)pyridin-3-yl)acetate. Prepared according to *general procedure 6* from (S)-5-bromo-2-(3-fluoropyrrolidin-1-yl)pyridine (110 mg, 0.449 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 1.00 mL, 0.50 mmol), Pd₂(dba)₃ (21 mg, 0.024 mmol) and Q-Phos (32 mg, 0.045 mmol) in THF (3 mL). The reaction is complete overnight h. Purification of the crude by automated FC (Büchi, EtOAc / heptane 2:98 → 5:95 → 10:90, 10 g silicagel, flow 10 mL/min) yields the title product. LC-MS: t_R = 0.61 min, MH^+ = 281.16 (conditions 3).

(S)-2-(6-(3-Fluoropyrrolidin-1-yl)pyridin-3-yl)acetic acid. Prepared according to *general procedure 7* from (R)-tert-butyl 2-(6-(3-fluoropyrrolidin-1-yl)pyridin-3-yl)acetate (54 mg, 0.193 mmol) and HCl (4M in dioxane, 3 mL) in CH₂Cl₂ (2 mL). The reaction is complete after 2 days. Removing the solvents under reduced pressure yields the crude title product.

- 15 The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t_R ; MH^+ ; conditions)
149	2-(4-Dimethylamino-phenyl)-N-[1-(5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	0.42 min; 353.84; conditions 3
150	2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	0.41 min; 355.03; conditions 3
151	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[6-[(2,2-difluoroethyl)-methyl-amino]-pyridin-3-yl]-acetamide	0.56 min; 412.07; conditions 3
152	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[6-[(S)-3-fluoro-pyrrolidin-1-yl]-pyridin-3-yl]-acetamide	0.60 min; 406.00; conditions 3
153	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-[(S)-3-fluoro-pyrrolidin-1-yl]-pyridin-3-yl]-acetamide	0.65 min; 416.04; conditions 3
154	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[6-[(S)-3-fluoro-pyrrolidin-1-yl]-pyridin-3-yl]-acetamide	0.61 min; 405.01; conditions 3
155	N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-[(S)-3-fluoro-pyrrolidin-1-yl]-pyridin-3-yl]-acetamide	0.64 min; 397.90; conditions 3

156	2-[6-((S)-3-Fluoro-pyrrolidin-1-yl)-pyridin-3-yl]-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.64 min; 409.99; conditions 3
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5 *4-Chloro-6-methylnicotinonitrile*. A suspension of 4-chloro-6-methylnicotinamide (29.7 g, 195 mmol) in POCl₃ (80.2 mL, 860 mmol) is heated at 110 °C for 15 min (gas development). The mixture is allowed to cool to rt, and is treated with PCl₅ (57.0 g, 274 mmol) over 20 min. The mixture is heated again at 110 °C for 1 h. The mixture is allowed to cool to rt, and is evaporated under reduced pressure. The residue is diluted with EtOAc, and cooled to 0 °C. Aq. 10% Na₂CO₃ is added. The mixture is extracted with EtOAc (3x). The combined org. layers are washed with brine, dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Biotage, EtOAc / heptane 2:98 → 30:70) yields the title compound. LC-MS: t_R = 0.55 min, MH⁺ = 194.15 (conditions 4).

10 *4-Chloro-5-cyano-2-methylpyridine 1-oxide*. To a sol. of 4-chloro-6-methylnicotinonitrile (10.0 g, 65.5 mmol) and H₂O₂·H₂NCONH₂ (18.5 g, 197 mmol) in CH₂Cl₂ (80 mL) at 0 °C is added trifluoroacetic acid anhydride (27.9 mL, 197 mmol) dropwise. The mixture is stirred at rt for 3.5 h. Aq. 10% KI (800mL) is carefully added. The phases are separated, and the aq. Layer is extracted with CH₂Cl₂. The combined org. layers are washed with aq. sat. Na₂S₂O₃ and brine. The org. layer is dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title compound. LC-MS: t_R = 0.34 min, MH⁺ = 210.22 (conditions 4).

15 *4-Chloro-6-(hydroxymethyl)nicotinonitrile*. 4-Chloro-5-cyano-2-methylpyridine 1-oxide (11.3 g, 66.9 mmol) is dissolved in Ac₂O (132 mL), and conc. H₂SO₄ (3 drops) is added at rt. The mixture is heated to 110 °C and stirred at this temperature for 1 h. The mixture is poured slowly onto ice/water, and aq. sat. NaHCO₃ is added. The resulting mixture is stirred for 15min. The phases are separated, and the aq. layer is extracted with EtOAc (2x). The combined org. layers are washed with brine, dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure. The crude is diluted with MeOH (162 mL). Water (82 mL) and K₂CO₃ (30.5 g, 221 mmol) are added. The mixture is stirred at rt for 30 min. The solvents are partially removed under reduced pressure. Purification of the residue by automated FC (Biotage, MeOH / CH₂Cl₂ 1:99 → 3:97, 340 g silicagel, then a second time with EtOAc / heptane 1:99 → 45:55, 100 g silicagel) yields the title product. LC-MS: t_R = 0.41 min, MH⁺ = 168.95 (conditions 4).

20 *(4-Chloro-5-cyanopyridin-2-yl)methyl methanesulfonate*. Methansulfonyl chloride (0.527 mL, 6.79 mmol) is added to a solution of 4-chloro-6-(hydroxymethyl)nicotinonitrile (1.10 g, 6.17 mmol) and Et₃N (1.29 mL, 9.26 mmol) in CH₂Cl₂ (32 mL) at 0 °C, and the mixture is stirred for 15 min. Aq. sat. NaHCO₃ is added, and the phases are separated. The org. layer is extracted with CH₂Cl₂, and the combined org. layers are washed with brine, dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title compound. LC-MS: t_R = 0.56 min, MH⁺ = 247.19 (conditions 4).

4-Chloro-6-((3-nitro-1H-pyrazol-1-yl)methyl)nicotinonitrile. Prepared according to *general procedure 4* with NaH (55% suspension in oil, 215 mg, about 5.37 mmol), (4-chloro-5-cyanopyridin-2-yl)methyl methanesulfonate (1.52 g, 6.14 mmol), 5-methyl-3-nitro-1H-pyrazole (609 mg, 5.12 mmol) in DMF (15 mL). The reaction is complete after 2 h at rt. Purification of the crude by automated FC (Biotage, EtOAc / heptane 5:95 → 20:80, 50 g silicagel) yields the title compound. LC-MS: $t_R = 0.63$ min (conditions 4).

6-((3-Amino-1H-pyrazol-1-yl)methyl)-4-chloronicotinonitrile. Prepared according to *general procedure 5* with Fe (2.32 g, 42.1 mmol) and 4-chloro-6-((3-nitro-1H-pyrazol-1-yl)methyl)nicotinonitrile (1.11 g, 4.21 mmol) in EtOH (48 mL), and aq. sat. NH_4Cl (7 mL). The reaction is complete after 2 days at 75 °C and yields the crude title compound. LC-MS: $t_R = 0.38$ min, $\text{MH}^+ = 234.14$ (conditions 4).

10 *N*-(1-((4-((3H-[1,2,3]Triazol[4,5-b]pyridin-3-yl)oxy)-5-cyanopyridin-2-yl)methyl)-1H-pyrazol-3-yl)-2-(4-isopropylphenyl)acetamide. Prepared according to *general procedure 3* from 2-(4-isopropylphenyl)acetic acid (407 mg, 2.29 mmol), 6-((3-amino-1H-pyrazol-1-yl)methyl)-4-chloronicotinonitrile (534 mg, 2.29 mmol), HATU (1.30 g, 3.43 mmol), and DIPEA (1.96 mL, 11.4 mmol) in DMF (5 mL). The reaction is complete overnight. Purification by HPLC yields the title compound. LC-MS: $t_R = 0.82$ min, $\text{MH}^+ = 494.18$ (conditions 4).

15 *Example 157. N*-[1-(4-Chloro-5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. A solution of *N*-(1-((4-((3H-[1,2,3]triazolo[4,5-b]pyridin-3-yl)oxy)-5-cyanopyridin-2-yl)methyl)-1H-pyrazol-3-yl)-2-(4-isopropylphenyl)acetamide (162 mg, 0.328 mmol) in POCl_3 (0.65 mL) is stirred at rt for 10 min. The mixture is quenched with aq. sat. NaHCO_3 , the phases are separated, and the org. layer is extracted with EtOAc. The comb. org. layers are washed with brine, dried over MgSO_4 , filtered, and the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 157. LC-MS: $t_R = 0.90$ min, $\text{MH}^+ = 394.26$ (conditions 4).

25 2-(4-Allylphenyl)-*N*-(1-(4-fluorobenzyl)-1H-pyrazol-3-yl)acetamide. A mixture of 2-(4-bromophenyl)-*N*-(1-(4-fluorobenzyl)-1H-pyrazol-3-yl)acetamide (252 mg, 0.65 mmol), allylboronic acid pinacol ester (0.366 mL, 1.95 mmol), K_2CO_3 (135 mg, 0.975 mmol) and $\text{Pd}(\text{PPh}_3)_4$ (75.1 mg, 0.065 mmol) in dioxane (6.5 mL) is stirred at 110 °C for 4 h. The mixture is stirred further at rt overnight. The mixture is filtrated, and the filtrate is diluted with EtOAc and washed with brine. The org. layer is dried over MgSO_4 , filtered, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Biotage, 25 g silicagel, EtOAc / heptane 30:70 → 100:0) yields the title product. LC-MS: $t_R = 0.91$ min, $\text{MH}^+ = 350.26$ (conditions 3).

30 *Example 158: 2*-(4-Cyclopropylmethyl-phenyl)-*N*-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide. A solution of 2-(4-allylphenyl)-*N*-(1-(4-fluorobenzyl)-1H-pyrazol-3-yl)acetamide (63 mg, 0.18 mmol) and CH_2Cl_2 (0.0472 mL, 0.648 mmol) in CH_2Cl_2 (1.8 mL) is treated at 0 °C with Et_2Zn (1.0 M in hexanes, 0.43 mL, 0.432 mmol). The mixture is stirred at 0 °C for 1 h, and is allowed to warm to rt, and stirred for 2 h. The mixture is again cooled to 0 °C, and CH_2Cl_2 (0.0944 mL, 1.296 mmol), followed by Et_2Zn (1.0 M in hexanes, 0.86 mL, 0.864 mmol) are added. The mixture is stirred at 0 °C for 30 min. Aq. sat. NH_4Cl is added, and the mixture was extracted with

- 86 -

EtOAc. The combined org. layers are washed with brine, dried over MgSO_4 , filtered, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Biotage, 10 g silicagel, EtOAc / heptane 20:80 \rightarrow 65:35) and subsequently by HPLC yields example 158. LC-MS: $t_R = 0.94$ min, $\text{MH}^+ = 364.30$ (conditions 3).

5 *5-Bromo-2-(3-fluoroazetid-1-yl)pyridine*. Prepared according to *general procedure 9* from 2,5-dibromopyridine (1.00 g, 4.22 mmol), 3-fluoroazetidine hydrochloride (504 mg, 4.52 mmol), and DBU (1.35 mL, 9.03 mmol) in DMSO (30 mL). The same amounts of 3-fluoroazetidine hydrochloride, and DBU are added again after 24 h, and the reaction is complete after 4 days. Purification of the crude by automated FC (Büchi, EtOAc / heptane 2:98 \rightarrow 3:97 \rightarrow 5:95 \rightarrow 10:90 \rightarrow 15:85, 20 g silicagel, flow 13 mL/min) yields the title product.

10 *tert-Butyl 2-(6-(3-fluoroazetid-1-yl)pyridin-3-yl)acetate*. Prepared according to *general procedure 6* from 5-bromo-2-(3-fluoroazetid-1-yl)pyridine (546 mg, 2.36 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et_2O , 5.20 mL, 2.60 mmol), $\text{Pd}_2(\text{dba})_3$ (108 mg, 0.118 mmol) and Q-Phos (168 mg, 0.236 mmol) in THF (3 mL). The reaction is complete after 3 h. Purification of the crude by automated FC (Büchi, EtOAc / heptane 2:98 \rightarrow 5:95 \rightarrow 10:90, 20 g silicagel, flow 18 mL/min) yields the title product. LC-MS: $t_R = 0.59$ min, $\text{MH}^+ = 267.08$ (conditions 3).

15 *2-(6-(3-Fluoroazetid-1-yl)pyridin-3-yl)acetic acid*. Prepared according to *general procedure 7* from tert-butyl 2-(6-(3-fluoroazetid-1-yl)pyridin-3-yl)acetate (370 mg, 1.39 mmol) and HCl (4M in dioxane, 12 mL) in CH_2Cl_2 (12 mL). The reaction is complete after 20 h. Removing the solvents under reduced pressure yields the crude title product.

20 *5-Bromo-N-cyclopropyl-N-methylpyridin-2-amine*. Prepared according to *general procedure 9* from 2,5-dibromopyridine (1.00 g, 4.22 mmol), N-cyclopropyl methylamine hydrochloride (486 mg, 4.52 mmol), and DBU (1.35 mL, 9.03 mmol) in DMSO (30 mL). The same amounts of N-cyclopropyl methylamine hydrochloride, and DBU are added again after 24 h, and the reaction is complete after 7 days. Purification of the crude by automated FC (Büchi, EtOAc / heptane 2:98 \rightarrow 3:97 \rightarrow 5:95 \rightarrow 10:90 \rightarrow 15:85, 20 g silicagel, flow 13 mL/min) yields the title product.

25 *tert-Butyl 2-(6-(cyclopropyl(methyl)amino)pyridin-3-yl)acetate*. Prepared according to *general procedure 6* from 5-bromo-N-cyclopropyl-N-methylpyridin-2-amine (148 mg, 0.652 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et_2O , 1.24 mL, 0.62 mmol), $\text{Pd}_2(\text{dba})_3$ (30 mg, 0.033 mmol) and Q-Phos (46 mg, 0.065 mmol) in THF (3 mL). The reaction is complete after 20 h. Purification of the crude by automated FC (Büchi, EtOAc / heptane 2:98 \rightarrow 5:95 \rightarrow 10:90, 10 g silicagel, flow 10 mL/min) yields the title product.

30 *2-(6-(Cyclopropyl(methyl)amino)pyridin-3-yl)acetic acid*. Prepared according to *general procedure 7* from tert-butyl 2-(6-(cyclopropyl(methyl)amino)pyridin-3-yl)acetate (459 mg, 1.55 mmol) and HCl (4M in dioxane, 15

mL) in CH₂Cl₂ (15 mL). The reaction is complete after 20 h. Removing the solvents under reduced pressure yields the crude title product.

The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t _R ; MH ⁺ ; conditions)
159	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[6-(3-fluoro-azetidin-1-yl)-pyridin-3-yl]-acetamide	0.53 min; 392.30; conditions 3
160	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3-fluoro-azetidin-1-yl)-pyridin-3-yl]-acetamide	0.59 min; 401.73; conditions 3
161	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[6-(3-fluoro-azetidin-1-yl)-pyridin-3-yl]-acetamide	0.59 min; 391.18; conditions 3
162	2-[6-(3-Fluoro-azetidin-1-yl)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.62 min; 383.79; conditions 3
163	2-[6-(3-Fluoro-azetidin-1-yl)-pyridin-3-yl]-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.62 min; 396.01; conditions 3
164	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[6-(cyclopropyl(methyl)amino)-pyridin-3-yl]-acetamide	0.56 min; 387.75; conditions 3
165	2-[6-(Cyclopropyl(methyl)amino)-pyridin-3-yl]-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.66 min; 397.99; conditions 3
166	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[6-(cyclopropyl(methyl)amino)-pyridin-3-yl]-acetamide	0.62 min; 386.84; conditions 3
167	2-[6-(Cyclopropyl(methyl)amino)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.64 min; 380.02; conditions 3
168	2-[6-(Cyclopropyl(methyl)amino)-pyridin-3-yl]-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.64 min; 392.02; conditions 3

5

Example 169. N-[1-(5-Cyano-4-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide.

A mixture of Example 157 (30 mg, 0.0762 mmol), trimethylboroxine (9.56 mg, 0.0762 mmol), K₂CO₃ (15.8 mg, 0.114 mmol) and Pd(PPh₃)₄ (8.8 mg, 0.00762 mmol) in dioxane (0.5 mL) is degased, and is stirred in a closed vial at 110°C overnight. The mixture is allowed to cool to rt, is diluted with water, and is extracted with EtOAc.

10 The org. layer is washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced

pressure. Purification of the crude by HPLC yields example 169. LC-MS: $t_R = 0.79$ min, $MH^+ = 374.31$ (conditions 4).

Example 170. *N-[1-(5-Cyano-4-cyclopropyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide.* A mixture of Example 157 (30 mg, 0.0762 mmol), cyclopropylboronic acid (19.6 mg, 0.228 mmol), K_2CO_3 (15.8 mg, 0.114 mmol) and $Pd(PPh_3)_4$ (8.8 mg, 0.00762 mmol) in dioxane (0.5 mL) is degased, and is stirred in a closed vial at 110 °C overnight. The mixture is allowed to cool to rt, is diluted with water, and is extracted with EtOAc. The org. layer is washed with brine, dried over $MgSO_4$, filtered, and the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 170. LC-MS: $t_R = 0.83$ min, $MH^+ = 400.32$ (conditions 4).

10 *5-Bromo-2-(pyrrolidin-1-yl)pyridine.* A mixture of 2,5-dibromopyridine (2.00 g, 8.44 mmol), pyrrolidine (0.698 mL, 8.44 mmol) and DBU (1.35 mL, 9.03 mmol) in DMSO (30 mL) is stirred at 80 °C for 4 days. The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Büchi, 20 g silicagel, EtOAc / heptane 2:98 → 3:97 → 5:95 → 10:90 → 15:85) yields the title product. LC-MS: $t_R = 0.48$ min, $MH^+ = 229.01$ (conditions 3).

15 *tert-Butyl 2-(6-(pyrrolidin-1-yl)pyridin-3-yl)acetate.* According to *general procedure 6*, from 5-bromo-2-(pyrrolidin-1-yl)pyridine (1.63 g, 7.18 mmol), 2-tert-butoxy-2-oxoethylzinc chloride (0.5M in diethyl ether, 15.8 mL, 7.90 mmol), $Pd_2(dba)_3$ (329 mg, 0.359 mmol) and Q-PHOS (510 mg, 0.718 mmol) in THF (3 mL). After 3 h at 90 °C the reaction is complete. Purification of the crude by automated FC (Büchi, 10 g silicagel, flow 10 mL/min, EtOAc / heptane 2:98 → 5:95 → 10:90) yields the title product. LC-MS: $t_R = 0.63$ min, $MH^+ = 263.14$
20 (conditions 3).

2-(6-(Pyrrolidin-1-yl)pyridin-3-yl)acetic acid. According to *general procedure 7*, from tert-butyl 2-(6-(pyrrolidin-1-yl)pyridin-3-yl)acetate (410 mg, 1.56 mmol) and HCl (4M in dioxane, 15 mL) in CH_2Cl_2 (15 mL). After 21 h at rt the reaction is complete. Removing the solvents under reduced pressure leads to the title crude product. LC-MS: $t_R = 0.42$ min, $MH^+ = 207.22$ (conditions 3).

25 *5-Bromo-N-(2-methoxyethyl)-N-methylpyridin-2-amine.* A mixture of 2,5-dibromopyridine (2.00 g, 8.44 mmol), N-(2-methoxyethyl)methylamine (0.97 mL, 9.03 mmol) and DBU (1.35 mL, 9.03 mmol) in DMSO (30 mL) is stirred at 80 °C for 5 days. The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Büchi, 20 g silicagel, EtOAc / heptane 2:98 → 3:97 → 5:95 → 10:90 → 15:85) yields the title product. LC-MS: $t_R = 0.50$ min, $MH^+ = 244.95$ (conditions 3).

30 *tert-Butyl 2-(6-((2-methoxyethyl)(methyl)amino)pyridin-3-yl)acetate.* According to *general procedure 6*, from 5-bromo-N-(2-methoxyethyl)-N-methylpyridin-2-amine (1.47 g, 6.00 mmol), 2-tert-butoxy-2-oxoethylzinc chloride (0.5M in diethyl ether, 13.2 mL, 6.60 mmol), $Pd_2(dba)_3$ (275 mg, 0.300 mmol) and Q-PHOS (426 mg, 0.600 mmol) in THF (3 mL). The reaction is complete after 4 days at 90 °C. Purification of the crude by automated

- 89 -

FC (Büchi, 10 g silicagel, flow 10 mL/min, EtOAc / heptane 2:98 → 5:95 → 10:90) yields the title product. LC-MS: t_R = 0.60 min, MH^+ = 281.14 (conditions 3).

2-(6-((2-Methoxyethyl)(methyl)amino)pyridin-3-yl)acetic acid. According to *general procedure 7*, from tert-butyl 2-(6-((2-methoxyethyl)(methyl)amino)pyridin-3-yl)acetate (197 mg, 0.703 mmol) and HCl (4M in dioxane, 7 mL) in CH_2Cl_2 (7 mL). The reaction is complete overnight at rt. Removing the solvents under reduced pressure leads to the title crude product. LC-MS: t_R = 0.39 min, MH^+ = 225.13 (conditions 3).

5-Bromo-N-(cyclopropylmethyl)-N-methylpyridin-2-amine. A mixture of 2,5-dibromopyridine (2.00 g, 8.44 mmol), (cyclopropylmethyl)methylamine hydrochloride (1.10, 9.03 mmol) and DBU (2.70 mL, 18.1 mmol) in DMSO (30 mL) is stirred at 80 °C for 2 days. The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Büchi, 20 g silicagel, EtOAc / heptane 2:98 → 3:97 → 5:95 → 10:90 → 15:85) yields the title product. LC-MS: t_R = 0.59 min, MH^+ = 240.96 (conditions 3).

tert-Butyl 2-(6-((cyclopropylmethyl)(methyl)amino)pyridin-3-yl)acetate. A mixture of 5-bromo-N-(cyclopropylmethyl)-N-methylpyridin-2-amine (1.50 g, 6.20 mmol), $Pd_2(dba)_3$ (284 mg, 0.31 mmol) and Q-PHOS (440 mg, 0.620 mmol) in THF (3 mL) is heated to 90 °C, and 2-tert-butoxy-2-oxoethylzinc chloride (0.5M in diethyl ether, 13.6 mL, 6.80 mmol) is added. The mixture is stirred at 90 °C for 5 days. $Pd_2(dba)_3$ (284 mg, 0.31 mmol), Q-PHOS (440 mg, 0.620 mmol) and 2-tert-butoxy-2-oxoethylzinc chloride (0.5M in diethyl ether, 13.6 mL, 6.80 mmol) are added again, and the mixture is stirred for 6 days at 80 °C. The mixture is allowed to cool to rt. The mixture is filtered, and the filtrate is evaporated under reduced pressure. Purification of the crude by automated FC (Büchi, 10 g silicagel, flow 10 mL/min, EtOAc / heptane 2:98 → 5:95 → 10:90 → 15:85 → 20:80 → 25:75) yields the title product.

2-(6-((Cyclopropylmethyl)(methyl)amino)pyridin-3-yl)acetic acid. According to *general procedure 7*, from tert-butyl 2-(6-((cyclopropylmethyl)(methyl)amino)pyridin-3-yl)acetate (115 mg, 0.416 mmol) and HCl (4M in dioxane, 6 mL) in CH_2Cl_2 (6 mL). The reaction is complete overnight at rt. Removing the solvents under reduced pressure leads to the title crude product.

The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t_R ; MH^+ ; conditions)
171	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[6-(ethyl-methyl-amino)-pyridin-3-yl]-acetamide	0.55 min; 375.97; conditions 3
172	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(ethyl-methyl-amino)-pyridin-3-yl]-acetamide	0.65 min; 386.01; conditions 3

173	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[6-(ethyl-methyl-amino)-pyridin-3-yl]-acetamide	0.61 min; 375.04; conditions 3
174	2-[6-(Ethyl-methyl-amino)-pyridin-3-yl]-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.63 min; 380.02; conditions 3
175	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide	0.66 min; 398.00; conditions 3
176	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide	0.62 min; 387.00; conditions 3
177	N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide	0.65 min; 380.02; conditions 3
178	N-[1-(4-Methoxy-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide	0.64 min; 392.01; conditions 3
179	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[6-[(2-methoxy-ethyl)-methyl-amino]-pyridin-3-yl]-acetamide	0.54 min; 405.99; conditions 3
180	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-[(2-methoxy-ethyl)-methyl-amino]-pyridin-3-yl]-acetamide	0.65 min; 415.98; conditions 3
181	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[6-[(2-methoxy-ethyl)-methyl-amino]-pyridin-3-yl]-acetamide	0.61 min; 404.98; conditions 3
182	N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-[(2-methoxy-ethyl)-methyl-amino]-pyridin-3-yl]-acetamide	0.64 min; 398.01; conditions 3
183	N-[1-(4-Methoxy-benzyl)-1H-pyrazol-3-yl]-2-[6-[(2-methoxy-ethyl)-methyl-amino]-pyridin-3-yl]-acetamide	0.63 min; 410.00; conditions 3
184	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[6-(cyclopropylmethyl-methyl-amino)-pyridin-3-yl]-acetamide	0.60 min; 402.02; conditions 3
185	2-[6-(Cyclopropylmethyl-methyl-amino)-pyridin-3-yl]-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.70 min; 412.00; conditions 3
186	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[6-(cyclopropylmethyl-methyl-amino)-pyridin-3-yl]-acetamide	0.66 min; 401.01; conditions 3
187	2-[6-(Cyclopropylmethyl-methyl-amino)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.68 min; 394.01; conditions 3

188	2-[6-(Cyclopropylmethyl-methyl-amino)-pyridin-3-yl]-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.68 min; 406.00; conditions 3
189	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(6-diethylamino-pyridin-3-yl)-acetamide	0.64 min; 388.94; conditions 3
190	2-(6-Diethylamino-pyridin-3-yl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.66 min; 382.00; conditions 3
191	2-(6-Diethylamino-pyridin-3-yl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.66 min; 394.00; conditions 3

N-(1-(4-Bromobenzyl)-1H-pyrazol-3-yl)-2-(4-isopropylphenyl)acetamide. According to general procedure 3, from 1-(4-bromobenzyl)-1H-pyrazol-3-amine and 2-(4-isopropylphenyl)acetic acid. LC-MS: t_R = 0.92 min, MH^+ = 412.21 (conditions 4).

- 5 *Example 192: N*-[1-(4-Cyclopropyl-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. A mixture of *N*-(1-(4-bromobenzyl)-1H-pyrazol-3-yl)-2-(4-isopropylphenyl)acetamide (109 mg, 0.25 mmol), cyclopropylboronic acid (64.4 mg, 0.75 mmol), K_2CO_3 (51.8 mg, 0.375 mmol) and $Pd(Ph_3)_4$ (28.9 mg, 0.025 mmol) in dioxane (1 ml) is degased, and is stirred in a closed vial at 110°C overnight. The mixture is diluted with water and extracted with EtOAc. The org. layer is washed with brine, dried over $MgSO_4$, filtered and the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 192. LC-MS: t_R = 0.94 min, MH^+ = 374.35 (conditions 4).

15 *tert-Butyl 2*-(6-chloropyridin-3-yl)acetate. $BF_3 \cdot OEt_2$ (0.2 mL) is added to a mixture of 2-chloropyridine-5-acetic acid (1.72 g, 10 mmol) and *tert*-butyl 2,2,2-trichloroacetimidate (3.58 mL, 20 mmol) in THF (20 mL), and the mixture is stirred overnight. The mixture is quenched with aq. sat. $NaHCO_3$ and extracted with EtOAc. The comb. org. layers are washed with brine, dried over $MgSO_4$, and concentrated under reduced pressure. Purification of the crude by FC (EtOAc / heptane 5:95 → 40:60) yields the title product. LC-MS: t_R = 0.85 min, MH^+ = 228.29 (conditions 3).

20 *tert-Butyl 2*-(6-cyclopropylpyridin-3-yl)acetate. A mixture of *tert*-butyl 2-(6-chloropyridin-3-yl)acetate (250 mg, 1.1 mmol), cyclopropylboronic acid (283 mg, 3.29 mmol), K_2CO_3 (228 mg, 1.65 mmol) and $Pd(PPh_3)_4$ (127 mg, 0.11 mmol) in dioxane (11 mL) is degased. The mixture is stirred in a closed vial at 110 °C overnight. The mixture is extracted between EtOAc and brine, and the org. layer is dried over $MgSO_4$, filtered, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Biotage, 50g silicagel, EtOAc / heptane 2:98 → 90:10) yields the title product. LC-MS: t_R = 0.50 min, MH^+ = 234.37 (conditions 4).

- 92 -

2-(6-Cyclopropylpyridin-3-yl)acetic acid. A mixture of tert-butyl 2-(6-cyclopropylpyridin-3-yl)acetate (148 mg, 0.634 mmol) in HCl (4M in dioxane, 10 mL) is stirred at rt for 7 h. The solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.22 min, MH^+ = 178.44 (conditions 4).

The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t_R ; MH^+ ; conditions)
193	N-[1-(4-Chloro-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-cyclopropylpyridin-3-yl)-acetamide	0.59 min; 385.00; conditions 4
194	N-[1-(3-Chloro-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-cyclopropylpyridin-3-yl)-acetamide	0.59 min; 385.17; conditions 4

10 1-(4-Bromobenzyl)-3-nitro-1H-pyrazole. According to *general procedure 4* from K_2CO_3 (3.46 g, 25.0 mmol), 4-bromobenzyl bromide (2.50 g, 10.0 mmol), 5-nitro-1H-pyrazole (1.13 g, 10.0 mmol), and Bu_4NBr (658 mg 2.00 mmol) in acetone (50 mL). The reaction is complete overnight. Purification of the crude by automated FC (Biotage, 100 g silicagel, EtOAc / heptane 20:80 \rightarrow 80:20) yields the desired product. LC-MS: t_R = 0.86 min, (conditions 3).

15 4-((3-Nitro-1H-pyrazol-1-yl)methyl)phenol. A degassed mixture of 1-(4-bromobenzyl)-3-nitro-1H-pyrazole (564 mg, 2 mmol), $Pd_2(dba)_3$ (91.6 mg, 0.1 mmol), tetramethyl di-*t*BuXPhos (96.2 mg, 0.2 mmol) and KOH (673 mg, 12 mmol) in dioxane (2 mL) and H_2O (4 mL) is stirred at 100 °C for 1 h. The mixture is quenched with aq. 1 M HCl and extracted with EtOAc. The combined org. layers are washed with brine, dried over $MgSO_4$, filtered, and the solvents are removed under reduced pressure. Purification by automated FC (Biotage, 50 g silicagel, MeOH / CH_2Cl_2 2:998 \rightarrow 15:985), followed by HPLC yields the title product. LC-MS: t_R = 0.69 min, (conditions 3).

20 3-Nitro-1-(4-(vinylloxy)benzyl)-1H-pyrazole. A mixture of 4-((3-nitro-1H-pyrazol-1-yl)methyl)phenol (304 mg, 1.39 mmol), vinyl acetate (0.256 mL, 2.77 mmol), chloro(1,5-cyclooctadiene)iridium(I) dimer (18.5 mg, 0.0277 mmol) and Na_2CO_3 (88.2 mg, 0.832 mmol) in toluene (2 mL) is stirred at 105 °C for 4 h. The mixture is allowed to cool to rt, and is diluted with H_2O . The mixture is extracted with EtOAc. The combined org. layers is washed with brine, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Biotage, 25 g silicagel, EtOAc / heptane 2:8 \rightarrow 8:2) yields the title compound. LC-MS: t_R = 25 0.86 min, (conditions 3).

1-(4-(Vinylloxy)benzyl)-1H-pyrazol-3-amine. Prepared according to *general procedure 5* from Zn (powder, 140 mg, 2.14 mmol), 3-nitro-1-(4-(vinylloxy)benzyl)-1H-pyrazole (105 mg, 0.428 mmol) in acetone (4 mL), and aq. sat. NH_4Cl (1 mL). The title product is obtained. LC-MS: t_R = 0.60 min, MH^+ = 316.31 (conditions 3).

2-(4-Isopropylphenyl)-N-(1-(4-(vinylloxy)benzyl)-1H-pyrazol-3-yl)acetamide. Prepared according to *general procedure 3* from 2-(4-isopropylphenyl)acetic acid (79 mg, 0.44 mmol), 1-(4-(vinylloxy)benzyl)-1H-pyrazol-3-amine (95 mg, 0.44 mmol), HATU (252 mg, 0.662 mmol), and DIPEA (0.227 mL, 1.32 mmol) in DMF (4 mL). The reaction is complete after 1 h. Purification by HPLC yields the title compound. LC-MS: $t_R = 0.96$ min, $MH^+ = 376.33$ (conditions 4).

5 *Example 195. N-[1-(4-Cyclopropoxy-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide.* A soln. of 2-(4-isopropylphenyl)-N-(1-(4-(vinylloxy)benzyl)-1H-pyrazol-3-yl)acetamide (65 mg, 0.173 mmol) in CH_2Cl_2 (1.7 mL) is treated at 0 °C with CH_2ClI (0.0454 mL, 0.623 mmol) and Et_2Zn (1.0 M in hexanes, 0.415 mL, 0.415 mmol). The mixture is stirred at 0 °C for 1 h. Then, more CH_2ClI (0.0908 mL, 1.246 mmol) and Et_2Zn (1.0 M in hexanes, 0.830 mL, 0.830 mmol, 4.8 eq) are added. The mixture is allowed to warm to RT and stirred for 30 min. Aq. sat. NH_4Cl is added, and the mixture is extracted with EtOAc. The combined org. layers are washed with brine, dried over $MgSO_4$, filtered, and the solvents are removed under reduced pressure. Purification by HPLC yields example 195. LC-MS: $t_R = 0.97$ min, $MH^+ = 390.33$ (conditions 4).

10 *(rac.)-1-Bromo-4-(1-methoxyethyl)benzene.* NaH (55% in oil, 197 mg, about 4.51 mmol) is added to a sol. of *(rac.)-1-(4-bromophenyl)ethanol* (605 mg, 3.01 mmol) in THF (10 mL) at 0 °C. The mixture is stirred for 30 min at 0 °C, and MeI (0.94 mL, 15 mmol) is added. The mixture is allowed to warm up to rt, and is stirred for 4 h. A little water is added, and the solvents are removed under reduced pressure. The residue is diluted with CH_2Cl_2 , and is dried over $MgSO_4$. The mixture is filtered, and the solvents are removed under reduced pressure. Purification of the residue by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92, 20 g silicagel, flow 18 mL/min) yields the title product.

15 *(rac.)-tert-butyl 2-(4-(1-methoxyethyl)phenyl)acetate.* According to *general procedure 6*, from *(rac.)-1-bromo-4-(1-methoxyethyl)benzene* (470 mg, 2.19 mmol), 2-tert-butoxy-2-oxoethylzinc chloride (0.5M in Et_2O , 5.0 mL, 2.5 mmol), $Pd_2(dba)_3$ (100 mg, 0.109 mmol), and Q-Phos (158 mg, 0.219 mmol) in THF (5 mL). The reaction is complete after 30 min at 90 °C. Purification of the residue by automated FC (Büchi, EtOAc / heptane 2:98 → 4:96 → 10:90, 20 g silicagel, flow 18 mL/min) yields the title product. LC-MS: $t_R = 0.93$ min, (conditions 3).

20 *(rac.)-2-(4-(1-Methoxyethyl)phenyl)acetic acid.* According to *general procedure 7*, from *(rac.)-tert-butyl 2-(4-(1-methoxyethyl)phenyl)acetate* (240 mg, 0.959 mmol) and HCl (4M in dioxane, 5 mL) in CH_2Cl_2 (10 mL). The reaction is complete overnight at rt. The solvents are removed under reduced pressure to yield the crude title compound that is used without further purification. LC-MS: $t_R = 0.65$ min (conditions 3).

30 *Methyl 2-(4-methyl-3-oxo-3,4-dihydro-2H-benzo[b][1,4]oxazin-6-yl)acetate.* NaH (55% in oil, 12 mg, 0.27 mmol) is added to a sol. of methyl (3,4-dihydro-3-oxo-2H-1,4-benzoxazin-6-yl)acetate (50 mg, 0.22 mmol) in THF (2 mL) at 0 °C. The mixture is stirred for 15 min, and MeI (0.030 mL, 0.34 mmol) is added. The mixture is stirred for 30 min at 0 °C, and the solvents are removed under reduced pressure. Purification by HPLC yields the title product. LC-MS: $t_R = 0.71$ min, $MH^+ = 277.12$ (conditions 3).

2-(4-Methyl-3-oxo-3,4-dihydro-2H-benzo[b][1,4]oxazin-6-yl)acetic acid. A mixture of methyl 2-(4-methyl-3-oxo-3,4-dihydro-2H-benzo[b][1,4]oxazin-6-yl)acetate (7.0 mg, 0.030 mmol) in aq. 2.5 M NaOH (0.5 mL) and MeOH (1.5 mL) is stirred at rt for 30 min. The solvents are partially removed under reduced pressure, and the pH is adjusted to 3 with aq. 1M HCl. The mixture is extracted with CH₂Cl₂. The combined org. layers are dried over 5 MgSO₄, filtered, and the solvents are removed under reduced pressure to yield the title crude product. LC-MS: t_R = 0.59 min, MH⁺ = 263.00 (conditions 3).

The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t _R ; MH ⁺ ; conditions)
196 ¹	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-cyclobutoxy-phenyl)-acetamide	0.84 min; 387.73; conditions 3
197 ¹	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(4-cyclobutoxy-phenyl)-acetamide	0.89 min; 386.71; conditions 3
198 ¹	2-(4-Cyclobutoxy-phenyl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.92 min; 380.01; conditions 3
199 ¹	2-(4-Cyclobutoxy-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide	0.91 min; 392.04; conditions 3
200 ¹	2-(4-Cyclobutoxy-phenyl)-N-[1-(5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	0.84 min; 380.87; conditions 3
201	rac-N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-methoxy-ethyl)-phenyl]-acetamide	0.85 min; 368.02; conditions 3
202	rac-N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-methoxy-ethyl)-phenyl]-acetamide	0.87 min; 385.87; conditions 3
203	rac-N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-methoxy-ethyl)-phenyl]-acetamide	0.76 min; 376.03; conditions 3
204	N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(2-oxo-pyrrolidin-1-yl)-phenyl]-acetamide	0.78 min; 392.99; conditions 3
205	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-quinoxalin-6-yl-acetamide	0.80 min; 379.95; conditions 3

206	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-quinolin-7-yl-acetamide	0.64 min; 378.95; conditions 3
207	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1H-indol-6-yl)-acetamide	0.84 min; 367.25; conditions 3
208	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl)-acetamide	0.76 min; 398.97; conditions 3
209	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-methyl-3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl)-acetamide	0.81 min; 412.99; conditions 3

¹ For the preparation of the carboxylic acid, see: Page, D.; Balaux, E.; Boisvert, L.; Liu, Z.; Milburn, C.; Tremblay, M.; Wei, Zhongyong; W., Simon; L., Xuehong; Cheng, Y; et al., Bioorg. Med. Chem. Lett., 2008, 18, 3695.

5 *5-Fluoro-2-((3-(2-(4-isopropylphenyl)acetamido)-1H-pyrazol-1-yl)methyl)pyridine 1-oxide*. To a solution of Example 106 (350 mg, 0.993 mmol,) in CH₂Cl₂ (3.5 mL) is added 3-chloroperbenzoic acid (343 mg, 1.99 mmol). The mixture is stirred overnight at rt. The mixture is diluted with EtOAc, and the org. layer is washed with aq. sat. Na₂S₂O₃, aq. sat. NaHCO₃, and brine. The org. layer is dried over MgSO₄, filtered and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Biotage, 50 g
10 silicagel, MeOH / CH₂Cl₂ 0:1000 → 15:985) yields the title product. LC-MS: t_R = 0.70 min, MH⁺ = 369.21 (conditions 4).

Example 210: N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. To a sol. of 5-fluoro-2-((3-(2-(4-isopropylphenyl)acetamido)-1H-pyrazol-1-yl)methyl)pyridine 1-oxide (175 mg, 0.475 mmol) in CH₃CN (10 mL) is added Me₃SiCN (0.119 ml, 0.95 mmol) at rt. The mixture is stirred for 5 min,
15 and diethylcarbonyl chloride (0.0903 ml, 0.713 mmol) is added dropwise. The mixture is stirred at 85 °C overnight. The mixture is partitioned between aq. sat. NaHCO₃ and EtOAc. The combined org. layers are washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by HPLC yields example 210. LC-MS: t_R = 0.82 min, MH⁺ = 378.31 (conditions 4).

Example 211: N-[1-(6-Chloro-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide.
20 5-Fluoro-2-((3-(2-(4-isopropylphenyl)acetamido)-1H-pyrazol-1-yl)methyl)pyridine 1-oxide (37.7 mg, 0.102 mmol) is added to POCl₃ (1 mL) at 0 °C, and the mixture is stirred for 10 min at 0 °C, and then for 2.5 h at rt. The mixture is heated to 60 °C, and stirred at this temperature for 2 h. The mixture is dropped slowly on aq. sat. NaHCO₃ at 0 °C. The mixture is extracted with EtOAc, and the combined org. layers are washed with brine, dried over MgSO₄, filtered and the solvents are removed under reduced pressure. Purification by HPLC
25 yields example 211. LC-MS: t_R = 0.86 min, MH⁺ = 387.26 (conditions 4).

5 *5-Bromo-1-methyl-1H-pyrrolo[2,3-b]pyridine*. NaH (55% suspension in oil, 95 mg, about 213 mmol) is added to a sol. of 5-bromo-1H-pyrrolo[2,3-b]pyridine (350 mg, 1.78 mmol) in THF (2 mL) at 0 °C. The mixture is stirred for 15 min, and MeI (0.17 mL, 2.7 mmol) is added. The mixture is stirred for 30 min at 0 °C, and little water was added. The solvents were removed under reduced pressure. Purification of the residue by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92, 20 g silicagel, flow 18 mL/min) yields the title product. LC-MS: t_R = 0.81 min, MH^+ = 211.02 (conditions 3).

10 *tert-Butyl 2-(1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl)acetate*. Prepared according to *general procedure 6* from 5-bromo-1-methyl-1H-pyrrolo[2,3-b]pyridine (100 mg, 0.474 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 1.90 mL, 0.95 mmol), Pd₂(dba)₃ (22 mg, 0.024 mmol) and Q-Phos (34 mg, 0.048 mmol) in THF (1 mL). The reaction is complete after 90 min. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92, 20 g silicagel, flow 16 mL/min) yields the title product. LC-MS: t_R = 0.78 min, MH^+ = 247.15 (conditions 3).

15 *2-(1-Methyl-1H-pyrrolo[2,3-b]pyridin-5-yl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl)acetate* (235 mg, 0.954 mmol) and HCl (4M in dioxane, 10 mL) in CH₂Cl₂ (10 mL). The reaction is complete overnight. Removing the solvents under reduced pressure yields the crude title product.

20 *tert-Butyl 2-(3-methyl-2-oxo-2,3-dihydrobenzo[d]oxazol-6-yl)acetate*. Prepared according to *general procedure 6* from 6-bromo-3-methylbenzo[d]oxazol-2(3H)-one (230 mg, 1.01 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 4.00 mL, 2.00 mmol), Pd₂(dba)₃ (46 mg, 0.051 mmol) and Q-Phos (73 mg, 0.10 mmol) in dioxane (5 mL). The reaction is complete after 1 h at 90 °C. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 10 g silicagel, flow 10 mL/min) yields the title product. LC-MS: t_R = 0.85 min, MH^+ = 305.12 (conditions 3).

25 *2-(3-Methyl-2-oxo-2,3-dihydrobenzo[d]oxazol-6-yl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(3-methyl-2-oxo-2,3-dihydrobenzo[d]oxazol-6-yl)acetate* (198 mg, 0.752 mmol) and HCl (4M in dioxane, 4 mL) in CH₂Cl₂ (4 mL). The reaction is complete overnight. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.57 min (conditions 3).

30 *tert-Butyl 2-(2-oxo-2,3-dihydrobenzo[d]oxazol-6-yl)acetate*. Prepared according to *general procedure 6* from 6-bromobenzo[d]oxazol-2(3H)-one (216 mg, 1.01 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 4.00 mL, 2.00 mmol), Pd₂(dba)₃ (46 mg, 0.051 mmol) and Q-Phos (73 mg, 0.10 mmol) in dioxane (5 mL). The reaction is complete after 1 h at 90 °C. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 10 g silicagel, flow 10 mL/min) yields the title product. LC-MS: t_R = 0.78 min, MH^+ = 291.18 (conditions 3).

2-(2-Oxo-2,3-dihydrobenzo[d]oxazol-6-yl)acetic acid. Prepared according to *general procedure 7* from *tert-butyl 2-(2-oxo-2,3-dihydrobenzo[d]oxazol-6-yl)acetate* (100 mg, 0.401 mmol) and HCl (4M in dioxane, 3 mL) in

- 97 -

CH₂Cl₂ (3 mL). The reaction is complete overnight. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.50 min (conditions 3).

tert-Butyl 2-(1H-indol-5-yl)acetate. Prepared according to *general procedure 6* from 5-bromoindole (300 mg, 1.53 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 6.00 mL, 3.00 mmol), Pd₂(dba)₃ (70 mg, 0.077 mmol) and Q-Phos (110 mg, 0.15 mmol) in dioxane (5 mL). The reaction is complete after 1 h at 90 °C. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 10 g silicagel, flow 10 mL/min) yields the title product. LC-MS: t_R = 0.89 min, MH⁺ = 232.19 (conditions 3).

2-(1H-Indol-5-yl)acetic acid. A mixture of *tert-butyl 2-(1H-indol-5-yl)acetate* (50 mg, 0.22 mmol) and NaOH (11 mg, 0.26 mmol) in MeOH (4 mL) is heated to 55 °C and stirred at this temperature for 2 h. The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. The residue is diluted with CH₂Cl₂, and aq. 1M HCl is added to pH 2-3. The phases are separated, and the org. layer is dried over MgSO₄, and filtered. The solvents are removed under reduced pressure to yield the crude title compound. LC-MS: t_R = 0.89 min (conditions 3).

tert-Butyl 2-(1-methyl-1H-indol-5-yl)acetate. Prepared according to *general procedure 6* from 5-bromo-1-methylindole (321 mg, 1.53 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 6.00 mL, 3.00 mmol), Pd₂(dba)₃ (70 mg, 0.077 mmol) and Q-Phos (110 mg, 0.15 mmol) in dioxane (5 mL). The reaction is complete after 1 h at 90 °C. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 10 g silicagel, flow 10 mL/min) yields the title product. LC-MS: t_R = 0.94 min, MH⁺ = 246.28 (conditions 3).

2-(1-Methyl-1H-indol-5-yl)acetic acid. A mixture of *tert-butyl 2-(1H-indol-5-yl)acetate* (53 mg, 0.22 mmol) and NaOH (11 mg, 0.26 mmol) in MeOH (4 mL) is heated to 55 °C and stirred at this temperature for 2 h. The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. The residue is diluted with CH₂Cl₂, and aq. 1M HCl is added to pH 2-3. The phases are separated, and the org. layer is dried over MgSO₄, and filtered. The solvents are removed under reduced pressure to yield the crude title compound. LC-MS: t_R = 0.69 min (conditions 3).

tert-Butyl 2-(1-methyl-1H-indol-6-yl)acetate. Prepared according to *general procedure 6* from 6-bromo-1-methylindole (321 mg, 1.53 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 6.00 mL, 3.00 mmol), Pd₂(dba)₃ (70 mg, 0.077 mmol) and Q-Phos (110 mg, 0.15 mmol) in dioxane (5 mL). The reaction is complete after 1 h at 90 °C. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 10 g silicagel, flow 10 mL/min) yields the title product. LC-MS: t_R = 0.95 min, MH⁺ = 246.25 (conditions 3).

2-(1-Methyl-1H-indol-6-yl)acetic acid. A mixture of *tert-butyl 2-(1H-indol-6-yl)acetate* (53 mg, 0.22 mmol) and NaOH (11 mg, 0.26 mmol) in MeOH (4 mL) is heated to 55 °C and stirred at this temperature for 2 h. The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. The residue is diluted

- 98 -

with CH₂Cl₂, and aq. 1M HCl is added to pH 2-3. The phases are separated, and the org. layer is dried over MgSO₄, and filtered. The solvents are removed under reduced pressure to yield the crude title compound. LC-MS: t_R = 0.69 min (conditions 3).

5 *tert-Butyl 2-(1-methyl-1H-benzo[d]imidazol-6-yl)acetate*. Prepared according to *general procedure 6* from 6-bromo-1-methyl-1H-benzo[d]imidazole (490 mg, 2.32 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 5.10 mL, 2.55 mmol), Pd₂(dba)₃ (106 mg, 0.116 mmol) and Q-Phos (167 mg, 0.232 mmol) in dioxane (4 mL). The reaction is complete after 1 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 10 g silicagel, flow 10 mL/min) yields the title product. LC-MS: t_R = 0.59 min, MH⁺ = 247.11 (conditions 3).

10 *2-(1-Methyl-1H-benzo[d]imidazol-6-yl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(1-methyl-1H-benzo[d]imidazol-6-yl)acetate* (50 mg, 0.203 mmol) and HCl (4M in dioxane, 2 mL) in CH₂Cl₂ (4 mL). The reaction is complete after 90 min. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.36 min (conditions 3).

15 *tert-Butyl 2-(1-methyl-1H-indazol-5-yl)acetate*. Prepared according to *general procedure 6* from 5-bromo-1-methyl-1H-indazole (490 mg, 2.32 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 5.10 mL, 2.55 mmol), Pd₂(dba)₃ (106 mg, 0.116 mmol) and Q-Phos (167 mg, 0.232 mmol) in dioxane (4 mL). The reaction is complete after 1 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 10 g silicagel, flow 10 mL/min) yields the title product. LC-MS: t_R = 0.88 min, MH⁺ = 247.14 (conditions 3).

20 *2-(1-Methyl-1H-indazol-5-yl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(1-methyl-1H-indazol-5-yl)acetate* (50 mg, 0.20 mmol) and HCl (4M in dioxane, 2 mL) in CH₂Cl₂ (4 mL). The reaction is complete after 4.5 h. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.60 min (conditions 3).

25 *tert-Butyl 2-(1-methyl-1H-indazol-6-yl)acetate*. Prepared according to *general procedure 6* from 6-bromo-1-methyl-1H-indazole (490 mg, 2.32 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 5.10 mL, 2.55 mmol), Pd₂(dba)₃ (106 mg, 0.116 mmol) and Q-Phos (167 mg, 0.232 mmol) in dioxane (4 mL). The reaction is complete after 1 h at rt. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 8:92 → 15:85, 10 g silicagel, flow 10 mL/min) yields the title product. LC-MS: t_R = 0.88 min, MH⁺ = 247.14 (conditions 3).

30 *2-(1-Methyl-1H-indazol-6-yl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(1-methyl-1H-indazol-6-yl)acetate* (50 mg, 0.20 mmol) and HCl (4M in dioxane, 2 mL) in CH₂Cl₂ (4 mL). The reaction is complete after 6.5 h. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.60 min (conditions 3).

tert-Butyl 2-(4-(3-fluorooxetan-3-yl)phenyl)acetate. Prepared according to *general procedure 6* from 3-(4-bromophenyl)-3-fluorooxetane (WO2008156726, 150 mg, 0.649 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 1.43 mL, 0.714 mmol), Pd₂(dba)₃ (29.7 mg, 0.033 mmol) and Q-Phos (46 mg, 0.065 mmol) in THF (4 mL). The reaction is complete after 2 h at 85 °C. Purification of the crude by automated FC (Büchi, EtOAc / heptane 10:90 → 30:70 → 50:50 → 75:25) yields the title product. LC-MS: t_R = 0.90 min (conditions 3).

2-(4-(3-Fluorooxetan-3-yl)phenyl)acetic acid. A mixture of *tert-butyl 2-(4-(3-fluorooxetan-3-yl)phenyl)acetate* (10 mg, 0.038 mmol) in HCOOH (1 mL) is stirred at rt for 1 h. The solvents are removed under reduced pressure. The residue is dissolved in CH₂Cl₂, and the mixture is washed with aq. 0.01M HCl. After partitioning the layers in a Separator® (Biotage), the org. layer is concentrated under reduced pressure to yield the crude title product. LC-MS: t_R = 0.63 min (conditions 3).

tert-Butyl 2-(4-(3-hydroxyoxetan-3-yl)phenyl)acetate. Prepared according to *general procedure 6* from 3-(4-bromophenyl)oxetan-3-ol (WO2008156726, 200 mg, 0.873 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 3.66 mL, 1.83 mmol), Pd₂(dba)₃ (40 mg, 0.044 mmol) and Q-Phos (62 mg, 0.087 mmol) in THF (4 mL). The reaction is complete after 2 h at 85 °C. Purification of the crude by automated FC (Büchi, EtOAc / heptane 10:90 → 30:70 → 50:50 → 75:25) yields the title product. LC-MS: t_R = 0.76 min (conditions 3).

2-(4-(3-Hydroxyoxetan-3-yl)phenyl)acetic acid. Prepared according to *general procedure 7* from *tert-butyl 2-(4-(3-hydroxyoxetan-3-yl)phenyl)acetate* (20 mg, 0.076 mmol) in HCOOH (1 mL). The reaction is complete after 1 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.48 min (conditions 3).

tert-butyl 2-(4-(3-Methyloxetan-3-yl)phenyl)acetate. Prepared according to *general procedure 6* from 3-(4-bromophenyl)-3-methyloxetane (105 mg, 0.462 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 1.02 mL, 0.509 mmol), Pd₂(dba)₃ (21 mg, 0.023 mmol) and Q-Phos (33 mg, 0.046 mmol) in THF (2.5 mL). The reaction is complete after 1.5 h at 85 °C. Purification of the crude by automated FC (Büchi, EtOAc / heptane 10:90 → 30:70 → 50:50 → 75:25) yields the title product. LC-MS: t_R = 0.91 min (conditions 3).

2-(4-(3-Methyloxetan-3-yl)phenyl)acetic acid. Prepared according to *general procedure 7* from *tert-butyl 2-(4-(3-methyloxetan-3-yl)phenyl)acetate* (25 mg, 0.095 mmol) in HCOOH (1 mL). The reaction is complete after 1 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.64 min (conditions 3).

tert-Butyl 2-(3,3-dimethyl-2-oxoindolin-5-yl)acetate. Prepared according to *general procedure 6* from 5-bromo-3,3-dimethylindolin-2-one (367 mg, 1.53 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 6.0 mL, 3.0 mmol), Pd₂(dba)₃ (70 mg, 0.077 mmol) and Q-Phos (110 mg, 0.153 mmol) in dioxane (5 mL). The reaction is complete after 1.5 h at 90 °C. Purification of the crude by automated FC (Büchi, EtOAc / heptane

- 100 -

1:99 → 3:97 → 5:95 → 10:90 → 25:75 → 50:50) yields the title product. LC-MS: t_R = 0.83 min, MH^+ = 276.28 (conditions 3).

2-(3,3-Dimethyl-2-oxoindolin-5-yl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(3,3-dimethyl-2-oxoindolin-5-yl)acetate (56 mg, 0.20 mmol) in HCl (4M in dioxane, 2 mL) and CH_2Cl_2 (4 mL).

5 The reaction is complete overnight at rt. Removing the solvents under reduced pressure yields the crude title product.

tert-Butyl 2-(1,3,3-trimethyl-2-oxoindolin-5-yl)acetate. Prepared according to *general procedure 6* from 5-bromo-1,3,3-trimethylindolin-2-one (170 mg, 0.669 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et_2O , 2.6 mL, 1.3 mmol), $Pd_2(dba)_3$ (31 mg, 0.033 mmol) and Q-Phos (48 mg, 0.077 mmol) in dioxane (4 mL).

10 The reaction is complete after 20 min at 90 °C. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 10:90 → 25:75 → 50:50) yields the title product. LC-MS: t_R = 0.89 min, MH^+ = 290.01 (conditions 3).

2-(1,3,3-Trimethyl-2-oxoindolin-5-yl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(1,3,3-trimethyl-2-oxoindolin-5-yl)acetate (90 mg, 0.31 mmol) in HCl (4M in dioxane, 2 mL) and CH_2Cl_2 (4 mL).

15 The reaction is complete overnight at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.63 min, MH^+ = 275.23 (conditions 3).

tert-Butyl 2-(1-methyl-1H-benzo[d]imidazol-5-yl)acetate. Prepared according to *general procedure 6* from 5-bromo-1-methyl-1H-benzo[d]imidazole (490 mg, 2.32 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et_2O , 5.1 mL, 2.55 mmol), $Pd_2(dba)_3$ (106 mg, 0.116 mmol) and Q-Phos (167 mg, 0.232 mmol) in dioxane

20 (4 mL). The reaction is complete after 2 h at 90 °C. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 10:90 → 25:75 → 50:50) yields the title product. LC-MS: t_R = 0.60 min, MH^+ = 246.99 (conditions 3).

2-(1-Methyl-1H-benzo[d]imidazol-5-yl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(1-methyl-1H-benzo[d]imidazol-5-yl)acetate (44 mg, 0.17 mmol) in HCl (4M in dioxane, 2 mL) and CH_2Cl_2 (4 mL). The reaction is complete after 3 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.37 min, MH^+ = 191.16 (conditions 3).

25 *3-(4-Bromophenyl)-3-methoxyoxetane*. 3-(4-Bromophenyl)oxetan-3-ol (WO2008156726, 150 mg, 0.65 mmol) is dissolved in DMF (2.00 mL). The mixture is cooled to 0 °C, and NaH (29 mg, 0.72 mmol) is added. The mixture is stirred for 1 h at 0 °C, and MeI (0.05 ml, 0.79 mmol) is added. The mixture is stirred at rt over 30 days. Water is added. The mixture is extracted with ether. The combined org. extracts are dried over $MgSO_4$, filtered, and the solvents are removed under reduced pressure under reduced pressure. Purification of the crude by automated FC (Combiflash, column 24 g, flow rate 35 mL/min, EtOAc / heptane 0:100 → 10:90 → 30:70) yields the title product. LC-MS: t_R = 0.80 min, MH^+ = 205.30 (conditions 3).

- 101 -

tert-Butyl 2-(4-(3-methoxyoxetan-3-yl)phenyl)acetate. Prepared according to *general procedure 6* from 3-(4-bromophenyl)-3-methoxyoxetane (100 mg, 0.41 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 0.9 mL, 0.45 mmol), Pd₂(dba)₃ (19 mg, 0.021 mmol) and Q-Phos (29 mg, 0.041 mmol) in dioxane (3 mL). The reaction is complete after 2 h at 90 °C. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 3:97 → 5:95 → 10:90 → 25:75 → 50:50) yields the title product. LC-MS: t_R = 0.87 min, (conditions 3).

2-(4-(3-Methoxyoxetan-3-yl)phenyl)acetic acid. Prepared according to *general procedure 7* from *tert-butyl 2-(4-(3-methoxyoxetan-3-yl)phenyl)acetate* (40 mg, 0.14 mmol) in HCOOH (1 mL). The reaction is complete after 1 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.59 min (conditions 3).

The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t _R ; MH ⁺ ; conditions)
212	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-acetamide	0.75 min; 382.26; conditions 3
213	N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-acetamide	0.73 min; 364.22; conditions 3
214	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-acetamide	0.70 min; 371.25; conditions 3
215	N-[1-(4-Methoxy-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-acetamide	0.73 min; 376.29; conditions 3
216	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-cyclopropyl-pyridin-3-yl)-acetamide	0.51 min; 376.33; conditions 4
217	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(3-methyl-2-oxo-2,3-dihydro-benzooxazol-6-yl)-acetamide	0.80 min; 399.25; conditions 3
218	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(2-oxo-2,3-dihydro-benzooxazol-6-yl)-acetamide	0.75 min; 385.18; conditions 3
219	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1H-indol-5-yl)-acetamide	0.83 min; 367.23; conditions 3

- 102 -

220	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide	0.88 min; 381.29; conditions 3
221	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide	0.88 min; 381.27; conditions 3
222	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(3-methyl-3H-benzimidazol-5-yl)-acetamide	0.62 min; 382.29; conditions 3
223	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-5-yl)-acetamide	0.83 min; 382.30; conditions 3
224	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-6-yl)-acetamide	0.83 min; 382.28; conditions 3
225	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-yl)-phenyl]-acetamide	0.85 min; 402.82; conditions 3
226	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-hydroxy-oxetan-3-yl)-phenyl]-acetamide	0.73 min; 400.11; conditions 3
227	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-yl)-phenyl]-acetamide	0.85 min; 398.02; conditions 3
228	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(3,3-dimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl)-acetamide	0.78 min; 411.29; conditions 3
229	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3,3-trimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl)-acetamide	0.83 min; 425.27; conditions 3
230	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-benzimidazol-5-yl)-acetamide	0.62 min; 382.29; conditions 3
231	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methoxy-oxetan-3-yl)-phenyl]-acetamide	0.82 min; 414.28; conditions 3

Examples 232 and 233: *N*-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((*R*)-1-methoxy-ethyl)-phenyl]-acetamide and *N*-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((*S*)-1-methoxy-ethyl)-phenyl]-acetamide

5 Separation of the enantiomers from Example 202 by chiral HPLC yields examples 232 and 233. Absolute configuration of each enantiomer was attributed arbitrarily.

- 103 -

4-Cyanophenethyl acetate. Pyridine (1.1 mL, 13.6 mmol) and Ac₂O (0.51 mL, 5.44 mmol) are added to a sol. of 4-(2-hydroxyethyl)benzotrile (200 mg, 1.36 mmol) in CH₂Cl₂ (3 mL). The mixture is stirred at rt overnight. The solvents are removed under reduced pressure, and the residue is partitioned between Et₂O and aq. 1M HCl. The org. layer is washed with aq. 1M HCl, aq. 10% Na₂CO₃, and brine. The org. layer is dried over
5 MgSO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.77 min (conditions 3).

4-(N-Hydroxycarbamimidoyl)phenethyl acetate. H₂NOH·HCl (97.2 mg, 1.4 mmol) is added to a sol. of 4-cyanophenethyl acetate (241 mg, 1.27 mmol) in MeOH (4.2 mL). The sol. is stirred at 45 °C for 45 h, and is allowed to cool to rt. The solvents are removed under reduced pressure. Purification of the crude by
10 automated FC (CombiFlash, 24 g silicagel, MeOH / CH₂Cl₂ 0:100 → 5:95) yields the title product. LC-MS: t_R = 0.45 min, MH⁺ = 223.08 (conditions 3).

4-(5-Methyl-1,2,4-oxadiazol-3-yl)phenethyl acetate. A mixture of 4-(N-hydroxycarbamimidoyl)phenethyl acetate (50 mg, 0.225 mmol) in Ac₂O (0.225 mL) is stirred at 100 °C for 2 h. The mixture is allowed to cool to
15 rt, and the solvents are removed under reduced pressure. The residue is dried in a Kugelrohr oven. Purification of the crude by automated FC (CombiFlash, 4 g silicagel, MeOH / CH₂Cl₂ 0:100 → 0.5:99.5) yields the title product. LC-MS: t_R = 0.81 min, MH⁺ = 247.22 (conditions 3).

2-(4-(5-Methyl-1,2,4-oxadiazol-3-yl)phenyl)ethan-1-ol. A mixture of 4-(5-methyl-1,2,4-oxadiazol-3-yl)phenethyl acetate (38.5 mg, 0.156 mmol), K₂CO₃ (216 mg, 1.56 mmol), in MeOH (1.35 mL) and water (0.15 mL) is
20 stirred at rt overnight. The mixture is taken up in EtOAc and washed twice with water. The org. layer is dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure. LC-MS: t_R = 0.65 min (conditions 3).

2-(4-(5-Methyl-1,2,4-oxadiazol-3-yl)phenyl)acetic acid. CrO₃ 2M in H₂SO₄, 0.288 mL, 0.575 mmol) is added at
rt to a sol. of 2-(4-(5-methyl-1,2,4-oxadiazol-3-yl)phenyl)ethan-1-ol (23.5 mg, 0.115 mmol) in acetone (1.5 mL). The resulting mixture is stirred at rt for 6 min, and water is added. The mixture is extracted with CH₂Cl₂
25 (5x). The combined org. layers are dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure. LC-MS: t_R = 0.65 min, MH⁺ = 260.23 (conditions 3).

4-(1,2,4-Oxadiazol-3-yl)phenethyl acetate. A mixture of 4-(N-hydroxycarbamimidoyl)phenethyl acetate (50 mg, 0.225 mmol) in HC(OEt)₃ (0.225 mL) is stirred at 100 °C for 5 h. The mixture is allowed to cool to rt, and the
solvents are removed under reduced pressure. The residue is dried in a Kugelrohr oven to yield the crude title
30 product. LC-MS: t_R = 0.80 min (conditions 3).

2-(4-(1,2,4-Oxadiazol-3-yl)phenyl)ethan-1-ol. A mixture of 4-(1,2,4-oxadiazol-3-yl)phenethyl acetate (52.2 mg, 0.225 mmol), K₂CO₃ (311 mg, 2.25 mmol), in MeOH (1.94 mL) and water (0.22 mL) is stirred at rt overnight. The mixture is taken up in EtOAc and washed twice with water. The org. layer is dried over Na₂SO₄, filtered,
and the solvents are removed under reduced pressure. LC-MS: t_R = 0.59 min (conditions 3).

- 104 -

2-(4-(1,2,4-Oxadiazol-3-yl)phenyl)acetic acid. CrO₃ 2M in H₂SO₄, 0.585 mL, 1.17 mmol) is added at rt to a sol. of 2-(4-(1,2,4-oxadiazol-3-yl)phenyl)ethan-1-ol (44.5 mg, 0.234 mmol) in acetone (3 mL). The resulting mixture is stirred at rt for 20 min, and water is added. The mixture is extracted with CH₂Cl₂ (5x). The combined org. layers are dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure. LC-MS: t_R = 0.62 min (conditions 3).

tert-Butyl 2-(4-(3,3-difluorocyclobutyl)phenyl)acetate. Prepared according to *general procedure 6* from 1-bromo-4-(3,3-difluorocyclobutyl)benzene (US 20100197591, 22 mg, 0.089 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 0.2 mL, 0.1 mmol), Pd₂(dba)₃ (4.1 mg, 0.045 mmol) and Q-Phos (6.3 mg, 0.089 mmol) in dioxane (1 mL). The reaction is complete after 3 h at 60 °C. Purification of the crude by automated FC (Combiflash, EtOAc / heptane 0:100 80:20) yields the title product. LC-MS: t_R = 1.00 min, (conditions 3).

2-(4-(3,3-Difluorocyclobutyl)phenyl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(4-(3,3-difluorocyclobutyl)phenyl)acetate (12 mg, 0.050 mmol) in HCOOH (0.55 mL). The reaction is complete after 2 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.78 min (conditions 3).

tert-Butyl 2-(4-(oxetan-3-yloxy)phenyl)acetate. Prepared according to *general procedure 6* from 3-(4-bromophenoxy)oxetane (WO 2012120397, 68 mg, 0.30 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 0.70 mL, 0.35 mmol), Pd₂(dba)₃ (14 mg, 0.015 mmol) and X-Phos (7.1 mg, 0.015 mmol) in THF (1.85 mL). The reaction is complete overnight at 50 °C. Purification of the crude by automated FC (Combiflash, MeOH / CH₂Cl₂ 0:100 2:98) yields the title product. LC-MS: t_R = 0.88 min, (conditions 3).

2-(4-(Oxetan-3-yloxy)phenyl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(4-(oxetan-3-yloxy)phenyl)acetate (40 mg, 0.15 mmol) in HCOOH (1.5 mL). The reaction is complete after 2.5 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.60 min (conditions 3).

1-Bromo-4-(3,3-difluorocyclobutoxy)benzene. PPh₃ (267 mg, 1.02 mmol) is dissolved in dry toluene (2 mL) and cooled to 0 °C. Dropwise, diethyl azodicarboxylate (0.165 mL, 1.02 mmol) is added and the light yellow sol. is stirred at 0 °C for 10 min. A sol. of 3,3-difluorocyclobutanol (100 mg, 0.925 mmol) in toluene (0.8 ml) is added. After stirring for another 10 min at rt, 4-bromophenol (160 mg, 0.925 mmol) is added, and the sol. is stirred at 100°C overnight. The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Combiflash, 40 g silicagel, EtOAc / heptane 0:100 → 5:95) yields the title product. LC-MS: t_R = 0.94 min (conditions 3).

tert-Butyl 2-(4-(3,3-difluorocyclobutoxy)phenyl)acetate. Prepared according to *general procedure 6* from 1-bromo-4-(3,3-difluorocyclobutoxy)benzene (78 mg, 0.30 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 0.74 mL, 0.37 mmol), Pd₂(dba)₃ (14 mg, 0.015 mmol) and X-Phos (7.1 mg, 0.015 mmol) in THF

- 105 -

(1.85 mL). The reaction is complete overnight at 50 °C. Purification of the crude by automated FC (Combiflash, MeOH / CH₂Cl₂ 0:100 2:98) yields the title product. LC-MS: t_R = 0.98 min, (conditions 3).

2-((4-(3,3-Difluorocyclobutoxy)phenyl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-((4-(3,3-difluorocyclobutoxy)phenyl)acetate (66 mg, 0.22 mmol) in HCOOH (2.2 mL). The reaction is complete after 40 min at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.77 min (conditions 3).

(3-Methyloxetan-3-yl)methyl 4-methylbenzenesulfonate. p-Toluenesulfonyl chloride (2.17 g, 11.4 mmol) is dissolved in CH₂Cl₂ (9.5 mL) at rt. Pyridine (1.53 mL, 19 mmol) is added, followed by 3-methyl-3-oxetanemethanol (0.977 mL, 9.5 mmol). The sol. is stirred at rt for 4 h. The sol. is diluted with CH₂Cl₂ and washed with aq. 0.1M HCl and with aq. sat. NaHCO₃. The org. layer is dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Combiflash, EtOAc/heptane 0:100 → 60:40) yields the title product. LC-MS: t_R = 0.80 min, MH⁺ = 257.17 (conditions 3).

3-((4-Bromophenoxy)methyl)-3-methyloxetane. A mixture of (3-methyloxetan-3-yl)methyl 4-methylbenzenesulfonate (500 mg, 1.95 mmol), 4-bromophenol (371 mg, 2.15 mmol), KI (139 mg, 0.839 mmol) and K₂CO₃ (539 mg, 3.9 mmol) in DMF (2.8 mL) is stirred at 130 °C for 1.5 h. The mixture is allowed to cool to rt, and is partitioned between EtOAc and water. The org. layer is washed with water (3x), dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by FC (Combiflash, 12 g cartridge, EtOAc / heptane 0:100 → 30:70) yields the title product. LC-MS: t_R = 0.87 min (conditions 3).

tert-Butyl 2-((3-methyloxetan-3-yl)methoxy)phenyl)acetate. Prepared according to *general procedure 6* from 3-((4-bromophenoxy)methyl)-3-methyloxetane (200 mg, 0.778 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 2.34 mL, 1.17 mmol), Pd₂(dba)₃ (36 mg, 0.039 mmol) and X-Phos (19 mg, 0.039 mmol) in THF (4.9 mL). The reaction is complete after 1.5 h at rt. Purification of the crude by automated FC (Combiflash, MeOH / CH₂Cl₂ 0:100 2:98) yields the title product. LC-MS: t_R = 0.93 min, (conditions 3).

2-((4-((3-methyloxetan-3-yl)methoxy)phenyl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-((4-((3-methyloxetan-3-yl)methoxy)phenyl)acetate (105 mg, 0.36 mmol) in HCOOH (3.4 mL). The reaction is complete after 1.5 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.68 min (conditions 3).

Oxetan-3-ylmethyl 4-methylbenzenesulfonate. p-Toluenesulfonyl chloride (370 mg, 1.94 mmol) is dissolved in pyridine (1.62 mL, 20 mmol). 3-Oxetanemethanol (150 mg, 1.62 mmol) is added. The sol. is stirred at rt for 3 h. The sol. is diluted with EtOAc, and washed with aq. 0.1M HCl and with aq. sat. NaHCO₃. The org. layer is dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Combiflash, EtOAc/heptane 0:100 → 50:50) yields the title product. LC-MS: t_R = 0.75 min, MH⁺ = 243.12 (conditions 3).

- 106 -

3-((4-Bromophenoxy)methyl)-3-oxetane. A mixture of oxetan-3-ylmethyl 4-methylbenzenesulfonate (300 mg, 1.24 mmol), 4-bromophenol (236 mg, 1.36 mmol), KI (88 mg, 0.43 mmol) and K₂CO₃ (342 mg, 2.48 mmol) in DMF (1.8 mL) is stirred at 130 °C for 1.5 h. The mixture is allowed to cool to rt, and is partitioned between EtOAc and water. The org. layer is washed with water (3x), dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by FC (Combiflash, 12 g silicagel, EtOAc / heptane 0:100 → 30:70) yields the title product. LC-MS: t_R = 0.82 min (conditions 3).

tert-Butyl 2-(4-(oxetan-3-ylmethoxy)phenyl)acetate. Prepared according to *general procedure 6* from 3-((4-bromophenoxy)methyl)-3-oxetane (182 mg, 0.749 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 2.2 mL, 1.1 mmol), Pd₂(dba)₃ (34 mg, 0.037 mmol) and X-Phos (18 mg, 0.037 mmol) in THF (4.7 mL). The reaction is complete after 2.5 h at rt. Purification of the crude by automated FC (Combiflash, MeOH / CH₂Cl₂ 0:100 2:98) yields the title product. LC-MS: t_R = 0.89 min, (conditions 3).

2-(4-(Oxetan-3-ylmethoxy)phenyl)acetic acid. Prepared according to *general procedure 7* from *tert-butyl 2-(4-(oxetan-3-ylmethoxy)phenyl)acetate* (95 mg, 0.34 mmol) in HCOOH (1.3 mL). The reaction is complete after 2 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.62 min (conditions 3).

(3,3-Difluoro-1-methylcyclobutyl)methyl 4-methylbenzenesulfonate. p-Toluenesulfonyl chloride (252 mg, 1.32 mmol) is dissolved in pyridine (1.1 mL). (3,3-Difluoro-1-methyl-cyclobutyl)methanol (150 mg, 1.10 mmol) is added. The sol. is stirred at rt overnight. The sol. is diluted with EtOAc, and washed with aq. 0.1M HCl and with aq. sat. NaHCO₃. The org. layer is dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.93 min, MH⁺ = 243.12 (conditions 3).

1-Bromo-4-((3,3-difluoro-1-methylcyclobutyl)methoxy)benzene. A mixture of (3,3-difluoro-1-methylcyclobutyl)methyl 4-methylbenzenesulfonate (232 mg, 0.799 mmol), 4-bromophenol (152 mg, 0.879 mmol), KI (57 mg, 0.34 mmol) and K₂CO₃ (221 mg, 1.60 mmol) in DMF (1.2 mL) is stirred at 130 °C for 2.5 h. The mixture is allowed to cool to rt, and is partitioned between EtOAc and water. The org. layer is washed with water (3x), dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by FC (Combiflash, 12 g silicagel, EtOAc / heptane 0:100 → 30:70) yields the title product. LC-MS: t_R = 1.01 min (conditions 3).

tert-Butyl 2-(4-((3,3-difluoro-1-methylcyclobutyl)methoxy)phenyl)acetate. Prepared according to *general procedure 6* from 1-bromo-4-((3,3-difluoro-1-methylcyclobutyl)methoxy)benzene (152 mg, 0.522 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 1.57 mL, 0.78 mmol), Pd₂(dba)₃ (24 mg, 0.026 mmol) and X-Phos (12.4 mg, 0.026 mmol) in THF (3.3 mL). The reaction is complete after 2.5 h at rt. Purification of the crude by automated FC (Combiflash, MeOH / CH₂Cl₂ 0:100 2:98) yields the title product. LC-MS: t_R = 1.04 min, (conditions 3).

- 107 -

2-(4-((3,3-Difluoro-1-methylcyclobutyl)methoxy)phenyl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(4-((3,3-difluoro-1-methylcyclobutyl)methoxy)phenyl)acetate (100 mg, 0.306 mmol) in HCOOH (1.2 mL). The reaction is complete after 2 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: $t_R = 0.85$ min (conditions 3).

5 (3,3-Difluorocyclobutyl)methyl 4-methylbenzenesulfonate. p-Toluenesulfonyl chloride (281 mg, 1.47 mmol) is dissolved in pyridine (1.23 mL). (3,3-Difluorocyclobutyl)methanol (150 mg, 1.23 mmol) is added. The sol. is stirred at rt overnight. The sol. is diluted with EtOAc, and washed with aq. 0.1M HCl and with aq. sat. NaHCO₃. The org. layer is dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: $t_R = 0.90$ min (conditions 3).

10 1-Bromo-4-((3,3-difluorocyclobutyl)methoxy)benzene. A mixture of (3,3-difluorocyclobutyl)methyl 4-methylbenzenesulfonate (227 mg, 0.822 mmol), 4-bromophenol (156 mg, 0.904 mmol), KI (59 mg, 0.35 mmol) and K₂CO₃ (227 mg, 1.64 mmol) in DMF (1.2 mL) is stirred at 130 °C for 2.5 h. The mixture is allowed to cool to rt, and is partitioned between EtOAc and water. The org. layer is washed with water (3x), dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by FC
15 (Combiflash, 12 g silicagel, EtOAc / heptane 0:100 → 30:70) yields the title product. LC-MS: $t_R = 0.97$ min (conditions 3).

tert-butyl 2-(4-((3,3-difluorocyclobutyl)methoxy)phenyl)acetate. Prepared according to *general procedure 6* from 1-bromo-4-((3,3-difluorocyclobutyl)methoxy)benzene (102 mg, 0.368 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 1.52 mL, 0.76 mmol), Pd₂(dba)₃ (17 mg, 0.018 mmol) and X-Phos (8.8
20 mg, 0.018 mmol) in THF (2.3 mL). The reaction is complete after 2.5 h at rt. Purification of the crude by automated FC (Combiflash, EtOAc / heptane 0:100 10:90) yields the title product. LC-MS: $t_R = 1.00$ min, (conditions 3).

2-(4-((3,3-Difluorocyclobutyl)methoxy)phenyl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(4-((3,3-difluorocyclobutyl)methoxy)phenyl)acetate (72 mg, 0.231 mmol) in HCOOH (0.87 mL).
25 The reaction is complete after 2 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: $t_R = 0.80$ min (conditions 3).

(3-Fluorooxetan-3-yl)methyl 4-methylbenzenesulfonate. p-Toluenesulfonyl chloride (216 mg, 1.13 mmol) is dissolved in CH₂Cl₂ (0.95 mL). Pyridine (0.152 mL, 1.89 mmol) and (3-fluorooxetan-3-yl)methanol (WO 2011084402, 100 mg, 0.943 mmol) is added. The sol. is stirred at rt for 6 h. The sol. is diluted with
30 CH₂Cl₂, and washed with aq. 0.1M HCl and with aq. sat. NaHCO₃. The org. layer is dried over Na₂SO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: $t_R = 0.80$ min, MH⁺ = 261.13 (conditions 3).

3-((4-Bromophenoxy)methyl)-3-fluorooxetane. A mixture of (3-fluorooxetan-3-yl)methyl 4-methylbenzenesulfonate (138 mg, 0.530 mmol), 4-bromophenol (101 mg, 0.583 mmol), KI (38 mg, 0.23 mmol)

and K_2CO_3 (147 mg, 1.06 mmol) in DMF (0.75 mL) is stirred at 130 °C for 1.5 h. The mixture is allowed to cool to rt, and is partitioned between EtOAc and water. The org. layer is washed with water (3x), dried over Na_2SO_4 , filtered, and the solvents are removed under reduced pressure. Purification of the crude by FC (Combiflash, 12 g silicagel, EtOAc / heptane 0:100 → 30:70) yields the title product. LC-MS: t_R = 0.84 min (conditions 3).

tert-Butyl 2-(4-((3-fluorooxetan-3-yl)methoxy)phenyl)acetate. Prepared according to *general procedure 6* from 3-((4-bromophenoxy)methyl)-3-fluorooxetane (84 mg, 0.32 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et_2O , 1.28 mL, 0.64 mmol), $Pd_2(dba)_3$ (15 mg, 0.016 mmol) and X-Phos (7.6 mg, 0.016 mmol) in THF (2.0 mL). The reaction is complete after 3 h at rt. Purification of the crude by automated FC (Combiflash, MeOH / CH_2Cl_2 0:100 → 2:98) yields the title product. LC-MS: t_R = 0.91 min, (conditions 3).

2-(4-((3-Fluorooxetan-3-yl)methoxy)phenyl)acetic acid. Prepared according to *general procedure 7* from *tert-butyl 2-(4-((3-fluorooxetan-3-yl)methoxy)phenyl)acetate* (63 mg, 0.21 mmol) in HCOOH (0.80 mL). The reaction is complete after 3 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.65 min (conditions 3).

5-Bromo-2-(3-methoxyoxetan-3-yl)pyridine. To an ice-cooled solution of 3-(5-bromopyridin-2-yl)oxetan-3-ol (US 14/018,993, 1.34 g, 5.82 mmol) in DMF (30 mL), NaH (60% in oil, 303 mg, 7.57 mmol) is added, and the mixture is stirred at 0 °C for 30 min. Mel (0.44 mL, 6.99 mmol) is added, and the mixture is stirred at rt overnight. The mixture is diluted with water (100 mL) and EtOAc (100 mL). The layers are separated. The aq. phase is extracted with EtOAc (2x 50 mL). The combined org. layers are washed with water and brine, dried over $MgSO_4$, filtered, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Flash master, column 100 g, flow : 45 mL/min, EtOAc / heptane 0:100 → 50:50) yields the title product. LC-MS: t_R = 0.66 min, MH^+ = 244.06 (conditions 3).

tert-Butyl 2-(6-(3-methoxyoxetan-3-yl)pyridin-3-yl)acetate. Prepared according to *general procedure 6* from 5-bromo-2-(3-methoxyoxetan-3-yl)pyridine (366 mg, 1.50 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et_2O , 6.0 mL, 3.0 mmol), $Pd_2(dba)_3$ (69 mg, 0.075 mmol) and X-Phos (37 mg, 0.075 mmol) in THF (20 mL). The reaction is complete overnight at 45 °C. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 0.71 min, MH^+ = 280.29 (conditions 3).

2-(6-(3-Methoxyoxetan-3-yl)pyridin-3-yl)acetic acid. Prepared according to *general procedure 7* from *tert-butyl 2-(6-(3-methoxyoxetan-3-yl)pyridin-3-yl)acetate* (50 mg, 0.18 mmol) in HCOOH (2.0 mL). The reaction is complete overnight at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.40 min, MH^+ = 224.20 (conditions 3).

6-Bromo-1,3-dimethyl-1H-indole. To an ice-cooled solution of 6-bromo-3-methylindole (1.00 g, 4.76 mmol) in DMF (20 mL), NaH (60% in oil, 381 mg, 9.52 mmol) is added, and the mixture is stirred at 0 °C for 30 min. Mel (0.449 mL, 7.14 mmol) is added, and the mixture is stirred at rt for 2 h. The mixture is diluted with water

- 109 -

(100 mL) and EtOAc (100 mL). The layers are separated. The aq. phase is extracted with EtOAc (2x 50 mL). The comb. org. layers are washed with water and brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.95 min (conditions 3).

5 *tert-Butyl 2-(1,3-dimethyl-1H-indol-6-yl)acetate*. Prepared according to *general procedure 6* from 6-bromo-1,3-dimethyl-1H-indole (300 mg, 1.34 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 5.4 mL, 2.7 mmol), Pd₂(dba)₃ (61 mg, 0.067 mmol) and X-Phos (33 mg, 0.067 mmol) in THF (20 mL). The reaction is complete overnight at 45 °C. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 0.98 min, MH⁺ = 260.29 (conditions 3).

10 *2-(1,3-Dimethyl-1H-indol-6-yl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(1,3-dimethyl-1H-indol-6-yl)acetate* (50 mg, 0.19 mmol) in HCOOH (2.0 mL). The reaction is complete after 3 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.75 min, MH⁺ = 204.28 (conditions 3).

15 *tert-Butyl 2-(1,3-dimethyl-1H-indol-5-yl)acetate*. Prepared according to *general procedure 6* from 5-bromo-1,3-dimethyl-1H-indole (Repka, L. M.; Ni, J.; Reisman, S. E. J. Am. Chem. Soc., 2010, 132, 14418, 300 mg, 1.34 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 5.4 mL, 2.7 mmol), Pd₂(dba)₃ (61 mg, 0.067 mmol) and X-Phos (33 mg, 0.067 mmol) in THF (20 mL). The reaction is complete overnight at 45 °C. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 0.98 min, MH⁺ = 260.30 (conditions 3).

20 *2-(1,3-Dimethyl-1H-indol-5-yl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(1,3-dimethyl-1H-indol-5-yl)acetate* (50 mg, 0.19 mmol) in HCOOH (2.0 mL). The reaction is complete after 3 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.75 min, MH⁺ = 204.30 (conditions 3).

25 *tert-Butyl 2-(4-(1-(trifluoromethyl)cyclopropyl)phenyl)acetate*. Prepared according to *general procedure 6* from 1-bromo-4-(1-(trifluoromethyl)cyclopropyl)benzene (1.00 g, 3.77 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 10.6 mL, 5.3 mmol), Pd₂(dba)₃ (69 mg, 0.076 mmol) and X-Phos (37 mg, 0.076 mmol) in THF (20 mL). The reaction is complete overnight at rt. Purification of the crude by automated FC (Combiflash, EtOAc / heptane 0:100 to 45:55) yields the title product. LC-MS: t_R = 1.02 min, (conditions 3).

30 *2-(4-(1-(Trifluoromethyl)cyclopropyl)phenyl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(4-(1-(trifluoromethyl)cyclopropyl)phenyl)acetate* (100 mg, 0.33 mmol) in HCOOH (2.3 mL). The reaction is complete after 2.5 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.82 min (conditions 3).

5-Bromo-2-(3-fluorooxetan-3-yl)pyridine. To a sol. of 3-(5-bromopyridin-2-yl)oxetan-3-ol (2.50 g, 10.9 mmol) in CH₂Cl₂ (60 mL) cooled at -78 °C is added (diethylamino)sulfur trifluoride (1.72 mL, 13 mmol) dropwise. The resulting mixture is stirred at -78 °C for 90 min, further at 0 °C for 20 min. The mixture is carefully quenched with aq. sat. NaHCO₃ (100 mL). The layers are separated and the aq. phase is extracted with CH₂Cl₂ (2x 100

- 110 -

mL). The comb. org. layers are washed with brine (1 x 100 mL), dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the residue by automated FC (Flash master, column 100 g, flow 45 mL/min, EtOAc/heptane 0:100 → 25:75) yields the title product. LC-MS: t_R = 0.72 min, MH⁺ = 232.04 (conditions 3).

5 *tert-Butyl 2-(6-(3-fluorooxetan-3-yl)pyridin-3-yl)acetate*. Prepared according to *general procedure 6* from 5-bromo-2-(3-fluorooxetan-3-yl)pyridine (600 mg, 2.59 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 10.4 mL, 5.2 mmol), Pd₂(dba)₃ (118 mg, 0.129 mmol) and X-Phos (64 mg, 0.129 mmol) in THF (20 mL). The reaction is complete overnight at 45 °C. Purification of the crude by automated FC (Combiflash, EtOAc / heptane 0:100 20:80) yields the title product. LC-MS: t_R = 0.80 min, MH⁺ = 268.20 (conditions 3).

10 *2-(6-(3-Fluorooxetan-3-yl)pyridin-3-yl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(6-(3-fluorooxetan-3-yl)pyridin-3-yl)acetate* (200 mg, 0.748 mmol) in HCOOH (5.0 mL). The reaction is complete overnight at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.50 min, MH⁺ = 212.12 (conditions 3).

15 *5-Bromo-1,3-dimethyl-1H-pyrrolo[2,3-b]pyridine*. NaH (60 in oil, 284 mg, 7.11 mmol) is added to an ice-cooled sol. of 5-bromo-3-methyl-7-azaindole (1.0 g, 4.74 mmol) in THF (12 mL). The mixture is stirred at rt for 15 min, then cooled again to 0 °C. MeI (1.19 mL, 19 mmol) is added, and the resulting mixture is stirred at 0 °C for 10 min, then at rt overnight. Water is slowly added, followed by MgSO₄. The mixture is filtered, and the solvents are removed under reduced pressure. Purification of the residue by automated FC (Combiflash, column 40 g, flow 40 mL/min, EtOAc / heptane 0:100 → 20:80) yields the title product. LC-MS: t_R = 0.87 min, MH⁺ = 226.94 (conditions 3).

25 *tert-Butyl 2-(1,3-dimethyl-1H-pyrrolo[2,3-b]pyridin-5-yl)acetate*. Prepared according to *general procedure 6* from 5-bromo-1,3-dimethyl-1H-pyrrolo[2,3-b]pyridine (450 mg, 1.98 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 8.00 mL, 4.00 mmol), Pd₂(dba)₃ (91 mg, 0.099 mmol) and X-Phos (49 mg, 0.099 mmol) in THF (30 mL). The reaction is complete overnight at 75 °C. Purification of the crude by automated FC (Combiflash, EtOAc / heptane 0:100 30:70) yields the title product. LC-MS: t_R = 0.76 min, MH⁺ = 261.16 (conditions 3).

30 *2-(1,3-Dimethyl-1H-pyrrolo[2,3-b]pyridin-5-yl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(1,3-dimethyl-1H-pyrrolo[2,3-b]pyridin-5-yl)acetate* (375 mg, 1.41 mmol) in HCOOH (9.3 mL). The reaction is complete overnight at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.50 min, MH⁺ = 205.18 (conditions 3).

5-Bromo-3-cyclobutyl-1H-indole. To a sol. of Et₃SiH (2.45 mL, 15 mmol) and trichloroacetic acid (0.75 mL, 7.36 mmol) in toluene (5 mL), is added dropwise at 70 °C a sol. of 5-bromoindole (990 mg, 5 mmol) and cyclobutanone (0.374 mL, 5 mmol) in toluene (2.5 mL). The resulting mixture is stirred at that temperature overnight. The mixture is allowed to cool to rt, and aq. 10% Na₂CO₃ is added. Et₂O is added, and the layers

- 111 -

are separated. The aq. layer is extracted with Et₂O (2x) and the combined org. layers are dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Combiflash, column 24 g, flow 35 mL/min, EtOAc / heptane 0:100 → 20:80) yields the title product. LC-MS: t_R = 0.96 min, MH⁺ = 250.07 (conditions 3).

5 *5-Bromo-3-cyclobutyl-1-methyl-1H-indole*. NaH (60% in oil, 175 mg, 4.38 mmol) is added to an ice-cooled sol. of 5-bromo-3-cyclobutyl-1H-indole (820 mg, 2.92 mmol) in THF (7.1 mL). The reaction mixture is stirred at rt for 15 min, and is cooled again to 0 °C. Mel (0.734 mL, 11.7 mmol) is added, and the resulting mixture is stirred at 0 °C for 10 min, then at rt overnight. Water is slowly added, followed by EtOAc. The layers are separated, and the aq. layer is extracted with EtOAc (2x). The combined org. layers are washed with brine,
10 dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the residue by FC (Combiflash, column 24 g, flow 35 mL/min, EtOAc / heptane 0:100 → 15:85) yields the title product. LC-MS: t_R = 1.02 min, MH⁺ = 264.08 (conditions 3).

tert-Butyl 2-(3-cyclobutyl-1-methyl-1H-indol-5-yl)acetate. Prepared according to *general procedure 6* from 5-bromo-3-cyclobutyl-1-methyl-1H-indole (790 mg, 2.39 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride
15 (0.5M in Et₂O, 9.7 mL, 4.85 mmol), Pd₂(dba)₃ (94 mg, 0.102 mmol) and X-Phos (59 mg, 0.119 mmol) in THF (36 mL). The reaction is complete overnight at 45 °C. Purification of the crude by automated FC (Combiflash, EtOAc / heptane 0:100 15:85) yields the title product. LC-MS: t_R = 1.04 min, MH⁺ = 300.14 (conditions 3).

2-(3-cyclobutyl-1-methyl-1H-indol-5-yl)acetic acid. Prepared according to *general procedure 7* from *tert-butyl 2-(3-cyclobutyl-1-methyl-1H-indol-5-yl)acetate* (538 mg, 1.41 mmol) in HCOOH (9.3 mL). The reaction is
20 complete after 3 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.84 min, MH⁺ = 244.21 (conditions 3).

5-Bromo-3-isopropyl-1H-indole. To a sol. of Et₃SiH (2.45 mL, 15 mmol) and trichloroacetic acid (0.75 mL, 7.36 mmol) in toluene (5 mL), is added dropwise at 70 °C a sol. of 5-bromoindole (990 mg, 5 mmol) and acetone (0.532 mL, 7.25 mmol) in toluene (2.5 mL). The resulting mixture is stirred at that temperature overnight. The
25 mixture is allowed to cool to rt, and aq. 10% Na₂CO₃ is added. Et₂O is added, and the layers are separated. The aq. layer is extracted with Et₂O (2x) and the combined org. layers are dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Combiflash, column 24 g, flow 35 mL/min, EtOAc / heptane 0:100 → 35:65) yields the title product. LC-MS: t_R = 0.94 min, MH⁺ = 238.11 (conditions 3).

30 *5-Bromo-3-isopropyl-1-methyl-1H-indole*. NaH (60% in oil, 782 mg, 7.06 mmol) is added to an ice-cooled sol. of 5-bromo-3-isopropyl-1H-indole (1.12 g, 4.70 mmol) in THF (11.5 mL). The reaction mixture is stirred at rt for 15 min, and is cooled again to 0 °C. Mel (1.18 mL, 18.8 mmol) is added, and the resulting mixture is stirred at 0 °C for 10 min, then at rt overnight. Water is slowly added, followed by EtOAc. The layers are separated, and the aq. layer is extracted with EtOAc (2x). The combined org. layers are washed with brine, dried over

- 112 -

MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the residue by FC (CombiFlash, column 24 g, flow 35 mL/min, EtOAc / heptane 0:100 → 30:70) yields the title product. LC-MS: t_R = 1.00 min, MH⁺ = 252.14 (conditions 3).

5 *tert-Butyl 2-(3-isopropyl-1-methyl-1H-indol-5-yl)acetate*. Prepared according to *general procedure 6* from 5-bromo-3-isopropyl-1-methyl-1H-indole (570 mg, 2.05 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 8.3 mL, 4.15 mmol), Pd₂(dba)₃ (94 mg, 0.102 mmol) and X-Phos (59 mg, 0.119 mmol) in THF (31 mL). The reaction is complete overnight at 45 °C. Purification of the crude by automated FC (CombiFlash, EtOAc / heptane 0:100 to 20:80) yields the title product. LC-MS: t_R = 1.02 min, MH⁺ = 288.20 (conditions 3).

10 *2-(3-Isopropyl-1-methyl-1H-indol-5-yl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(3-isopropyl-1-methyl-1H-indol-5-yl)acetate* (423 mg, 1.41 mmol) in HCOOH (9.3 mL). The reaction is complete after 3 h at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.82 min, MH⁺ = 232.23 (conditions 3).

15 *5-Bromo-1-methyl-1H-indole-3-carbonitrile*. NaH (60% in oil, 600 mg, 15 mmol) is added to an ice-cooled sol. of 5-bromo-1H-indole-3-carbonitrile (2.26 g, 10.0 mmol) in THF (24 mL). The reaction mixture is stirred at rt for 15 min, and is cooled again to 0 °C. Mel (2.52 mL, 40.0 mmol) is added, and the resulting mixture is stirred at 0 °C for 10 min, then at rt overnight. Water is slowly added, followed by EtOAc. The layers are separated, and the aq. layer is extracted with EtOAc (2x). The combined org. layers are washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the residue by FC (CombiFlash, column 24 g, flow 35 mL/min, EtOAc / heptane 0:100 → 40:60) yields the title product. LC-MS: t_R = 0.86 min, MH⁺ = 276.06 (conditions 3).

25 *tert-Butyl 2-(3-cyano-1-methyl-1H-indol-5-yl)acetate*. Prepared according to *general procedure 6* from 5-bromo-1-methyl-1H-indole-3-carbonitrile (2.13 g, 8.87 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 36 mL, 18 mmol), Pd₂(dba)₃ (218 mg, 0.443 mmol) and X-Phos (406 mg, 0.443 mmol) in THF (104 mL). The reaction is complete overnight at 45 °C. Purification of the crude by automated FC (CombiFlash, EtOAc / heptane 0:100 35:65) yields the title product. LC-MS: t_R = 0.91 min, MH⁺ = 271.19 (conditions 3).

30 *2-(3-Cyano-1-methyl-1H-indol-5-yl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(3-cyano-1-methyl-1H-indol-5-yl)acetate* (200 mg, 0.654 mmol) in TFA (0.75 mL) and CH₂Cl₂ (0.77 mL). The reaction is complete after 1 h at rt. Purification by HPLC yields title product. LC-MS: t_R = 0.67 min, MH⁺ = 215.19 (conditions 3).

(rac.)-5-Bromo-3-hydroxy-1-methyl-3-(trifluoromethyl)indolin-2-one. To a sol. of 5-bromo-1-methyl-1H-indole-2,3-dione (3.60 g, 15.0 mmol) in THF (100 mL) are added sequentially at rt trifluoromethyltrimethylsilane (4.43 mL, 30.0 mmol) and CsF (91.1 mg, 0.60 mmol). The resulting sol. is stirred at rt overnight. The mixture is quenched with cold water (100 mL). The mixture is extracted with EtOAc (3 x 100 mL). The comb. org.

layers are washed with brine (100 mL), dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the residue by automated FC (Combiflash, column 80 g, flow 60 mL/min, EtOAc / heptane 0:100 → 20:80) yields the trimethylsilyl-protected product. To a sol. of this isolated compound in MeOH (50 mL) is added aq. 2M HCl (40 mL). The resulting sol. is stirred at rt for 2 h. The reaction is diluted with CH₂Cl₂ (100 mL). The layers are separated and the aq. phase is extracted with CH₂Cl₂ (2x 50 mL). The comb. org. layers are washed with brine (1 x 50 mL), dried over MgSO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.79 min (conditions 3).

(rac.)-5-Bromo-1-methyl-3-(trifluoromethyl)indolin-3-ol. To an ice-cooled sol. of *(rac.)-5-bromo-3-hydroxy-1-methyl-3-(trifluoromethyl)indolin-2-one* (2.42 g, 7.80 mmol) in THF (100 mL) is added dropwise BH₃ (1M in THF, 24 mL, 24 mmol). The sol. is allowed to warm to rt overnight. Aq. 2M HCl (40 mL) is carefully added dropwise at 0°C. The biphasic system is stirred at t. for 5 min. Aq. 2M NaOH (40 mL) is added dropwise at 0°C. The resulting mixture is diluted with EtOAc (100 mL). The layers are separated, and the aq. layer is extracted with EtOAc (2x 50 mL). The comb. org. layers are washed with aq. sat. NaHCO₃ (1 x 100 mL), brine (1 x 100 mL), dried over MgSO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.85 min (conditions 3).

5-Bromo-1-methyl-3-(trifluoromethyl)-1H-indole. To an ice-cooled solution of *(rac.)-5-bromo-1-methyl-3-(trifluoromethyl)indolin-3-ol* (3.32 g, 11.2 mmol) in pyridine (40 mL) is added dropwise SOCl₂ (1.22 mL, 16.8 mmol, 1.5 eq). The sol. is allowed to warm up to rt overnight. Aq. 2M HCl (40 mL) is carefully added at 0°C. The biphasic system is stirred at rt for 5 min. The resulting mixture is diluted with EtOAc (100 mL). The layers are separated, and the aq. layer is extracted with EtOAc (2x 50 mL). The comb. org. layers are washed with aq. sat. NaHCO₃ (1 x 100 mL), brine (1 x 100 mL), dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the residue by automated FC (Combiflash, column 80 g, flow 60 mL/min, EtOAc / heptane 0:100 → 20:80) yields the title product. LC-MS: t_R = 0.96 min (conditions 3).

tert-Butyl 2-(1-methyl-3-(trifluoromethyl)-1H-indol-5-yl)acetate. Prepared according to *general procedure 6* from *5-bromo-1-methyl-3-(trifluoromethyl)-1H-indole* (850 mg, 3.06 mmol), *(2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride* (0.5M in Et₂O, 6.0 mL, 3.0 mmol), Pd₂(dba)₃ (140 mg, 0.153 mmol) and X-Phos (75.1 mg, 0.153 mmol) in THF (50 mL). The reaction is complete overnight at 45 °C. Purification of the crude by automated FC (Combiflash, EtOAc / heptane 0:100 to 25:75) yields the title product. LC-MS: t_R = 0.99 min (conditions 3).

2-(1-Methyl-3-(trifluoromethyl)-1H-indol-5-yl)acetic acid. Prepared according to *general procedure 7* from *tert-butyl 2-(1-methyl-3-(trifluoromethyl)-1H-indol-5-yl)acetate* (200 mg, 0.638 mmol) in HCl (4M in dioxane, 5 mL). The reaction is complete overnight at rt. Purification by HPLC yields title product. LC-MS: t_R = 0.79 min (conditions 3).

- 114 -

tert-Butyl 2-(4-fluoro-2-(2,2,2-trifluoroethoxy)phenyl)acetate. Prepared according to *general procedure 6* from 1-bromo-4-fluoro-2-(2,2,2-trifluoroethoxy)benzene (2.40 g, 8.79 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 35.2 mL, 17.6 mmol), Pd₂(dba)₃ (402 mg, 0.44 mmol) and X-Phos (216 mg, 0.44 mmol) in THF (110 mL). The reaction is complete overnight at 45 °C. Purification of the crude by automated
5 FC (Combiflash, EtOAc / heptane 0:100 to 25:75) yields the title product. LC-MS: t_R = 0.98 min (conditions 3).

2-(4-fluoro-2-(2,2,2-trifluoroethoxy)phenyl)acetic acid. Prepared according to *general procedure 7* from *tert-butyl 2-(4-fluoro-2-(2,2,2-trifluoroethoxy)phenyl)acetate* (2.60 g, 8.43 mmol) in HCl (4M in dioxane, 15 mL). The reaction is complete overnight at rt. Purification by HPLC yields title product. LC-MS: t_R = 0.76 min (conditions 3).

10 *tert-Butyl 2-(4-(pentafluoro-λ⁶-sulfanyl)phenyl)acetate*. Prepared according to *general procedure 6* from pentafluoro(4-iodophenyl)-λ⁶-sulfane (660 mg, 2.00 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 8.0 mL, 4.0 mmol), Pd₂(dba)₃ (92 mg, 0.10 mmol) and X-Phos (49 mg, 0.10 mmol) in THF (30 mL). The reaction is complete overnight at 45 °C. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 0.89 min (conditions 3).

15 *2-(4-(Pentafluoro-λ⁶-sulfanyl)phenyl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(4-(pentafluoro-λ⁶-sulfanyl)phenyl)acetate* (103 mg, 0.30 mmol) in HCOOH (3.0 mL). The reaction is complete after 30 min at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.79 min (conditions 3).

tert-Butyl 2-(4-(2-cyanopropan-2-yl)phenyl)acetate. Prepared according to *general procedure 6* from 2-(4-bromophenyl)-2-methylpropanenitrile (462 mg, 2.00 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 8.0 mL, 4.0 mmol), Pd₂(dba)₃ (92 mg, 0.10 mmol) and X-Phos (49 mg, 0.10 mmol) in THF (30 mL). The reaction is complete overnight at 45 °C. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 0.94 min, MH⁺ = 260.25 (conditions 3).
20

2-(4-(2-Cyanopropan-2-yl)phenyl)acetic acid. Prepared according to *general procedure 7* from *tert-butyl 2-(4-(2-cyanopropan-2-yl)phenyl)acetate* (77.8 mg, 0.30 mmol) in TFA (0.34 mL) and CH₂Cl₂ (0.35 mL). The reaction is complete overnight at rt. Removing the solvents under reduced pressure yields the crude title product. LC-MS: t_R = 0.70 min (conditions 3).
25

Methyl 2-(3-methyl-4-(2,2,2-trifluoroethoxy)phenyl)acetate. To an ice-cooled sol. of methyl 4-hydroxy-3-methylphenylacetate (0.33 mL, 2 mmol) and Cs₂CO₃ (1.30 g, 4.00 mmol) in DMF (5.3 mL), is added dropwise
30 2,2,2-trifluoroethyl trifluoromethanesulfonate (0.46 mL, 3.0 mmol). The mixture is stirred at rt over 3 days while warming up to rt. The mixture is partitioned between water (10 mL) and EtOAc (10 mL). The layers are separated. The aq. layer is extracted with EtOAc (2 x 5 mL). The comb. org. layers are washed with water (2 x 10 mL) and with brine (1x 10 mL), dried over MgSO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.90 min (conditions 3).

- 115 -

2-(3-Methyl-4-(2,2,2-trifluoroethoxy)phenyl)acetic acid. To a sol. of methyl 2-(3-methyl-4-(2,2,2-trifluoroethoxy)phenyl)acetate (710 mg, 2.59 mmol) in THF (8.2 mL) and MeOH (2 mL), is added aq. 1M NaOH (2.8 mL). The sol. is stirred at rt for 1 h. The solvents are removed under reduced pressure. The residue is diluted with water and washed with EtOAc (1 x). The aq. phase is acidified with aq. 1M HCl. The mixture is extracted with CH₂Cl₂ (3 x). The comb. org. layers are dried over MgSO₄, filtered and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.80 min (conditions 3).

5-Bromo-3-fluoro-2-(pyrrolidin-1-yl)pyridine. To a sol. of 5-bromo-2,3-difluoropyridine (680 mg, 3.51 mmol) in DMSO (20 mL), are added pyrrolidine (0.307 mL, 3.68 mmol) and then DBU (1.10 mL, 7.36 mmol). The mixture is heated to 80 °C and stirred at this temperature for one day. The mixture is allowed to cool down to rt. The mixture is diluted with aq. sat. NaHCO₃ (200 mL) and EtOAc (200 mL). The layers are separated, and the aq. layer is extracted with EtOAc (1x 100 mL). The comb. org. layers are washed with aq. sat. NaHCO₃ (2 x 200 mL), and brine (1 x 100 mL), are dried over MgSO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.85 min, MH⁺ = 245.09 (conditions 3).

tert-Butyl 2-(5-fluoro-6-(pyrrolidin-1-yl)pyridin-3-yl)acetate. Prepared according to *general procedure 6* from 5-bromo-3-fluoro-2-(pyrrolidin-1-yl)pyridine (504 mg, 2.06 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 8.22 mL, 4.11 mmol), Pd₂(dba)₃ (94 mg, 0.10 mmol) and X-Phos (50 mg, 0.10 mmol) in THF (20 mL). The reaction is complete after 1h at 50 °C. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 0.66 min, MH⁺ = 281.22 (conditions 3).

2-(5-Fluoro-6-(pyrrolidin-1-yl)pyridin-3-yl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(5-fluoro-6-(pyrrolidin-1-yl)pyridin-3-yl)acetate (200 mg, 0.713 mmol) in HCl (4M in dioxane, 10 mL). The reaction is complete overnight at rt. Purification by HPLC yields title product. LC-MS: t_R = 0.44 min, MH⁺ = 225.16 (conditions 3).

4-Bromomethyl-2,6-difluorobenzonitrile. 2,6-Difluoro-4-(hydroxymethyl)benzonitrile (WO 2003101423, 2.97 g, 17.6 mmol) is dissolved in THF (80 mL). PPh₃ (5.07 g, 19.3 mmol) is added and the mixture is cooled to 0 °C. CBr₄ (7.28 g, 22.0 mmol) is added in portions. The mixture is stirred for 20 h while warming up to rt. The mixture is filtered, and the filtrate is partitioned between EtOAc and aq. sat. NH₄Cl. The org. layer is dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the residue by automated FC (Büchi, 50 g silicagel, flow 26 mL/min, EtOAc / heptane 1:99 → 3:97 → 8:92 → 15:85) yields the title product. LC-MS: t_R = 0.85 min (conditions 3).

2,6-Difluoro-4-((3-nitro-1H-pyrazol-1-yl)methyl)benzonitrile. Prepared according to *general procedure 4* from K₂CO₃ (2.13 g, 15.4 mmol), 4-bromomethyl-2,6-difluorobenzonitrile (716 mg, 3.09 mmol), 5-nitro-1H-pyrazole (349 mg, 3.09 mmol), and Bu₄NBr (114 mg, 0.309 mmol) in acetone (7 mL). The reaction is complete after 1 h. Purification of the crude by automated FC (Büchi, EtOAc / heptane 1:99 → 10:90 → 20:80 → 50:50 →

- 116 -

80:20, 24 g silicagel, flow 35 mL/min) yields the title product. LC-MS: t_R = 0.81 min, MH^+ = 242.22 (conditions 3).

4-((3-Amino-1H-pyrazol-1-yl)methyl)-2,6-difluorobenzonitrile. Prepared according to *general procedure 5* from Fe (powder, 358 mg, 6.42 mmol), 2,6-difluoro-4-((3-nitro-1H-pyrazol-1-yl)methyl)benzonitrile (565 mg, 2.14 mmol) and NH_4Cl (572 mg, 10.7 mmol) in a 2:1-mixture of EtOH and water (21 mL). The reaction is complete after 45 min at 85 °C. This yields the crude title compound. LC-MS: t_R = 0.60 min, MH^+ = 276.16 (conditions 3).

tert-Butyl 2-(4-(1-cyanocyclopropyl)phenyl)acetate. Prepared according to *general procedure 6* from 1-(4-bromophenyl)cyclopropane-1-carbonitrile (227 mg, 1.00 mmol), (2-(*tert*-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et_2O , 4.00 mL, 2.00 mmol), $Pd_2(dba)_3$ (46 mg, 0.05 mmol) and X-Phos (25 mg, 0.05 mmol) in THF (15 mL). The reaction is complete after 2 days at 45 °C. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 0.92 min, MH^+ = 258.14 (conditions 3).

2-(4-(1-Cyanocyclopropyl)phenyl)acetic acid. Prepared according to *general procedure 7* from *tert*-butyl 2-(4-(1-cyanocyclopropyl)phenyl)acetate (77.4 mg, 0.030 mmol) in TFA (0.34 mL) and CH_2Cl_2 (0.35 mL). The reaction is complete after 2.5 h at 0 °C. Purification by HPLC yields title product. LC-MS: t_R = 0.68 min (conditions 3).

tert-Butyl 2-(4-(1-((tert-butyldimethylsilyl)oxy)cyclopropyl)phenyl)acetate. Prepared according to *general procedure 6* from (1-(4-bromophenyl)cyclopropoxy)(*tert*-butyl)dimethylsilane (Isabel, E.; Bateman, K. P.; Chaurat, N.; Cromlish, W.; Desmarais, S.; Duong, Le T.; Falguyret, J.-P.; Gauthier, J. Y.; Lamontagne, S.; Lau, C. K.; et al., *Bioorg. Med. Chem. Lett.*, **2010**, 20, 887, 200 mg, 0.601 mmol), (2-(*tert*-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et_2O , 2.40 mL, 1.20 mmol), $Pd_2(dba)_3$ (28 mg, 0.030 mmol) and X-Phos (15 mg, 0.030 mmol) in THF (15 mL). The reaction is complete after 2 days at 45 °C. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 1.13 min, (conditions 3).

tert-Butyl 2-(4-(1-hydroxycyclopropyl)phenyl)acetate. To an ice-cooled sol. of *tert*-butyl 2-(4-(1-((*tert*-butyldimethylsilyl)oxy)cyclopropyl)phenyl)acetate (200 mg, 0.534 mmol) in THF (12 mL) is added tetrabutylammonium fluoride (1.0 M in THF, 1.7 mL, 1.7 mmol). The resulting sol. is stirred at 0 °C for 30 min. The sol. is diluted with EtOAc (10 mL), and aq. sat. NH_4Cl (25 mL) is added. The mixture is extracted with EtOAc (3 x 30 mL). The comb. org. layers are dried over $MgSO_4$, filtered, and the solvents are removed under reduced pressure. Purification of the residue by automated FC (Flash Master, 25 g silicagel, flow 30 mL/min, EtOAc/heptane 0:100 → 20:80) yields the title product. LC-MS: t_R = 0.83 min, (conditions 3).

2-(4-(1-Hydroxycyclopropyl)phenyl)acetic acid. Prepared according to *general procedure 7* from *tert*-butyl 2-(4-(1-hydroxycyclopropyl)phenyl)acetate (75 mg, 0.030 mmol) in TFA (0.34 mL) and CH_2Cl_2 (0.35 mL). The reaction is complete after 2.5 h at 0 °C. Purification by HPLC yields title product. LC-MS: t_R = 0.55 min (conditions 3).

- 117 -

(6-Cyano-5-methylpyridin-2-yl)methyl acetate. To Ac₂O (8.08 mL, 84.7 mmol) at 120 °C is added 2-cyano-3,6-dimethylpyridine 1-oxide (WO 2006066968, 2.27 g, 14.9 mmol). The resulting sol. is stirred at 120 °C for 5 min, and is heated to reflux for 1 h. The mixture is allowed to cool to rt, and is poured into ice (63 g). The mixture is then neutralized with NaHCO₃. Et₂O (70 mL) is added, and the layers are separated. The aq. phase
5 is extracted with Et₂O (2 x 35 mL), and the combined org. layers are washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the residue by automated FC by (Flash Master, column 100 g, flow 45 mL/min, EtOAc/heptane 0:100 → 40:60) yields the title product. . LC-MS: t_R = 0.69 min, MH⁺ = 191.95 (conditions 3).

6-(Hydroxymethyl)-3-methylpicolinonitrile. K₂CO₃ (41.7 mg, 0.302 mmol) is added to a sol. of (6-cyano-5-methylpyridin-2-yl)methyl acetate (1.79 g, 9.37 mmol) in MeOH (12.6 mL). The resulting mixture is stirred at rt
10 overnight. Water (25 mL) is added, and the mixture is neutralized with aq. 5% AcOH. CH₂Cl₂ is added, and the phases are separated. The aq. layer is extracted with CH₂Cl₂ (2 x). The combined org. layers are washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure to yield to crude title compound. LC-MS: t_R = 0.51 min, MH⁺ = 149.18 (conditions 3).

15 6-(Chloromethyl)-3-methylpicolinonitrile. A sol. of 6-(hydroxymethyl)-3-methylpicolinonitrile (1.49 g, 9.35 mmol) and SOCl₂ (1.61 mL, 9.35 mmol) in CH₂Cl₂ (35.2 mL) is stirred at rt for 6 h. The solvents are removed under reduced pressure. Toluene (20 mL) is added, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.74 min, MH⁺ = 167.09 (conditions 3).

3-Methyl-6-((3-nitro-1H-pyrazol-1-yl)methyl)picolinonitrile. Prepared according to *general procedure 4* from
20 K₂CO₃ (1.26 g, 9.13 mmol), 6-(chloromethyl)-3-methylpicolinonitrile (1.64 g, 9.19 mmol), 5-nitro-1H-pyrazole (859 mg, 7.60 mmol) in DMF (6 mL). The reaction is complete overnight. Purification of the crude by automated FC (CombiFlash, EtOAc / heptane 0:100 → 40:60, 40 g silicagel, flow 40 mL/min) yields the title product. LC-MS: t_R = 0.75 min, MH⁺ = 244.18 (conditions 3).

6-((3-Amino-1H-pyrazol-1-yl)methyl)-3-methylpicolinonitrile. Prepared according to *general procedure 5* from
25 Fe (powder, 1.03 g, 18.3 mmol), 3-methyl-6-((3-nitro-1H-pyrazol-1-yl)methyl)picolinonitrile (1.90 g, 6.09 mmol) and NH₄Cl (1.23 g, 30.4 mmol) in a 2:1-mixture of EtOH and water (43 mL). The reaction is complete overnight at 100 °C. This yields the crude title compound.

tert-Butyl 2-(4-(1-methylcyclopropyl)phenyl)acetate. Prepared according to *general procedure 6* from 1-bromo-4-(1-methylcyclopropyl)benzene (500 mg, 2.37 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in
30 Et₂O, 9.50 mL, 4.75 mmol), Pd₂(dba)₃ (108 mg, 0.118 mmol) and X-Phos (58 mg, 0.12 mmol) in THF (20 mL). The reaction is complete after 2 h at 50 °C. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 1.01 (conditions 3).

- 118 -

2-(4-(1-Methylcyclopropyl)phenyl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(4-(1-methylcyclopropyl)phenyl)acetate (500 mg, 2.03 mmol) in HCOOH (17 mL). The reaction is complete after 2.5 h at 0 °C. Purification by HPLC yields title product. LC-MS: $t_R = 0.79$ min (conditions 3).

5 *tert-Butyl 2-(4-(1,1,1-trifluoro-2-methylpropan-2-yl)phenyl)acetate*. Prepared according to *general procedure 6* from 1-bromo-4-(1,1,1-trifluoro-2-methylpropan-2-yl)benzene (WO 2013011033, 575 mg, 2.11 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 8.40 mL, 4.20 mmol), Pd₂(dba)₃ (97 mg, 0.105 mmol) and X-Phos (52 mg, 0.105 mmol) in THF (32 mL). The reaction is complete overnight at 45 °C. Purification of the crude by HPLC yields the title product. LC-MS: $t_R = 1.02$ (conditions 3).

10 2-(4-(1,1,1-Trifluoro-2-methylpropan-2-yl)phenyl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(4-(1,1,1-trifluoro-2-methylpropan-2-yl)phenyl)acetate (63 mg, 0.20 mmol) in TFA (0.23 mL) and CH₂Cl₂ (0.23 mL). The reaction is complete after 2.5 h at 0 °C. Purification by HPLC yields title product. LC-MS: $t_R = 0.82$ min (conditions 3).

15 *tert-Butyl 2-(2,2-dimethyl-2,3-dihydrobenzofuran-5-yl)acetate*. Prepared according to *general procedure 6* from 5-bromo-2,2-dimethyl-2,3-dihydrobenzofuran (468 mg, 2.06 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 8.24 mL, 4.12 mmol), Pd₂(dba)₃ (94 mg, 0.103 mmol) and X-Phos (51 mg, 0.103 mmol) in THF (20 mL). The reaction is complete overnight at 50 °C. Purification of the crude by HPLC yields the title product. LC-MS: $t_R = 0.96$, MH⁺ = 263.28 (conditions 3).

20 2-(2,2-Dimethyl-2,3-dihydrobenzofuran-5-yl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(2,2-dimethyl-2,3-dihydrobenzofuran-5-yl)acetate (300 mg, 1.14 mmol) in HCl (4M in dioxane, 5.0 mL). The reaction is complete overnight at rt. Purification by HPLC yields title product. LC-MS: $t_R = 0.71$ min, MH⁺ = 207.20 (conditions 3).

25 *tert-Butyl 2-(3,3-dimethyl-2,3-dihydrobenzofuran-5-yl)acetate*. Prepared according to *general procedure 6* from 5-bromo-3,3-dimethyl-2,3-dihydrobenzofuran (468 mg, 2.06 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 8.24 mL, 4.12 mmol), Pd₂(dba)₃ (94 mg, 0.103 mmol) and X-Phos (51 mg, 0.103 mmol) in THF (20 mL). The reaction is complete overnight at 50 °C. Purification of the crude by HPLC yields the title product. LC-MS: $t_R = 0.96$ (conditions 3).

30 2-(3,3-Dimethyl-2,3-dihydrobenzofuran-5-yl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(3,3-dimethyl-2,3-dihydrobenzofuran-5-yl)acetate (300 mg, 1.14 mmol) in HCl (4M in dioxane, 5.0 mL). The reaction is complete overnight at rt. Purification by HPLC yields title product. LC-MS: $t_R = 0.72$ min, MH⁺ = 207.20 (conditions 3).

tert-Butyl 2-(2,2-dimethyl-2,3-dihydrobenzofuran-6-yl)acetate. Prepared according to *general procedure 6* from 6-bromo-2,2-dimethyl-2,3-dihydrobenzofuran (Wang, X.; Lu, Y.; Dai, H.-X.; Yu, J.-Q., *J. Am. Chem. Soc.*, **2010**, 132, 12203, 480 mg, 2.11 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 8.46 mL, 4.23 mmol), Pd₂(dba)₃ (97 mg, 0.106 mmol) and X-Phos (52 mg, 0.106 mmol) in THF (30 mL). The reaction is

- 119 -

complete after 2 h at 50 °C. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 0.96 (conditions 3).

2-(2,2-Dimethyl-2,3-dihydrobenzofuran-6-yl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(2,2-dimethyl-2,3-dihydrobenzofuran-6-yl)acetate (300 mg, 1.14 mmol) in HCl (4M in dioxane, 5.0 mL).

5 The reaction is complete overnight at rt. Purification by HPLC yields title product. LC-MS: t_R = 0.72 min, MH^+ = 207.19 (conditions 3).

4-Bromo-1-methyl-2-(2,2,2-trifluoroethoxy)benzene. To an ice-cooled sol. of 5-bromo-2-methylphenol (1.87 g, 10 mmol) and Cs_2CO_3 (4.23 g, 13 mmol) in DMF (20 mL) is added dropwise 2,2,2-trifluoroethyl trifluoromethanesulfonate (1.67 mL, 11 mmol). The mixture is stirred overnight while warming up to rt. The mixture is partitioned between water (100 mL) and EtOAc (100 mL). The layers are separated. The aq. phase is extracted with EtOAc (2 x 50 mL). The comb. org. layers are washed with water (3 x 100 mL) and brine (1x 100 mL), dried over $MgSO_4$, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.96 min (conditions 3).

15 *tert-Butyl 2-(4-methyl-3-(2,2,2-trifluoroethoxy)phenyl)acetate*. Prepared according to *general procedure 6* from 4-bromo-1-methyl-2-(2,2,2-trifluoroethoxy)benzene (800 mg, 2.97 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et_2O , 12.0 mL, 6.00 mmol), $Pd_2(dba)_3$ (136 mg, 0.150 mmol) and X-Phos (73 mg, 0.150 mmol) in THF (20 mL). The reaction is complete after 2 h at 50 °C. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 1.00 (conditions 3).

20 *2-(4-methyl-3-(2,2,2-trifluoroethoxy)phenyl)acetic acid*. Prepared according to *general procedure 7* from tert-butyl 2-(4-methyl-3-(2,2,2-trifluoroethoxy)phenyl)acetate (300 mg, 0.986 mmol) in HCl (4M in dioxane, 5.0 mL). The reaction is complete overnight at rt. LC-MS: t_R = 0.81 min (conditions 3).

Ethyl 2-(3-fluoro-4-(2,2,2-trifluoroethoxy)phenyl)acetate. To an ice-cooled sol. of ethyl 2-(3-fluoro-4-hydroxyphenyl)acetate (Cho, Y.; Kim, M. S.; Kim, Ho S.; Ann, J.; Lee, J.; Pearce, L. V.; Pavlyukovets, V. A.; Morgan, M. A.; Blumberg, P. M.; Lee, J., *Bioorg. Med. Chem. Lett.*, **2012**, 22, 5227, 2.87 g, 14.5 mmol) and Cs_2CO_3 (6.13 g, 18.8 mmol) in DMF (20 mL) is added dropwise 2,2,2-trifluoroethyl trifluoromethanesulfonate (2.42 mL, 15.9 mmol). The mixture is stirred overnight while warming up to rt. The mixture is partitioned between water (100 mL) and EtOAc (100 mL). The layers are separated. The aq. phase is extracted with EtOAc (2 x 50 mL). The comb. org. layers are washed with water (3 x 100 mL) and brine (1x 100 mL), dried over $MgSO_4$, filtered, the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.91 min (conditions 3).

30 *2-(3-Fluoro-4-(2,2,2-trifluoroethoxy)phenyl)acetic acid*. To a sol. of ethyl 2-(3-fluoro-4-(2,2,2-trifluoroethoxy)phenyl)acetate (2.00 g, 7.14 mmol) in THF (50 mL) and MeOH (10 mL) is added aq. 1M NaOH (10 mL). The sol. is stirred at rt for 1 h. The solvents are removed under reduced pressure. The residue is diluted with water and washed with EtOAc (1x). The aq. phase is acidified with aq. 2M HCl. The mixture is

- 120 -

extracted with CH₂Cl₂ (3 x). The comb. org. layers are washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.77 min (conditions 3).

5 *rac-tert-Butyl 2-(4-((1R*,2R*)-2-(trifluoromethyl)cyclopropyl)phenyl)acetate*. Prepared according to general procedure 6 from *rac-1-bromo-4-((1R*,2R*)-2-(trifluoromethyl)cyclopropyl)benzene* (0.156 mL, 0.896 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 3.20 mL, 1.60 mmol), and bis(tri-tert-butylphosphine)palladium(0) (45.8 mg, 0.0896 mmol) in dioxane (7.7 mL). The reaction is complete overnight at rt. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 1.01 (conditions 3).

10 *rac-2-(4-((1R*,2R*)-2-(trifluoromethyl)cyclopropyl)phenyl)acetic acid*. Prepared according to *general procedure 7* from *rac-tert-butyl 2-(4-((1R*,2R*)-2-(trifluoromethyl)cyclopropyl)phenyl)acetate* (61 mg, 0.20 mmol) in TFA (0.23 mL) and CH₂Cl₂ (0.23 mL) The reaction is complete after 3 h at 0 °C. LC-MS: t_R = 0.82 min (conditions 3).

15 *General procedure 10 for the preparation of arylacetic acid derivatives*. A sol. of bromoaryl / bromoheteroaryl (1 eq.), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 1.2 eq.), Pd₂(dba)₃ (0.05 eq.) and Q-Phos or X-Phos (0.1 eq.) in dioxane (0.5M) is stirred between rt and 90 °C until the starting materials are consumed (0.33 - 18 h). The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. Chromatographic purification yields the tert-butyl arylacetate.

20 A sol. of the tert-butyl arylacetate in an acid (HCl/dioxane, or HCOOH) with optionally CH₂Cl₂ is prepared at 0 °C. This mixture is stirred at 0 °C, optionally warming up to rt, until consumption of the starting material. The solvents are removed under reduced pressure to yield the crude desired arylacetic acid derivative.

Following *general procedure 10*, the following examples have been prepared

Product name	LC-MS tert-butyl arylacetate t _R (min.), MH ⁺ , conditions	LC-MS final product t _R (min.), MH ⁺ , conditions	Acid used for ester hydrolysis
2-(1-ethyl-1H-indazol-5-yl)acetic acid	0.90, -, cond. 3	0.64, 205.21, cond. 3	4M HCl / dioxane
2-(1,3-dimethyl-1H-indazol-5-yl)acetic acid	0.90, 261.23, cond. 3	0.63, 205.20, cond. 3	4M HCl / dioxane
2-(3-cyclopropyl-1H-indazol-5-yl)acetic acid	0.87, 273.32, cond. 3	0.64, 217.13, cond. 1	4M HCl / dioxane
2-(1-butyl-1H-indazol-5-yl)acetic acid	0.89, 289.26, cond. 3	0.82, 233.15, cond. 1	4M HCl / dioxane
2-(2-methyl-1H-indol-5-yl)acetic acid	0.91, 246.19, cond. 3	-	4M HCl / dioxane
2-(3-butyl-1H-indazol-5-yl)acetic acid	0.93, 289.26, cond. 3	-	4M HCl / dioxane
2-(1-isopropyl-1H-indazol-5-yl)acetic acid	0.94, 275.30, cond. 3	-	4M HCl / dioxane

2-(1-propyl-1H-indazol-5-yl)acetic acid	0.94, 275.14, cond. 3	-	4M HCl / dioxane
2-(3-cyclopropyl-1-methyl-1H-indazol-5-yl)acetic acid	0.93, 287.18, cond. 3	-	4M HCl / dioxane
2-(benzofuran-5-yl)acetic acid	0.94, -, cond. 3	-	4M HCl / dioxane
2-(benzo[b]thiophen-5-yl)acetic acid	0.97, -, cond. 3	-	4M HCl / dioxane
2-(1-methyl-1H-pyrazolo[3,4-b]pyridin-5-yl)acetic acid	0.83, 248.28, cond. 3	-	4M HCl / dioxane
2-(3-(trifluoromethyl)-1H-indazol-5-yl)acetic acid	-	-	4M HCl / dioxane

5 *tert-Butyl 2-(4-(1-methoxycyclopropyl)phenyl)acetate*. Prepared according to general procedure 6 from 1-bromo-4-(1-methoxycyclopropyl)benzene (790 mg, 2.92 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 11.7 mL, 5.80 mmol), Pd₂(dba)₃ (133 mg, 0.146 mmol), and X-Phos (72 mg, 0.15 mmol) in THF (44 mL). The reaction is complete after 2.5 h at 45 °C. Purification of the crude by automated FC (CombiFlash, acetone / heptane 0:100 → 85:15, 40 g silicagel, flow 40 mL/min) yields the title product. LC-MS: t_R = 0.94 min, MH⁺ = 263.25 (conditions 3).

10 *2-(4-(1-Methoxycyclopropyl)phenyl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(4-(1-methoxycyclopropyl)phenyl)acetate* (84 mg, 0.30 mmol) in TFA (0.34 mL) and CH₂Cl₂ (0.35 mL). The reaction is complete after 2.5 h at 0 °C. LC-MS: t_R = 0.70 min (conditions 3).

The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t _R ; MH ⁺ ; conditions)
234	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide	0.94 min; 370.33; conditions 3
235	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(5-methyl-[1,2,4]oxadiazol-3-yl)-phenyl]-acetamide	0.85 min; 410.21; conditions 3
236	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-[1,2,4]oxadiazol-3-yl-phenyl)-acetamide	0.83 min; 396.09; conditions 3
237	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide	0.93 min; 418.00; conditions 3
238	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-yloxy)-phenyl]-acetamide	0.82 min; 400.18; conditions 3

239	N-[1-(4-Bromo-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide	0.66 min; 413.11; conditions 3
240	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide	0.92 min; 434.05; conditions 3
241	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-ylmethoxy)-phenyl]-acetamide	0.86 min; 428.16; conditions 3
242	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-ylmethoxy)-phenyl]-acetamide	0.83 min; 414.18; conditions 3
243	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-1-methyl-cyclobutylmethoxy)-phenyl]-acetamide	0.97 min; 462.08; conditions 3
244	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide	0.94 min; 448.01; conditions 3
245	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-ylmethoxy)-phenyl]-acetamide	0.85 min; 432.07; conditions 3
246	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-yl)-phenyl]-acetamide	0.74 min; 392.14; conditions 3
247	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-yloxy)-phenyl]-acetamide	0.71 min; 390.07; conditions 3
248	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-ylmethoxy)-phenyl]-acetamide	0.75 min; 422.16; conditions 3
249	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-5-yl)-acetamide	0.71 min; 372.22; conditions 3
250	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-yl)-phenyl]-acetamide	0.80 min; 391.18; conditions 3
251	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-yloxy)-phenyl]-acetamide	0.78 min; 389.19; conditions 3
252	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-5-yl)-acetamide	0.78 min; 371.11; conditions 3
253	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-yl)-phenyl]-acetamide	0.82 min; 409.16; conditions 3

254	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-yloxy)-phenyl]-acetamide	0.80 min; 407.13; conditions 3
255	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-5-yl)-acetamide	0.80 min; 389.16; conditions 3
256	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-ylmethoxy)-phenyl]-acetamide	0.81 min; 421.17; conditions 3
257	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-ylmethoxy)-phenyl]-acetamide	0.83 min; 439.12; conditions 3
258	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3-methoxy-oxetan-3-yl)-pyridin-3-yl]-acetamide	0.70 min; 415.10; conditions 3
259	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-6-yl)-acetamide	0.91 min; 395.10; conditions 3
260	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-5-yl)-acetamide	0.91 min; 395.11; conditions 3
261	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide	0.90 min; 441.05; conditions 3
262	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-ylmethoxy)-phenyl]-acetamide	0.80 min; 421.07; conditions 3
263	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-ylmethoxy)-phenyl]-acetamide	0.84 min; 435.03; conditions 3
264	2-(4-tert-Butyl-phenyl)-N-[1-(4-cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.94 min; 391.14; conditions 3
265	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide	0.93 min; 443.05; conditions 3
266	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide	0.91 min; 377.09; conditions 3
267	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-ylmethoxy)-phenyl]-acetamide	0.82 min; 439.07; conditions 4
268	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-5-yl)-acetamide	0.78 min; 388.49; conditions 4

269	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-yloxy)-phenyl]-acetamide	0.80 min; 406.92; conditions 4
270	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-yl)-phenyl]-acetamide	0.82 min; 408.48; conditions 4
271	2-(4-tert-Butyl-phenyl)-N-[1-(4-cyano-benzyl)-1H-pyrazol-3-yl]-acetamide	0.92 min; 373.15; conditions 3
272	2-(4-tert-Butyl-phenyl)-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	0.87 min; 374.20; conditions 3
273	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide	0.88 min; 423.00; conditions 3
274	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide	0.83 min; 424.10; conditions 3
275	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide	0.64 min; 405.12; conditions 3
276	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide	0.56 min; 388.12; conditions 3
277	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide	0.92 min; 425.10; conditions 3
278	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide	0.87 min; 426.14; conditions 3
279	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-ylmethoxy)-phenyl]-acetamide	0.80 min; 421.10; conditions 3
280	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-ylmethoxy)-phenyl]-acetamide	0.84 min; 435.09; conditions 3
281	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide	0.90 min; 441.06; conditions 3
282	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide	0.91 min; 377.17; conditions 3
283	2-(4-tert-Butyl-phenyl)-N-[1-(3-cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.94 min; 391.14; conditions 3

284	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-ylmethoxy)-phenyl]-acetamide	0.76 min; 418.00; conditions 3
285	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-ylmethoxy)-phenyl]-acetamide	0.82 min; 417.07; conditions 3
286	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-ylmethoxy)-phenyl]-acetamide	0.78 min; 403.07; conditions 3
287	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-ylmethoxy)-phenyl]-acetamide	0.72 min; 404.10; conditions 3
288	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide	0.91 min; 425.11; conditions 3
289	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide	0.92 min; 455.02; conditions 3
290	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-1-methyl-cyclobutylmethoxy)-phenyl]-acetamide	0.95 min; 468.76; conditions 3
291	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-6-yl)-acetamide	0.80 min; 389.06; conditions 3
292	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide	0.85 min; 387.99; conditions 3
293	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide	0.86 min; 388.02; conditions 3
294	N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide	0.66 min; 441.07; conditions 3
295	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-6-yl)-acetamide	0.78 min; 371.11; conditions 3
296	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide	0.83 min; 370.11; conditions 3
297	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide	0.84 min; 369.98; conditions 3
298	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-1-methyl-cyclobutylmethoxy)-phenyl]-acetamide	0.94 min; 451.06; conditions 3

299	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide	0.90 min; 437.07; conditions 3
300	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide	0.89 min; 406.97; conditions 3
301	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide	0.78 min; 371.07; conditions 3
302	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide	0.77 min; 371.08; conditions 3
303	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-1-methyl-cyclobutylmethoxy)-phenyl]-acetamide	0.89 min; 452.06; conditions 3
304	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide	0.86 min; 438.07; conditions 3
305	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide	0.85 min; 408.13; conditions 3
306	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide	0.66 min; 441.06; conditions 3
307	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide	0.64 min; 405.14; conditions 3
308	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-6-yl)-acetamide	0.80 min; 389.09; conditions 3
309	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide	0.85 min; 388.09; conditions 3
310	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide	0.85 min; 388.07; conditions 3
311	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-1-methyl-cyclobutylmethoxy)-phenyl]-acetamide	0.95 min; 468.93; conditions 3
312	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide	0.91 min; 425.10; conditions 3
313	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide	0.92 min; 455.02; conditions 3

314	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide	0.93 min; 443.05; conditions 3
315	N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3-fluoro-oxetan-3-yl)-pyridin-3-yl]-acetamide	0.77 min; 403.05; conditions 3
316	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-yl)-phenyl]-acetamide	0.82 min; 405.12; conditions 3
317	N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-yl)-phenyl]-acetamide	0.80 min; 387.15; conditions 3
318	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-yl)-phenyl]-acetamide	0.73 min; 388.15; conditions 3
319	rac-N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-methoxy-ethyl)-phenyl]-acetamide	0.83 min; 393.14; conditions 3
320	rac-N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-methoxy-ethyl)-phenyl]-acetamide	0.82 min; 375.16; conditions 3
321	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-acetamide	0.72 min; 403.12; conditions 3
322	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-acetamide	0.63 min; 386.05; conditions 3
323	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-cyclobutyl-1-methyl-1H-indol-5-yl)-acetamide	0.89 min; 425.19; conditions 3
324	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-isopropyl-1-methyl-1H-indol-5-yl)-acetamide	0.88 min; 413.19; conditions 3
325	2-(3-Cyano-1-methyl-1H-indol-5-yl)-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	0.75 min; 396.14; conditions 3
326	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1-methyl-3-trifluoromethyl-1H-indol-5-yl)-acetamide	0.85 min; 439.09; conditions 3
327	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(3-cyclobutyl-1-methyl-1H-indol-5-yl)-acetamide	0.95 min; 442.11; conditions 3
328	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(3-isopropyl-1-methyl-1H-indol-5-yl)-acetamide	0.94 min; 430.14; conditions 3

329	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(3-cyano-1-methyl-1H-indol-5-yl)-acetamide	0.83 min; 413.15; conditions 3
330	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-6-yl)-acetamide	0.89 min; 402.05; conditions 3
331	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-6-yl)-acetamide	0.82 min; 385.09; conditions 3
332	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-fluoro-2-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.89 min; 451.04; conditions 3
333	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-fluoro-2-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.82 min; 433.94; conditions 3
334	N-(1-(3-cyano-4-fluorobenzyl)-1H-pyrazol-3-yl)-2-(4-(pentafluoro- λ^6 -sulfanyl)phenyl)acetamide	0.91 min; 460.87; conditions 3
335	2-[4-(Cyano-dimethyl-methyl)-phenyl]-N-[1-(3-cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.86 min; 402.05; conditions 3
336	N-(1-((5-cyanopyridin-2-yl)methyl)-1H-pyrazol-3-yl)-2-(4-(pentafluoro- λ^6 -sulfanyl)phenyl)acetamide	0.85 min; 444.02; conditions 3
337	2-[4-(Cyano-dimethyl-methyl)-phenyl]-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	0.78 min; 385.09; conditions 3
338	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-trifluoromethyl-phenyl)-acetamide	0.82 min; 386.01; conditions 3
339	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.86 min; 430.11; conditions 3
340	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(5-fluoro-6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide	0.67 min; 423.17; conditions 3
341	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(5-fluoro-6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide	0.58 min; 406.18; conditions 3
342	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-trifluoromethyl-phenyl)-acetamide	0.89 min; 403.01; conditions 3

343	N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.91 min; 447.08; conditions 3
344	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-5-yl)-acetamide	0.82 min; 407.15; conditions 3
345	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide	0.91 min; 449.04; conditions 3
346	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-6-yl)-acetamide	0.82 min; 407.14; conditions 3
347	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-yl)-phenyl]-acetamide	0.83 min; 427.11; conditions 3
348	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indazol-5-yl)-acetamide	0.83 min; 421.15; conditions 3
349	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide	0.67 min; 459.03; conditions 3
350	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide	0.94 min; 461.03; conditions 3
351	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide	0.66 min; 423.16; conditions 3
352	2-(4-tert-Butyl-phenyl)-N-[1-(4-cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.95 min; 409.18; conditions 3
353	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide	0.93 min; 395.18; conditions 3
354	2-[4-(1-Cyano-cyclopropyl)-phenyl]-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	0.77 min; 383.17; conditions 3
355	2-[4-(1-Cyano-cyclopropyl)-phenyl]-N-[1-(3-cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.84 min; 400.17; conditions 3
356	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-hydroxy-cyclopropyl)-phenyl]-acetamide	0.55 min; 374.19; conditions 3
357	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-ethyl-1H-indazol-5-yl)-acetamide	0.84 min; 421.14; conditions 3

358	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-5-yl)-acetamide	0.90 min; 420.14; conditions 3
359	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methoxy-oxetan-3-yl)-phenyl]-acetamide	0.81 min; 439.10; conditions 3
360	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-ylmethoxy)-phenyl]-acetamide	0.82 min; 439.10; conditions 3
361	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-ylmethoxy)-phenyl]-acetamide	0.84 min; 457.04; conditions 3
362	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-ylmethoxy)-phenyl]-acetamide	0.86 min; 453.07; conditions 3
363	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide	0.93 min; 473.10; conditions 3
364	N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-1-methyl-cyclobutylmethoxy)-phenyl]-acetamide	0.96 min; 487.01; conditions 3
365	N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide	0.91 min; 444.08; conditions 3
366	N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide	0.63 min; 438.14; conditions 3
367	N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	1.40 min; 444.07; conditions 1
368	N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indazol-5-yl)-acetamide	1.03 min; 400.13; conditions 1
369	N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-5-yl)-acetamide	1.28 min; 399.09; conditions 1
370	N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1-ethyl-1H-indazol-5-yl)-acetamide	1.07 min; 400.01; conditions 1
371	2-(4-tert-Butyl-phenyl)-N-[1-(6-cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	1.47 min; 388.16; conditions 1
372	N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide	1.44 min; 440.01; conditions 1

373	N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide	1.10 min; 402.14; conditions 1
374	N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide	1.33 min; 438.05; conditions 1
375	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-methyl-cyclopropyl)-phenyl]-acetamide	0.85 min; 472.20; conditions 3
376	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(2,2,2-trifluoro-1,1-dimethyl-ethyl)-phenyl]-acetamide	0.87 min; 428.17; conditions 3
377	N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-methyl-cyclopropyl)-phenyl]-acetamide	0.89 min; 386.12; conditions 3
378	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(2,2-dimethyl-2,3-dihydro-benzofuran-5-yl)-acetamide	0.80 min; 388.18; conditions 3
379	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3,3-dimethyl-2,3-dihydro-benzofuran-5-yl)-acetamide	0.80 min; 388.19; conditions 3
380	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(2,2-dimethyl-2,3-dihydro-benzofuran-6-yl)-acetamide	0.80 min; 388.19; conditions 3
381	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-methyl-3-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.86 min; 430.13; conditions 3
382	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-fluoro-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.83 min; 433.98; conditions 3
383	rac-N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-((1R*,2R*)-2-trifluoromethyl-cyclopropyl)-phenyl]-acetamide	0.87 min; 426.17; conditions 3
384	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-methoxy-cyclopropyl)-phenyl]-acetamide	0.78 min; 388.19; conditions 3

Example 385: *N*-[1-(5-Cyano-6-difluoromethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide and Example 386: *N*-[1-(5-cyano-4-difluoromethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. To a sol. of Example 71 (205 mg, 0.57 mmol) and zinc difluoromethanesulfinate (355 mg, 1.14 mmol) in DMSO (3.2 mL), is added trifluoroacetic acid (0.0446 mL, 0.57 mmol) at rt. Luperox® TBH70X (tert-butyl hydroperoxide; 70% weight sol. in water, 0.23 mL, 1.71 mmol) is added slowly with vigorous stirring. The mixture is stirred at rt overnight. Zinc difluoromethanesulfinate (355 mg, 1.14 mmol) and

- 132 -

Luperox® TBH70X are added again. The mixture was stirred at r.t over 4 nights. The reaction mixture was partitioned between CH₂Cl₂ (5 mL) and aq. sat. NaHCO₃ (5 mL). The layers are separated, and the aq. phase is extracted with CH₂Cl₂ (3 x 5 mL). The combined org. layers are dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the residue by prep. HPLC (column: Waters XBridge, 30x75 mm, 10 μm, UV/MS, basic conditions) yields the title products. LC-MS: t_R = 0.90 min, MH⁺ = 410.18 and t_R = 0.89 min, MH⁺ = 410.19 respectively (conditions 3).

2-(1λ4-Diazenylidene)-1-(3,3-dimethyl-2,3-dihydrobenzofuran-6-yl)ethan-1-one and *(rac.)-2-(1λ4-diazenylidene)-1-(3-methylchroman-7-yl)ethan-1-one*. To a mixture of 3,3-dimethyl-2,3-dihydrobenzofuran-6-carboxylic acid (710 mg, 3.69 mmol) in CH₂Cl₂ (20 mL) at -5 °C, are added oxalyl chloride, (0.474 mL, 5.54 mmol) and 4 drops of DMF. The mixture is allowed to warm up to rt over 2 h. The mixture is concentrated *in vacuo* (backfilled with N₂). The resulting oil is dissolved in THF (20 mL) and cooled to -5 °C. (Trimethylsilyl)diazomethane (2.0 M in hexanes, 4.15 mL, 8.31 mmol) is added and the mixture is allowed to warm to rt overnight. The solvents are removed under reduced pressure. Purification of the residue by automated FC (Combiflash, heptane → EtOAc/heptane 1:3, column : 80 g, flow : 60 mL/min,) yields a mixture of the two title products. LC-MS: t_R = 0.80 min, MH⁺ = 217.20 for the mixture (conditions 3).

Ethyl 2-(3,3-dimethyl-2,3-dihydrobenzofuran-6-yl)acetate and *(rac.)-ethyl 2-(3-methylchroman-7-yl)acetate*. To a sol. of the previous mixture (280 mg, 1.29 mmol) in EtOH (30 mL), a sol. of silver benzoate (178 mg, 0.777 mmol) in Et₃N (5.0 mL) is added dropwise. The resulting black sol. is stirred at rt for 19 h. The black suspension is filtered through *Celite*. The pad is rinsed with EtOAc. The filtrate is concentrated *in vacuo*. Purification of the crude by HPLC yielded the two separated title products. LC-MS: t_R = 0.90 min, MH⁺ = 235.22 and t_R = 0.90 min, respectively (conditions 3).

(rac.)-2-(3-Methylchroman-7-yl)acetic acid. To a sol. of *(rac.)-ethyl 2-(3-methylchroman-7-yl)acetate* (38 mg, 0.162 mmol) in DMF (1.00 mL) is added aq. NaOH (1M, 0.5 mL). The resulting sol. is stirred at rt for 4 h. The sol. is neutralized with formic acid (0.5 mL), filtered and then purified by prep. HPLC to yield the crude title product. LC-MS: t_R = 0.74 min (conditions 3).

5-Bromo-3-fluoro-2-((3-nitro-1H-pyrazol-1-yl)methyl)pyridine. Prepared according to *general procedure 4* with K₂CO₃ (1.87 g, 13.6 mmol), 5-bromo-2-(bromomethyl)-3-fluoropyridine (760 mg, 2.71 mmol), and 5-nitro-1H-pyrazole (313 mg, 2.71 mmol) in acetone (25 mL). The reaction is complete after 2 h. The crude is not purified. LC-MS: t_R = 0.78 min, MH⁺ = 302.98 (conditions 3).

5-Fluoro-6-((3-nitro-1H-pyrazol-1-yl)methyl)nicotinonitrile. To a sol. of 5-bromo-3-fluoro-2-((3-nitro-1H-pyrazol-1-yl)methyl)pyridine (1.02 g, 3.04 mmol) in N,N-dimethylacetamide (6.2 mL), are added in sequence Zn(CN)₂ (196 mg, 1.67 mmol), Pd₂(dba)₃ (60.7 mg, 0.066 mmol), 1,1'-bis-(diphenylphosphino)-ferrocene (45.5 mg, 0.082 mmol) and poly(methylhydrosiloxane) (PMHS) (0.067 mL). The resulting mixture is stirred at 150 °C in a microwave during 40 min. The mixture is allowed to cool to rt, filtered over *Celite*, and the filtrate is

- 133 -

concentrated in vacuo. Purification of the residue by automated FC (Combiflash, EtOAc / heptane 0:100 → 40:60, column 24 g, flow 35 mL/min) yields the title product. LC-MS: t_R = 0.70 min, MH^+ = 248.17 (conditions 3).

5 *6-((3-Amino-1H-pyrazol-1-yl)methyl)-5-fluoronicotinonitrile*. To a sol. of 5-fluoro-6-((3-nitro-1H-pyrazol-1-yl)methyl)nicotinonitrile (260 mg, 0.899 mmol) in EtOAc (9.22 mL) under N_2 , is added Pd (10 wt. % on activated charcoal, 52 mg, 0.489 mmol). The flask is carefully evacuated and backfilled with H_2 (3x). The black suspension was stirred at rt under an H_2 atmosphere for 30 h. The black suspension is filtered through *Celite*, and the *Celite* is rinsed with EtOAc. The filtrate is concentrated in vacuo. To a sol. of the previous residue in THF (9.22 mL) under N_2 , Pd (10 wt. % on activated charcoal, 52 mg, 0.49 mmol) is added. The
10 flask is carefully evacuated and backfilled with H_2 (3x). The black suspension is stirred at rt under an H_2 atmosphere overnight. Purification of the residue by HPLC yields the title product. LC-MS: t_R = 0.40 min, MH^+ = 218.16 (conditions 3).

tert-Butyl 2-(4-(1-cyano-3,3-difluorocyclobutyl)phenyl)acetate. Prepared according to general procedure 6 from 1-(4-bromophenyl)-3,3-difluorocyclobutane-1-carbonitrile (WO2012027322, 92.7 mg, 0.337 mmol), (2-
15 (tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et_2O , 1.4 mL, 0.70 mmol), $Pd_2(dba)_3$ (15.4 mg, 0.017 mmol), and X-Phos (8.3 mg, 0.017 mmol) in THF (2.9 mL). The reaction is complete overnight at 45 °C. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 0.95 min, MH^+ = 308.13 (conditions 3).

2-(4-(1-Cyano-3,3-difluorocyclobutyl)phenyl)acetic acid. Prepared according to *general procedure 7* from *tert-Butyl 2-(4-(1-cyano-3,3-difluorocyclobutyl)phenyl)acetate* (42 mg, 0.13 mmol) in TFA (0.15 mL) and CH_2Cl_2
20 (0.15 mL). The reaction is complete after 3 h at 0 °C. LC-MS: t_R = 0.74 min (conditions 3).

2-Bromo-3-fluoro-6-((3-nitro-1H-pyrazol-1-yl)methyl)pyridine. Prepared according to *general procedure 4* with K_2CO_3 (2.01 g, 14.6 mmol), 2-bromo-6-(bromomethyl)-3-fluoropyridine (799 mg, 2.91 mmol), and 5-nitro-1H-pyrazole (336 mg, 2.91 mmol) in acetone (26 mL). The reaction is complete after 2 h. The crude is not purified. LC-MS: t_R = 0.80 (conditions 3).

25 *3-Fluoro-6-((3-nitro-1H-pyrazol-1-yl)methyl)picolinonitrile*. To a sol. of 2-bromo-3-fluoro-6-((3-nitro-1H-pyrazol-1-yl)methyl)pyridine (1.13 g, 3.51 mmol) in N,N-Dimethylacetamide (7.2 mL), are added in sequence $Zn(CN)_2$ (226 mg, 1.93 mmol), $Pd_2(dba)_3$ (70.1 mg, 0.0766 mmol), 1,1'-bis-(diphenylphosphino)-ferrocene (52.6 mg, 0.0948 mmol), and poly(methylhydrosiloxane) (PMHS) (0.077 mL). The mixture is stirred at 150 °C in a microwave for 40 min. The mixture is filtered over *Celite*, and the *Celite* is rinsed with EtOAc. The filtrate is
30 concentrated in vacuo. Purification of the residue by automated FC (Combiflash, EtOAc/heptane 0:100 → 30:70, column 24 g, flow 35 mL/min) yields the title product. LC-MS: t_R = 0.74, MH^+ = 248.20 (conditions 3).

6-((3-Amino-1H-pyrazol-1-yl)methyl)-3-fluoropicolinonitrile. To a sol. of 3-fluoro-6-((3-nitro-1H-pyrazol-1-yl)methyl)picolinonitrile (320 mg, 1.08 mmol) in EtOAc (11.1 mL) under N_2 , is added Pd (10 wt. % on activated charcoal, 64 mg, 0.56 mmol). The flask is carefully evacuated and backfilled with H_2 (3x). The black

- 134 -

suspension was stirred at rt under an H₂ atmosphere overnight. The black suspension is filtered through *Celite*, and the *Celite* is rinsed with EtOAc. The filtrate is concentrated in vacuo. Purification of the residue by HPLC yields the title product. LC-MS: t_R = 0.48 min, MH⁺ = 218.18 (conditions 3).

5 *tert-Butyl 2-(3-cyano-4-isobutylphenyl)acetate*. Prepared according to general procedure 6 from 5-bromo-2-isobutylbenzotrile (136 mg, 0.57 mmol), (2-(*tert*-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 1.24 mL, 0.62 mmol), Pd₂(dba)₃ (26.2 mg, 0.0286 mmol), and Q-Phos (41.1 mg, 0.0571 mmol) in dioxane (1.5 mL). The reaction is complete after 30 min at 85 °C. Purification by automated FC (Combiflash, EtOAc/heptane 0:100 → 60:40) yields the title product. LC-MS: t_R = 1.00 min, MH⁺ = 273.97 (conditions 4).

10 *2-(3-Cyano-4-isobutylphenyl)acetic acid*. Prepared according to *general procedure 7* from *tert*-butyl 2-(3-cyano-4-isobutylphenyl)acetate (33 mg, 0.12 mmol) in HCl (4M in dioxane, 7 mL) and CH₂Cl₂ (1.4 mL). The reaction is complete overnight at rt. LC-MS: t_R = 0.73 min (conditions 3).

The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t _R ; MH ⁺ ; conditions)
387	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3,3-dimethyl-2,3-dihydro-benzofuran-6-yl)-acetamide	0.81 min; 388.19; conditions 3
388	rac-N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-methylchroman-7-yl)-acetamide	0.81 min; 388.17; conditions 3
389	N-[1-(5-Cyano-3-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide	0.89 min; 444.07; conditions 3
390	2-[4-(1-Cyano-3,3-difluoro-cyclobutyl)-phenyl]-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	0.81 min; 433.01; conditions 3
391	N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.89 min; 448.08; conditions 3
392	2-(3-Cyano-4-isobutyl-phenyl)-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	0.86 min; 399.17; conditions 3
393	2-(3-Cyano-4-isobutyl-phenyl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide	0.94 min; 409.16; conditions 3

- 135 -

Example 394: *N*-[1-(5-Azetidin-1-yl-pyridin-2-ylmethyl)-1*H*-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide. To a degassed mixture of Example 94 (80 mg, 0.192 mmol), Pd₂(dba)₃ (17.5 mg, 0.02 mmol), RuPhos (17.9 mg, 0.04 mmol), NaOtBu (37 mg, 0.38 mmol), and molecular sieve (4A powder, 100 mg) in toluene (2.00 mL) is added azetidine (0.04 mL, 0.57 mmol). The reaction is stirred in a closed vial at 95 °C for 17 h. The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 0.74 min, MH⁺ = 390.20 (conditions 3).

Example 395: 2-(4-Isopropyl-phenyl)-*N*-[1-(5-pyrrolidin-1-yl-pyridin-2-ylmethyl)-1*H*-pyrazol-3-yl]-acetamide. To a degassed mixture of Example 94 (80 mg, 0.192 mmol), Pd₂(dba)₃ (17.5 mg, 0.02 mmol), RuPhos (17.9 mg, 0.04 mmol), NaOtBu (37 mg, 0.38 mmol), and molecular sieve (4A powder, 100 mg) in toluene (2.00 mL) is added pyrrolidine (0.05 mL, 0.57 mmol). The reaction is stirred in a closed vial at 110 °C for 17 h. The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 0.75 min, MH⁺ = 404.23 (conditions 3).

Example 396: *N*-{1-[5-(3,3-Difluoro-pyrrolidin-1-yl)-pyridin-2-ylmethyl]-1*H*-pyrazol-3-yl}-2-(4-isopropyl-phenyl)-acetamide. To a degassed mixture of Example 94 (80 mg, 0.192 mmol), Pd₂(dba)₃ (17.5 mg, 0.02 mmol), RuPhos (17.9 mg, 0.04 mmol), NaOtBu (37 mg, 0.38 mmol), and molecular sieve (4A powder, 100 mg) in toluene (2.00 mL) is added 3,3-difluoropyrrolidine hydrochloride (57.6 mg, 0.57 mmol). The reaction is stirred in a closed vial at 110 °C for 17 h. The mixture is allowed to cool to rt, and the solvents are removed under reduced pressure. Purification of the crude by HPLC yields the title product. LC-MS: t_R = 0.78 min, MH⁺ = 440.17 (conditions 3).

tert-Butyl 2-(4-(cyclopropylmethoxy)-3-(trifluoromethoxy)phenyl)acetate. Prepared according to general procedure 6 from 4-bromo-1-(cyclopropylmethoxy)-2-(trifluoromethoxy)benzene (146 mg, 0.47 mmol), (2-(*tert*-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 1.04 mL, 0.52 mmol), Pd₂(dba)₃ (22 mg, 0.020 mmol), and Q-Phos (34 mg, 0.050 mmol) in dioxane (1.5 mL). The reaction is complete after 1 h at 85 °C. Purification by automated FC (Combiflash, EtOAc/heptane 0:100 → 60:40) yields the title product. LC-MS: t_R = 1.04 min, MH⁺ = 223.23 (conditions 4).

2-(4-(Cyclopropylmethoxy)-3-(trifluoromethoxy)phenyl)acetic acid. Prepared according to general procedure 7 from *tert*-butyl 2-(4-(cyclopropylmethoxy)-3-(trifluoromethoxy)phenyl)acetate (30 mg, 0.087 mmol) in HCOOH (0.60 mL) The reaction is complete after 2 h at rt.

4-Bromo-5-fluoro-2-methylpyridine 1-oxide. To a stirred solution of acetyl bromide (10.7 mL, 143 mmol) in AcOH (22.3 mL), is added portionwise 5-fluoro-2-methyl-4-nitropyridine 1-Oxide (2500 mg, 14.5 mmol). The mixture is stirred at for 2.5 h at rt. The mixture is carefully poured onto ice, and solid K₂CO₃ is carefully added in portions. The aq. layer is extracted with EtOAc (95 mL) and the org. layer is washed with brine (20 mL). The combined aq. layers are saturated with NaCl, and CH₂Cl₂ / iPrOH 3/1 (100 mL) is added. The mixture is stirred at rt for 2h. The layers are separated, and the aq. phase is extracted with CH₂Cl₂ / iPrOH 3/1 (2 x 100

- 136 -

mL) and CH₂Cl₂ (1 x 200 mL). The combined org. layers are dried over MgSO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.51 min, MH⁺ = 206.06 (conditions 3).

5 *(4-Bromo-5-fluoropyridin-2-yl)methyl acetate*. To Ac₂O (7.39 mL, 77.5 mmol) at 120°C is added 4-bromo-5-fluoro-2-methylpyridine 1-oxide (2.98 g, 13.6 mmol). The resulting sol. is stirred at 120 °C for 5 min, and at reflux for 30 min. The mixture is allowed to cool down to rt, and is poured onto ice (57 g). The mixture is neutralized with NaHCO₃. Et₂O (60 mL) is added, and the layers are separated. The aq. phase is extracted with Et₂O (2 x 30 mL), and the combined org. layers are washed with brine, dried over MgSO₄, filtered and the solvents are removed under reduced pressure. Purification by automated FC (Combiflash, EtOAc / heptane
10 0:100 → 30:70, column 80 g, flow 60 mL/min) yields the title product. LC-MS: t_R = 0.73 min, MH⁺ = 248.08 (conditions 3).

(4-Bromo-5-fluoropyridin-2-yl)methanol. K₂CO₃ (25.9 mg, 0.187 mmol) is added to a sol. of (4-bromo-5-fluoropyridin-2-yl)methyl acetate (1680 mg, 5.82 mmol) in MeOH (7.8 mL). The resulting mixture is stirred overnight at rt. K₂CO₃ (1674 mg, 12.1 mmol, 2.082 eq) is added again, and the mixture is stirred at rt for 1h.
15 Water (16 mL) is added, and the mixture is neutralized with aq. 5% AcOH. CH₂Cl₂ is added, and the layers are separated. The aq. phase is extracted with CH₂Cl₂ (2x), and the combined org. layers are washed with brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.55 min, MH⁺ = 206.06 (conditions 3).

4-Bromo-2-(bromomethyl)-5-fluoropyridine. To a warmed (50°C) mixture of (4-bromo-5-fluoropyridin-2-yl)methanol (810 mg, 3.76 mmol) in DMF (4.8 mL) is added PBr₃ (0.389 mL, 4.14 mmol). The mixture is stirred at 50°C for 1.5 h. The mixture is allowed to cool down to rt, is diluted with water (240 mL) and is basified with aq. sat. NaHCO₃. EtOAc is added, and the layers are separated. The aq. layer is extracted with EtOAc (2x), and the combined org. layers are washed with brine, dried over MgSO₄, filtered and concentrated in vacuo to give the crude title product. LC-MS: t_R = 0.78 min, MH⁺ = 269.97 (conditions 3).

25 *4-Bromo-5-fluoro-2-((3-nitro-1H-pyrazol-1-yl)methyl)pyridine*. Prepared according to *general procedure 4* with K₂CO₃ (2.38 g, 17.3 mmol), 4-bromo-2-(bromomethyl)-5-fluoropyridine (952 mg, 3.45 mmol), and 5-nitro-1H-pyrazole (399 mg, 3.45 mmol) in acetone (31 mL). The reaction is complete after 3 h. The crude is not purified. LC-MS: t_R = 0.78, MH⁺ = 301.02 (conditions 3).

30 *5-Fluoro-2-((3-nitro-1H-pyrazol-1-yl)methyl)isonicotinonitrile*. To a sol. of 4-bromo-5-fluoro-2-((3-nitro-1H-pyrazol-1-yl)methyl)pyridine (1.38 g, 4.15 mmol) in N,N-Dimethylacetamide (8.5 mL), are added in sequence Zn(CN)₂ (268 mg, 2.28 mmol), Pd₂(dba)₃ (83 mg, 0.091 mmol), 1,1'-bis-(diphenylphosphino)-ferrocene (62.3 mg, 0.112 mmol) and poly(methylhydrosiloxane) (0.091 mL). The mixture is stirred at 150°C in a microwave for 40 min. The mixture is filtered over *Celite*, and the *Celite* is rinsed with EtOAc. The filtrate is concentrated

- 137 -

in vacuo. Purification of the residue by automated FC (Combiflash, EtOAc / heptane 0:100 → 70:30, column 24 g, flow 35 mL/min) yields the title product. LC-MS: $t_R = 0.72$ (conditions 3).

2-((3-Amino-1H-pyrazol-1-yl)methyl)-5-fluoroisonicotinonitrile. To a sol. of 5-fluoro-2-((3-nitro-1H-pyrazol-1-yl)methyl)isonicotinonitrile (815 mg, 2.35 mmol) in EtOAc (24 mL) is added Pd on charcoal (10 wt. %, 163 mg, 1.53 mmol). The flask is carefully evacuated and backfilled with H₂ (3x). The black suspension is stirred at rt under an H₂ atmosphere overnight. The black suspension is filtered through *Celite*. The *Celite* is rinsed with EtOAc. The filtrate is concentrated in vacuo. Ca. 300 mg of the residue is purified by HPLC. The resulting fractions are combined and CH₂Cl₂ is added. The layers are separated, and the aq. phase is extracted with CH₂Cl₂ (2x). The combined org. layers are dried over MgSO₄, filtered, and the solvents are concentrated in vacuo to give the crude title product. LC-MS: $t_R = 0.45$, MH⁺ = 218.18 (conditions 3).

tert-Butyl 2-(4-(1-cyanocyclopropyl)-3-(trifluoromethyl)phenyl)acetate. Prepared according to general procedure 6 from 1-(4-bromo-2-(trifluoromethyl)phenyl)cyclopropane-1-carbonitrile (WO2006018725, 170 mg, 0.59 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 1.28 mL, 0.64 mmol), Pd₂(dba)₃ (27 mg, 0.029 mmol), and Q-Phos (42 mg, 0.059 mmol) in dioxane (1.5 mL). The reaction is complete after 1 h at 85 °C. Purification by automated FC (Combiflash, EtOAc/heptane 0:100 → 50:50) yields the title product. LC-MS: $t_R = 0.91$ min, MH⁺ = 326.04 (conditions 4).

2-(4-(1-Cyanocyclopropyl)-3-(trifluoromethyl)phenyl)acetic acid. Prepared according to general procedure 7 from *tert-butyl 2-(4-(1-cyanocyclopropyl)-3-(trifluoromethyl)phenyl)acetate* (36 mg, 0.11 mmol) in TFA (0.36 mL) and CH₂Cl₂ (0.35 mL). The reaction is complete after 2.5 h at 0 °C. LC-MS: $t_R = 0.65$ (conditions 4).

Methyl 2-(3-methyl-4-(3,3,3-trifluoropropoxy)phenyl)acetate. To a sol. of 2-(4-hydroxy-3-methylphenyl)acetic acid methyl ester (200 mg, 1.11 mmol) in DMF (3 mL) is added Cs₂CO₃ (470 mg, 1.44 mmol). The mixture is cooled to 0 °C, and 3,3,3-trifluoropropyl methanesulfonate (853 mg, 4.44 mmol) is added dropwise. The mixture is stirred overnight while warming up to rt. Cs₂CO₃ (1.88 g, 5.76 mmol) and 3,3,3-trifluoropropyl methanesulfonate (853 mg, 4.44 mmol) are added again. The mixture is stirred overnight. Water is added, and the mixture is extracted with EtOAc (2 x). The solvents are removed under reduced pressure. Purification of the residue by FC (EtOAc / heptane 10:90 → 20:80 → 25:75 → 50:50 → 75:25 → 100:0) yields the title product.

2-(3-Methyl-4-(3,3,3-trifluoropropoxy)phenyl)acetic acid. To a sol. of methyl 2-(3-methyl-4-(3,3,3-trifluoropropoxy)phenyl)acetate (50.0 mg, 0.18 mmol) in THF (1.00 mL) and MeOH (0.15 mL), is added 1M aq. NaOH (0.23 mL). The mixture is stirred overnight at rt, and the organic volatiles are removed in vacuo. The residue is diluted with water and washed with EtOAc (1x). The aq. layer is acidified with aq. 1M HCl. The mixture is extracted with CH₂Cl₂ (3x). The comb. org. layers are dried over MgSO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title product.

5 *4-Bromo-2-cyclopropyl-1-(2,2,2-trifluoroethoxy)benzene*. To a sol. of 4-bromo-2-cyclopropylphenol (240 mg, 1.13 mmol) in DMF (5 mL) are added Cs₂CO₃ (550 mg, 1.69 mmol) and 1,1,1-trifluoro-2-iodoethane (0.555 mL, 5.63 mmol). The mixture is stirred for 2 h at 90 °C, and is allowed to cool to rt. Water is added, and the mixture is extracted with EtOAc (3 x). The combined org. layers are washed with water and with brine, are dried over MgSO₄, filtered, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Combiflash, EtOAc / heptane 1:1) yields the title product.

10 *tert-Butyl 2-(3-cyclopropyl-4-(2,2,2-trifluoroethoxy)phenyl)acetate*. Prepared according to general procedure 6 from 4-bromo-2-cyclopropyl-1-(2,2,2-trifluoroethoxy)benzene (144 mg, 0.488 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 2.20 mL, 1.10 mmol), Pd₂(dba)₃ (22 mg, 0.024 mmol), and Q-Phos (23 mg, 0.049 mmol) in dioxane (3.0 mL). The reaction is complete overnight at 85 °C. Purification by automated FC (Combiflash, EtOAc/heptane 0:100 → 50:50) yields the title product.

2-(3-Cyclopropyl-4-(2,2,2-trifluoroethoxy)phenyl)acetic acid. Prepared according to *general procedure 7* from *tert-butyl 2-(3-cyclopropyl-4-(2,2,2-trifluoroethoxy)phenyl)acetate* (30 mg, 0.091 mmol) in HCOOH (0.80 mL). The reaction is complete after 2.5 h at rt. LC-MS: t_R = 0.77 (conditions 4).

15 *tert-Butyl 2-(3-methyl-4-(trifluoromethoxy)phenyl)acetate*. Prepared according to general procedure 6 from 4-bromo-2-methyl-1-(trifluoromethoxy)benzene (300 mg, 1.18 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 3.40 mL, 1.70 mmol), Pd₂(dba)₃ (54 mg, 0.059 mmol), and Q-Phos (56 mg, 0.118 mmol) in dioxane (3.0 mL). The reaction is complete overnight at 85 °C. Purification by automated FC (Combiflash, EtOAc/heptane 0:100 → 100:0) yields the title product. LC-MS: t_R = 1.02 (conditions 4).

20 *2-(3-Methyl-4-(trifluoromethoxy)phenyl)acetic acid*. Prepared according to *general procedure 7* from *tert-butyl 2-(3-methyl-4-(trifluoromethoxy)phenyl)acetate* (32 mg, 0.11 mmol) in HCOOH (0.80 mL). The reaction is complete after 2.5 h at rt. LC-MS: t_R = 0.77 (conditions 4).

25 *4-Bromo-2-ethyl-1-(2,2,2-trifluoroethoxy)benzene*. To a sol. of 4-bromo-2-ethylphenol (300 mg, 1.49 mmol) in DMF (3 mL) is added Cs₂CO₃ (632 mg, 1.94 mmol). The mixture is cooled to 0 °C, and 2,2,2-trifluoroethyl trifluoromethanesulfonate (0.215 mL, 1.49 mmol) is added. The mixture is stirred for 90 min while warming up to rt. Water is added, and the mixture is extracted with EtOAc (3 x). The combined org. layers are washed with water and brine, dried over MgSO₄, filtered, and the solvents are removed under reduced pressure to yield the crude title product. LC-MS: t_R = 0.99 (conditions 3).

30 *tert-Butyl 2-(3-ethyl-4-(2,2,2-trifluoroethoxy)phenyl)acetate*. Prepared according to general procedure 6 from 4-bromo-2-ethyl-1-(2,2,2-trifluoroethoxy)benzene (100 mg, 0.353 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et₂O, 1.40 mL, 0.70 mmol), Pd₂(dba)₃ (16 mg, 0.018 mmol), and X-Phos (17 mg, 0.035 mmol) in dioxane (3.0 mL). The reaction is complete overnight at 85 °C. Purification by automated FC (Combiflash, EtOAc/heptane 0:100 → 80:20) yields the title product. LC-MS: t_R = 1.02 (conditions 4).

- 139 -

2-(3-Ethyl-4-(2,2,2-trifluoroethoxy)phenyl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(3-ethyl-4-(trifluoromethoxy)phenyl)acetate (86 mg, 0.27 mmol) in HCOOH (2.0 mL). The reaction is complete after 2.5 h at rt. LC-MS: $t_R = 0.77$ (conditions 4).

5-Bromo-1,3-dimethyl-2-(2,2,2-trifluoroethoxy)benzene. To a sol. of 4-bromo-2,6-xyleneol (300 mg, 1.49 mmol, 1 eq) in DMF (3 mL) is added Cs_2CO_3 (632 mg, 1.94 mmol). The mixture is cooled to 0 °C, and 2,2,2-trifluoroethyl trifluoromethanesulfonate (0.215 mL, 1.49 mmol) is added. The mixture is stirred overnight while warming up to rt. Water is added, and the mixture is extracted with EtOAc (3 x). The combined org. layers are washed with water and brine, dried over MgSO_4 , filtered, and the solvents are removed under reduced pressure. Purification of the crude by automated FC (Combiflash, EtOAc / heptane 0:100 → 100:0) yields the title product.

tert-Butyl 2-(3,5-dimethyl-4-(2,2,2-trifluoroethoxy)phenyl)acetate. Prepared according to general procedure 6 from 5-bromo-1,3-dimethyl-2-(2,2,2-trifluoroethoxy)benzene (100 mg, 0.353 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et_2O , 1.40 mL, 0.70 mmol), $\text{Pd}_2(\text{dba})_3$ (16 mg, 0.018 mmol), and X-Phos (17 mg, 0.035 mmol) in dioxane (3.0 mL). The reaction is complete overnight at 85 °C. Purification by automated FC (Combiflash, EtOAc/heptane 0:100 → 80:20) yields the title product. LC-MS: $t_R = 1.01$ (conditions 4).

2-(3,5-Dimethyl-4-(2,2,2-trifluoroethoxy)phenyl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(3,5-dimethyl-4-(2,2,2-trifluoroethoxy)phenyl)acetate (96 mg, 0.30 mmol) in HCOOH (2.2 mL). The reaction is complete after 2.5 h at rt. LC-MS: $t_R = 0.76$ (conditions 4).

tert-Butyl 2-(5-methyl-6-(2,2,2-trifluoroethoxy)pyridin-3-yl)acetate. Prepared according to general procedure 6 from 5-bromo-3-methyl-2-(2,2,2-trifluoroethoxy)pyridine (334 mg, 1.17 mmol), (2-(tert-butoxy)-2-oxoethyl)zinc(II) chloride (0.5M in Et_2O , 3.40 mL, 1.70 mmol), $\text{Pd}_2(\text{dba})_3$ (54 mg, 0.058 mmol), and X-Phos (56 mg, 0.117 mmol) in dioxane (3.0 mL). The reaction is complete overnight at 85 °C. Purification by automated FC (Combiflash, EtOAc/heptane 0:100 → 80:20) yields the title product. LC-MS: $t_R = 0.97$ (conditions 4).

2-(5-Methyl-6-(2,2,2-trifluoroethoxy)pyridin-3-yl)acetic acid. Prepared according to *general procedure 7* from tert-butyl 2-(5-methyl-6-(2,2,2-trifluoroethoxy)pyridin-3-yl)acetate (92 mg, 0.30 mmol) in HCOOH (2.2 mL). The reaction is complete after 2.5 h at rt. LC-MS: $t_R = 0.70$ (conditions 4).

The following examples were prepared according to general procedure 3, from the appropriate carboxylic acids and aminopyrazoles:

Example No	Name	LC-MS (t_R ; MH^+ ; conditions)
397	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-cyclopropylmethoxy-3-trifluoromethoxy-phenyl)-acetamide	0.90 min; 472.01; conditions 3

398	2-(4-Cyclopropylmethoxy-3-trifluoromethoxy-phenyl)-N-[1-(3,4-difluorobenzyl)-1H-pyrazol-3-yl]-acetamide	0.97 min; 481.76; conditions 3
399	N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.88 min; 448.06; conditions 3
400	2-(4-tert-Butyl-phenyl)-N-[1-(4-cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	0.90 min; 392.18; conditions 3
401	N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropylphenyl)-acetamide	0.88 min; 378.16; conditions 3
402	N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide	0.90 min; 444.07; conditions 3
403	2-[4-(1-Cyano-cyclopropyl)-3-trifluoromethyl-phenyl]-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide	0.71 min; 451.04; conditions 4
404	2-[4-(1-Cyano-cyclopropyl)-3-trifluoromethyl-phenyl]-N-[1-(3,4-difluorobenzyl)-1H-pyrazol-3-yl]-acetamide	0.82 min; 460.99; conditions 4
405	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(3,3,3-trifluoro-propoxy)-phenyl]-acetamide	0.78 min; 444.10; conditions 4
406	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-cyclopropyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.80 min; 456.01; conditions 4
407	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-methyl-4-trifluoromethoxy-phenyl)-acetamide	0.78 min; 416.10; conditions 4
408	N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-cyclopropyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.84 min; 473.76; conditions 4
409	N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-cyclopropyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.83 min; 473.89; conditions 4
410	N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-methyl-4-trifluoromethoxy-phenyl)-acetamide	0.83 min; 433.94; conditions 4
411	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-ethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.80 min; 444.07; conditions 4
412	N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-ethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.85 min; 462.03; conditions 4

413	N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-ethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.84 min; 461.97; conditions 4
414	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3,5-dimethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.79 min; 444.05; conditions 4
415	N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3,5-dimethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.84 min; 462.05; conditions 4
416	N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3,5-dimethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide	0.82 min; 461.94; conditions 4
417	N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[5-methyl-6-(2,2,2-trifluoro-ethoxy)-pyridin-3-yl]-acetamide	0.75 min; 431.04; conditions 4
418	N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[5-methyl-6-(2,2,2-trifluoro-ethoxy)-pyridin-3-yl]-acetamide	0.80 min; 448.93; conditions 4
419	N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[5-methyl-6-(2,2,2-trifluoro-ethoxy)-pyridin-3-yl]-acetamide	0.79 min; 449.01; conditions 4
420	N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(3,3,3-trifluoro-propoxy)-phenyl]-acetamide	0.82 min; 461.98; conditions 4
421	N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(3,3,3-trifluoro-propoxy)-phenyl]-acetamide	0.81 min; 462.03; conditions 4

In vitro Methods – Measurement of calcium channel flux by means of FLIPR assays.

HEK293 cells recombinantly expressing either voltage-dependent T-type calcium channel subunit alpha-1G (Cav3.2) or voltage-dependent L-type calcium channel subunit alpha-1C (Cav1.2) are assayed for calcium flux using the calcium indicator dye Fluo-4-AM (Molecular Devices) and FLIPR technology (Fluorometric Imaging Plate Reader, Molecular Devices) (Xie X, Van Deusen AL, Vitko I, Babu DA, Davies LA, Huynh N, Cheng H, Yang N, Barrett PQ, Perez-Reyes E. Validation of high throughput screening assays against three subtypes of Ca(v)3 T-type channels using molecular and pharmacologic approaches. Assay and Drug Development Technologies 2007, 5(2), 191-203). The HEK293 cells recombinantly expressing Cav3.2 are maintained in DMEM growth medium (Life Technologies) supplemented with 10 % Fetal Bovine Serum (FBS), 100 U/ml penicillin (Life Technologies), 100 µg/ml streptomycin (Life Technologies) and 1 mg/ml G418 (Life Technologies). HEK293 cells recombinantly expressing Cav1.2 are maintained in DMEM growth medium (Life technologies) supplemented with 10 % FBS, 0.1 mg/ml G418 (Life Technologies), 0.1 mg/ml hygromycin (Life Technologies) and 40 ug/ml zeocin (Life Technologies).

- 142 -

Cells are washed once with PBS, then dissociated in 0.25 % trypsin/EDTA (Life Technologies) and seeded into poly-D-lysine coated 384-well black, clear bottom plates (BD Biosciences) at a density of 30,000 cells/well. The seeded plates are incubated overnight at 37°C.

Immediately prior to performing the assay, medium is removed and cells are treated for 1 hour at 37°C with loading buffer containing HBSS 1X (137 mM NaCl; 5.4 mM KCl; 0.25 mM Na₂HPO₄; 1.3 mM CaCl₂; 0.4 mM MgSO₄; 0.5 mM MgCl₂; 0.4 mM KH₂PO₄, pH 7.4), 0.375 g/L NaHCO₃, 20 mM HEPES, supplemented with 3 μM Fluo-4-AM and 0.15 % Pluronic (Life Technologies). The cells are then washed three times with assay buffer (HBSS 1X; 0.375 g/L NaHCO₃; 20 mM HEPES; 1 % FBS; pH 7.4) and allowed to rest in 50 μl of wash buffer for 30 minutes.

10 Stock solutions of test compounds are prepared to a concentration of 10 mM in DMSO. For the Cav3.2 assay, serial dilutions of the compounds are prepared in TEAC buffer (100 mM tetraethylammonium chloride; 20 mM HEPES; 2.5 mM CaCl₂; 5 mM KCl; 1 mM MgCl₂; 1 % FBS; pH 7.2), for the Cav1.2 assay serial dilutions are prepared in assay buffer. Test compounds are added to the cells to give a 3-fold dilution range from 10 μM to 0.05 nM. The compounds are incubated with the cells for 3 minutes and Ca²⁺ entry is stimulated by adding
 15 either CaCl₂ to a final concentration of 10 mM (Cav3.2 assay) or by adding KCl to a final concentration of 20 mM (Cav1.2 assay). The kinetics of fluorescence increase are recorded for every well and the area under the fluorescence trace for every compound concentration is used to generate inhibition curves using non-linear regression sigmoidal concentration-response curve analysis with in-house software. IC₅₀ values are calculated and represent the compound concentration required to inhibit 50% of the signal that is obtained in the
 20 presence of vehicle instead of test compound. In analogy, antagonistic activities (IC₅₀ values) of all exemplified compounds have been measured for the Cav3.1- and the Cav3.3-channel. Antagonistic activities (IC₅₀ values) of all exemplified compounds are in the range of 0.3 to 1210 nM with respect to Cav3.1; and in the range of 0.8 to 1280 nM with respect to Cav3.3.

In the following table, IC₅₀-values generated for the Cav3.2-channel are presented.

Example	IC50 (nM)	Example	IC50 (nM)	Example	IC50 (nM)	Example	IC50 (nM)
1	14	107	338	213	31	319	66
2	4.1	108	322	214	164	320	99
3	12	109	22	215	599	321	91
4	82	110	14	216	269	322	856
5	20	111	1330	217	15	323	36
6	6.6	112	21	218	79	324	31
7	7.9	113	4.8	219	14	325	893
8	47	114	14	220	3.1	326	33
9	12	115	57	221	5.0	327	37

- 143 -

10	10	116	75	222	117	328	33
11	5.4	117	332	223	8.4	329	80
12	20	118	97	224	21	330	4.8
13	133	119	137	225	13	331	9.6
14	650	120	6.7	226	25	332	600
15	374	121	68	227	4.3	333	2790
16	10	122	19	228	44	334	21
17	12	123	1270	229	3.8	335	20
18	25	124	9.9	230	255	336	34
19	10	125	64	231	21	337	168
20	5.1	126	3.4	232	5.8	338	61
21	3.4	127	27	233	8.1	339	7.0
22	5.0	128	9.7	234	6	340	8.5
23	6.4	129	128	235	42	341	64
24	13	130	293	236	18	342	40
25	64	131	88	237	6.1	343	4.5
26	5.4	132	51	238	32	344	52
27	61	133	191	239	2.4	345	34
28	8.0	134	428	240	11	346	159
29	25	135	247	241	34	347	85
30	8.6	136	1570	242	39	348	29
31	4.0	137	313	243	37	349	23
32	7.6	138	756	244	33	350	69
33	101	139	36	245	30	351	65
34	91	140	176	246	705	352	22
35	43	141	35	247	2590	353	30
36	160	142	185	248	1810	354	248
37	29	143	19	249	295	355	26
38	39	144	160	250	127	356	327
39	49	145	44	251	303	357	34
40	16	146	136	252	56	358	20
41	38	147	13	253	57	359	212
42	19	148	7.6	254	100	360	360
43	82	149	85	255	52	361	80

- 144 -

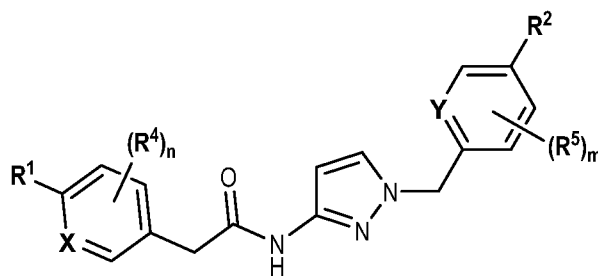
44	372	150	682	256	251	362	117
45	33	151	649	257	76	363	51
46	26	152	1160	258	934	364	62
47	37	153	21	259	4.1	365	18
48	138	154	78	260	3.1	366	147
49	9.2	155	70	261	15	367	10
50	11	156	179	262	155	368	301
51	16	157	34	263	97	369	64
52	2.6	158	11	264	5.4	370	578
53	6.7	159	1180	265	15	371	13
54	28	160	29	266	6.6	372	38
55	33	161	258	267	90	373	349
56	46	162	64	268	35	374	107
57	14	163	345	269	162	375	9.9
58	285	164	568	270	51	376	20
59	136	165	13	271	3.4	377	25
60	4.7	166	86	272	7.5	378	249
61	3.4	167	21	273	35	379	658
62	3.8	168	113	274	133	380	214
63	38	169	104	275	14	381	54
64	80	170	191	276	188	382	114
65	74	171	980	277	15	383	36
66	19	172	15	278	18	384	128
67	3.4	173	188	279	275	385	44
68	4.8	174	319	280	138	386	69
69	16	175	17	281	21	387	122
70	11	176	67	282	12	388	30
71	60	177	18	283	9.5	389	506
72	46	178	99	284	3070	390	47
73	7.9	179	2500	285	208	391	2.1
74	14	180	33	286	393	392	101
75	5.2	181	272	287	9480	393	51
76	6.1	182	65	288	4.7	394	126
77	9.1	183	530	289	23	395	315

- 145 -

78	275	184	490	290	39	396	369
79	218	185	7.7	291	80	397	44
80	92	186	41	292	6.5	398	39
81	131	187	15	293	6.6	399	60
82	33	188	60	294	22	400	49
83	26	189	88	295	308	401	126
84	18	190	21	296	17	402	106
85	301	191	93	297	20	403	97
86	140	192	133	298	43	404	14
87	157	193	78	299	37	405	18
88	109	194	61	300	7.5	406	15
89	61	195	47	301	71	407	25
90	75	196	176	302	39	408	8.5
91	23	197	54	303	51	409	43
92	48	198	16	304	118	410	17
93	39	199	74	305	29	411	7.8
94	8.3	200	67	306	17	412	5.3
95	99	201	30	307	42	413	30
96	53	202	16	308	263	414	6.4
97	31	203	1260	309	27	415	4.9
98	38	204	79	310	13	416	17
99	48	205	288	311	81	417	37
100	60	206	50	312	10	418	94
101	925	207	5.3	313	45	419	9430
102	7050	208	88	314	32	420	8.7
103	145	209	53	315	240	421	41
104	4520	210	8.0	316	36		
105	31	211	3.1	317	56		
106	15	212	35	318	378		

Claims

1. A compound of formula (I)



Formula (I)

5 wherein

X represents a ring carbon or a ring nitrogen atom;

• R¹ represents

- (C₂₋₆)alkyl;
- (C₂₋₄)alkyl mono-substituted with cyano, or (C₁₋₃)alkoxy;
- 10 ➤ (C₁₋₄)fluoroalkyl;
- (C₁₋₃)fluoroalkoxy;
- pentafluoro-sulfanyl;
- (C₃₋₆)cycloalkyl-L¹- wherein
 - 15 ➤ said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is unsubstituted, or mono-substituted with fluoro, (C₁₋₃)alkyl, (C₁₋₃)alkoxy, hydroxy, cyano, or (C₁₋₃)fluoroalkyl, or di-substituted with fluoro, or tri-substituted with two fluoro substituents and a substituent selected from (C₁₋₃)alkyl and cyano; and
 - the linker L¹ represents a direct bond, (C₁₋₂)alkylene, oxygen, or (C₁₋₂)alkylene-oxy;
 - 20 ➤ 5- or 6-membered heteroaryl, independently optionally mono-substituted with (C₁₋₃)alkyl;
 - -NR¹¹R¹², wherein
 - 25 ➤ R¹¹ and R¹² independently represent hydrogen, (C₁₋₃)alkyl, (C₂₋₃)fluoroalkyl, (C₃₋₆)cycloalkyl, (C₃₋₆)cycloalkyl mono- or di-substituted with fluoro, (C₃₋₆)cycloalkyl-(C₁₋₃)alkyl, (C₁₋₃)alkoxy-(C₂₋₃)alkyl;
 - or R¹¹ and R¹², together with the nitrogen atom to which they are attached to, form a 4- to- 6 membered ring optionally mono- or di-substituted with fluoro; a 2-oxo-pyrrolidinyl group; or a morpholinyl group;

and (R⁴)_n represents one or two optional substituents independently selected from (C₁₋₄)alkyl, (C₃₋₆)cycloalkyl, (C₁₋₄)alkoxy, (C₁₋₃)fluoroalkyl, (C₁₋₃)fluoroalkoxy, halogen, and cyano;

- 147 -

- or **R**¹ together with (**R**⁴)_n forms a non-aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring; wherein said 5- or 6-membered ring optionally contains one or two heteroatoms independently selected from oxygen and nitrogen; wherein said fused 5- or 6-membered non-aromatic ring independently is optionally further mono-substituted with oxo or (C₁₋₃)alkyl; di-substituted with (C₁₋₃)alkyl; or di-, tri-, or tetra-substituted wherein one substituent is oxo and the remaining are (C₁₋₃)alkyl;
- or **R**¹ together with (**R**⁴)_n forms an aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring; wherein said 5- or 6-membered ring optionally contains one or two heteroatoms selected from nitrogen, wherein said fused 5- or 6-membered aromatic ring independently is optionally further mono- or di-substituted wherein the substituents are independently selected from (C₁₋₃)alkyl, (C₃₋₆)cycloalkyl, (C₁)fluoroalkyl, or cyano;
- or **R**¹ represents methyl, or halogen; and (**R**⁴)_n represents one substituent selected from (C₁₋₃)fluoroalkoxy which is attached to the phenyl / pyridinyl ring in *ortho* or *meta*-position to the point of attachment of the -CH₂-CO-NH- group;

Y represents a ring carbon or a ring nitrogen atom; and

R² represents (C₁₋₄)alkyl; (C₃₋₆)cycloalkyl; (C₁₋₄)alkoxy; (C₃₋₆)cycloalkyl-oxy; (C₁₋₃)fluoroalkyl; (C₁₋₃)fluoroalkoxy; (C₁₋₃)alkoxy-(C₂₋₃)alkoxy; halogen; cyano; or -NR²¹R²², wherein R²¹ and R²² independently represent hydrogen, or (C₁₋₃)alkyl, or R²¹ and R²², together with the nitrogen atom to which they are attached to, form a 4- to 6 membered ring optionally mono- or di-substituted with fluoro, or a morpholinyl group;

and

(R⁵)_m represents one or two optional substituents independently selected from (C₁₋₄)alkyl; (C₃₋₆)cycloalkyl; (C₁₋₄)alkoxy; halogen; cyano; (C₁₋₃)fluoroalkyl; and (C₁₋₃)fluoroalkoxy; or a salt of such a compound.

2. A compound according to claim 1, wherein **X** represents a ring carbon atom; or a salt of such a compound.

3. A compound according to claim 1 or 2, wherein **R**¹ represents

- (C₂₋₆)alkyl;
- (C₂₋₄)alkyl mono-substituted with cyano, or (C₁₋₃)alkoxy;
- (C₁₋₄)fluoroalkyl;
- (C₁₋₃)fluoroalkoxy;
- pentafluoro-sulfanyl;
- (C₃₋₆)cycloalkyl-L¹- wherein

- said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is unsubstituted, or mono-substituted with fluoro, (C₁₋₃)alkyl,

- 148 -

(C₁₋₃)alkoxy, hydroxy, cyano, or (C₁₋₃)fluoroalkyl, or di-substituted with fluoro, or tri-substituted with two fluoro substituents and a (C₁₋₃)alkyl substituent; and

- the linker **L**¹ represents a direct bond, (C₁₋₂)alkylene, oxygen, or (C₁₋₂)alkylene-oxy;
- 5- or 6-membered heteroaryl selected from oxadiazolyl, pyrazinyl, pyrimidinyl, and pyridinyl; wherein said heteroaryl independently is optionally mono-substituted with (C₁₋₃)alkyl; or
- -NR¹¹R¹², wherein
 - R¹¹ and R¹² independently represent hydrogen, (C₁₋₃)alkyl, (C₂₋₃)fluoroalkyl, (C₃₋₆)cycloalkyl, (C₃₋₆)cycloalkyl mono- or di-substituted with fluoro, (C₃₋₆)cycloalkyl-(C₁₋₃)alkyl, (C₁₋₃)alkoxy-(C₂₋₃)alkyl;
 - or R¹¹ and R¹², together with the nitrogen atom to which they are attached to, form an azetidinyll or a pyrrolidinyl ring, both independently optionally mono- or di-substituted with fluoro; or a 2-oxo-pyrrolidinyl group;

and (**R**⁴)_n represents one optional substituent selected from (C₁₋₄)alkyl, (C₁₋₄)alkoxy, (C₁₋₃)fluoroalkyl, (C₁₋₃)fluoroalkoxy, halogen, and cyano;

- or **R**¹ together with (**R**⁴)_n forms a non-aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring to form a bicyclic ring system; wherein said bicyclic ring system is selected from 2,3-dihydro-benzooxazolyl, 3,4-dihydro-2H-benzo[1,4]oxazinyl, 2,3-dihydro-1H-indolyl, and 2,3-dihydro-benzofuranyl; wherein said non-aromatic 5- or 6-membered ring part of said bicyclic ring system independently is optionally further mono-substituted with oxo; or di-, tri-, or tetra-substituted wherein one substituent is oxo and the remaining are (C₁₋₃)alkyl;
- or **R**¹ together with (**R**⁴)_n forms an aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring to form a bicyclic aromatic ring system selected from pyrrolo[2,3-b]pyridinyl, indolyl, indazolyl, quinoxalinyll, benzoimidazolyl, and quinolinyl; wherein said fused 5- or 6-membered aromatic ring part of said aromatic bicyclic ring system independently is optionally further mono- or di-substituted wherein the substituents are independently selected from (C₁₋₃)alkyl, (C₃₋₆)cycloalkyl, (C₁)fluoroalkyl, or cyano;
- or **R**¹ represents methyl, or halogen; and (**R**⁴)_n represents one substituent selected from (C₁₋₃)fluoroalkoxy which is attached to the phenyl / pyridinyl ring in *ortho* or *meta*-position to the point of attachment of the -CH₂-CO-NH- group;

or a salt of such a compound.

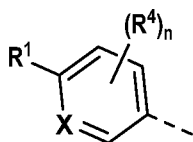
- 30 4. A compound according to claims 1 or 2, wherein **R**¹ represents
- (C₂₋₆)alkyl;
 - (C₁₋₄)fluoroalkyl;
 - (C₁₋₃)fluoroalkoxy;

- 149 -

- (C₃₋₆)cycloalkyl wherein said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is mono-substituted with fluoro or (C₁₋₃)fluoroalkyl, or di-substituted with fluoro; or
- (C₃₋₆)cycloalkyl-oxy- wherein said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is unsubstituted, or di-substituted with fluoro;
- 5 and (R⁴)_n represents one optional substituent selected from (C₁₋₄)alkyl, or halogen;

or a salt of such a compound.

5. A compound according to claims 1 or 2, wherein the fragment



- 10 represents 4-cyclopropyl-phenyl, 4-isopropyl-phenyl, 4-dimethylamino-phenyl, 4-trifluoromethyl-phenyl, 4-*tert*-butyl-phenyl, 4-isobutyl-phenyl, 4-(1-methoxy-ethyl)-phenyl, 4-(1-methyl-cyclopropyl)-phenyl, 4-(cyclopropyl-methyl)-phenyl, 4-(1-hydroxy-cyclopropyl)-phenyl, 4-(cyclopropyl-oxy)-phenyl, 4-(azetidin-1-yl)-phenyl, 4-(oxetan-3-yl-oxy)-phenyl, 4-(3-hydroxy-oxetan-3-yl)-phenyl, 4-(3-fluoro-oxetan-3-yl)-phenyl, 4-(cyclobutyl-oxy)-phenyl, 4-(3-methyl-oxetan-3-yl)-phenyl, 4-([1,2,4]oxadiazol-3-yl)-phenyl, 4-(5-methyl-
- 15 [1,2,4]oxadiazol-3-yl)-phenyl, 4-(3-fluoro-azetidin-1-yl)-phenyl, 4-(1-cyano-cyclopropyl)-phenyl, 4-(1-cyano-1-methyl-ethyl)-phenyl, 4-(diethylamino)-phenyl, 4-(pentafluoro-sulfonyl)-phenyl, 4-(2,2,2-trifluoroethoxy)-phenyl, 3-methyl-4-(2,2,2-trifluoroethoxy)-phenyl, 3-fluoro-4-(2,2,2-trifluoroethoxy)-phenyl, 4-((2-methoxyethyl)-methyl-amino)-phenyl, 4-(3,3-difluoro-cyclobutyl)-phenyl, 4-(3-methoxy-oxetan-3-yl)-phenyl, 4-(oxetan-3-yl-methoxy)-phenyl, 4-(pyrazin-2-yl)-phenyl, 4-(3-methyl-pyrazin-2-yl)-phenyl, 4-(pyrimidin-4-yl)-phenyl, 4-(5-methyl-
- 20 pyrimidin-4-yl)-phenyl, 4-(pyrimidin-2-yl)-phenyl, 4-(pyrimidin-5-yl)-phenyl, 4-(pyridin-4-yl)-phenyl, 4-(pyridin-3-yl)-phenyl, 4-(pyridin-2-yl)-phenyl, 4-(3-fluoro-pyrrolidin-1-yl)-phenyl, 4-(3,3-difluoro-azetidin-1-yl)-phenyl, 4-(2-oxo-pyrrolidin-1-yl)-phenyl, 4-(2-trifluoromethyl-cyclopropyl)-phenyl, 4-(1-trifluoromethyl-cyclopropyl)-phenyl, 4-((3-fluoro-oxetan-3-yl)-methoxy)-phenyl, 4-(3,3-difluoro-cyclobutyl-oxy)-phenyl, 4-(2,2,2-trifluoro-1,1-dimethyl-ethyl)-phenyl, 4-((3,3-difluoro-cyclobutyl)-methoxy)-phenyl, 4-((3,3-difluoro-1-methyl-cyclobutyl)-
- 25 methoxy)-phenyl; 2-cyclopropyl-pyridin-5-yl, 2-dimethylamino-pyridin-5-yl, 2-isopropyl-pyridin-5-yl, 2-(ethyl-methyl-amino)-pyridin-5-yl, 2-(3-fluoro-azetidin-1-yl)-pyridin-5-yl, 2-(pyrrolidin-1-yl)-pyridin-5-yl, 2-(cyclopropyl-methyl-amino)-pyridin-5-yl, 2-(3-fluoro-oxetan-3-yl)-pyridin-5-yl, 2-(diethylamino)-pyridin-5-yl, 2-((2,2-difluoro-ethyl)-methyl-amino)-pyridin-5-yl, 2-((2-methoxyethyl)-methyl-amino)-pyridin-5-yl, 2-(2,2,2-trifluoroethoxy)-pyridin-5-yl, 3-fluoro-2-(2,2,2-trifluoroethoxy)-pyridin-5-yl, 3-fluoro-2-(pyrrolidin-1-yl)-pyridin-5-yl, 2-(3-fluoro-pyrrolidin-1-yl)-pyridin-5-yl, 2-((cyclopropylmethyl)-methyl-amino)-pyridin-5-yl, 2-(3,3-difluoro-azetidin-1-yl)-pyridin-5-yl, 2-(3-methoxy-oxetan-3-yl)-pyridin-5-yl, 2-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-5-yl; 2-oxo-2,3-dihydro-benzooxazol-6-yl, 3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl, 4-methyl-3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl, 3-methyl-2-oxo-2,3-dihydro-benzooxazol-6-yl, 3,3-dimethyl-2-oxo-2,3-dihydro-1H-indol-
- 30

- 150 -

5-yl, 1,3,3-trimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl, 2,2-dimethyl-2,3-dihydro-benzofuran-6-yl, 2,2-dimethyl-2,3-dihydro-benzofuran-5-yl, 3,3-dimethyl-2,3-dihydro-benzofuran-5-yl; 1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl, 1,3-dimethyl-1H-pyrrolo[2,3-b]pyridin-5-yl, 1H-indol-5-yl, 1H-indol-6-yl, 1-methyl-1H-indazol-5-yl, 1-methyl-1H-indazol-6-yl, 1-ethyl-1H-indazol-5-yl, 1-ethyl-1H-indazol-6-yl, 1,3-dimethyl-1H-indazol-5-yl, 1-methyl-1H-indol-5-yl, 1-methyl-1H-indol-6-yl, 1,3-dimethyl-1H-indol-5-yl, 1,3-dimethyl-1H-indol-6-yl, 3-cyano-1-methyl-1H-indol-5-yl, 3-isopropyl-1-methyl-1H-indol-5-yl, 3-cyclobutyl-1-methyl-1H-indol-5-yl, 1-methyl-3-trifluoromethyl-1H-indol-5-yl, quinoxalin-6-yl, 2-methyl-1H-benzimidazol-6-yl, 1-methyl-1H-benzimidazol-5-yl, 1-methyl-1H-benzimidazol-6-yl, quinolin-7-yl; 4-methyl-3-(2,2,2-trifluoroethoxy)-phenyl; or 4-fluoro-2-(2,2,2-trifluoroethoxy)-phenyl;

10 or a salt of such a compound.

6. A compound according to any one of claims 1 to 5, wherein

- Y represents a ring nitrogen atom; and
 - R² represents (C₁₋₄)alkyl; (C₃₋₆)cycloalkyl; (C₁₋₄)alkoxy; (C₁₋₃)fluoroalkyl; (C₁₋₃)fluoroalkoxy; (C₁₋₃)alkoxy-(C₂₋₃)alkoxy; halogen; or cyano; and
 - 15 ➤ (R⁵)_m represents one optional substituent independently selected from the group consisting of (C₁₋₄)alkyl; (C₃₋₆)cycloalkyl; (C₁₋₄)alkoxy; halogen; cyano; (C₁₋₃)fluoroalkyl; and (C₁₋₃)fluoroalkoxy;

or

- Y represents a ring carbon atom; and
 - R² represents (C₁₋₄)alkyl; (C₃₋₆)cycloalkyl; (C₁₋₄)alkoxy; (C₃₋₆)cycloalkyl-oxy; (C₁₋₃)fluoroalkyl; (C₁₋₃)fluoroalkoxy; halogen; or cyano; and
 - 20 ➤ (R⁵)_m represents one or two optional substituents independently selected from the group consisting of (C₁₋₄)alkyl; (C₁₋₄)alkoxy; halogen; cyano; (C₁₋₃)fluoroalkyl, and (C₁₋₃)fluoroalkoxy;

or a salt of such a compound.

7. A compound according to any one of claims 1 to 5, wherein

- 25 • Y represents a ring nitrogen atom; and
 - R² represents (C₁₋₄)alkyl; (C₃₋₆)cycloalkyl; (C₁₋₄)alkoxy; (C₁₋₃)fluoroalkyl; (C₁₋₃)fluoroalkoxy; (C₁₋₃)alkoxy-(C₂₋₃)alkoxy; halogen; or cyano; and
 - (R⁵)_m represents one optional substituent independently selected from the group consisting of (C₁₋₄)alkyl; (C₃₋₆)cycloalkyl; (C₁₋₄)alkoxy; halogen; cyano; (C₁₋₃)fluoroalkyl, and (C₁₋₃)fluoroalkoxy;

30 or a salt of such a compound.

8. A compound according to claim 1, wherein

X represents a ring carbon or a ring nitrogen atom;

- R¹ represents
 - (C₂₋₆)alkyl;

- 151 -

- (C₂₋₄)alkyl mono-substituted with cyano;
- (C₁₋₄)fluoroalkyl;
- (C₃₋₆)cycloalkyl-L¹- wherein
 - said (C₃₋₆)cycloalkyl optionally contains one ring oxygen atom; wherein said (C₃₋₆)cycloalkyl is unsubstituted, or mono-substituted with fluoro, (C₁₋₃)alkyl, (C₁₋₃)alkoxy, hydroxy, cyano, or (C₁₋₃)fluoroalkyl, or di-substituted with fluoro; and
 - the linker L¹ represents a direct bond, or (C₁₋₂)alkylene; or
- 5- or 6-membered heteroaryl, independently optionally mono-substituted with (C₁₋₃)alkyl; and (R⁴)_n represents one or two optional substituents independently selected from (C₁₋₄)alkyl, (C₃₋₆)cycloalkyl, (C₁₋₃)fluoroalkyl, halogen, and cyano;
- or R¹ together with (R⁴)_n forms an aromatic 5- or 6-membered ring which is fused to the phenyl / pyridine ring to form a bicyclic aromatic ring system selected from indolyl, indazolyl and quinolinyl; wherein said fused 5- or 6-membered aromatic ring part of said aromatic bicyclic ring system independently is optionally further mono- or di-substituted wherein the substituents are independently selected from (C₁₋₃)alkyl, (C₃₋₆)cycloalkyl, (C₁)fluoroalkyl, or cyano;

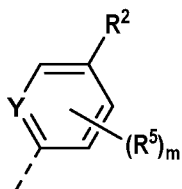
Y represents a ring carbon or a ring nitrogen atom; and

R² represents (C₁₋₄)alkyl; (C₃₋₆)cycloalkyl; (C₁₋₄)alkoxy; (C₃₋₆)cycloalkyl-oxy; (C₁₋₃)fluoroalkyl; (C₁₋₃)fluoroalkoxy; halogen; or cyano;

and

- 20 (R⁵)_m represents one or two optional substituents independently selected from (C₁₋₄)alkyl; (C₃₋₆)cycloalkyl; (C₁₋₄)alkoxy; halogen; cyano; (C₁₋₃)fluoroalkyl; and (C₁₋₃)fluoroalkoxy; or a salt of such a compound.

9. A compound according to any one of claims 1 to 5, wherein the fragment



- 25 represents 4-fluorophenyl, 4-chlorophenyl, 4-bromophenyl, 4-methylphenyl, 4-ethylphenyl, 3-fluoro-4-methylphenyl, 4-fluoro-3-methylphenyl, 4-fluoro-3-cyano-phenyl, 4-fluoro-3,5-dimethylphenyl, 4-chloro-3-fluorophenyl, 3-chloro-4-fluorophenyl, 3,4-difluorophenyl, 3,5-difluoro-4-methoxy-phenyl, 4-cyano-3,5-difluorophenyl, 4-methoxyphenyl, 4-cyanophenyl, 4-cyclopropyl-phenyl, 3,4,5-trifluorophenyl, 4-*tert*-butyl-phenyl, 4-isopropyl-phenyl, 4-(cyclopropyl-oxy)-phenyl, 4-chloro-3-trifluoromethyl-phenyl, 4-fluoro-3-trifluoromethyl-phenyl, 4-methoxy-3-trifluoromethyl-phenyl, 4-difluoromethoxy-phenyl, 4-trifluoromethoxy-phenyl, 4-chloro-3-trifluoromethoxy-phenyl, 4-fluoro-3-trifluoromethoxy-phenyl; 5-fluoro-pyridin-2-yl, 5-bromo-pyridin-2-yl, 5-
- 30

- 152 -

cyano-pyridin-2-yl, 5-methyl-pyridin-2-yl, 5-ethyl-pyridin-2-yl, 5-methoxy-pyridin-2-yl, 6-chloro-5-fluoro-pyridin-2-yl, 5-cyclopropyl-pyridin-2-yl, 6-cyano-5-fluoro-pyridin-2-yl, 5-cyano-6-fluoro-pyridin-2-yl, 6-chloro-5-cyano-pyridin-2-yl, 5-chloro-6-cyano-pyridin-2-yl, 5-cyano-6-methyl-pyridin-2-yl, 5-cyano-4-methyl-pyridin-2-yl, 6-cyano-5-methyl-pyridin-2-yl, 5-cyano-6-isobutyl-pyridin-2-yl, 5-cyano-6-methoxy-pyridin-2-yl, 5-cyano-6-isopropoxy-pyridin-2-yl, 5-trifluoromethyl-pyridin-2-yl, 5-(2,2,2-trifluoroethoxy)-pyridin-2-yl, 5-cyano-6-(2,2,2-trifluoroethoxy)-pyridin-2-yl, 5-isobutyl-pyridin-2-yl, 5-isopropoxy-pyridin-2-yl, 5-dimethylamino-pyridine-2-yl, 4-cyclopropyl-5-cyano-pyridin-2-yl, 5-(2-methoxy-ethoxy)-pyridin-2-yl, or 5-(3-fluoropyrrolidin-1-yl)-pyridin-2-yl; or a salt of such a compound.

10. A compound according to claim 1 selected from the group consisting of
- 10 N-[1-(4-Chloro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(4-Chloro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Chloro-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
- 15 2-(4-Isopropyl-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Isopropyl-phenyl)-N-[1-(4-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(4-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
- 20 N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(4-ethyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(4-isopropyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-tert-Butyl-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
N-[1-(4-Difluoromethoxy-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
- 25 2-(4-Dimethylamino-phenyl)-N-[1-(4-trifluoromethoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-3-trifluoromethoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-3-trifluoromethyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(3,4,5-trifluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 30 2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-3,5-dimethyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Chloro-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
N-[1-(4-Chloro-3-trifluoromethyl-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
N-[1-(3,5-Difluoro-4-methoxy-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(4-methoxy-3-trifluoromethyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 35 2-(4-Dimethylamino-phenyl)-N-[1-(4-fluoro-3-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide;

- N-[1-(3-Chloro-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
2-(4-Dimethylamino-phenyl)-N-[1-(3-fluoro-4-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(4-ethyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(4-trifluoromethoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
5 2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(3-fluoro-4-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(4-fluoro-3-methyl-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(3-Chloro-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide;
2-(6-Dimethylamino-pyridin-3-yl)-N-[1-(3,4,5-trifluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Chloro-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide;
10 N-[1-(4-Methoxy-benzyl)-1H-pyrazol-3-yl]-2-[4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
2-[4-(3,3-Difluoro-azetidin-1-yl)-phenyl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-azetidin-1-yl)-phenyl]-acetamide;
15 2-[4-(3,3-Difluoro-azetidin-1-yl)-phenyl]-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-[4-(3,3-Difluoro-azetidin-1-yl)-phenyl]-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Azetidin-1-yl-phenyl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Azetidin-1-yl-phenyl)-N-[1-(4-cyano-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Azetidin-1-yl-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
20 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-dimethylamino-pyridin-3-yl)-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
2-(4-Azetidin-1-yl-phenyl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((S)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((R)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
25 2-(4-Cyclopropoxy-phenyl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Cyclopropoxy-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Cyclopropoxy-phenyl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((R)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
30 N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-((R)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((R)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-azetidin-1-yl)-phenyl]-acetamide;
2-[4-(3-Fluoro-azetidin-1-yl)-phenyl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
35 N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-((S)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((S)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;

- N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
2-[4-(3,3-Difluoro-pyrrolidin-1-yl)-phenyl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-pyridin-2-yl-phenyl)-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-pyridin-3-yl-phenyl)-acetamide;
- 5 N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-pyridin-4-yl-phenyl)-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-((R)-3-fluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-pyrrolidin-1-yl)-phenyl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(5-methyl-pyrimidin-4-yl)-phenyl]-acetamide;
2-(4-Isopropyl-phenyl)-N-[1-[5-(2,2,2-trifluoro-ethoxy)-pyridin-2-ylmethyl]-1H-pyrazol-3-yl]-acetamide;
- 10 N-[1-(5-Bromo-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(5-Cyclopropyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
2-(4-Isopropyl-phenyl)-N-[1-(5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(5-Isobutyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
2-(6-Azetidin-1-yl-pyridin-3-yl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
- 15 N-[1-(5-Ethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(5-Isopropoxy-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(5-Fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
2-(4-Isopropyl-phenyl)-N-[1-(5-trifluoromethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(6-Chloro-5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
- 20 2-(4-Diethylamino-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Diethylamino-phenyl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(4-diethylamino-phenyl)-acetamide;
N-[1-(5-Cyano-6-ethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
- 25 N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
2-[6-(3,3-Difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(6-Diethylamino-pyridin-3-yl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Methoxy-benzyl)-1H-pyrazol-3-yl]-2-[4-[(2-methoxy-ethyl)-methyl-amino]-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-[(2-methoxy-ethyl)-methyl-amino]-phenyl]-acetamide;
- 30 N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-[(2-methoxy-ethyl)-methyl-amino]-phenyl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-[(2-methoxy-ethyl)-methyl-amino]-phenyl]-acetamide;
N-[1-(5-Cyano-6-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-((R)-3-fluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-((R)-3-fluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
- 35 2-[6-(3,3-Difluoro-azetidin-1-yl)-pyridin-3-yl]-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-[6-(3,3-Difluoro-azetidin-1-yl)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;

- N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isobutyl-phenyl)-acetamide;
N-[1-(5-Cyano-6-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-((S)-3-fluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-((S)-3-fluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
5 N-[1-(4-Chloro-5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
2-(4-Cyclopropylmethyl-phenyl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3-fluoro-azetid-1-yl)-pyridin-3-yl]-acetamide;
2-[6-(3-Fluoro-azetid-1-yl)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-[6-(Cyclopropyl(methyl)amino)-pyridin-3-yl]-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
10 2-[6-(Cyclopropyl(methyl)amino)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(ethyl-methyl-amino)-pyridin-3-yl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
15 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-[(2-methoxy-ethyl)-methyl-amino]-pyridin-3-yl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-[(2-methoxy-ethyl)-methyl-amino]-pyridin-3-yl]-acetamide;
2-[6-(Cyclopropylmethyl-methyl-amino)-pyridin-3-yl]-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[6-(cyclopropylmethyl-methyl-amino)-pyridin-3-yl]-acetamide;
2-[6-(Cyclopropylmethyl-methyl-amino)-pyridin-3-yl]-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
20 2-[6-(Cyclopropylmethyl-methyl-amino)-pyridin-3-yl]-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(6-Diethylamino-pyridin-3-yl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(3-Chloro-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-cyclopropyl-pyridin-3-yl)-acetamide;
N-[1-(4-Cyclopropoxy-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(4-cyclobutoxy-phenyl)-acetamide;
25 2-(4-Cyclobutoxy-phenyl)-N-[1-(4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Cyclobutoxy-phenyl)-N-[1-(4-methoxy-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-Cyclobutoxy-phenyl)-N-[1-(5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-methoxy-ethyl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-methoxy-ethyl)-phenyl]-acetamide;
30 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-quinolin-7-yl-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1H-indol-6-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-methyl-3-oxo-3,4-dihydro-2H-benzo[1,4]oxazin-7-yl)-
acetamide;
N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
35 N-[1-(6-Chloro-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-acetamide;

- N-[1-(4-Fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(3-methyl-2-oxo-2,3-dihydro-benzooxazol-6-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1H-indol-5-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide;
5 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-5-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-6-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-yl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-hydroxy-oxetan-3-yl)-phenyl]-acetamide;
10 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-yl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(3,3-dimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3,3-trimethyl-2-oxo-2,3-dihydro-1H-indol-5-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methoxy-oxetan-3-yl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((R)-1-methoxy-ethyl)-phenyl]-acetamide;
15 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-((S)-1-methoxy-ethyl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(5-methyl-[1,2,4]oxadiazol-3-yl)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-[1,2,4]oxadiazol-3-yl-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide;
20 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-yloxy)-phenyl]-acetamide;
N-[1-(4-Bromo-benzyl)-1H-pyrazol-3-yl]-2-(4-dimethylamino-phenyl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-ylmethoxy)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(oxetan-3-ylmethoxy)-phenyl]-acetamide;
25 N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-1-methyl-cyclobutylmethoxy)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-ylmethoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-5-yl)-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-yl)-phenyl]-acetamide;
30 N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-5-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-6-yl)-acetamide;
N-[1-(3,4-Difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-5-yl)-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide;
2-(4-tert-Butyl-phenyl)-N-[1-(4-cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
35 N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;

- N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indazol-5-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-fluoro-oxetan-3-yl)-phenyl]-acetamide;
2-(4-tert-Butyl-phenyl)-N-[1-(4-cyano-benzyl)-1H-pyrazol-3-yl]-acetamide;
2-(4-tert-Butyl-phenyl)-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
- 5 N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide;
- 10 N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
2-(4-tert-Butyl-phenyl)-N-[1-(3-cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-1-methyl-cyclobutylmethoxy)-phenyl]-
15 acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide;
N-[1-(4-Cyano-3-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide;
- 20 N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-1-methyl-cyclobutylmethoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide;
- 25 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-1-methyl-cyclobutylmethoxy)-phenyl]-
acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
- 30 N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-6-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-methyl-1H-indol-5-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutyl)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide;
- 35 N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-yl)-phenyl]-acetamide;

- N-[1-(4-Cyano-benzyl)-1H-pyrazol-3-yl]-2-[4-(3-methyl-oxetan-3-yl)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(1-methoxy-ethyl)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-pyrrolo[2,3-b]pyridin-5-yl)-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-cyclobutyl-1-methyl-1H-indol-5-yl)-acetamide;
5 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-isopropyl-1-methyl-1H-indol-5-yl)-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1-methyl-3-trifluoromethyl-1H-indol-5-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(3-cyclobutyl-1-methyl-1H-indol-5-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(3-isopropyl-1-methyl-1H-indol-5-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-6-yl)-acetamide;
10 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-6-yl)-acetamide;
N-(1-(3-cyano-4-fluorobenzyl)-1H-pyrazol-3-yl)-2-(4-(pentafluoro- λ^6 -sulfanyl)phenyl)acetamide ;
2-[4-(Cyano-dimethyl-methyl)-phenyl]-N-[1-(3-cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-(1-((5-cyanopyridin-2-yl)methyl)-1H-pyrazol-3-yl)-2-(4-(pentafluoro- λ^6 -sulfanyl)phenyl)acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-trifluoromethyl-phenyl)-acetamide;
15 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(5-fluoro-6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(5-fluoro-6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-trifluoromethyl-phenyl)-acetamide;
N-[1-(3-Cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
20 N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indazol-5-yl)-acetamide;
N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[6-(3,3-difluoro-pyrrolidin-1-yl)-pyridin-3-yl]-acetamide;
N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(6-pyrrolidin-1-yl-pyridin-3-yl)-acetamide;
2-(4-tert-Butyl-phenyl)-N-[1-(4-cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
25 N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
2-[4-(1-Cyano-cyclopropyl)-phenyl]-N-[1-(3-cyano-4-fluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1-ethyl-1H-indazol-5-yl)-acetamide;
N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-(1,3-dimethyl-1H-indol-5-yl)-acetamide;
N-[1-(4-Cyano-3,5-difluoro-benzyl)-1H-pyrazol-3-yl]-2-[4-(3,3-difluoro-cyclobutylmethoxy)-phenyl]-acetamide;
30 N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-
acetamide;
N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-
acetamide;
2-(4-tert-Butyl-phenyl)-N-[1-(6-cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
35 N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-
acetamide;

- 159 -

N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-methyl-cyclopropyl)-phenyl]-acetamide;
 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(2,2,2-trifluoro-1,1-dimethyl-ethyl)-phenyl]-acetamide;
 N-[1-(6-Cyano-5-methyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-methyl-cyclopropyl)-phenyl]-acetamide;
 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-methyl-3-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;

5 and

N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-((1S*,2S*)-2-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;

or a salt of such a compound.

11. A compound according to claim 1 selected from the group consisting of:

- 10 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-methoxy-cyclopropyl)-phenyl]-acetamide;
 N-[1-(5-Cyano-6-difluoromethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
 N-[1-(5-cyano-4-difluoromethyl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3,3-dimethyl-2,3-dihydro-benzofuran-6-yl)-acetamide;
 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-methyl-chroman-7-yl)-acetamide;
- 15 N-[1-(5-Cyano-3-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;
 2-[4-(1-Cyano-3,3-difluoro-cyclobutyl)-phenyl]-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
 N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- 20 2-(3-Cyano-4-isobutyl-phenyl)-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
 2-(3-Cyano-4-isobutyl-phenyl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
 N-[1-(5-Azetidin-1-yl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
 2-(4-Isopropyl-phenyl)-N-[1-(5-pyrrolidin-1-yl-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
 N-[1-[5-(3,3-Difluoro-pyrrolidin-1-yl)-pyridin-2-ylmethyl]-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
- 25 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-cyclopropylmethoxy-3-trifluoromethoxy-phenyl)-acetamide;
 2-(4-Cyclopropylmethoxy-3-trifluoromethoxy-phenyl)-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;
 N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- 30 2-(4-tert-Butyl-phenyl)-N-[1-(4-cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
 N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(4-isopropyl-phenyl)-acetamide;
 N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[4-(1-trifluoromethyl-cyclopropyl)-phenyl]-acetamide;
- 35 2-[4-(1-Cyano-cyclopropyl)-3-trifluoromethyl-phenyl]-N-[1-(5-cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-acetamide;
 2-[4-(1-Cyano-cyclopropyl)-3-trifluoromethyl-phenyl]-N-[1-(3,4-difluoro-benzyl)-1H-pyrazol-3-yl]-acetamide;

- 160 -

- N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(3,3,3-trifluoro-propoxy)-phenyl]-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-cyclopropyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-methyl-4-trifluoromethoxy-phenyl)-acetamide;
- 5 N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-cyclopropyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-cyclopropyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-(3-methyl-4-trifluoromethoxy-phenyl)-acetamide;
- 10 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-ethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-ethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-ethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- 15 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3,5-dimethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3,5-dimethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3,5-dimethyl-4-(2,2,2-trifluoro-ethoxy)-phenyl]-acetamide;
- 20 N-[1-(5-Cyano-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[5-methyl-6-(2,2,2-trifluoro-ethoxy)-pyridin-3-yl]-acetamide;
N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[5-methyl-6-(2,2,2-trifluoro-ethoxy)-pyridin-3-yl]-acetamide;
- 25 N-[1-(6-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(3,3,3-trifluoro-propoxy)-phenyl]-acetamide; and
N-[1-(4-Cyano-5-fluoro-pyridin-2-ylmethyl)-1H-pyrazol-3-yl]-2-[3-methyl-4-(3,3,3-trifluoro-propoxy)-phenyl]-acetamide;
- or a salt of such a compound.
- 30 12. A pharmaceutical composition containing, as active principle, a compound of formula (I) according to any one of claims 1 to 11, or a pharmaceutically acceptable salt thereof, and at least one therapeutically inert excipient.
13. A compound of formula (I) according to any one of claims 1 to 11, or a pharmaceutically acceptable salt thereof, for use as a medicament.

- 161 -

14. A compound of formula (I) according to any one of claims 1 to 11, or a pharmaceutically acceptable salt thereof, for the treatment or prevention of epilepsy; sleep disorders; sleep disturbances; pain; neurological disorders; cardiovascular disorders; cancer; diabetes; diabetic neuropathy; infertility; and sexual dysfunction.

5 15. Use of a compound of formula (I) according to any one of claims 1 to 11, or a pharmaceutically acceptable salt thereof, for the manufacture of a medicament for the treatment or prevention of epilepsy; sleep disorders; sleep disturbances; pain; neurological disorders; cardiovascular disorders; cancer; diabetes; diabetic neuropathy; infertility; and sexual dysfunction.

INTERNATIONAL SEARCH REPORT

International application No PCT/IB2015/054164

A. CLASSIFICATION OF SUBJECT MATTER				
INV. C07D403/12	C07D401/14	C07D405/14	C07D231/40	C07D401/06
C07D401/12	C07D405/12	C07D413/12	C07D471/04	A61K31/415
A61K31/4155	A61K31/4439	A61P3/10	A61P9/00	A61P15/00
According to International Patent Classification (IPC) or to both national classification and IPC				

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols) C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal, CHEM ABS Data, WPI Data, BEILSTEIN Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2007/120729 A2 (MERCK & CO INC [US]; BARROW JAMES C [US]; BIEBER KELLY-ANN S [US]; CUB) 25 October 2007 (2007-10-25) the whole document -----	1-15

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 9 July 2015	Date of mailing of the international search report 03/08/2015
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Fink, Dieter
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2015/054164

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