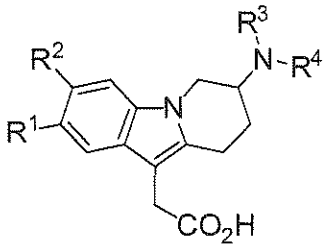
Description of the invention:

1) The present invention relates to 7-(heteroaryl-amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol acetic acid derivatives of the formula (I),



(I)

wherein

R^1 and R^2 represent independently of each other hydrogen, $(C_1\text{-}C_4)$alkyl, $(C_1\text{-}C_4)$alkoxy, halogen, trifluoromethoxy or trifluoromethyl;

R^3 represents hydrogen, $(C_1\text{-}C_4)$alkyl, $(C_1\text{-}C_2)$alkoxy-$(C_2\text{-}C_3)$alkyl, $(C_1\text{-}C_4)$fluoroalkyl or $(C_3\text{-}C_6)$cycloalkyl-$(C_1\text{-}C_2)$alkyl; and

R^4 represents a heteroaryl group which is unsubstituted or mono-, di- or tri-substituted, wherein the substituents are independently selected from the group consisting of halogen, $(C_1\text{-}C_4)$alkyl, $(C_3\text{-}C_6)$cycloalkyl, $(C_1\text{-}C_4)$alkoxy, $(C_1\text{-}C_4)$fluoroalkyl and phenyl (preferably from halogen, $(C_1\text{-}C_4)$alkyl and $(C_1\text{-}C_4)$fluoroalkyl);

and to the salts (in particular pharmaceutically acceptable salts) of such compounds.

In another aspect, there is provided a pharmaceutical composition comprising a compound as defined above, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

In another aspect, there is provided a compound as defined above, or a pharmaceutically acceptable salt thereof, for use as a medicament.

In another aspect, there is provided the use of a compound as defined above, or a pharmaceutically acceptable salt thereof, for the preparation of a medicament for the prevention and/or treatment of a disease selected from the group consisting of chronic and acute allergic/immune diseases/disorders, comprising asthma, allergic asthma, eosinophilic asthma, severe asthma, rhinitis, allergic rhinitis, angioedema, insect venom allergy, drug allergies, allergic sinusitis, allergic nephritis, allergic conjunctivitis, atopic dermatitis, bronchial asthma, food allergy, systemic mast cell disorders, anaphylactic shock, urticaria, eczema, ulcerative colitis, chronic obstructive pulmonary disease (COPD), inflammatory bowel disease and rheumatoid arthritis; eosinophil-related diseases comprising small vessel vasculitides like Churg-Strauss syndrome, Wegener's granulomatosis, microscopic polyangiitis (and organ-specific subsets of the latter), hypereosinophilic syndromes like eosinophilic pneumonia, eosinophilic esophagitis, reflux esophagitis, eosinohilic endocarditis (Loeffler's endocarditis), eosinophilia-myalgia syndrome, eosinophilic fasciitis, eosinohilic pustular folliculitis (Ofuji's disease), eosinophilic ulcers, angiolymphoid hyperplasia with eosinophilia (ALHE), eosinophilic cellulitis (Wells syndrome), chronic eosinophilic leukemia and DRESS syndrome (Drug Rash with Eosinophilia and Systemic Symptoms); and basophil-related diseases, comprising basophilic leukemia and basophilic leukocytosis.

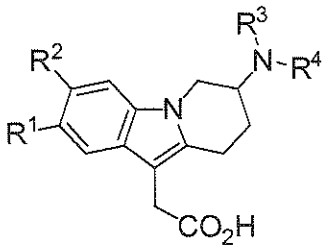
The compounds of formula (I) according to embodiment 1) may contain one or more stereogenic or asymmetric centers, such as one or more asymmetric carbon atoms. Substituents at a double bond may be present in the (*Z*)- or (*E*)-configuration unless indicated otherwise. The compounds of formula (I) may 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.

The following paragraphs provide definitions of the various chemical moieties for the compounds according to the invention and are intended to apply uniformly throughout the specification and claims unless an otherwise expressly set out definition provides a broader or narrower definition.

The term "alkyl", used alone or in combination, refers to a straight or branched chain alkyl group containing one to four carbon atoms. The term "(C_x-C_y)alkyl" (x and y each being an integer), refers to an alkyl group as defined before containing x to y carbon atoms. For example a (C_1-C_4)alkyl group contains from one to four carbon atoms. Representative

Claims:

1. A compound of formula (I):



(I)

wherein

R^1 and R^2 represent independently of each other hydrogen, $(C_1$-$C_4)$alkyl, $(C_1$-$C_4)$alkoxy, halogen, trifluoromethoxy or trifluoromethyl;

R^3 represents hydrogen, $(C_1$-$C_4)$alkyl, $(C_1$-$C_2)$alkoxy-$(C_2$-$C_3)$alkyl, $(C_1$-$C_4)$fluoroalkyl or $(C_3$-$C_6)$cycloalkyl-$(C_1$-$C_2)$alkyl; and

R^4 represents a heteroaryl group which is unsubstituted or mono-, di- or tri-substituted, wherein the substituents are independently selected from the group consisting of halogen, $(C_1$-$C_4)$alkyl, $(C_3$-$C_6)$cycloalkyl, $(C_1$-$C_4)$alkoxy, $(C_1$-$C_4)$fluoroalkyl and phenyl;

or a pharmaceutically acceptable salt of such a compound.

2. A compound according to claim 1, wherein

R^1 represents hydrogen, $(C_1$-$C_4)$alkyl, $(C_1$-$C_4)$alkoxy, halogen or trifluoromethoxy;

R^2 represents hydrogen, halogen or trifluoromethyl;

R^3 represents hydrogen or $(C_1$-$C_4)$alkyl; and

R^4 represents a heteroaryl group which is unsubstituted or mono- or di-substituted, wherein the substituents are independently selected from the group consisting of halogen and $(C_1$-$C_4)$fluoroalkyl;

or a pharmaceutically acceptable salt of such a compound.

3. A compound according to claim 1, wherein

R^1 represents hydrogen;

R^2 represents hydrogen, fluoro, chloro or trifluoromethyl;

R^3 represents methyl; and

R^4 represents a heteroaryl group which is mono-substituted with fluoro or chloro, wherein the heteroaryl group is selected from pyrimidin-2-yl, benzoxazol-2-yl and benzothiazol-2-yl;

or a pharmaceutically acceptable salt of such a compound.

4. A compound according to any one of claims 1 to 3, wherein
R^1 represents hydrogen;
or a pharmaceutically acceptable salt of such a compound.

5. A compound according to any one of claims 1, 2 or 4, wherein
R^2 represents hydrogen, halogen or trifluoromethyl;
or a pharmaceutically acceptable salt of such a compound.

6. A compound according to any one of claims 1 to 5, wherein
R^2 represents fluoro or chloro;
or a pharmaceutically acceptable salt of such a compound.

7. A compound according to any one of claims 1, 2 or 4 to 6, wherein
R^3 represents hydrogen or methyl;
or a pharmaceutically acceptable salt of such a compound.

8. A compound according to any one of claims 1, 2 or 4 to 7, wherein
R^4 represents a heteroaryl group which is mono-substituted with halogen or (C_1-C_4)fluoroalkyl;
or a pharmaceutically acceptable salt of such a compound.

9. A compound according to claim 8, wherein
the heteroaryl group is selected from pyrimidyl, benzoxazolyl and benzothiazolyl;
or a pharmaceutically acceptable salt of such a compound.

10. A compound according to claim 1 selected from the group consisting of:
2-(7-((5-chloropyrimidin-2-yl)(methyl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid;
2-(7-((5-fluoropyrimidin-2-yl)(methyl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid;
2-(7-(methyl(5-(trifluoromethyl)pyrimidin-2-yl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid;
2-(7-((6-fluorobenzo[d]thiazol-2-yl)(methyl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid;

2-(3-chloro-7-((7-fluoroquinazolin-2-yl)(methyl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid;
2-(3-chloro-7-(methyl(2-methylquinazolin-4-yl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid;
2-(3-chloro-7-((6-fluoroquinoxalin-2-yl)(methyl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid;
2-(3-chloro-7-((2,2-difluoroethyl)(5-fluorobenzo[d]oxazol-2-yl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid;
2-(3-chloro-7-(ethyl(5-fluoropyrimidin-2-yl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid;
2-(3-chloro-7-((5-fluorobenzo[d]oxazol-2-yl)(isopropyl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid;
2-(3-chloro-7-((5-fluoropyrimidin-2-yl)(2-methoxyethyl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid;
2-(3-chloro-7-((5-fluorobenzo[d]oxazol-2-yl)(isobutyl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid;
2-(3-chloro-7-((5-fluoropyrimidin-2-yl)(propyl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid;
2-(3-chloro-7-(ethyl(5-fluorobenzo[d]oxazol-2-yl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid; and
2-(3-chloro-7-((cyclopropylmethyl)(5-fluoropyrimidin-2-yl)amino)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl)acetic acid;
or a pharmaceutically acceptable salt of such a compound.

11. A pharmaceutical composition comprising a compound according to any one of claims 1 to 10, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

12. A compound according to any one of claims 1 to 10, or a pharmaceutically acceptable salt thereof, for use as a medicament.

13. Use of a compound according to any one of claims 1 to 10, or a pharmaceutically acceptable salt thereof, for the preparation of a medicament for the prevention and/or treatment of a disease selected from the group consisting of chronic and acute allergic/immune diseases/disorders, comprising asthma, allergic asthma, eosinophilic asthma, severe asthma, rhinitis, allergic rhinitis, angioedema, insect venom allergy, drug