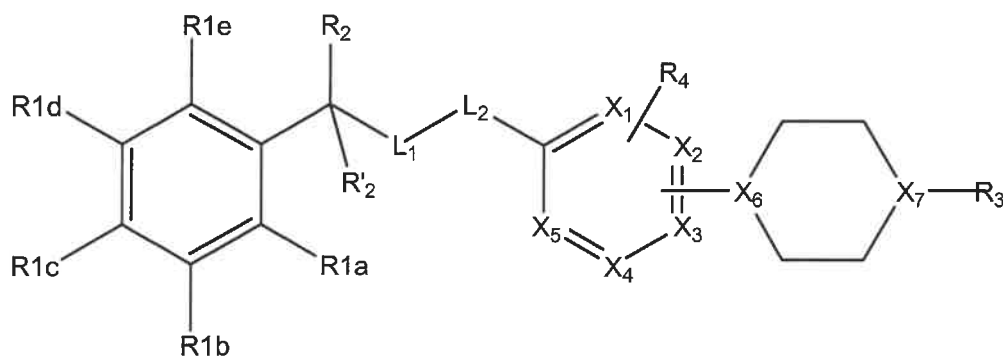


CLAIMS

1. A compound of formula (I)



(I)

in which,

R1a is a hydrogen atom, a halogen atom, a nitrile group, a nitro group (NO₂), a (C1-C6)alkyl group, a (C1-C6)alkyloxy group, a (C1-C6)alkylthio group, an amino group, a (C1-C6)alkylamino group, a (C1-C6)dialkylamino group, or a heterocyclic group;

R1b is a hydrogen atom, a (C1-C6)alkyloxy group, a (C1-C6)alkyl group or a heterocyclic group;

R1c is a hydrogen atom, a halogen atom, a (C1-C6)alkyl group, a (C1-C6)alkyloxy group, a (C1-C6)alkylthio group, a heterocyclic group, a cyano group, an amido group or a hydroxyl group;

R1d and R1e are, independently, a hydrogen atom, a halogen atom, a (C1-C6)alkyloxy group or a (C1-C6)alkyl group;

wherein at least one R1a, R1b, R1c, R1d, and R1e is not a hydrogen atom;

R2 is a (C1-C6)alkyl group optionally substituted by a (C1-C6)alkyl group, a (C2-C6)alkenyl group optionally substituted by a (C1-C6)alkyl group, a (C2-C6)alkynyl group optionally substituted by a (C1-C6)alkyl group, a (C3-C14)cycloalkyl group optionally substituted by a (C1-C6)alkyl group, a (C6-C14)aryl group optionally substituted by a (C1-C6)alkyl group or a heterocyclic group optionally substituted by a (C1-C6)alkyl group;

R'2 is a hydrogen atom, a (C1-C6)alkyl group, a (C2-C6)alkenyl group, a (C2-C6)alkynyl group, a (C3-C14)cycloalkyl group, a (C6-C14)aryl group group optionally substituted by a (C1-C6)alkyl group or a heterocyclic group optionally substituted by a (C1-C6)alkyl group;

or R² and R'² can form, together with the carbon atom to which they are attached, a cycloalkyl group or a heterocycloalkyl group;

L¹ is a NR⁷-CO-CH₂, NR⁷-CO-, NR⁷-CO-C(CH₃)₂, CO-NH-CH₂, CO-NH or CO-NH-C(CH₃)₂ group;

5 R⁷ is a hydrogen atom or a (C₁-C₆)alkyl group;

L² represents a bond, a (C₁-C₆)alkyl group, a (C₃-C₁₄)cycloalkyl group or a CR⁸R'⁸ group;

with the proviso that when L¹ is a NR³-CO- or a CO-NH group, L² represents a (C₁-C₆)alkyl group, a (C₃-C₁₄)cycloalkyl group, or a CR⁸R'⁸ group;

10 R⁸ and R'⁸ are independently, a hydrogen atom, or a (C₁-C₆)alkyl group;

R⁸ and R'⁸ can optionally form, together with the carbon atom to which they are attached, a cycloalkyl group;

X₁, X₂, X₃, X₄ and X₅ are, independently, a CH group, a C-R₄ group, a C-X₆ group or a nitrogen atom;

15 wherein at least one X₁, X₂, X₃, X₄, and X₅ is a nitrogen atom;

X₆ and X₇ are independently a CH group or a nitrogen atom;

R³ is a hydrogen atom, a carbonyl(C₁-C₆)alkyl group, a SO₂R' group, a COOR' group, an amido group, a (C₁-C₆)alkylamido group, or a (C₁-C₆)dialkylamidogroup;

R' is a (C₁-C₆)alkyl group; and

20 R₄ is a hydrogen atom, a (C₁-C₆)alkyl group, or a halogen atom.

2. The compound according to claim 1, wherein:

R^{1a} is a hydrogen atom, a halogen atom, a nitrile group, a nitro group (NO₂), a (C₁-C₆)alkyl group, a (C₁-C₆)alkyloxy group, a (C₁-C₆)alkylthio group, an amino group, a
25 (C₁-C₆)alkylamino group, a (C₁-C₆)dialkylamino group, a piperidinyl group, a pyrrolidinyl group, or an azepanyl group, wherein said piperidinyl, pyrrolidinyl or azepanyl group can be optionally substituted by at least one (C₁-C₆)alkyl groups;

R^{1b} is a hydrogen atom;

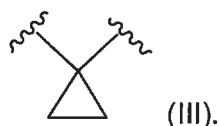
R^{1c} is a (C₁-C₆)alkyl group; and

30 R² is a (C₁-C₆)alkyl group, a (C₃-C₁₄)cycloalkyl group, an (C₆-C₁₄)aryl group, or a heteroaryl group, and R'² is a hydrogen atom.

3. The compound according to claim 1 or 2, wherein X₆ is a nitrogen atom and X₇ is a CH group.

4. The compound according to any one of claims 1 to 3, wherein L1 is a NR7-CO-CH₂, NR7-CO-C(CH₃)₂, CO-NH-CH₂, or CO-NH-C(CH₃)₂ group and L2 is a bond.

5. The compound according to any one of claims 1 to 3, wherein L1 is a NR7-CO-, or -CO-NH- group and L2 is a cyclopropyl group of formula (III)



6. The compound according to any one of claims 1 to 5, wherein R1b is a hydrogen atom.

7. The compound according to any one of claims 1 to 6, wherein R1d and R1e are hydrogen atoms.

8. The compound according to any one of claims 1 or 7, wherein

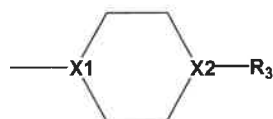
R1a is a heterocyclic group,

R1c is a (C1-C6)alkyl group,

R2 is a heterocyclic group,

L1 represents a NH-CO-CH₂ group,

L2 is a bound,



the cycle is in para or meta position of the L group,

X6 is a nitrogen atom and X7 is a CH group,

R3 represents a hydrogen atom, a carbonyl(C1-C6)alkyl group, a SO₂R' group, or a COOR' group.

9. The compound according to any one of the previous claims, characterized in that it is selected from:

2-[6-(4-methanesulfonylpiperazin-1-yl)pyridin-3-yl]-N-[[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl]acetamide;

2-[6-(4-methanesulfonylpiperidin-1-yl)pyridin-3-yl]-N-[[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl]acetamide;

- tert-butyl 4-{5-[[[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl]carbamoyl)methyl]pyridin-2-yl}piperazine-1-carboxylate;
 2-[2-(4-methanesulfonylpiperazin-1-yl)pyrimidin-5-yl]-N-{[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl}acetamide;
 5 2-[2-(4-methanesulfonylpiperidin-1-yl)pyrimidin-5-yl]-N-{[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl}acetamide;
 2-[2-(4-acetylpiperidin-1-yl)pyrimidin-5-yl]-N-[(2,4-dimethylphenyl)(5-methylfuran-2-yl)methyl]acetamide;
 methyl 1-{5-[[[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl]carbamoyl)methyl]pyrimidin-2-yl}piperidine-4-carboxylate;
 10 2-[2-(4-acetylpiperidin-1-yl)pyrimidin-5-yl]-N-{[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl}acetamide;
 1-{5-[[[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl]carbamoyl)methyl]pyrimidin-2-yl}piperidine-4-carboxylic acid;
 15 N-{[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl}-2-[6-(piperazin-1-yl)pyridin-3-yl]acetamide;
 1-[2-(4-acetylpiperazin-1-yl)pyrimidin-5-yl]-N-{[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl}cyclopropane-1-carboxamide, and
 2-[6-(4-acetylpiperazin-1-yl)pyridin-2-yl]-N-{[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl}acetamide.
 20 2-[2-(4-acetylpiperazin-1-yl)pyrimidin-5-yl]-N-{[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl}acetamide;
 2-[5-(4-acetylpiperazin-1-yl)pyridin-3-yl]-N-{[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl}acetamide;
 25 2-[2-(4-acetylpiperazin-1-yl)pyrimidin-4-yl]-N-{[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl}acetamide;
 N-{[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl}-2-{6-[4-(trifluoroacetyl)piperazin-1-yl]pyridin-2-yl}acetamide; and
 2-[2-(3-methanesulfonylpiperidin-1-yl)pyrimidin-5-yl]-N-{[4-methyl-2-(piperidin-1-yl)phenyl](5-methylfuran-2-yl)methyl}acetamide.
 30

10. A combination product comprising:

i) a compound of formula (I) as defined in any one of claims 1 to 9, or a pharmaceutically acceptable salt thereof; and

ii) another therapeutically active agent, such as a PPAR activator.

- 5 11. The combination product according to claim 10, component ii) is Elafibranor or seladelpar, saroglitazar, lanifibranor, pioglitazone or a pharmaceutically acceptable salt thereof.
- 10 12. The combination product according to claim 10 or 11, wherein the combination product is a composition comprising components i) and ii) and a pharmaceutically acceptable carrier.
13. The combination product according to claim 10 or 11, wherein the combination product is a kit of parts comprising components i) and ii), for sequential, separate or simultaneous use.
- 15 14. The combination product according to any one of claims 10 to 13, wherein components i) and ii) are formulated in an injectable suspension, a gel, an oil, a pill, a tablet, a suppository, a powder, a capsule, an aerosol, an ointment, a cream, a patch, or means of galenic forms for a prolonged and/or slow release.
- 20 15. The compound according to any one of claims 1 to 9, or a pharmaceutically acceptable salt thereof, for use as a medicament.
- 25 16. The compound according to any one of claims 1 to 9, or a pharmaceutically acceptable salt thereof, or the combination product according to any one of claims 10 to 13, for use in a method for the treatment of an autoimmune disease, an autoimmune-related disease, an inflammatory disease, a metabolic disease, a fibrotic disease, or a cholestatic disease.
- 30 17. Use of a compound according to any one of claims 1 to 9, or a pharmaceutically acceptable salt thereof, in the preparation of a medicament for treating an autoimmune disease, an autoimmune-related disease, an inflammatory disease, a metabolic disease, a fibrotic disease, or a cholestatic disease.

18. Use of a compound according to any one of claims 1 to 9, or a pharmaceutically acceptable salt thereof, and another therapeutically active agent, such as a PPAR activator, in the preparation of a combination product for treating an autoimmune disease, an autoimmune-related disease, an inflammatory disease, a metabolic disease, a fibrotic disease, or a cholestatic disease.