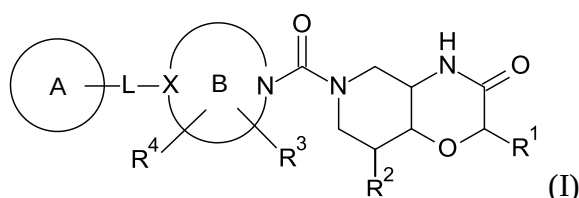


activation of MAGL is a promising new therapeutic strategy for providing neuroprotection and myelin regeneration. Accordingly, there is a high unmet medical need for new MAGL inhibitors.

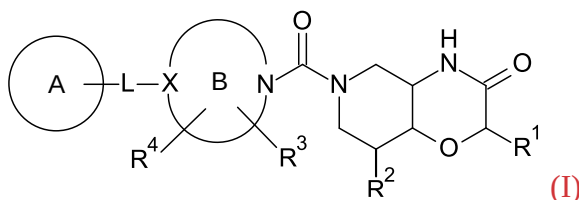
Summary of the Invention

In a first aspect, the present invention provides a compound of formula (I)



wherein A, B, L, X, R¹, R², R³ and R⁴ are as described herein.

In one aspect, the present disclosure provides a compound of formula (I)



or a pharmaceutically acceptable salt thereof, wherein:

(i) X is C-R⁵;

L is a covalent bond, $-(CH_2)_n-N(C_{1-6}\text{-alkyl})-$, $-(CH_2)_n-NH-$, $-N(C_{1-6}\text{-alkyl})-(CH_2)_p-$, $-NH-(CH_2)_p-$, $-(CH_2)_n-O-$, $-O-(CH_2)_p-$, $-SO_2-N(C_{1-6}\text{-alkyl})-$, $-SO_2-NH-$, $-N(C_{1-6}\text{-alkyl})-SO_2-$, $-NH-SO_2-$, carbonyl, $-(CH_2)_n-$, $-CHR^6-$, $-CF_2-(CH_2)_n-$, $-(CH_2)_p-CF_2-$, $-(CH_2)_n-S-$, $-S-(CH_2)_p-$, $-SO_2-$, $-C(O)-NH-$, $-C(O)-N(C_{1-6}\text{-alkyl})-$, $-NH-C(O)-$ or $-N(C_{1-6}\text{-alkyl})-C(O)-$; and

A is:

(i) C₆₋₁₄-aryl substituted with R⁷, R⁸ and R⁹; or

(ii) 5-14 membered heteroaryl substituted with R¹⁰, R¹¹ and R¹²; or

(ii) X is N;

L is a covalent bond, $-(CH_2)_n-$, $-CHR^6-$, $-SO_2-$, carbonyl, $-N(C_{1-6}\text{-alkyl})-(CH_2)_p-$, $-NH-(CH_2)_p-$, $-O-(CH_2)_p-$, $-CF_2-CH_2-$, $-N(C_{1-6}\text{-alkyl})-SO_2-$, $-NH-SO_2-$, $-NH-C(O)-$ or $-N(C_{1-6}\text{-alkyl})-C(O)-$; and

A is:

(i) C₆₋₁₄-aryl substituted with R⁷, R⁸ and R⁹; or

(ii) 5-14 membered heteroaryl substituted with R¹⁰, R¹¹ and R¹²; or

(iii) X is N;

L is C₁₋₆-alkoxycarbonyl, C₆₋₁₄-aryloxycarbonyl or 5-14 membered heteroaryloxycarbonyl; and

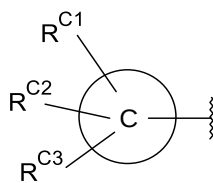
A is absent;

B is a bicyclic spirocycle;

R¹, R², R³, R⁴ and R⁵ are independently hydrogen, halogen, hydroxy, C₁₋₆-alkyl or halo-C₁₋₆-alkyl;

R⁶ is C₆₋₁₄-aryl or 5-14 membered heteroaryl;

R⁷, R⁸, R⁹, R¹⁰, R¹¹ and R¹² are each at each occurrence independently hydrogen, hydroxy, C₁₋₆-alkyl, halo-C₁₋₆-alkyl, halogen, C₁₋₆-alkoxy, halo-C₁₋₆-alkoxy, SF₅, C₁₋₆-



alkylsulfonyl, cyano or a group;

C is 5-14 membered heteroaryl, 3-14 membered heterocyclyl or C₃₋₁₀-cycloalkyl;

R^{C1}, R^{C2} and R^{C3} are each independently hydrogen, C₁₋₆-alkyl, halo-C₁₋₆-alkyl, oxo, halogen, hydroxy, C₁₋₆-alkoxy or halo-C₁₋₆-alkoxy;

each occurrence of n is independently 0, 1, 2 or 3;

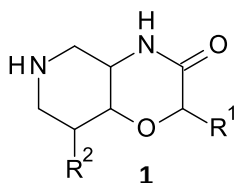
each occurrence of p is independently 1, 2 or 3; and

q is 0, 1 or 2.

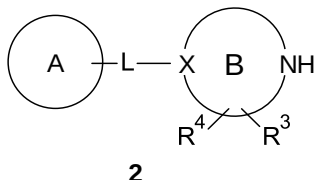
~~In one aspect, the~~The present ~~invention~~disclosure provides a process of manufacturing the urea compounds of formula (I) described herein, and pharmaceutically acceptable salts thereof, comprising:

- (a) reacting a first amine of formula **1**, wherein R¹ and R² are as described herein, preferably wherein R¹ and R² are hydrogen,

- 4b -



with a secondary amine **2**, wherein A, B, L, X, R³ and R⁴ are as described herein

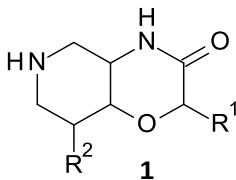


in the presence of a base and a urea forming reagent, to form said compound of formula (I); and optionally

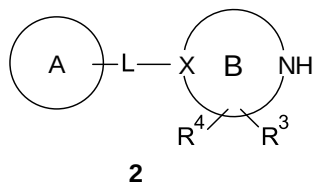
- (b) transforming said compound of formula (I) to a pharmaceutically acceptable salts thereof.

In a further aspect, the present disclosure provides a process of manufacturing the compounds of formula (I) as described herein, or pharmaceutically acceptable salts thereof, comprising:

- (a) reacting a first amine of formula **1**, wherein R¹ and R² are as described herein,



with a second amine **2**, wherein A, B, L, X, R³ and R⁴ are as described herein



in the presence of a base and a urea forming reagent, to form said compound of formula (I); and optionally

(c) transforming said compound of formula (I) to a pharmaceutically acceptable salts thereof.

In a further aspect, the present ~~invention~~disclosure provides a compound of formula (I) as described herein, when manufactured according to the processes described herein.

- 5 In a further aspect, the present ~~invention~~disclosure provides a compound of formula (I) as described herein, for use as therapeutically active substance.

In a further aspect, the present ~~invention~~disclosure provides a pharmaceutical composition comprising a compound of formula (I) as described herein and a therapeutically inert carrier.

~~In a further aspect, the~~The present ~~invention~~disclosure also provides a compound of formula (I) as described herein or a pharmaceutical composition described herein for use in a method of inhibiting monoacylglycerol lipase in a mammal.

In a further aspect, the present ~~invention~~disclosure provides a compound of formula (I) as described herein or a pharmaceutical composition described herein for use in the treatment or prophylaxis of neuroinflammation, neurodegenerative diseases, pain, cancer and/or mental disorders in a mammal.

In a further aspect, the present ~~invention~~disclosure provides a compound of formula (I) as described herein or a pharmaceutical composition described herein; for use in the treatment or prophylaxis of multiple sclerosis, Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, traumatic brain injury, neurotoxicity, stroke, epilepsy, anxiety, migraine, depression, hepatocellular carcinoma, colon carcinogenesis, ovarian cancer, neuropathic pain, chemotherapy induced neuropathy, acute pain, chronic pain and/or spasticity associated with pain in a mammal.

In a further aspect, the present disclosure provides use of a compound of formula (I) as described herein in the preparation of a medicament for the treatment or prophylaxis of neuroinflammation, neurodegenerative diseases, pain, cancer and/or mental disorders in a mammal.

In a further aspect, the present disclosure provides use of a compound of formula (I) as described herein in the preparation of a medicament for the treatment or prophylaxis of multiple sclerosis, Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, traumatic brain injury, neurotoxicity, stroke, epilepsy, anxiety, migraine, depression, hepatocellular carcinoma, colon carcinogenesis, ovarian cancer, neuropathic pain, chemotherapy induced neuropathy, acute pain, chronic pain and/or spasticity associated with pain in a mammal.

Detailed Description of the Invention

Definitions

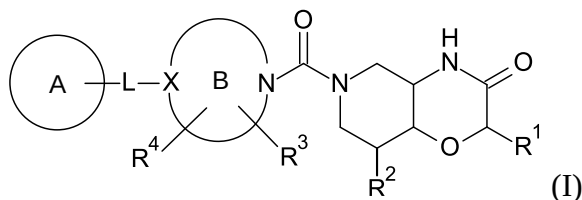
Features, integers, characteristics, compounds, chemical moieties or groups described in conjunction with a particular aspect, embodiment or example of the invention are to be

5 understood to be applicable to any other aspect, embodiment or example described herein, unless incompatible therewith. All of the features disclosed in this specification (including any accompanying claims, abstract and drawings), and/or all of the steps of any method or process so disclosed, may be combined in any combination, except combinations where at least some of

10 any foregoing embodiments. The invention extends to any novel one, or any novel combination, of the features disclosed in this specification (including any accompanying claims, abstract and drawings), or to any novel one, or any novel combination, of the steps of any method or process so disclosed.

CLAIMS

1. A compound of formula (I)



or a pharmaceutically acceptable salt thereof, wherein:

(i) X is C-R⁵;

L is a covalent bond, -(CH₂)_n-N(C₁₋₆-alkyl)-, -(CH₂)_n-NH-, -N(C₁₋₆-alkyl)-(CH₂)_p-, -NH-(CH₂)_p-, -(CH₂)_n-O-, -O-(CH₂)_p-, -SO₂-N(C₁₋₆-alkyl)-, -SO₂-NH-, -N(C₁₋₆-alkyl)-SO₂-, -NH-SO₂-, carbonyl, -(CH₂)_n-, -CHR⁶-, -CF₂-(CH₂)_n-, -(CH₂)_p-CF₂-, -(CH₂)_n-S-, -S-(CH₂)_p-, -SO₂-, -C(O)-NH-, -C(O)-N(C₁₋₆-alkyl)-, -NH-C(O)- or -N(C₁₋₆-alkyl)-C(O)-; and

A is:

(i) C₆₋₁₄-aryl substituted with R⁷, R⁸ and R⁹; or

(ii) 5-14 membered heteroaryl substituted with R¹⁰, R¹¹ and R¹²; or

(ii) X is N;

L is a covalent bond, -(CH₂)_n-, -CHR⁶-, -SO₂-, carbonyl, -N(C₁₋₆-alkyl)-(CH₂)_p-, -NH-(CH₂)_p-, -O-(CH₂)_p-, -CF₂-CH₂-, -N(C₁₋₆-alkyl)-SO₂-, -NH-SO₂-, -NH-C(O)- or -N(C₁₋₆-alkyl)-C(O)-; and

A is:

(i) C₆₋₁₄-aryl substituted with R⁷, R⁸ and R⁹; or

(ii) 5-14 membered heteroaryl substituted with R¹⁰, R¹¹ and R¹²; or

(iii) X is N;

L is C₁₋₆-alkoxycarbonyl, C₆₋₁₄-aryloxycarbonyl or 5-14 membered heteroaryloxycarbonyl; and

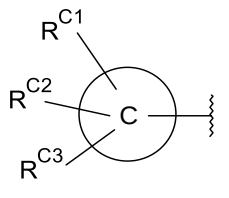
A is absent;

B is a bicyclic spirocycle;

R¹, R², R³, R⁴ and R⁵ are independently hydrogen, halogen, hydroxy, C₁₋₆-alkyl or halo-C₁₋₆-alkyl;

R⁶ is C₆₋₁₄-aryl or 5-14 membered heteroaryl;

R^7 , R^8 , R^9 , R^{10} , R^{11} and R^{12} are each at each occurrence independently hydrogen, hydroxy, C_{1-6} -alkyl, halo- C_{1-6} -alkyl, halogen, C_{1-6} -alkoxy, halo- C_{1-6} -alkoxy, SF_5 , C_{1-6} -



alkylsulfonyl, cyano or a group

C is 5-14 membered heteroaryl, 3-14 membered heterocyclyl or C_{3-10} -cycloalkyl;

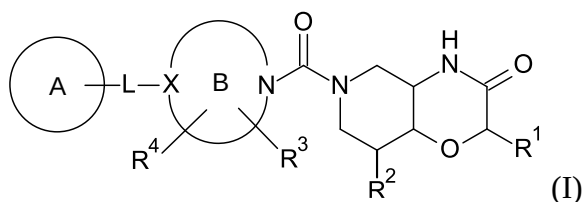
R^{C1} , R^{C2} and R^{C3} are each independently hydrogen, C_{1-6} -alkyl, halo- C_{1-6} -alkyl, oxo, halogen, hydroxy, C_{1-6} -alkoxy or halo- C_{1-6} -alkoxy;

each occurrence of n is independently 0, 1, 2 or 3;

each occurrence of p is independently 1, 2 or 3; and

q is 0, 1 or 2.

2. The compound of formula (I) according to claim 1,



or a pharmaceutically acceptable salt thereof, wherein:

(i) X is $C-R^5$;

L is $-(CH_2)_n-N(C_{1-6}\text{-alkyl})-$, $-(CH_2)_n-NH-$, $-N(C_{1-6}\text{-alkyl})-(CH_2)_p-$, $-NH-(CH_2)_p-$, $-(CH_2)_n-O-$, $-O-(CH_2)_p-$, $-SO_2-N(C_{1-6}\text{-alkyl})-$, $-SO_2-NH-$, $-N(C_{1-6}\text{-alkyl})-SO_2-$, $-NH-SO_2-$, carbonyl, $-(CH_2)_n-$, $-CHR^6-$, $-CF_2-(CH_2)_n-$, $-(CH_2)_p-CF_2-$, $-(CH_2)_n-S-$, $-S-(CH_2)_p-$, $-SO_2-$, $-C(O)-NH-$, $-C(O)-N(C_{1-6}\text{-alkyl})-$, $-NH-C(O)-$ or $-N(C_{1-6}\text{-alkyl})-C(O)-$; and

A is:

(i) C_{6-14} -aryl substituted with R^7 , R^8 and R^9 ; or

(ii) 5-14 membered heteroaryl substituted with R^{10} , R^{11} and R^{12} ; or

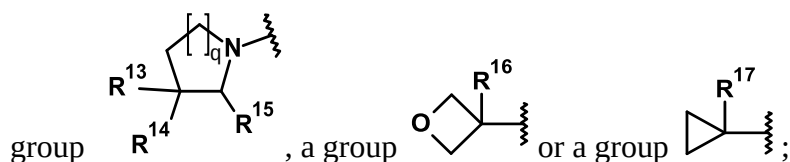
(ii) X is N;

L is $-(CH_2)_n-$, $-CHR^6-$, $-SO_2-$, carbonyl, $-N(C_{1-6}\text{-alkyl})-(CH_2)_p-$, $-NH-(CH_2)_p-$, $-O-(CH_2)_p-$, $-CF_2-CH_2-$, $-N(C_{1-6}\text{-alkyl})-SO_2-$, $-NH-SO_2-$, $-NH-C(O)-$ or $-N(C_{1-6}\text{-alkyl})-C(O)-$; and

A is:

(i) C_{6-14} -aryl substituted with R^7 , R^8 and R^9 ; or

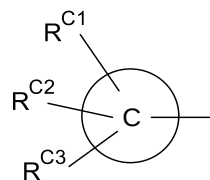
- (ii) 5-14 membered heteroaryl substituted with R^{10} , R^{11} and R^{12} ; or
- (iii) X is N;
 L is C_{1-6} -alkoxycarbonyl, C_{6-14} -aryloxycarbonyl or 5-14 membered heteroaryloxycarbonyl; and
- 5 A is absent;
- B is a bicyclic spirocycle;
- R^1 is hydrogen or C_{1-6} -alkyl;
- R^2 is hydrogen or C_{1-6} -alkyl;
- R^3 is hydrogen, C_{1-6} -alkyl, halo- C_{1-6} -alkyl, halogen or hydroxy;
- 10 R^4 is hydrogen, C_{1-6} -alkyl, halo- C_{1-6} -alkyl, halogen or hydroxy;
- R^5 is hydrogen, C_{1-6} -alkyl, halo- C_{1-6} -alkyl, halogen or hydroxy;
- R^6 is C_{6-14} -aryl or 5-14 membered heteroaryl;
- R^7 , R^8 , R^9 , R^{10} , R^{11} and R^{12} are each at each occurrence independently hydrogen, C_{1-6} -alkyl, halo- C_{1-6} -alkyl, halogen, C_{1-6} -alkoxy, halo- C_{1-6} -alkoxy, SF_5 , SO_2CH_3 , cyano, a



- R^{13} is hydrogen, C_{1-6} -alkyl, halo- C_{1-6} -alkyl, halogen, hydroxy or C_{1-6} -alkoxy; and
- R^{14} is hydrogen, C_{1-6} -alkyl, halo- C_{1-6} -alkyl, halogen, hydroxy, C_{1-6} -alkoxy; or
- R^{13} and R^{14} , taken together with the carbon atom to which they are attached, form a 4-6-membered ring containing 0, 1 or 2 heteroatoms selected from oxygen and NR¹⁸;
- 20 R^{15} is hydrogen, C_{1-6} -alkyl or halo- C_{1-6} -alkyl;
- R^{16} is hydrogen, hydroxy, C_{1-6} -alkyl, halo- C_{1-6} -alkyl or cyano;
- R^{17} is hydrogen, hydroxy, halo- C_{1-6} -alkyl, C_{1-6} -alkyl or cyano;
- R^{18} is hydrogen or C_{1-6} -alkyl;
- each occurrence of n is independently 0, 1, 2 or 3;
- 25 each occurrence of p is independently 1, 2 or 3; and
- q is 0, 1 or 2.

3. The compound of formula (I) according to claim 1, or a pharmaceutically acceptable salt thereof, wherein R^1 is hydrogen.
4. The compound of formula (I) according to claim 1 or 2, or a pharmaceutically acceptable salt thereof, wherein R^2 is hydrogen.
- 30

5. The compound of formula (I) according to any one of claims 1 to 3, or a pharmaceutically acceptable salt thereof, wherein R^3 is hydrogen.
6. The compound of formula (I) according to any one of claims 1 to 4, or a pharmaceutically acceptable salt thereof, wherein R^4 is hydrogen.
7. The compound of formula (I) according to any one of claims 1 to 5, or a pharmaceutically acceptable salt thereof, wherein R^5 is hydrogen or halo- C_{1-6} -alkyl.
8. The compound of formula (I) according to any one of claims 1 to 5, or a pharmaceutically acceptable salt thereof, wherein R^5 is hydrogen.
9. The compound of formula (I) according to any one of claims 1 to 8, or a pharmaceutically acceptable salt thereof, wherein R^6 is C_{6-14} -aryl.
10. The compound of formula (I) according to any one of claims 1 to 9, or a pharmaceutically acceptable salt thereof, wherein R^7 is hydrogen, hydroxy, C_{1-6} -alkyl, halo- C_{1-6} -alkyl,



halogen, C_{1-6} -alkoxy, halo- C_{1-6} -alkoxy, SF_5 or a group ; wherein

C is 5-14 membered heteroaryl or 3-14 membered heterocyclyl;

R^{C1} is C_{1-6} -alkyl, halo- C_{1-6} -alkyl or oxo; and

R^{C2} and R^{C3} are both hydrogen.

11. The compound of formula (I) according to any one of claims 1 to 9, or a pharmaceutically acceptable salt thereof, wherein R^7 is hydrogen, C_{1-6} -alkyl, halo- C_{1-6} -alkyl, halogen, C_{1-6} -alkoxy, halo- C_{1-6} -alkoxy or SF_5 .
12. The compound of formula (I) according to any one of claims 1 to 9, or a pharmaceutically acceptable salt thereof, wherein R^7 is hydrogen, fluoro, chloro, CF_3 , methyl, methoxy, trifluoromethoxy or SF_5 .
13. The compound of formula (I) according to any one of claims 1 to 12, or a pharmaceutically acceptable salt thereof, wherein R^8 is hydrogen, C_{1-6} -alkoxy, halo- C_{1-6} -alkyl or halogen.

14. The compound of formula (I) according to any one of claims 1 to 12, or a pharmaceutically acceptable salt thereof, wherein R^8 is hydrogen, halo-C₁₋₆-alkyl or halogen.
15. The compound of formula (I) according to any one of claims 1 to 9, or a pharmaceutically acceptable salt thereof, wherein R^8 is hydrogen, CF₃, chloro or fluoro.
16. The compound of formula (I) according to any one of claims 1 to 15, or a pharmaceutically acceptable salt thereof, wherein R^9 is hydrogen.
17. The compound of formula (I) according to any one of claims 1 to 16, or a pharmaceutically acceptable salt thereof, wherein R^{10} is halogen or halo-C₁₋₆-alkyl.
18. The compound of formula (I) according to any one of claims 1 to 16, or a pharmaceutically acceptable salt thereof, wherein R^{10} is halo-C₁₋₆-alkyl.
19. The compound of formula (I) according to any one of claims 1 to 16, or a pharmaceutically acceptable salt thereof, wherein R^{10} is CF₃.
20. The compound of formula (I) according to any one of claims 1 to 19, or a pharmaceutically acceptable salt thereof, wherein R^{11} is hydrogen or halo-C₁₋₆-alkyl.
21. The compound of formula (I) according to any one of claims 1 to 19, or a pharmaceutically acceptable salt thereof, wherein R^{11} is hydrogen or CF₃.
22. The compound of formula (I) according to any one of claims 1 to 21, or a pharmaceutically acceptable salt thereof, wherein R^{12} is hydrogen.
23. The compound of formula (I) according to any one of claims 1 to 22, or a pharmaceutically acceptable salt thereof, wherein A is phenyl or pyridyl.
24. The compound of formula (I) according to any one of claims 1 to 23, or a pharmaceutically acceptable salt thereof, wherein:

X is C-R⁵;

L is a covalent bond, -(CH₂)_n-N(C₁₋₆-alkyl)-, -(CH₂)_n-NH-, -(CH₂)_n-O-, -OCH₂-, -CH₂-, -SO₂-, -SO₂-N(C₁₋₆-alkyl)- or -SO₂-NH-;

n is 0 or 1; and

R⁵ is as defined herein.

25. The compound of formula (I) according to any one of claims 1 to 23, or a pharmaceutically acceptable salt thereof, wherein:

X is C-R⁵;

L is a covalent bond, -CH₂O-, -O-, -OCH₂-, -CH₂- or -SO₂-N(C₁₋₆-alkyl)-; and

R⁵ is as defined herein.

26. The compound of formula (I) according to any one of claims 1 to 23, or a pharmaceutically acceptable salt thereof, wherein:

X is C-R⁵;

L is a covalent bond, -CH₂O-, -O-, -OCH₂-, -CH₂- or -SO₂-N(methyl)-; and

R⁵ is as defined herein.

27. The compound of formula (I) according to any one of claims 1 to 23, or a pharmaceutically acceptable salt thereof, wherein:

X is N;

L is a covalent bond, -CH₂-, -CHR⁶- or -SO₂-; and

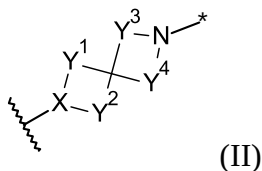
R⁶ is as defined herein.

28. The compound of formula (I) according to any one of claims 1 to 23, or a pharmaceutically acceptable salt thereof, wherein:

X is N; and

L is -CH₂- or -SO₂-.

29. The compound of formula (I) according to any one of claims 1 to 28, or a pharmaceutically acceptable salt thereof, wherein B is a bicyclic spirocycle having formula (II):



wherein:

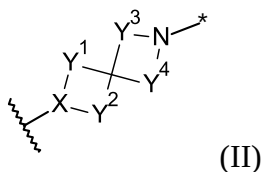
X is as defined herein;

Y¹, Y², Y³ and Y⁴ are each independently -(CH₂)_m-, -(CH₂)_mO-, -O(CH₂)_m-, -(CH₂)_mNH- or -NH(CH₂)_m-;

each occurrence of m is independently 1, 2 or 3;

the wavy line indicates the point of attachment of bicyclic spirocycle B to L in formula (I);
and
the asterisk indicates the point of attachment of bicyclic spirocycle B to the remainder of
formula (I).

- 5 30. The compound of formula (I) according to any one of claims 1 to 28, or a
pharmaceutically acceptable salt thereof, wherein B is a bicyclic spirocycle having formula
(II):



wherein:

10 X is as defined herein;

Y¹ is $-(CH_2)_m-$ or $-(CH_2)_mO-$, wherein m is 1 or 2;

Y² is $-CH_2-$ or $-CH_2O-$;

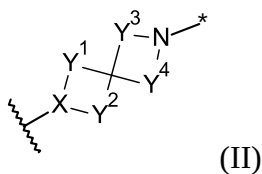
Y³ and Y⁴ are each independently $-(CH_2)_m-$, wherein m is 1 or 2;

the wavy line indicates the point of attachment of bicyclic spirocycle B to L in formula (I);

15 and

the asterisk indicates the point of attachment of bicyclic spirocycle B to the remainder of
formula (I).

31. The compound of formula (I) according to any one of claims 1 to 28, or a
pharmaceutically acceptable salt thereof, wherein B is a bicyclic spirocycle having formula
20 (II):



wherein:

X is as defined herein;

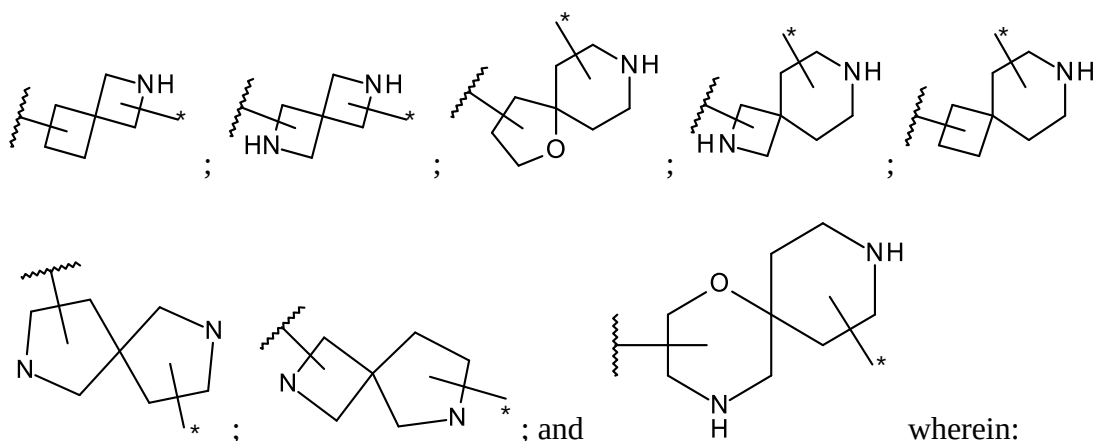
Y¹ is $-CH_2-$;

25 Y² is $-CH_2-$ or $-CH_2O-$;

Y³ and Y⁴ are each independently $-(CH_2)_m-$, wherein m is 1 or 2;

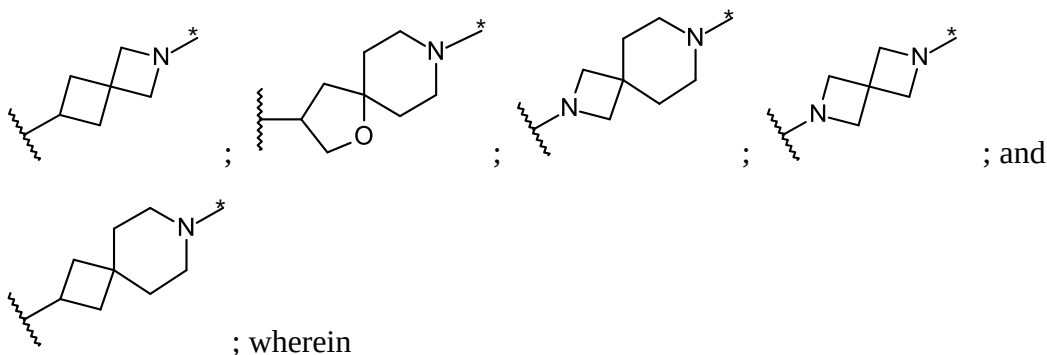
the wavy line indicates the point of attachment of bicyclic spirocycle B to L in formula (I);
and
the asterisk indicates the point of attachment of bicyclic spirocycle B to the remainder of
formula (I).

- 5 32. The compound of formula (I) according to any one of claims 1 to 28, or a
pharmaceutically acceptable salt thereof, wherein B is a bicyclic spirocycle selected from
the group consisting of:



- 10 (i) a wavy line indicates the point of attachment of bicyclic spirocycle B to L in formula
(I); and
an asterisk indicates the point of attachment of bicyclic spirocycle B to the remainder
of formula (I); or
15 (ii) a wavy line indicates the point of attachment of bicyclic spirocycle B to the
remainder of formula (I); and
an asterisk indicates the point of attachment of bicyclic spirocycle B to L in formula
(I).

- 20 33. The compound of formula (I) according to any one of claims 1 to 28, or a
pharmaceutically acceptable salt thereof, wherein B is a bicyclic spirocycle selected from
the group consisting of:



a wavy line indicates the point of attachment of bicyclic spirocycle B to L in formula (I);

and

an asterisk indicates the point of attachment of bicyclic spirocycle B to the remainder of formula (I).

34. The compound of formula (I) according to claim 1, or a pharmaceutically acceptable salt thereof, wherein:

(i) X is C-R⁵;

L is a covalent bond, -CH₂-N(C₁₋₆-alkyl)-, -CH₂-NH-, -O-, -CH₂O-, -OCH₂-, -CH₂-, -SO₂-, -SO₂-N(C₁₋₆-alkyl)- or -SO₂-NH-; and

A is:

(i) C₆₋₁₄-aryl substituted with R⁷, R⁸ and R⁹; or

(ii) 5-14 membered heteroaryl substituted with R¹⁰, R¹¹ and R¹²; or

(ii) X is N;

L is a covalent bond, -CH₂-, -CHR⁶- or -SO₂-; and

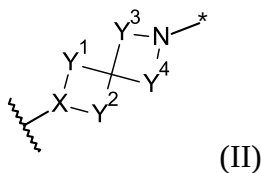
A is C₆₋₁₄-aryl substituted with R⁷, R⁸ and R⁹; or

(iii) X is N;

L is C₁₋₆-alkoxycarbonyl; and

A is absent;

B is a bicyclic spirocycle having formula (II):



wherein:

Y¹ is -(CH₂)_m- or -(CH₂)_mO-, wherein m is 1 or 2;

Y² is -CH₂- or -CH₂O-;

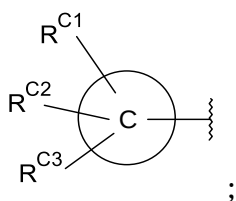
Y^3 and Y^4 are each independently $-(CH_2)_m-$, wherein m is 1 or 2;
the wavy line indicates the point of attachment of bicyclic spirocycle B to L in
formula (I); and
the asterisk indicates the point of attachment of bicyclic spirocycle B to the
remainder of formula (I);

each of R^1 , R^2 , R^3 , R^4 , R^9 and R^{12} is hydrogen;

R^5 is hydrogen or C_{1-6} -alkyl;

R^6 is C_{6-14} -aryl;

R^7 is hydrogen, hydroxy, C_{1-6} -alkyl, halo- C_{1-6} -alkyl, halogen, C_{1-6} -alkoxy or halo- C_{1-6} -



alkoxy, SF_5 or a group ;

R^8 is hydrogen, C_{1-6} -alkoxy, halo- C_{1-6} -alkyl or halogen;

R^{10} is halogen or halo- C_{1-6} -alkyl;

R^{11} is hydrogen or halo- C_{1-6} -alkyl;

R^{C1} is C_{1-6} -alkyl, halo- C_{1-6} -alkyl or oxo;

R^{C2} and R^{C3} are both hydrogen; and

C is 5-14 membered heteroaryl or 3-14 membered heterocyclyl.

35. The compound of formula (I) according to claim 1, or a pharmaceutically acceptable salt thereof, wherein:

(i) X is $C-R^5$;

L is $-CH_2O-$, $-OCH_2-$, $-O-$, $-CH_2-$ or $-SO_2-N(C_{1-6}\text{-alkyl})-$; and

A is:

(i) C_{6-14} -aryl substituted with R^7 , R^8 and R^9 ; or

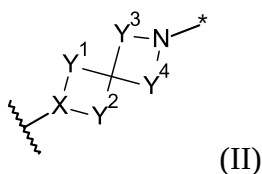
(ii) 5-14 membered heteroaryl substituted with R^{10} , R^{11} and R^{12} ; or

(ii) X is N;

L is $-CH_2-$ or $-SO_2-$; and

A is C_{6-14} -aryl substituted with R^7 , R^8 and R^9 ; or

B is a bicyclic spirocycle having formula (II):



wherein:

Y^1 is $-\text{CH}_2-$;

Y^2 is $-\text{CH}_2-$ or $-\text{CH}_2\text{O}-$;

Y^3 and Y^4 are each independently $-(\text{CH}_2)_m-$, wherein m is 1 or 2;

the wavy line indicates the point of attachment of bicyclic spirocycle B to L in formula (I); and

the asterisk indicates the point of attachment of bicyclic spirocycle B to the remainder of formula (I);

each of R^1 , R^2 , R^3 , R^4 , R^5 , R^9 , and R^{12} is hydrogen;

R^7 is hydrogen, C_{1-6} -alkyl, halo- C_{1-6} -alkyl, halogen, C_{1-6} -alkoxy, halo- C_{1-6} -alkoxy or SF_5 ;

R^8 is hydrogen, halo- C_{1-6} -alkyl or halogen;

R^{10} is halo- C_{1-6} -alkyl; and

R^{11} is hydrogen or halo- C_{1-6} -alkyl.

36. The compound of formula (I) according to claim 1, or a pharmaceutically acceptable salt thereof, wherein:

(i) X is $\text{C}-\text{R}^5$;

L is $-\text{CH}_2\text{O}-$, $-\text{OCH}_2-$, $-\text{O}-$, $-\text{CH}_2-$ or $-\text{SO}_2-\text{N}(\text{methyl})-$; and

A is:

(i) phenyl substituted with R^7 , R^8 and R^9 ; or

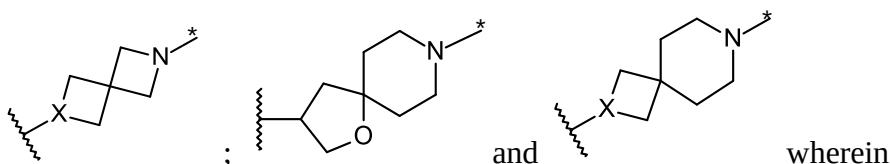
(ii) pyridyl substituted with R^{10} , R^{11} and R^{12} ; or

(ii) X is N;

L is $-\text{CH}_2-$ or $-\text{SO}_2-$; and

A is phenyl substituted with R^7 , R^8 and R^9 ; or

B is a bicyclic spirocycle selected from the group consisting of:



the wavy line indicates the point of attachment of bicyclic spirocycle B to L in formula (I); and

the asterisk indicates the point of attachment of bicyclic spirocycle B to the remainder of formula (I);

5 each of R¹, R², R³, R⁴, R⁵, R⁹, and R¹² is hydrogen;

R⁷ is hydrogen, fluoro, chloro, CF₃, methyl, methoxy, trifluoromethoxy or SF₅;

R⁸ is hydrogen, CF₃, chloro or fluoro;

R¹⁰ is CF₃; and

R¹¹ is hydrogen or CF₃.

10 37. The compound of formula (I) according to any one of claims 1 to 36, or a pharmaceutically acceptable salt thereof, wherein said compound of formula (I) is selected from the group consisting of:

(4aR,8aS)-6-(6-(2-Chloro-4-(trifluoromethoxy)phenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;

15 (4aR,8aS)-6-(2-(2-Fluoro-4-(trifluoromethyl)phenoxy)-7-azaspiro[3.5]nonane-7-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;

(4aR,8aS)-6-(6-(2-Fluoro-4-(trifluoromethyl)phenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;

20 (4aR,8aS)-6-(6-(2-Methoxy-5-(trifluoromethyl)phenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;

(4aR,8aS)-6-(6-(2-Fluoro-4-(trifluoromethoxy)phenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;

(4aR,8aS)-6-(6-(2-Chloro-4-fluorophenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;

25 (4aR,8aS)-6-(6-(4-(Trifluoromethyl)phenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;

(4aR,8aS)-6-(6-(4-Chloro-2-(trifluoromethyl)phenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;

30 (4aR,8aS)-6-(6-(2,4-Difluorophenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;

(4aR,8aS)-6-(6-(3-Fluoro-5-(trifluoromethyl)phenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;

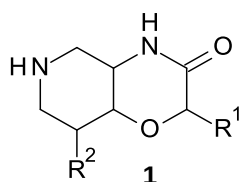
- (4aR,8aS)-6-(6-(2-Fluoro-4-(trifluoromethyl)benzyl)-2,6-diazaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(2-Chloro-4-fluorobenzyl)-2,6-diazaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 5 (4aR,8aS)-6-(2-(2-Fluoro-4-(trifluoromethyl)benzyl)-2,7-diazaspiro[3.5]nonane-7-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-((2-Chloro-4-fluorophenyl)sulfonyl)-2,6-diazaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(7-(2-Fluoro-4-(trifluoromethyl)benzyl)-2,7-diazaspiro[4.4]nonane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 10 (4aR,8aS)-6-(6-((2-Fluoro-4-(trifluoromethyl)phenyl)sulfonyl)-2,6-diazaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(2-(2-Fluoro-4-(trifluoromethyl)benzyl)-2,6-diazaspiro[3.4]octane-6-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 15 rac-(4aR,8aS)-N-((R)-8-(3-Oxo-octahydro-2H-pyrido[4,3-b][1,4]oxazine-6-carbonyl)-1-oxa-8-azaspiro[4.5]decan-3-yl)benzenesulfonamide;
- rac-(4aR,8aS)-N-((S)-8-(3-Oxo-octahydro-2H-pyrido[4,3-b][1,4]oxazine-6-carbonyl)-1-oxa-8-azaspiro[4.5]decan-3-yl)benzenesulfonamide;
- rac-(4aR,8aS)-6-(2-Benzhydryl-2,6-diazaspiro[3.4]octane-6-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 20 rac-(4aR,8aS)-6-(4-((4-Fluorophenyl)sulfonyl)-1-oxa-4,9-diazaspiro[5.5]undecane-9-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-((4,5-bis(trifluoromethyl)pyridin-2-yl)oxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 25 (4aR,8aS)-6-(6-((5,6-Bis(trifluoromethyl)pyridin-2-yl)oxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 2-Chloro-4-fluoro-N-methyl-N-((R)-8-((4aR,8aS)-3-oxo-octahydro-2H-pyrido[4,3-b][1,4]oxazine-6-carbonyl)-1-oxa-8-azaspiro[4.5]decan-3-yl)benzenesulfonamide;
- (4aR,8aS)-6-(6-((5-(Trifluoromethyl)pyridin-2-yl)oxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 30 (4aR,8aS)-6-(6-((4-Methyl-3-(trifluoromethyl)benzyl)oxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;

- (4aR,8aS)-6-(2-((2-Chloro-4-fluorophenyl)sulfonyl)-2,7-diazaspiro[3.5]nonane-7-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-((2-Fluoro-4-(trifluoromethyl)benzyl)oxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 5 N-((S)-8-((4aR,8aS)-3-Oxo-octahydro-2H-pyrido[4,3-b][1,4]oxazine-6-carbonyl)-1-oxa-8-azaspiro[4.5]decan-3-yl)-4-(trifluoromethyl)benzenesulfonamide;
- N-Methyl-N-((R)-8-((4aR,8aS)-3-oxo-octahydro-2H-pyrido[4,3-b][1,4]oxazine-6-carbonyl)-1-oxa-8-azaspiro[4.5]decan-3-yl)benzenesulfonamide;
- 2-Chloro-4-fluoro-N-((S)-8-((4aR,8aS)-3-oxo-octahydro-2H-pyrido[4,3-b][1,4]oxazine-6-carbonyl)-1-oxa-8-azaspiro[4.5]decan-3-yl)benzenesulfonamide;
- 10 N-((S)-8-((4aR,8aS)-3-Oxo-octahydro-2H-pyrido[4,3-b][1,4]oxazine-6-carbonyl)-1-oxa-8-azaspiro[4.5]decan-3-yl)-3-(trifluoromethyl)benzenesulfonamide;
- (4aR,8aS)-6-(3-((2-Chloro-4-fluorobenzyl)(methyl)amino)-1-oxa-8-azaspiro[4.5]decane-8-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 15 (4aR,8aS)-6-(3-((2-Chloro-4-fluorobenzyl)(methyl)amino)-1-oxa-8-azaspiro[4.5]decane-8-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(3-((2-Chloro-4-fluorobenzyl)amino)-1-oxa-8-azaspiro[4.5]decane-8-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(3-((2-Chloro-4-fluorobenzyl)amino)-1-oxa-8-azaspiro[4.5]decane-8-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 20 (4aR,8aS)-6-(2-((4-(Trifluoromethyl)phenyl)sulfonyl)-2,7-diazaspiro[3.5]nonane-7-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- rac-(4aR,8aS)-6-(3-((2-Chloro-4-fluorobenzyl)amino)-1-oxa-8-azaspiro[4.5]decane-8-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 25 (4aR,8aS)-6-(2-(Phenylsulfonyl)-2,7-diazaspiro[3.5]nonane-7-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- rac-tert-butyl 6-((4aR,8aS)-3-oxo-octahydro-2H-pyrido[4,3-b][1,4]oxazine-6-carbonyl)-2,6-diazaspiro[3.4]octane-2-carboxylate;
- (4aR,8aS)-6-(6-(4-(1-methyl-1H-pyrazol-5-yl)phenyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 30 (4aR,8aS)-6-(6-(2-fluoro-6-hydroxybenzyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;

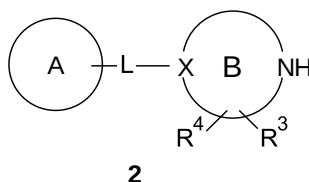
- (4aR,8aS)-6-(6-(2-hydroxybenzyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(2-(4-(2-oxopyrrolidin-1-yl)phenyl)-2,6-diazaspiro[3.4]octane-6-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 5 (4aR,8aS)-6-(6-(2-fluoro-6-methoxybenzyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(4-(pentafluoro-16-sulfaneyl)phenyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(2-fluoro-4-(trifluoromethyl)benzyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 10 (4aR,8aS)-6-(6-(2,4-difluorobenzyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(2-methoxy-4-(trifluoromethyl)benzyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 15 (4aR,8aS)-6-(6-((2-chloro-4-fluorophenoxy)methyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-((2-fluoro-4-(trifluoromethyl)benzyl)oxy)-6-(trifluoromethyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(2-fluoro-4-(trifluoromethyl)phenyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 20 (4aR,8aS)-6-(6-(4-(2-(trifluoromethyl)pyrrolidin-1-yl)phenyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(2-chloro-4-fluorobenzyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 25 (4aR,8aS)-6-(6-(2-fluoro-6-(trifluoromethyl)benzyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(4-(trifluoromethyl)phenyl)-2,6-diazaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(3-(trifluoromethyl)phenyl)-2,6-diazaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 30 (4aR,8aS)-6-(2-(4-(trifluoromethyl)phenyl)-2,6-diazaspiro[3.4]octane-6-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;

- (4aR,8aS)-6-(2-(3-(trifluoromethyl)phenyl)-2,6-diazaspiro[3.4]octane-6-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(2-(4-isopropoxyphenyl)-2,6-diazaspiro[3.4]octane-6-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 5 (4aR,8aS)-6-(6-(4-isopropoxyphenyl)-2,6-diazaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(2-(4-methoxy-3-methylphenyl)-2,6-diazaspiro[3.4]octane-6-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(2-(4-chloro-3-(trifluoromethyl)phenyl)-2,6-diazaspiro[3.4]octane-6-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 10 (4aR,8aS)-6-(2-(2-fluoropyridin-4-yl)-2,6-diazaspiro[3.4]octane-6-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(2,5-bis(trifluoromethyl)phenyl)-2,6-diazaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 15 (4aR,8aS)-6-(6-((4-fluoro-2-(trifluoromethyl)phenyl)sulfonyl)-2,6-diazaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-((2-chloro-4-fluorophenyl)sulfonyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-((3-chloro-4-(trifluoromethyl)phenyl)sulfonyl)-2,6-diazaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 20 (4aR,8aS)-6-(6-((2,4-bis(trifluoromethyl)phenyl)sulfonyl)-2,6-diazaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(2,6-difluorobenzyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one; and
- 25 (4aR,8aS)-6-(6-(2-methoxybenzyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one.
38. A compound of formula (I) according to any one of claims 1 to 36, or a pharmaceutically acceptable salt thereof, wherein said compound of formula (I) is selected from the group consisting of:
- 30 (4aR,8aS)-6-(6-(2-Chloro-4-(trifluoromethoxy)phenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(2-(2-Fluoro-4-(trifluoromethyl)phenoxy)-7-azaspiro[3.5]nonane-7-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;

- (4aR,8aS)-6-(6-(2-Fluoro-4-(trifluoromethyl)phenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(2-Methoxy-5-(trifluoromethyl)phenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 5 (4aR,8aS)-6-(6-(2-Fluoro-4-(trifluoromethoxy)phenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(2-Chloro-4-fluorophenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(4-(Trifluoromethyl)phenoxy)-2-azaspiro[3.3]heptane-2-
- 10 carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(4-Chloro-2-(trifluoromethyl)phenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(2,4-Difluorophenoxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 15 (4aR,8aS)-6-(6-(2-Fluoro-4-(trifluoromethyl)benzyl)-2,6-diazaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-((4,5-bis(trifluoromethyl)pyridin-2-yl)oxy)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(4-(pentafluoro-1 β -sulfaneyl)phenyl)-2-azaspiro[3.3]heptane-2-
- 20 carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(2-fluoro-4-(trifluoromethyl)benzyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- (4aR,8aS)-6-(6-(2,4-difluorobenzyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one;
- 25 (4aR,8aS)-6-(6-(2-methoxy-4-(trifluoromethyl)benzyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one; and
- (4aR,8aS)-6-(6-((2-chloro-4-fluorophenoxy)methyl)-2-azaspiro[3.3]heptane-2-carbonyl)hexahydro-2H-pyrido[4,3-b][1,4]oxazin-3(4H)-one.
39. A process of manufacturing the compounds of formula (I) according to any one of claims
- 30 1 to 38, or pharmaceutically acceptable salts thereof, comprising:
- (a) reacting a first amine of formula **1**, wherein R¹ and R² are as described in any one of claims 1 to 38,



with a second amine **2**, wherein A, B, L, X, R³ and R⁴ are as described in any one of claims 1 to 38



- 5 in the presence of a base and a urea forming reagent, to form said compound of formula (I); and optionally
- (b) transforming said compound of formula (I) to a pharmaceutically acceptable salts thereof.
40. A compound of formula (I) according to any one of claims 1 to 38, when manufactured
- 10 according to the process of claim 39.
41. The compound of formula (I) according to any one of claims 1 to 38 and 40, wherein said compound of formula (I) has an IC₅₀ for monoacylglycerol lipase below 10 μM.
42. A compound of formula (I) according to any one of claims 1 to 38, 40 and 41 for use as therapeutically active substance.
- 15 43. A pharmaceutical composition comprising a compound of formula (I) according to any one of claims 1 to 38, 40 and 41 and a therapeutically inert carrier.
- 20 ~~44. The use of a compound of formula (I) according to any one of claims 1 to 38, 40 and 41 or of a pharmaceutical composition according to claim 43 for the treatment or prophylaxis of neuroinflammation, neurodegenerative diseases, pain, cancer and/or mental disorders in a mammal.~~
- 25 ~~45. The use of a compound of formula (I) according to any one of claims 1 to 38, 40 and 41 or of a pharmaceutical composition according to claim 43 for the treatment or prophylaxis of multiple sclerosis, Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, traumatic brain injury, neurotoxicity, stroke, epilepsy, anxiety, migraine, depression, hepatocellular carcinoma, colon carcinogenesis, ovarian cancer, neuropathic pain,~~

~~chemotherapy induced neuropathy, acute pain, chronic pain and/or spasticity associated with pain in a mammal.~~

~~46.44.~~ A compound of formula (I) according to any one of claims 1 to 38, 40 and 41 or ~~of~~ a pharmaceutical composition according to claim 43 for use in the treatment or prophylaxis of neuroinflammation, neurodegenerative diseases, pain, cancer and/or mental disorders in a mammal.

~~47.45.~~ A compound of formula (I) according to any one of claims 1 to 38, 40 and 41 or ~~of~~ a pharmaceutical composition according to claim 43 for use in the treatment or prophylaxis of multiple sclerosis, Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, traumatic brain injury, neurotoxicity, stroke, epilepsy, anxiety, migraine, depression, hepatocellular carcinoma, colon carcinogenesis, ovarian cancer, neuropathic pain, chemotherapy induced neuropathy, acute pain, chronic pain and/or spasticity associated with pain in a mammal.

~~48.46.~~ ~~The use~~Use of a compound of formula (I) according to any one of claims 1 to 38, 40 and 41 ~~for in~~ the preparation of a medicament for the treatment or prophylaxis of neuroinflammation, neurodegenerative diseases, pain, cancer and/or mental disorders in a mammal.

~~49.47.~~ ~~The use~~Use of a compound of formula (I) according to any one of claims 1 to 38, 40 and 41 ~~for in~~ the preparation of a medicament for the treatment or prophylaxis of multiple sclerosis, Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, traumatic brain injury, neurotoxicity, stroke, epilepsy, anxiety, migraine, depression, hepatocellular carcinoma, colon carcinogenesis, ovarian cancer, neuropathic pain, chemotherapy induced neuropathy, acute pain, chronic pain and/or spasticity associated with pain in a mammal.

~~50.— A method for the treatment or prophylaxis of neuroinflammation, neurodegenerative diseases, pain, cancer and/or mental disorders in a mammal, which method comprises administering an effective amount of a compound of formula (I) according to any one of claims 1 to 38, 40 and 41 or of a pharmaceutical composition according to claim 43 to the mammal.~~

~~51.— A method for the treatment or prophylaxis of multiple sclerosis, Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, traumatic brain injury, neurotoxicity,~~

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~~stroke, epilepsy, anxiety, migraine, depression, hepatocellular carcinoma, colon carcinogenesis, ovarian cancer, neuropathic pain, chemotherapy induced neuropathy, acute pain, chronic pain and/or spasticity associated with pain in a mammal, which method comprises administering an effective amount of a compound of formula (I) according to any one of claims 1 to 38, 40 and 41 or of a pharmaceutical composition according to claim 43 to the mammal.~~