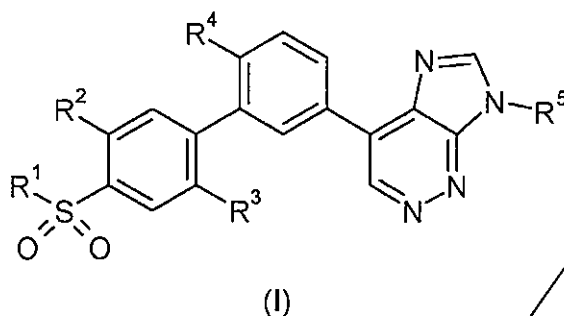


Claims

1. A compound according to formula (I)



wherein

R^1 is selected from (C₁-C₄)alkyl, (C₃-C₄)cycloalkyl, NH₂, and NH(C₁-C₄)alkyl and R^2 is H; or

R^1 and R^2 together are -CH₂-CH₂- or -N(CH₃)-CH₂-;

R^3 is selected from H, F, CHF₂, OCH₃ and CN;

R^4 is selected from H, F, Cl, OH, OCH₃ and CN; and

R^5 is selected from (C₂-C₄)alkyl, (C₃-C₅)cycloalkyl and methyl-substituted (C₃-C₅)cycloalkyl,

or a pharmaceutically acceptable salt thereof.

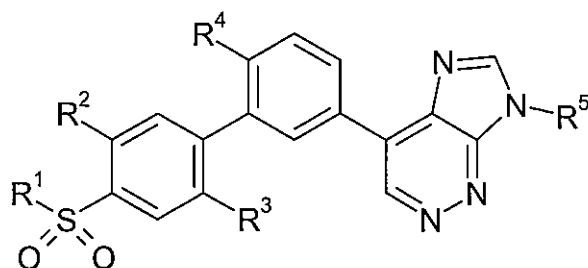
2. The compound according to claim 1 wherein R^1 is (C₂-C₄)alkyl and R^2 is H, or a pharmaceutically acceptable salt thereof.
3. The compound according to claim 1 or claim 2 wherein R^3 is selected from F and OCH₃, or a pharmaceutically acceptable salt thereof.
4. The compound according to any one of claims 1 to 3 wherein R^4 is selected from H and F, or a pharmaceutically acceptable salt thereof.
5. The compound according to any one of claims 1 to 4 wherein R^5 is (C₂-C₄)alkyl, or a pharmaceutically acceptable salt thereof.
6. The compound according to claim 1 selected from:
7-ethyl-4-(6-fluoro-4'-((1-methylethyl)sulfonyl)biphenyl-3-yl)-7H-imidazo[4,5-

c]pyridazine;
4-(4'-ethanesulfonyl-6-fluoro-2'-methoxybiphenyl-3-yl)-7-ethyl-7H-imidazo[4,5-
c]pyridazine;
7-cyclopropyl-4-(4'-ethylsulfonyl-6-fluorobiphenyl-3-yl)-7H-imidazo[4,5-
c]pyridazine; and
4-(4'-ethanesulfonyl-2',6-difluorobiphenyl-3-yl)-7-(1-methylethyl)-7H-
imidazo[4,5-c]pyridazine.

7. The compound according to claim 1 which is 4-(4'-ethanesulfonyl-6-fluoro-2'-methoxybiphenyl-3-yl)-7-ethyl-7H-imidazo[4,5-c]pyridazine.
8. A compound according to any one of claims 1 to 7 for use as a medicament.
9. The compound according to claim 8 for use in the treatment of pain.
10. A pharmaceutical composition comprising a compound according to any one of claims 1 to 7 and a pharmaceutically acceptable excipient.
11. A method of treating pain comprising the administration to a subject in need of such treatment of an effective amount of a compound according to any one of claims 1 to 7.
12. The use of a compound according to any one of claims 1 to 7 for the manufacture of a medicament for treating pain.
13. The use of a compound according to any one of claims 1 to 7 for treating pain.
14. A combination comprising a compound according to any one of claims 1 to 7 and a second pharmaceutically active agent.

Claims

1. A compound according to formula (I)



(I)

wherein

R^1 is selected from (C_1-C_4) alkyl, (C_3-C_4) cycloalkyl, NH_2 , and $NH(C_1-C_4)$ alkyl and R^2 is H; or

R^1 and R^2 together are $-CH_2-CH_2-$ or $-N(CH_3)-CH_2-$;

R^3 is selected from H, F, CHF_2 , OCH_3 and CN;

R^4 is selected from H, F, Cl, OH, OCH_3 and CN; and

R^5 is selected from (C_2-C_4) alkyl, (C_3-C_5) cycloalkyl and methyl-substituted (C_3-C_5) cycloalkyl,

or a pharmaceutically acceptable salt thereof.

2. The compound according to claim 1 wherein R^1 is (C_2-C_4) alkyl and R^2 is H, or a pharmaceutically acceptable salt thereof.
3. The compound according to claim 1 or claim 2 wherein R^3 is selected from F and OCH_3 , or a pharmaceutically acceptable salt thereof.
4. The compound according to any one of claims 1 to 3 wherein R^4 is selected from H and F, or a pharmaceutically acceptable salt thereof.
5. The compound according to any one of claims 1 to 4 wherein R^5 is (C_2-C_4) alkyl, or a pharmaceutically acceptable salt thereof.
6. The compound according to claim 1 selected from:
7-ethyl-4-(6-fluoro-4'-((1-methylethyl)sulfonyl)biphenyl-3-yl)-7H-imidazo[4,5-

c]pyridazine;

4-(4'-ethanesulfonyl-6-fluoro-2'-methoxybiphenyl-3-yl)-7-ethyl-7H-imidazo[4,5-c]pyridazine;

7-cyclopropyl-4-(4'-ethylsulfonyl-6-fluorobiphenyl-3-yl)-7H-imidazo[4,5-c]pyridazine; and

4-(4'-ethanesulfonyl-2',6-difluorobiphenyl-3-yl)-7-(1-methylethyl)-7H-imidazo[4,5-c]pyridazine.

7. The compound according to claim 1 which is 4-(4'-ethanesulfonyl-6-fluoro-2'-methoxybiphenyl-3-yl)-7-ethyl-7H-imidazo[4,5-c]pyridazine.
8. A compound according to any one of claims 1 to 7 for use as a medicament.
9. A pharmaceutical composition comprising a compound according to any one of claims 1 to 7 and a pharmaceutically acceptable excipient.
10. The use of a compound according to any one of claims 1 to 7 in the manufacture of a medicament for the treatment of pain.
11. The use of a compound according to any one of claims 1 to 7 in the manufacture of a medicament for the treatment of anxiety.
12. The use of a compound according to any one of claims 1 to 7 in the manufacture of a medicament for the treatment of epilepsy.
13. A combination comprising a compound according to any one of claims 1 to 7 and a second pharmaceutically active agent.