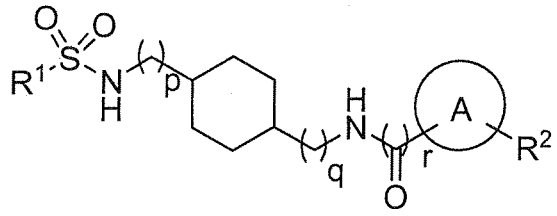
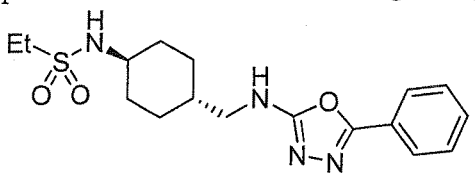
Claims

Claim 1. A compound of the formula (I):

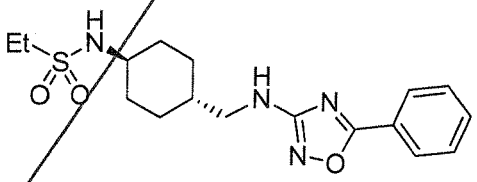


(I)

or its pharmaceutically acceptable salt,
wherein R^1 is substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkenyl or substituted amino,
p, q and r are each independently 0 or 1,
ring A is oxadiazole, and
R^2 is substituted or unsubstituted alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkenyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl or substituted or unsubstituted heterocyclyl, provided that the following compounds are excluded,



and

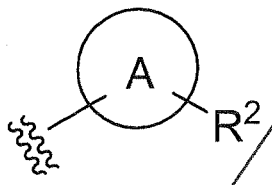


Claim 2. The compound or its pharmaceutically acceptable salt of Claim 1, wherein p is 1, and q and r are 0.

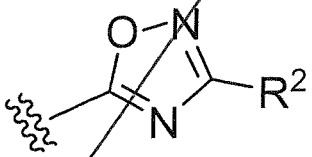
Claim 3. The compound or its pharmaceutically acceptable salt of Claims 1 or 2, wherein R^1 is substituted or unsubstituted alkyl or substituted or unsubstituted cycloalkyl.

Claim 4. The compound or its pharmaceutically acceptable salt of Claim 3, wherein R^1 is substituted or unsubstituted alkyl.

Claim 5. The compound or its pharmaceutically acceptable salt of any one of Claims 1 to 4, wherein a group of the formula:

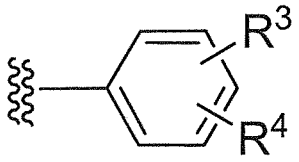


is a group of the formula:



Claim 6. The compound or its pharmaceutically acceptable salt of Claim 5, wherein R^2 is substituted or unsubstituted aryl.

Claim 7. The compound or its pharmaceutically acceptable salt of Claim 5, wherein R^2 is a group of the formula:



wherein R^3 is halogen, alkylsulfonyl, haloalkyl or haloalkyloxy, and
R^4 is hydrogen, halogen, alkylsulfonyl, haloalkyl or haloalkyloxy.

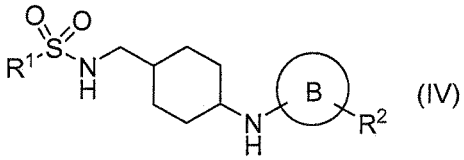
Claim 8. The compound or its pharmaceutically acceptable salt of Claim 5, wherein R^2 is substituted or unsubstituted alkyl.

Claim 9. The compound or its pharmaceutically acceptable salt of Claim 5, wherein R^2 is substituted or unsubstituted haloalkyl.

Claim 10. The compound or its pharmaceutically acceptable salt of Claim 5, wherein R^2 is substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkenyl or substituted or unsubstituted heterocyclyl.

Claim 11. The compound or its pharmaceutically acceptable salt of Claim 5, wherein R^2 is substituted or unsubstituted cycloalkyl.

Claim 12. A compound of the formula (IV):



(IV)

or its pharmaceutically acceptable salt,
wherein R^1 is substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkenyl or substituted amino,
ring B is 5-membered aromatic heterocycle, and
R^2 is substituted or unsubstituted haloalkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkenyl or substituted or unsubstituted heterocyclyl.

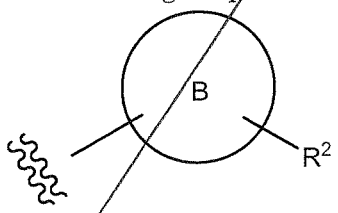
Claim 13. The compound or its pharmaceutically acceptable salt of Claim 12, wherein ring B is oxadiazole, thiadiazole, imidazole, thiazole or oxazole.

Claim 14. The compound or its pharmaceutically acceptable salt of Claim 13, wherein ring B is oxadiazole or oxazole.

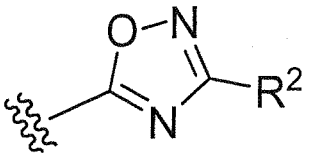
Claim 15. The compound or its pharmaceutically acceptable salt of any one of Claims 12 to 14, wherein R^1 is substituted or unsubstituted alkyl or substituted or unsubstituted cycloalkyl.

Claim 16. The compound or its pharmaceutically acceptable salt of Claim 15, wherein R^1 is substituted or unsubstituted alkyl.

Claim 17. The compound or its pharmaceutically acceptable salt of Claim 12, wherein a group of the formula:



is a group of the formula:



Claim 18. The compound or its pharmaceutically acceptable salt of any one of Claims 12 to 17, wherein R^2 is substituted or unsubstituted haloalkyl.

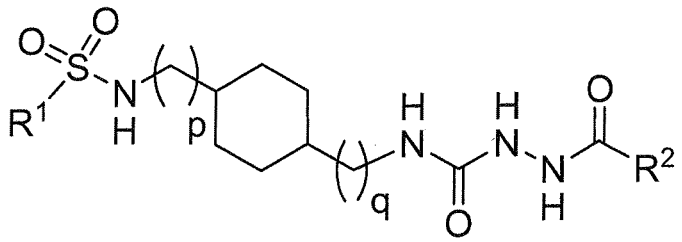
Claim 19. The compound or its pharmaceutically acceptable salt of any one of Claims 12 to 17, wherein R^2 is substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkenyl or substituted or unsubstituted heterocyclyl.

Claim 20. The compound or its pharmaceutically acceptable salt of Claim 19, wherein R^2 is substituted or unsubstituted cycloalkyl.

Claim 21. A pharmaceutical composition comprising the compound or its pharmaceutically acceptable salt of any one of Claims 1 to 20.

Claim 22. The pharmaceutical composition of Claim 21 having NPY Y5 receptor antagonistic activity.

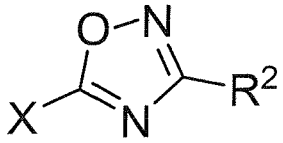
Claim 23. A compound of the formula (II):



(II)

or its salt,
wherein R^1 is substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkenyl or substituted amino,
R^2 is substituted or unsubstituted alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkenyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl or substituted or unsubstituted heterocyclyl, and p and q are each independently 0 or 1.

Claim 24. A compound of the formula (III):



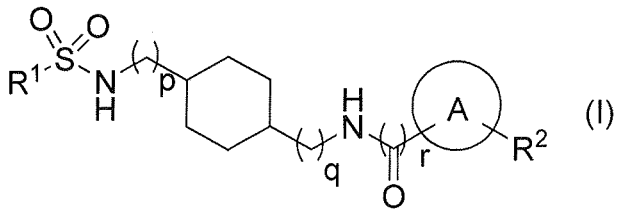
(III)

or its salt,
wherein X is halogen or trihalogenomethyl, and
R^2 is substituted or unsubstituted haloalkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkenyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl or substituted or unsubstituted heterocyclyl.

Claim 25. The compound or its salt of Claim 24, wherein R^2 is substituted or unsubstituted haloalkyl or substituted or unsubstituted cycloalkyl.

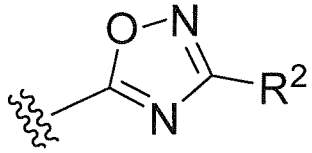
Claims

Claim 1. A compound of the formula (I):



(I)

or its pharmaceutically acceptable salt,
wherein R^1 is substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted alkynyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkenyl or substituted amino,
p is 1, and q and r are 0,
ring A is a group of the formula:



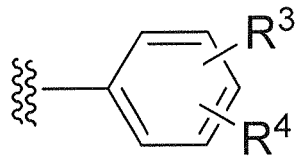
and
R^2 is substituted or unsubstituted alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkenyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl or substituted or unsubstituted heterocyclyl.

Claim 2. The compound or its pharmaceutically acceptable salt of Claims 1, wherein R^1 is substituted or unsubstituted alkyl or substituted or unsubstituted cycloalkyl.

Claim 3. The compound or its pharmaceutically acceptable salt of Claim 2, wherein R^1 is substituted or unsubstituted alkyl.

Claim 4. The compound or its pharmaceutically acceptable salt of Claim 1, wherein R^2 is substituted or unsubstituted aryl.

Claim 5. The compound or its pharmaceutically acceptable salt of Claim 4, wherein
R^2 is a group of the formula:



wherein R^3 is halogen, alkylsulfonyl, haloalkyl or haloalkyloxy, and
R^4 is hydrogen, halogen, alkylsulfonyl, haloalkyl or haloalkyloxy.

Claim 6. The compound or its pharmaceutically acceptable salt of Claim 1,

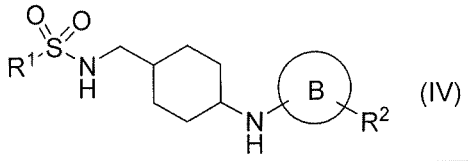
wherein R^2 is substituted or unsubstituted alkyl.

Claim 7. The compound or its pharmaceutically acceptable salt of Claim 1, wherein R^2 is substituted or unsubstituted haloalkyl.

Claim 8. The compound or its pharmaceutically acceptable salt of Claim 1, wherein R^2 is substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkenyl or substituted or unsubstituted heterocyclyl.

Claim 9. The compound or its pharmaceutically acceptable salt of Claim 1, wherein R^2 is substituted or unsubstituted cycloalkyl.

Claim 10. A compound of the formula (IV):

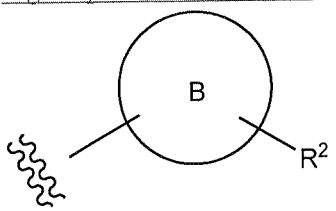


(IV)

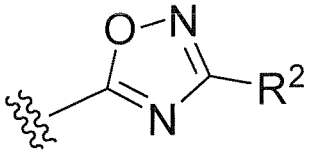
or its pharmaceutically acceptable salt,

wherein R^1 is substituted or unsubstituted alkyl,

a group of the formula:



is a group of the formula:



and

R^2 is substituted or unsubstituted haloalkyl.

Claim 11. A pharmaceutical composition comprising the compound or its pharmaceutically acceptable salt of any one of Claims 1 to 10.

Claim 12. The pharmaceutical composition of Claim 11 having NPY Y5 receptor antagonistic activity.