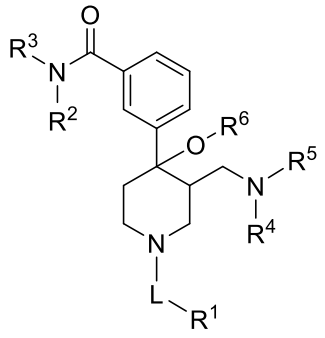
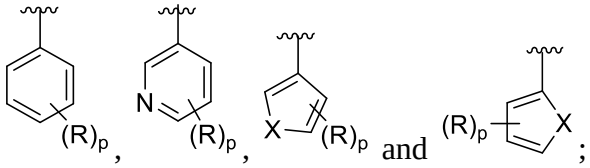
CLAIMS

1. A compound of formula (I):



(I), wherein:

L is selected from the group consisting of -(CZ^1Z^2)-, -(CZ^1Z^2-CZ^1Z^2)-, and -(CZ^1Z^2-CZ^1Z^2-CZ^1Z^2)-;

R^1 is selected from the group consisting of ;

R^2 is selected from the group consisting of hydrogen, C_1-C_6 alkyl, and substituted C_1-C_6 alkyl;

R^3 is selected from the group consisting of hydrogen, methyl and ethyl;

R^4 is selected from the group consisting of methyl and ethyl;

R^5 is selected from the group consisting of methyl and ethyl;

R^6 is selected from the group consisting of H and C_1-C_6 alkyl;

each occurrence of Z^1 and Z^2 is independently selected from the group consisting of hydrogen, fluoro, and methyl;

X is selected from the group consisting of S, O, and N-R^7;

each occurrence of R is independently selected from the group consisting of hydrogen, fluoro, chloro, bromo, iodo, cyano, nitro, hydroxyl, C_1-C_6 alkoxy, C_1-C_6 alkyl, substituted C_1-C_6 alkyl, C_2-C_6 alkenyl, substituted C_2-C_6 alkenyl, alkynyl, substituted C_2-C_6 alkynyl, phenyl, substituted phenyl, -$COOR^7$, and carboxamide;

or –L-R^1 combine to form H, C_1-C_6 alkyl, or cyclopropylmethyl;

each occurrence of p is independently selected from the group consisting of 0, 1, 2 and 3; and

each occurrence of R^7 is independently selected from the group consisting of hydrogen and C_1-C_6 alkyl;

or a salt, solvate, enantiomer, diastereoisomer and/or tautomer thereof, and any mixtures thereof.

2. The compound of claim 1, wherein R^2 and R^3 are H.

3. The compound of claim 1, wherein R^4 and R^5 are methyl.

4. The compound of claim 1, wherein R^6 is selected from the group consisting of H and methyl.

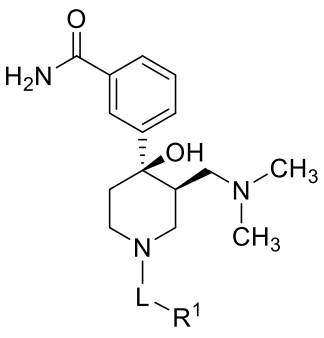
5. The compound of claim 1, wherein L is selected from the group consisting of methylene ($-CH_2-$), 1,2-ethylene ($-CH_2-CH_2-$), and 1,3-propylene ($-CH_2-CH_2-CH_2-$).

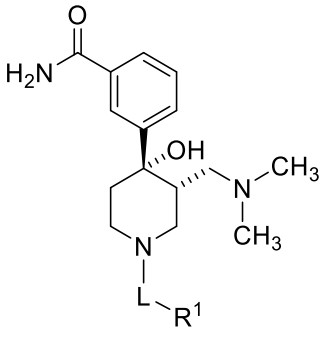
6. The compound of claim 1, wherein R^1 is selected from the group consisting of phenyl, thienyl, furanyl, 3-pyridinyl, substituted phenyl, substituted thienyl, substituted furanyl, and substituted 3-pyridinyl.

7. The compound of claim 1, wherein R^2 and R^3 are H, wherein R^4 and R^5 are methyl, wherein R^6 is selected from the group consisting of H and methyl, wherein L is selected from the group consisting of methylene ($-CH_2-$), 1,2-ethylene ($-CH_2-CH_2-$), and 1,3-propylene ($-CH_2-CH_2-CH_2-$), and wherein R^1 is selected from the group consisting of phenyl, thienyl, furanyl, 3-pyridinyl, substituted phenyl, substituted thienyl, substituted furanyl, and substituted 3-pyridinyl.

8. The compound of claim 1, wherein the $-R^6$ and $-CH_2NR^4R^5$ groups have *syn* relative stereochemistry.

9. The compound of claim 8, which is selected from the group consisting of :



,


and any mixtures thereof.

10. The compound of claim 1, which is at least one selected from the group consisting of:

3-(-(2-Chloro-4-fluoro-benzyl)-3-dimethylaminomethyl-4-hydroxy-piperidin-4-yl)-benzamide (**6**);

(+)-Ent-A-syn-3-(1-(2-chloro-4-fluorobenzyl)-3-((dimethylamino)methyl)-4-hydroxy piperidin-4-yl)benzamide [*(+)-Ent-A-syn*-(**6**)];

(-)-Ent-B-syn-3-(1-(2-chloro-4-fluorobenzyl)-3-((dimethylamino)methyl)-4-hydroxy piperidin-4-yl)benzamide [*(-)-Ent-B-syn*-(**6**)];

(+)-Ent-A-anti-3-[1-(2-chloro-4-fluorobenzyl)-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**6**)];

(-)-Ent-B-anti-3-[1-(2-chloro-4-fluorobenzyl)-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(-)-Ent-B-anti*-(**6**)];

3-(3-Dimethylaminomethyl-4-hydroxy-1-thiophen-3-ylmethyl-piperidin-4-yl)-benzamide (**11**);

(+)-Ent-A-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[(thiophen-3-yl)methyl]piperidin-4-yl] benzamide [*(+)-Ent-A-syn*-(**11**)];

(-)-Ent-B-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[(thiophen-3-yl)methyl]piperidin-4-yl] benzamide [*(-)-Ent-B-syn*-(**11**)];

(+)-Ent-A-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[(thiophen-3-yl)methyl]piperidin-4-yl] benzamide [*(+)-Ent-A-anti*-(**11**)];

(-)-Ent-B-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[(thiophen-3-yl)methyl]piperidin-4-yl] benzamide [*(-)-Ent-B-anti*-(**11**)];

3-{3-[(dimethylamino)methyl]-1-[(5-fluoropyridin-3-yl)methyl]-4-hydroxypiperidin-4-yl} benzamide;

3-[(*3S,4R*)-3-Dimethylaminomethyl-1-(5-fluoro-pyridin-3-ylmethyl)-4-hydroxy-piperidin-4-yl]-benzamide (**29a**);

3-[(*3R,4S*)-3-Dimethylaminomethyl-1-(5-fluoro-pyridin-3-ylmethyl)-4-hydroxy-piperidin-4-yl]-benzamide (**29b**);

(+)-Ent-A-anti-3-[(dimethylamino)methyl]-1-[(5-fluoropyridin-3-yl)methyl]-4-hydroxypiperidin-4-yl]benzamide;

(-)-Ent-B-anti-3-[3-[(dimethylamino)methyl]-1-[(5-fluoropyridin-3-yl)methyl]-4-hydroxypiperidin-4-yl]benzamide;

3-(3-Dimethylaminomethyl-4-hydroxy-1-phenethyl-piperidin-4-yl)-benzamide (**9**);

(+)-Ent-A-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(2-phenylethyl)piperidin-4-yl]benzamide (**45a**);

(-)-Ent-B-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(2-phenylethyl)piperidin-4-yl]benzamide (**45b**);

(+)-Ent-A-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(2-phenylethyl)piperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**9**)];

(-)-Ent-B-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(2-phenylethyl)piperidin-4-yl]benzamide [*(-)-Ent-B-anti*-(**9**)];

3-(1-(2-Chloro-4-fluorophenethyl)-3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl) benzamide (**13**);

3-((*3S,4R*)-1-(2-Chloro-4-fluorophenethyl)-3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (**32a**);

3-((*3R,4S*)-1-(2-Chloro-4-fluorophenethyl)-3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (**32b**);

(+)-Ent-A-anti-3-[1-[2-(2-chloro-4-fluorophenyl)ethyl]-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**13**)];

(-)-Ent-B-anti-3-[1-[2-(2-chloro-4-fluorophenyl)ethyl]-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(-)-Ent-B-anti*-(**13**)];

3-(3-((Dimethylamino)methyl)-4-hydroxy-1-(4-methoxyphenethyl)piperidin-4-yl)benzamide (**17**);

(+)-Ent-A-syn-3-(3-((dimethylamino)methyl)-4-hydroxy-1-(4-methoxyphenethyl)piperidin-4-yl)benzamide [*(+)-Ent-A-syn*-(**17**)];

(-)-Ent-B-syn-3-(3-((dimethylamino)methyl)-4-hydroxy-1-(4-methoxyphenethyl)piperidin-4-yl)benzamide [*(-)-Ent-B-syn*-(**17**)];

(+)-Ent-A-anti-3-(3-((dimethylamino)methyl)-4-hydroxy-1-(4-methoxyphenethyl)piperidin-4-yl)benzamide [*(+)-Ent-A-anti*-(**17**)];

(-)-Ent-B-anti-3-(3-((dimethylamino)methyl)-4-hydroxy-1-(4-methoxyphenethyl)piperidin-4-yl)benzamide [*(-)-Ent-B-anti*-(**17**)];

3-(3-((Dimethylamino)methyl)-4-hydroxy-1-(4-hydroxyphenethyl)piperidin-4-yl)benzamide (**18**);

(+)-Ent-A-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[2-(4-hydroxyphenyl)ethyl] piperidin-4-yl]benzamide (**38a**);

(-)-Ent-B-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[2-(4-hydroxyphenyl)ethyl] piperidin-4-yl]benzamide (**38b**);

(+)-Ent-A-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[2-(4-hydroxyphenyl)ethyl]piperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**18**)];

(-)-Ent-B-anti-3-[3-(dimethylamino)methyl]-4-hydroxy-1-[2-(4-hydroxyphenyl)ethyl] piperidin-4-yl]benzamide [*(-)-Ent-B-anti*-(**18**)];

3-(3-((Dimethylamino)methyl)-4-hydroxy-1-(2-(thiophen-3-yl)ethyl)piperidin-4-yl)benzamide (**15**);

3-(3S,4R)-3-((Dimethylamino)methyl)-4-hydroxy-1-(2-(thiophen-3-yl)ethyl)piperidin-4-yl)benzamide (**41a**);

3-((*3R,4S*)-3-((Dimethylamino)methyl)-4-hydroxy-1-(2-(thiophen-3-yl)ethyl)piperidin-4-yl)benzamide (**41b**);

(+)-Ent-A-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[2-(thiophen-3-yl)ethyl]piperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**15**)];

(-)-Ent-B-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[2-(thiophen-3-yl)ethyl]piperidin-4-yl]benzamide [*(-)-Ent-B-anti*-(**15**)];

3-[3-Dimethylaminomethyl-4-hydroxy-1-(3-phenyl-propyl)-piperidin-4-yl]-benzamide (**20**);

(+)-Ent-A-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(3-phenylpropyl)piperidin-4-yl]benzamide (**44a**);

(-)-Ent-B-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(3-phenylpropyl)piperidin-4-yl]benzamide (**44b**);

(+)-Ent-A-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(3-phenylpropyl)piperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**20**)];

(-)-Ent-B-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(3-phenylpropyl)piperidin-4-yl]benzamide [*(-)-Ent-B-anti*-(**20**)];

3-{1-[3-(2-Chloro-4-fluorophenyl)propyl]-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl}benzamide (**23**);

3-((*3S,4R*)-1-(3-(2-Chloro-4-fluorophenyl)propyl)-3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (**23a**);

3-((*3R,4S*)-1-(3-(2-Chloro-4-fluorophenyl)propyl)-3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (**23b**);

(+)-Ent-A-anti-3-[1-[3-(2-chloro-4-fluorophenyl)propyl]-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**23**)];

(-)-Ent-B-anti-3-[1-(3-(2-chloro-4-fluorophenyl)propyl)-3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide [*(-)-Ent-B-anti*-(**23**)];

3-{3-[(Dimethylamino)methyl]-1-[3-(5-fluoropyridin-3-yl)propyl]-4-hydroxypiperidin-4-yl}benzamide;

3-[(*3S,4R*)-3-Dimethylaminomethyl-1-(5-fluoro-pyridin-3-ylmethyl)-4-hydroxy-piperidin-4-yl]-benzamide (**26a**);

3-[(*3R,4S*)-3-Dimethylaminomethyl-1-(5-fluoro-pyridin-3-ylmethyl)-4-hydroxy-piperidin-4-yl]-benzamide (**26b**);

(+)-Ent-A-anti-3-[3-[(dimethylamino)methyl]-1-[3-(5-fluoropyridin-3-yl)propyl]-4-hydroxypiperidin-4-yl]benzamide;

(-)-Ent-B-anti-3-[3-[(dimethylamino)methyl]-1-[3-(5-fluoropyridin-3-yl)propyl]-4-hydroxypiperidin-4-yl]benzamide;

3-[1-(cyclopropylmethyl)-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide (**35**);

(+)-Ent-A-syn-3-[1-(cyclopropylmethyl)-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(+)-Ent-A-syn*-(**35**)];

(-)-Ent-B-syn-3-[1-(cyclopropylmethyl)-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(-)-Ent-B-syn*-(**35**)];

(+)-Ent-A-anti-3-[1-(cyclopropylmethyl)-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**35**)];

(-)-Ent-B-anti-3-[1-(cyclopropylmethyl)-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(-)-Ent-B-anti*-(**35**)];

3-(3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (**21**);

Rac-syn-3-(3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (*rac-syn*-**21**);

Rac-anti-3-(3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (*rac-anti*-**21**);

(+)-Ent-A-syn-3-(3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (*(+)-Ent-A-syn*-**21**);

(-)-Ent-B-syn-3-(3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (*(-)-Ent-B-syn*-

21);

(+)-Ent-A-anti-3-(3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (*(+)-Ent-A-anti*-**21**);

(-)-Ent-B-anti-3-(3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (*(-)-Ent-B-anti*-**21**);

or a salt, solvate, enantiomer, diastereoisomer and/or tautomer thereof, and any mixtures thereof.

11. A pharmaceutical composition comprising at least one pharmaceutically acceptable carrier and at least one compound of any one of claims 1-10.

12. Use of at least one compound of any one of claims 1-10 and/or at least one pharmaceutical composition of claim 11 in the manufacture of a medicament for the treatment and/or prevention of pain in a subject.

13. The use of claim 12, wherein the at least one compound is selected from the group of:

3-(-(2-Chloro-4-fluoro-benzyl)-3-dimethylaminomethyl-4-hydroxy-piperidin-4-yl)-benzamide (**6**);

(+)-Ent-A-syn-3-(1-(2-chloro-4-fluorobenzyl)-3-((dimethylamino)methyl)-4-hydroxy piperidin-4-yl)benzamide [*(+)-Ent-A-syn*-(**6**)];

(-)-Ent-B-syn-3-(1-(2-chloro-4-fluorobenzyl)-3-((dimethylamino)methyl)-4-hydroxy piperidin-4-yl)benzamide [*(-)-Ent-B-syn*-(**6**)];

(+)-Ent-A-anti-3-[1-(2-chloro-4-fluorobenzyl)-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**6**)];

(-)-Ent-B-anti-3-[1-(2-chloro-4-fluorobenzyl)-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(-)-Ent-B-anti*-(**6**)];

3-(3-Dimethylaminomethyl-4-hydroxy-1-thiophen-3-ylmethyl-piperidin-4-yl)-benzamide (**11**);

(+)-Ent-A-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[(thiophen-3-yl)methyl]piperidin-4-yl] benzamide [*(+)-Ent-A-syn*-(**11**)];

(-)-Ent-B-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[(thiophen-3-yl)methyl]piperidin-4-yl] benzamide [*(-)-Ent-B-syn*-(**11**)];

(+)-Ent-A-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[(thiophen-3-yl)methyl]piperidin-4-

yl] benzamide [*(+)-Ent-A-anti*-(**11**)];

(-)-Ent-B-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[(thiophen-3-yl)methyl]piperidin-4-yl] benzamide [*(-)-Ent-B-anti*-(**11**)];

3-{3-[(dimethylamino)methyl]-1-[(5-fluoropyridin-3-yl)methyl]-4-hydroxypiperidin-4-yl} benzamide;

3-[(*3S,4R*)-3-Dimethylaminomethyl-1-(5-fluoro-pyridin-3-ylmethyl)-4-hydroxy-piperidin-4-yl]-benzamide (**29a**);

3-[(*3R,4S*)-3-Dimethylaminomethyl-1-(5-fluoro-pyridin-3-ylmethyl)-4-hydroxy-piperidin-4-yl]-benzamide (**29b**);

(+)-Ent-A-anti-3-[(dimethylamino)methyl]-1-[(5-fluoropyridin-3-yl)methyl]-4-hydroxypiperidin-4-yl]benzamide;

(-)-Ent-B-anti-3-[3-[(dimethylamino)methyl]-1-[(5-fluoropyridin-3-yl)methyl]-4-hydroxypiperidin-4-yl]benzamide;

3-(3-Dimethylaminomethyl-4-hydroxy-1-phenethyl-piperidin-4-yl)-benzamide (**9**);

(+)-Ent-A-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(2-phenylethyl)piperidin-4-yl]benzamide (**45a**);

(-)-Ent-B-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(2-phenylethyl)piperidin-4-yl]benzamide (**45b**);

(+)-Ent-A-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(2-phenylethyl)piperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**9**)];

(-)-Ent-B-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(2-phenylethyl)piperidin-4-yl]benzamide [*(-)-Ent-B-anti*-(**9**)];

3-(1-(2-Chloro-4-fluorophenethyl)-3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl) benzamide (**13**);

3-((*3S,4R*)-1-(2-Chloro-4-fluorophenethyl)-3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (**32a**);

3-((*3R,4S*)-1-(2-Chloro-4-fluorophenethyl)-3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (**32b**);

(+)-Ent-A-anti-3-[1-[2-(2-chloro-4-fluorophenyl)ethyl]-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**13**)];

(-)-Ent-B-anti-3-[1-[2-(2-chloro-4-fluorophenyl)ethyl]-3-[(dimethylamino)methyl]-4-

hydroxypiperidin-4-yl]benzamide [*(-)-Ent-B-anti*-(**13**)];

3-(3-((Dimethylamino)methyl)-4-hydroxy-1-(4-methoxyphenethyl)piperidin-4-yl)benzamide (**17**);

(+)-Ent-A-syn-3-(3-((dimethylamino)methyl)-4-hydroxy-1-(4-methoxyphenethyl)piperidin-4-yl)benzamide [*(+)-Ent-A-syn*-(**17**)];

(-)-Ent-B-syn-3-(3-((dimethylamino)methyl)-4-hydroxy-1-(4-methoxyphenethyl)piperidin-4-yl)benzamide [*(-)-Ent-B-syn*-(**17**)];

(+)-Ent-A-anti-3-(3-((dimethylamino)methyl)-4-hydroxy-1-(4-methoxyphenethyl)piperidin-4-yl)benzamide [*(+)-Ent-A-anti*-(**17**)];

(-)-Ent-B-anti-3-(3-((dimethylamino)methyl)-4-hydroxy-1-(4-methoxyphenethyl)piperidin-4-yl)benzamide [*(-)-Ent-B-anti*-(**17**)];

3-(3-((Dimethylamino)methyl)-4-hydroxy-1-(4-hydroxyphenethyl)piperidin-4-yl)benzamide (**18**);

(+)-Ent-A-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[2-(4-hydroxyphenyl)ethyl] piperidin-4-yl]benzamide (**38a**);

(-)-Ent-B-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[2-(4-hydroxyphenyl)ethyl] piperidin-4-yl]benzamide (**38b**);

(+)-Ent-A-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[2-(4-hydroxyphenyl)ethyl]piperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**18**)];

(-)-Ent-B-anti-3-[3-(dimethylamino)methyl]-4-hydroxy-1-[2-(4-hydroxyphenyl)ethyl] piperidin-4-yl]benzamide [*(-)-Ent-B-anti*-(**18**)];

3-(3-((Dimethylamino)methyl)-4-hydroxy-1-(2-(thiophen-3-yl)ethyl)piperidin-4-yl)benzamide (**15**);

3-(3S,4R)-3-((Dimethylamino)methyl)-4-hydroxy-1-(2-(thiophen-3-yl)ethyl)piperidin-4-yl)benzamide (**41a**);

3-((*3R,4S*)-3-((Dimethylamino)methyl)-4-hydroxy-1-(2-(thiophen-3-yl)ethyl)piperidin-4-yl)benzamide (**41b**);

(+)-Ent-A-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[2-(thiophen-3-yl)ethyl]piperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**15**)];

(-)-Ent-B-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-[2-(thiophen-3-yl)ethyl]piperidin-4-yl]benzamide [*(-)-Ent-B-anti*-(**15**)];

3-[3-Dimethylaminomethyl-4-hydroxy-1-(3-phenyl-propyl)-piperidin-4-yl]-benzamide (**20**);

(+)-Ent-A-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(3-phenylpropyl)piperidin-4-yl]benzamide (**44a**);

(-)-Ent-B-syn-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(3-phenylpropyl)piperidin-4-yl]benzamide (**44b**);

(+)-Ent-A-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(3-phenylpropyl)piperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**20**)];

(-)-Ent-B-anti-3-[3-[(dimethylamino)methyl]-4-hydroxy-1-(3-phenylpropyl)piperidin-4-yl]benzamide [*(-)-Ent-B-anti*-(**20**)];

3-{1-[3-(2-Chloro-4-fluorophenyl)propyl]-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl}benzamide (**23**);

3-((*3S,4R*)-1-(3-(2-Chloro-4-fluorophenyl)propyl)-3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (**23a**);

3-((*3R,4S*)-1-(3-(2-Chloro-4-fluorophenyl)propyl)-3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (**23b**);

(+)-Ent-A-anti-3-[1-[3-(2-chloro-4-fluorophenyl)propyl]-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**23**)];

(-)-Ent-B-anti-3-[1-(3-(2-chloro-4-fluorophenyl)propyl)-3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide [*(-)-Ent-B-anti*-(**23**)];

3-{3-[(Dimethylamino)methyl]-1-[3-(5-fluoropyridin-3-yl)propyl]-4-hydroxypiperidin-4-yl}benzamide;

3-[(*3S,4R*)-3-Dimethylaminomethyl-1-(5-fluoro-pyridin-3-ylmethyl)-4-hydroxy-piperidin-4-yl]-benzamide (**26a**);

3-[(*3R,4S*)-3-Dimethylaminomethyl-1-(5-fluoro-pyridin-3-ylmethyl)-4-hydroxy-piperidin-4-yl]-benzamide (**26b**);

(+)-Ent-A-anti-3-[3-[(dimethylamino)methyl]-1-[3-(5-fluoropyridin-3-yl)propyl]-4-hydroxypiperidin-4-yl]benzamide;

(-)-Ent-B-anti-3-[3-[(dimethylamino)methyl]-1-[3-(5-fluoropyridin-3-yl)propyl]-4-hydroxypiperidin-4-yl]benzamide;

3-[1-(cyclopropylmethyl)-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide (**35**);

(+)-Ent-A-syn-3-[1-(cyclopropylmethyl)-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-

yl]benzamide [*(+)-Ent-A-syn*-(**35**)];

(-)-Ent-B-syn-3-[1-(cyclopropylmethyl)-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(-)-Ent-B-syn*-(**35**)];

(+)-Ent-A-anti-3-[1-(cyclopropylmethyl)-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(+)-Ent-A-anti*-(**35**)];

(-)-Ent-B-anti-3-[1-(cyclopropylmethyl)-3-[(dimethylamino)methyl]-4-hydroxypiperidin-4-yl]benzamide [*(-)-Ent-B-anti*-(**35**)];

3-(3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (**21**);

Rac-syn-3-(3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (*rac-syn*-**21**);

Rac-anti-3-(3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (*rac-anti*-**21**);

(+)-Ent-A-syn-3-(3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (*(+)-Ent-A-syn*-**21**);

(-)-Ent-B-syn-3-(3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (*(-)-Ent-B-syn*-**21**);

(+)-Ent-A-anti-3-(3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (*(+)-Ent-A-anti*-**21**);

(-)-Ent-B-anti-3-(3-((dimethylamino)methyl)-4-hydroxypiperidin-4-yl)benzamide (*(-)-Ent-B-anti*-**21**);

or a salt, solvate, enantiomer, diastereoisomer and/or tautomer thereof, and any mixtures thereof.

14. The use of claim 12, wherein the at least one compound is a MOR agonist.

15. The use of claim 12, wherein the at least one compound decreases cyclic adenosine monophosphate (cAMP) levels in the subject.

16. The use of claim 12, wherein the at least one compound does not significantly induce recruitment, binding to, or association with a β-arrestin.

17. The use of claim 12, wherein the at least one compound does not significantly cause at least one side effect selected from the group consisting of tachyphylaxis, respiratory depression, constipation, nausea, emesis, withdrawal, dependence, and addiction.

18. The use of claim 12, wherein the pain comprises chronic pain, neuropathic pain, nociceptive pain, hyperalgesia, and/or allodynia.

19. The use of claim 12, wherein the subject is a mammal.

20. The use of claim 19, wherein the mammal is human.

21. A compound of any one of claims 1-10 and/or a pharmaceutical composition of claim 11 for use in the treatment and/or prevention of pain.