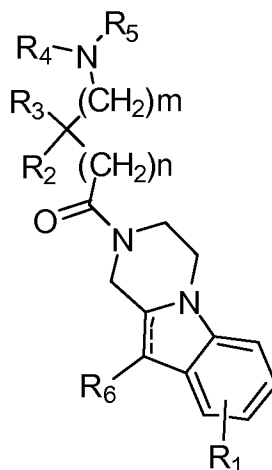


CLAIMS

1. A compound of general formula (I), or a pharmaceutically acceptable salt, enantiomer, diastereomer, racemate or solvate thereof:



(I)

wherein

m is selected from 0, 1, 2, 3 and 4;

n is selected from 0, 1, 2, 3 and 4;

----- represents a single or double bond;

R₁ represents one or more optional and independent substitutions in the benzene moiety selected from the group consisting of substituted or unsubstituted alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted aryl, substituted or unsubstituted arylalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclylalkyl, -COR₈, -C(O)OR₈, -C(O)NR₈R₉, -CH=NR₈, -CN, -OR₈, -OC(O)R₈, -S(O)_t-R₈, -NR₈R₉, -NR₈C(O)R₉, -NO₂, -N=CR₈R₉, and halogen;

R₂ and **R₃** are independently selected from the group consisting of hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted aryl, substituted or unsubstituted arylalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclylalkyl, -COR₈, -C(O)OR₈, -C(O)NR₈R₉, -CH=NR₈, -CN, -OR₈, -OC(O)R₈, -S(O)_t-R₈, -NR₈R₉, -NR₈C(O)R₉, and halogen;

or **R₂** and **R₃** together form a substituted or unsubstituted cycloalkyl or a substituted or unsubstituted heterocyclyl;

R₄ and **R₅** are independently selected from the group consisting of hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted alkenyl,

substituted or unsubstituted aryl, substituted or unsubstituted arylalkyl, substituted or unsubstituted, heterocyclyl, substituted or unsubstituted heterocyclalkyl, -COR₈, -C(O)OR₈, and -C(O)NR₈R₉;

5 or **R**₄ and **R**₅ together with the bridging nitrogen atom form a substituted or unsubstituted heterocyclyl;

R₆ is selected from the group consisting of hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted aryl, substituted or unsubstituted arylalkyl, substituted or unsubstituted heterocyclyl, substituted or unsubstituted heterocyclalkyl, -COR₈, -C(O)OR₈, -C(O)NR₈R₉, -CH=NR₈, -CN, -OR₈, -OC(O)R₈, -S(O)_t-R₈, -NR₈R₉, -NR₈C(O)R₉, -NO₂, -N=CR₈R₉, and halogen;

t is selected from 0, 1 and 2;

R₈ and **R**₉ are each independently selected from hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted aryl, substituted or unsubstituted heterocyclyl and halogen;

with the proviso that the following compounds are not included:

2-(2-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-oxoethyl)isoindoline-1,3-dione,

20 2-(2-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-oxopropyl)isoindoline-1,3-dione,

2-(2-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-oxobutyl)isoindoline-1,3-dione,

[2-(3,4-dihydro-1H-pyrazino[1,2-a]indol-2-yl)-1-(4-hydroxy-benzyl)-2-oxo-ethyl]-carbamic acid tert-butyl ester,

25 [2-(3,4-dihydro-1H-pyrazino[1,2-a]indol-2-yl)-1-(4-hydroxy-benzyl)-2-oxo-ethyl]-methyl-carbamic acid tert-butyl ester,

[2-(8-fluoro-3,4-dihydro-1H-pyrazino[1,2-a]indol-2-yl)-1-(4-hydroxy-benzyl)-2-oxo-ethyl]-methyl-carbamic acid tert-butyl ester,

30 3-(2-[(trifluoroacetamido)acetyl]-1,2,3,4-tetrahydropyrazino[1,2-a]indol-10-yl)-4-(1-methyl-3-indolyl)-1H-pyrrole-2,5-dione,

3-[2-(aminoacetyl)-1,2,3,4-tetrahydropyrazino[1,2-a]indol-10-yl]-4-(1-methyl-3-indolyl)-1H-pyrrole-2,5-dione hydrochloride,

8-chloro-2-(diethylaminoacetyl)-1,2,3,4-tetrahydro-10-phenylpyrazino[1,2-a]indole,

35 4-(dimethylamino)-1-(10-phenyl-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)butan-1-one, and

3-morpholino-1-(10-phenyl-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one.

2. The compound according to claim 1, wherein R₁ represents one or more optional and independent substitutions in the benzene moiety selected from the group consisting of substituted or unsubstituted alkyl and halogen.
- 5 3. The compound according to any one of claims 1 to 2, wherein m is selected from 0, 1 and 2 and/or n is selected from 0, 1 and 2.
- 10 4. The compound according to any one of claims 1 to 3, wherein R₂ and R₃ are independently selected from the group consisting of hydrogen, substituted or unsubstituted alkyl and substituted or unsubstituted cycloalkyl, or R₂ and R₃ together form a substituted or unsubstituted cycloalkyl or a substituted or unsubstituted heterocyclyl.
- 15 5. The compound according to any one of claims 1 to 4, wherein R₄ and R₅ are independently selected from the group consisting of hydrogen, substituted or unsubstituted alkyl, and substituted or unsubstituted cycloalkyl, or R₄ and R₅ together with the bridging nitrogen atom form a substituted or unsubstituted heterocyclyl.
- 20 6. The compound according to any one of claims 1 to 5, wherein R₆ is selected from the group consisting of hydrogen and substituted or unsubstituted alkyl.
7. A compound according to any one of claims 1 to 6, which is selected from:
- 25 [1] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)propan-1-one
- [2] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-methyl-2-(4-methylpiperazin-1-yl)propan-1-one
- [3] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-3-(4-methylpiperazin-1-yl)butan-1-one
- 30 [4] 2-(azepan-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)ethanone hydrochloride
- [5] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(piperidin-1-yl)ethanone hydrochloride
- 35 [6] 2-(4-benzylpiperidin-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)ethanone hydrochloride
- [7] 2-(azepan-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [8] 2-(azepan-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one maleate
- [9] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(piperidin-1-yl)propan-1-one

- [10] 2-(4-benzylpiperidin-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [11] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-4-(dimethylamino)butan-1-one
- 5 [12] 2-(azepan-1-yl)-1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)ethanone
- [13] 2-(azepan-1-yl)-1-(8-methyl-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [14] 1-(10-methyl-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(piperidin-1-yl)ethanone
- 10 [15] 2-(4-benzylpiperidin-1-yl)-1-(10-methyl-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)ethanone
- [16] 1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-4-(piperidin-1-yl)butan-1-one
- 15 [17] 3-(azepan-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [18] (R)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)propan-1-one
- [19] (S)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)propan-1-one
- 20 [20] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-4-(piperidin-1-yl)butan-1-one
- [21] 4-(azepan-1-yl)-1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)butan-1-one
- [22] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-4-(4-methylpiperazin-1-yl)butan-1-one
- 25 [23] 1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-4-(4-methylpiperazin-1-yl)butan-1-one
- [24] 2-(4-cyclohexylpiperazin-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- 30 [25] 2-(4-methylpiperazin-1-yl)-1-(3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [26] 1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)propan-1-one
- [27] 2-(4-cyclohexylpiperazin-1-yl)-1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- 35 [28] 1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methyl-1,4-diazepan-1-yl)propan-1-one
- [29] 2-(4-ethylpiperazin-1-yl)-1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one

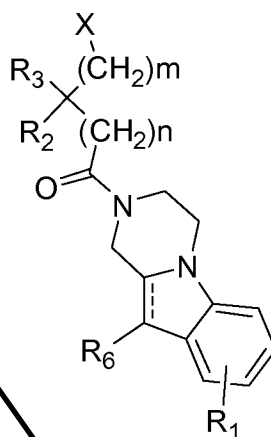
- [30] 2-(2-(diethylamino)ethylamino)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [31] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(1,4-oxazepan-4-yl)propan-1-one
- 5 [32] (R)-2-(4-methylpiperazin-1-yl)-1-((S)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [33] (S)-2-(4-methylpiperazin-1-yl)-1-((R)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- 10 [34] (S)-2-(4-methylpiperazin-1-yl)-1-((S)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [35] (R)-2-(4-methylpiperazin-1-yl)-1-((R)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [36] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-(tetrahydro-2H-pyran-4-yl)piperazin-1-yl)propan-1-one
- 15 [37] 2-(1,4'-bipiperidin-1'-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [38] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)butan-1-one
- 20 [39] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-((2-(dimethylamino)ethyl)(methyl)amino)butan-1-one
- [40] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-((2-(dimethylamino)ethyl)(methyl)amino)propan-1-one
- [41] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-methyl-3-(4-methylpiperazin-1-yl)propan-1-one
- 25 [42] 4-(4-methylpiperazin-1-yl)-1-(3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)butan-1-one
- [43] 4-(dimethylamino)-1-(3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)butan-1-one
- 30 [44] 2-methyl-2-(4-methylpiperazin-1-yl)-1-(3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [45] (R)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)butan-1-one
- [46] (S)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)butan-1-one
- 35 [47] (R)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-methyl-3-(4-methylpiperazin-1-yl)propan-1-one
- [48] (S)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-methyl-3-(4-methylpiperazin-1-yl)propan-1-one

- [49] (S)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-3-(4-methylpiperazin-1-yl)butan-1-one
- [50] (R)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-3-(4-methylpiperazin-1-yl)butan-1-one
- 5 [51] (R)-2-(4-cyclohexylpiperazin-1-yl)-1-((S)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [52] (S)-2-(4-cyclohexylpiperazin-1-yl)-1-((R)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- 10 [53] (S)-2-(4-cyclohexylpiperazin-1-yl)-1-((S)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [54] (R)-2-(4-cyclohexylpiperazin-1-yl)-1-((R)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [55] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-morpholinoethanone hydrochloride
- 15 [56] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)ethanone hydrochloride
- [57] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(dimethylamino)propan-1-one
- [58] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(dimethylamino)propan-1-one maleate
- 20 [59] 2-(4-acetylpiperazin-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [60] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-((3S,5R)-3,5-dimethylpiperazin-1-yl)propan-1-one
- 25 [61] (3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)(1-(piperidin-1-yl)cyclopropyl)methanone
- [62] (8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)(1-(piperidin-1-yl)cyclopropyl)methanone
- [63] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(9-methyl-3,9-diazaspiro[5.5]undecan-3-yl)propan-1-one
- 30 [64] (3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)(1-(4-methylpiperazin-1-yl)cyclopentyl)methanone
- [65] (1-(4-methylpiperazin-1-yl)cyclopentyl)(3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)methanone
- 35 [66] 2-(piperazin-1-yl)-1-(3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [67] 2-(4-acetylpiperazin-1-yl)-1-(3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one

[68] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-((3aR,6aS)-5-methylhexahydropyrrolo[3,4-c]pyrrol-2(1H)-yl)butan-1-one
or a pharmaceutically acceptable salt or solvate thereof.

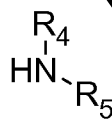
- 5 8. A process for the preparation of a compound of formula general (I) as defined in claim 1, or a pharmaceutically acceptable salt, enantiomer, diastereomer, racemate or solvate thereof, the process being selected from:

a) a process comprising the reaction between a compound of general formula (II)



(II)

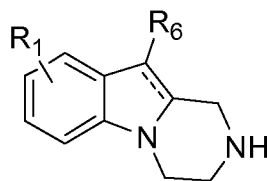
10 where m, n, --- , R₁, R₂, R₃ and R₆ have the meanings as in general formula (I) and X is a suitable leaving group,
with a compound of general formula (III)



(III)

15 where R₄, R₅ have the meanings as in general formula (I);

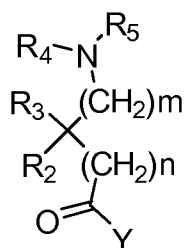
b) a process comprising the reaction between a compound of general formula (IV):



(IV)

20 where --- , R₁ and R₆ have the meanings as in general formula (I), with a compound of general formula (VI)

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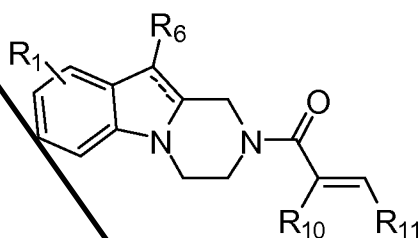


(VI)

where m, n, R₂, R₃, R₄ and R₅ have the meanings as in general formula (I) and Y is OH or a suitable leaving group;

or

c) a process comprising the reaction between a compound of general formula (VII)

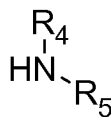


(VII)

where --- , R₁ and R₆ have the meaning as in general formula (I) and

R₁₀ and R₁₁ are independently selected from the group consisting of hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted cycloalkylalkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted aryl, substituted or unsubstituted arylalkyl, substituted or unsubstituted heterocyclyl, and substituted or unsubstituted heterocyclalkyl;

with a compound of formula general (III)



(III)

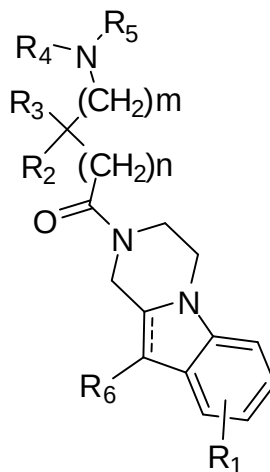
where R₄ and R₅ have the meanings as in general formula (I).

9. A pharmaceutical composition comprising at least one compound of general formula (I) as defined in claim 1, or a pharmaceutically acceptable salt, enantiomer, diastereomer, racemate or solvate thereof and a pharmaceutically acceptable excipient.

10. A compound of general formula (I) as defined in claim 1, or a pharmaceutically acceptable salt, enantiomer, diastereomer, racemate or solvate thereof, for use as a medicament.
- 5 11. The compound for use according to claim 10, wherein the medicament is for the treatment and/or prophylaxis of a sigma receptor-mediated disease or condition.
- 10 12. The compound for use according to claim 11, wherein the sigma receptor-mediated disease or condition is selected from pain; diarrhoea; lipoprotein disorders; hyperlipidemia; hypertriglyceridemia; hypercholesterolemia; obesity; migraine; arthritis; hypertension; arrhythmia; ulcer; glaucoma; learning, memory and attention deficits; cognition disorders; neurodegenerative diseases; demyelinating diseases; addiction to drugs and chemical substances including cocaine, amphetamine, ethanol and nicotine; tardive dyskinesia; stroke including ischemic stroke; epilepsy; 15 stress; cancer; psychotic conditions, in particular depression, anxiety or schizophrenia; inflammation and autoimmune diseases.
- 20 13. The compound for use according to claim 12, wherein the pain is selected from neuropathic pain, inflammatory pain or other pain conditions involving allodynia and/or hyperalgesia.

CLAIMS

1. A compound of general formula (I), or a pharmaceutically acceptable salt, enantiomer, diastereomer, racemate or solvate thereof:



(I)

wherein

m is selected from 0, 1, 2, 3 and 4;

n is selected from 0, 1, 2, 3 and 4;

----- represents a single or double bond;

R₁ represents one or more optional and independent substitutions in the benzene moiety selected from the group consisting of substituted or unsubstituted alkyl and halogen;

R₂ and **R₃** are independently selected from the group consisting of hydrogen, substituted or unsubstituted alkyl and substituted or unsubstituted cycloalkyl;

or **R₂** and **R₃** together form a substituted or unsubstituted cycloalkyl or a substituted or unsubstituted heterocyclyl;

R₄ and **R₅** are independently selected from the group consisting of hydrogen, substituted or unsubstituted alkyl, and substituted or unsubstituted cycloalkyl;

or **R₄** and **R₅** together with the bridging nitrogen atom form a substituted or unsubstituted heterocyclyl;

R₆ is selected from the group consisting of hydrogen and substituted or unsubstituted alkyl;

with the proviso that the following compounds are not included:

2-(2-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-oxoethyl)isoindoline-1,3-dione,

2-(2-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-oxopropyl)isoindoline-1,3-dione, and

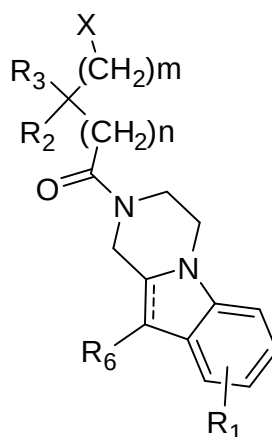
2-(2-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-oxobutyl)isoindoline-1,3-dione.

2. The compound according to claim 1, wherein m is selected from 0, 1 and 2 and/or n is selected from 0, 1 and 2.
- 5 3. A compound according to any one of claims 1 to 2, which is selected from:
 - [1] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)propan-1-one
 - [2] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-methyl-2-(4-methylpiperazin-1-yl)propan-1-one
 - 10 [3] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-3-(4-methylpiperazin-1-yl)butan-1-one
 - [4] 2-(azepan-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)ethanone hydrochloride
 - [5] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(piperidin-1-yl)ethanone hydrochloride
 - 15 [6] 2-(4-benzylpiperidin-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)ethanone hydrochloride
 - [7] 2-(azepan-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
 - [8] 2-(azepan-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one maleate
 - 20 [9] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(piperidin-1-yl)propan-1-one
 - [10] 2-(4-benzylpiperidin-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
 - [11] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-4-(dimethylamino)butan-1-one
 - 25 [12] 2-(azepan-1-yl)-1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)ethanone
 - [13] 2-(azepan-1-yl)-1-(8-methyl-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
 - 30 [14] 1-(10-methyl-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(piperidin-1-yl)ethanone
 - [15] 2-(4-benzylpiperidin-1-yl)-1-(10-methyl-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)ethanone
 - [16] 1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-4-(piperidin-1-yl)butan-1-one
 - 35 [17] 3-(azepan-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one

- [18] (R)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)propan-1-one
- [19] (S)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)propan-1-one
- 5 [20] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-4-(piperidin-1-yl)butan-1-one
- [21] 4-(azepan-1-yl)-1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)butan-1-one
- [22] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-4-(4-methylpiperazin-1-yl)butan-1-one
- 10 [23] 1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-4-(4-methylpiperazin-1-yl)butan-1-one
- [24] 2-(4-cyclohexylpiperazin-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [25] 2-(4-methylpiperazin-1-yl)-1-(3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- 15 [26] 1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)propan-1-one
- [27] 2-(4-cyclohexylpiperazin-1-yl)-1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- 20 [28] 1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methyl-1,4-diazepan-1-yl)propan-1-one
- [29] 2-(4-ethylpiperazin-1-yl)-1-(8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [30] 2-(2-(diethylamino)ethylamino)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- 25 [31] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(1,4-oxazepan-4-yl)propan-1-one
- [32] (R)-2-(4-methylpiperazin-1-yl)-1-((S)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- 30 [33] (S)-2-(4-methylpiperazin-1-yl)-1-((R)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [34] (S)-2-(4-methylpiperazin-1-yl)-1-((S)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [35] (R)-2-(4-methylpiperazin-1-yl)-1-((R)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- 35 [36] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-(tetrahydro-2H-pyran-4-yl)piperazin-1-yl)propan-1-one

- [37] 2-(1,4'-bipiperidin-1'-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [38] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)butan-1-one
- 5 [39] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-((2-(dimethylamino)ethyl)(methyl)amino)butan-1-one
- [40] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-((2-(dimethylamino)ethyl)(methyl)amino)propan-1-one
- 10 [41] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-methyl-3-(4-methylpiperazin-1-yl)propan-1-one
- [42] 4-(4-methylpiperazin-1-yl)-1-(3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)butan-1-one
- [43] 4-(dimethylamino)-1-(3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)butan-1-one
- 15 [44] 2-methyl-2-(4-methylpiperazin-1-yl)-1-(3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [45] (R)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)butan-1-one
- 20 [46] (S)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)butan-1-one
- [47] (R)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-methyl-3-(4-methylpiperazin-1-yl)propan-1-one
- [48] (S)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-methyl-3-(4-methylpiperazin-1-yl)propan-1-one
- 25 [49] (S)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-3-(4-methylpiperazin-1-yl)butan-1-one
- [50] (R)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-3-(4-methylpiperazin-1-yl)butan-1-one
- 30 [51] (R)-2-(4-cyclohexylpiperazin-1-yl)-1-((S)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [52] (S)-2-(4-cyclohexylpiperazin-1-yl)-1-((R)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [53] (S)-2-(4-cyclohexylpiperazin-1-yl)-1-((S)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- 35 [54] (R)-2-(4-cyclohexylpiperazin-1-yl)-1-((R)-3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [55] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-morpholinoethanone hydrochloride

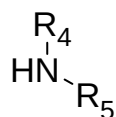
- [56] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(4-methylpiperazin-1-yl)ethanone hydrochloride
- [57] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(dimethylamino)propan-1-one
- 5 [58] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(dimethylamino)propan-1-one maleate
- [59] 2-(4-acetylpiperazin-1-yl)-1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- 10 [60] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-((3S,5R)-3,5-dimethylpiperazin-1-yl)propan-1-one
- [61] (3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)(1-(piperidin-1-yl)cyclopropyl)methanone
- [62] (8-fluoro-3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)(1-(piperidin-1-yl)cyclopropyl)methanone
- 15 [63] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-(9-methyl-3,9-diazaspiro[5.5]undecan-3-yl)propan-1-one
- [64] (3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)(1-(4-methylpiperazin-1-yl)cyclopentyl)methanone
- 20 [65] (1-(4-methylpiperazin-1-yl)cyclopentyl)(3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)methanone
- [66] 2-(piperazin-1-yl)-1-(3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- [67] 2-(4-acetylpiperazin-1-yl)-1-(3,4,10,10a-tetrahydropyrazino[1,2-a]indol-2(1H)-yl)propan-1-one
- 25 [68] 1-(3,4-dihydropyrazino[1,2-a]indol-2(1H)-yl)-2-((3aR,6aS)-5-methylhexahydropyrrolo[3,4-c]pyrrol-2(1H)-yl)butan-1-one
- or a pharmaceutically acceptable salt or solvate thereof.
4. A process for the preparation of a compound of formula general (I) as defined in claim 1, or a pharmaceutically acceptable salt, enantiomer, diastereomer, racemate or solvate thereof, the process being selected from:
- 30 a) a process comprising the reaction between a compound of general formula (II)



(II)

where m , n , ----- , R_1 , R_2 , R_3 and R_6 have the meanings as in general formula (I) and X is a suitable leaving group,

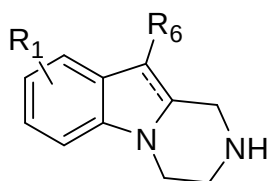
5 with a compound of general formula (III)



(III)

where R_4 , R_5 have the meanings as in general formula (I);

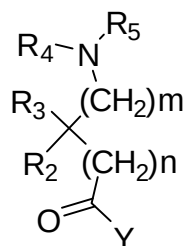
10 b) a process comprising the reaction between a compound of general formula (IV):



(IV)

where ----- , R_1 and R_6 have the meanings as in general formula (I), with a

15 compound of general formula (VI)

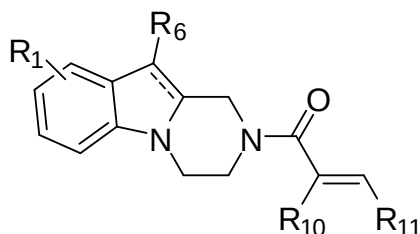


(VI)

where m, n, R₂, R₃, R₄ and R₅ have the meanings as in general formula (I) and Y is OH or a suitable leaving group;

or

c) a process comprising the reaction between a compound of general formula (VII)

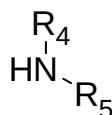


(VII)

where ----- , R₁ and R₆ have the meaning as in general formula (I) and

R₁₀ and R₁₁ are independently selected from the group consisting of hydrogen, substituted or unsubstituted alkyl and substituted or unsubstituted cycloalkyl,;

with a compound of formula general (III)



(III)

where R₄ and R₅ have the meanings as in general formula (I).

5. A pharmaceutical composition comprising at least one compound of general formula (I) as defined in claim 1, or a pharmaceutically acceptable salt, enantiomer, diastereomer, racemate or solvate thereof and a pharmaceutically acceptable excipient.
6. A compound of general formula (I) as defined in claim 1, or a pharmaceutically acceptable salt, enantiomer, diastereomer, racemate or solvate thereof, for use as a medicament.
7. The compound for use according to claim 6, wherein the medicament is for the treatment and/or prophylaxis of a sigma receptor-mediated disease or condition selected from pain; diarrhea; lipoprotein disorders; hyperlipidemia; hypertriglyceridemia; hypercholesterolemia; obesity; migraine; arthritis; hypertension; arrhythmia; ulcer; glaucoma; learning, memory and attention deficits; cognition disorders; neurodegenerative diseases; demyelinating diseases; addiction to drugs and chemical substances including cocaine, amphetamine, ethanol and nicotine; tardive dyskinesia; stroke including ischemic stroke; epilepsy;

stress; cancer; psychotic conditions, in particular depression, anxiety or schizophrenia; inflammation and autoimmune diseases.

- 5 8. The compound for use according to claim 7, wherein the pain is selected from neuropathic pain, inflammatory pain or other pain conditions involving allodynia and/or hyperalgesia.