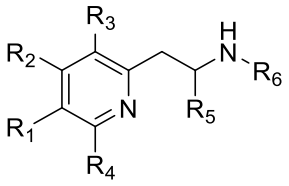
WHAT IS CLAIMED IS:

1. A compound of the structure:



or a pharmaceutically acceptable salt thereof, wherein

R_1 is hydrogen, C_1-C_8 alkyl, C_2-C_8 alkenyl, C_2-C_8 alkynyl, C_3-C_{10} cycloalkyl, 3- to 6-membered heterocyclyl, C_3-C_{10} cycloalkyl C_1-C_8 alkyl, 3- to 6-membered heterocyclyl C_1-C_8 alkyl, -OR_7, -SR_7, halo, -CF_3, -SF_5, -OCF_3, -CN, -NO_2, -NR_8R_9, aryl, heteroaryl, aryl C_1-C_8 alkyl, or heteroaryl C_1-C_8 alkyl;

R_2 is hydrogen, C_1-C_8 alkyl, C_2-C_8 alkenyl, C_2-C_8 alkynyl, C_3-C_{10} cycloalkyl, C_3-C_{10} cycloalkyl C_1-C_3 alkyl, -OR_{10}, -SR_{10}, halo, -CF_3, -SF_5, -OCF_3, -CN, -NO_2, or -$NR_{11}R_{12}$;

R_3 is hydrogen, C_1-C_8 alkyl, C_2-C_8 alkenyl, C_2-C_8 alkynyl, C_3-C_{10} cycloalkyl, C_3-C_{10} cycloalkyl C_1-C_8 alkyl, -OR_{13}, -SR_{13}, halo, -CF_3, -SF_5, -OCF_3, -CN, -NO_2, -$NR_{14}R_{15}$, -$C(O)R_{16}$, -$C(O)OR_{16}$, -O-$C(O)R_{16}$, or -$C(O)NR_{17}R_{18}$;

R_4 is hydrogen, C_1-C_8 alkyl, C_2-C_8 alkenyl, C_2-C_8 alkynyl, C_3-C_{10} cycloalkyl, C_3-C_{10} cycloalkyl C_1-C_8 alkyl, -OR_{19}, -SR_{19}, halo, -CF_3, -SF_5, -OCF_3, -CN, -NO_2, -$NR_{20}R_{21}$, -$C(O)R_{22}$, -$C(O)OR_{22}$, -O-$C(O)R_{22}$, or -$C(O)NR_{23}R_{24}$;

R_5 is hydrogen, C_1-C_3 alkyl, C_2-C_3 alkenyl, C_2-C_3 alkynyl, C_1-C_3 alkoxy, cyclopropyl, or cyclopropylmethyl; and

R_6 is hydrogen or benzyl, wherein the phenyl ring of benzyl is optionally substituted with 1-5 instances of R_{6a} and each R_{6a} is independently selected for each occurrence from the group

consisting of hydroxyl, C_1-C_5 alkyl, C_2-C_5 alkenyl, C_2-C_5 alkynyl, C_3-C_{10} cycloalkyl, C_3-C_{10} cycloalkyl C_1-C_8 alkyl, halo, -CF_3, -SF_5, -OCF_3, -OR_{25}, -SR_{25}, -CN, -NO_2, -$NR_{26}R_{27}$, -$C(O)R_{28}$, -$C(O)OR_{28}$, -O-$C(O)R_{28}$, and -$C(O)NR_{29}R_{30}$, or wherein any two adjacent R_{6a} can be taken together with the atoms on which they are attached to form a C_4-C_6 cycloalkyl or 4- to 6-membered heterocyclyl;

wherein

R_7 is hydrogen, C_1-C_8 alkyl, C_2-C_8 alkenyl, C_2-C_8 alkynyl, C_3-C_{10} cycloalkyl, 3- to 6-membered heterocyclyl, C_3-C_{10} cycloalkyl C_1-C_8 alkyl, 3- to 6-membered heterocyclyl C_1-C_8 alkyl, aryl, heteroaryl, aryl C_1-C_8 alkyl, or heteroaryl C_1-C_8 alkyl;

R_8 and R_9 are independently hydrogen, C_1-C_8 alkyl, C_2-C_8 alkenyl, C_2-C_8 alkynyl, C_3-C_{10} cycloalkyl, 3- to 6-membered heterocyclyl, C_3-C_{10} cycloalkyl C_1-C_8 alkyl, 3- to 6-membered heterocyclyl C_1-C_8 alkyl, aryl, heteroaryl, aryl C_1-C_8 alkyl, or heteroaryl C_1-C_8 alkyl;

R_{10}, R_{11}, R_{12}, R_{13}, R_{14}, R_{15}, R_{16}, R_{17}, R_{18}, R_{19}, R_{20}, R_{21}, R_{22}, R_{23}, R_{24}, R_{25}, R_{26}, R_{27}, R_{28}, R_{29}, and R_{30} are independently hydrogen, C_1-C_5 alkyl, C_2-C_5 alkenyl, C_2-C_5 alkynyl, C_3-C_6 cycloalkyl, 3- to 6-membered heterocyclyl, C_3-C_6 cycloalkyl C_1-C_5 alkyl, or 3- to 6-membered heterocyclyl C_1-C_5 alkyl;

aryl is a monocyclic or bicyclic aromatic ring containing 6 or 10 ring carbon atoms;

heteroaryl is a 5- to 10-membered ring, which is either monocyclic or bicyclic, containing 1, 2, 3, or 4 ring heteroatoms and 2 to 9 ring carbon atoms;

aryl and heteroaryl groups may be unsubstituted or substituted with one or more substituents independently selected from hydroxyl, C_1-C_5 alkyl, C_2-C_5 alkenyl, C_2-C_5 alkynyl, C_3-C_6 cycloalkyl, C_1-C_5 alkoxy, halo, -CF_3, -CN, -NO_2, -NH_2, aryl, 3- to 6-membered heterocyclyl,

heteroaryl, C_3-C_6 cycloalkyl C_1-C_3 alkyl, aryl C_1-C_3 alkyl, 3- to 6-membered heterocyclyl C_1-C_3 alkyl, and heteroaryl C_1-C_3 alkyl;

cycloalkyl and heterocyclyl groups may be unsubstituted or substituted with one or more substituents independently selected from hydroxyl, C_1-C_5 alkyl, C_2-C_5 alkenyl, C_2-C_5 alkynyl, C_3-C_6 cycloalkyl, C_1-C_5 alkoxy, halo, -CF_3, -CN, -NO_2, -NH_2, aryl, 3- to 6-membered heterocyclyl, heteroaryl, C_3-C_6 cycloalkyl C_1-C_3 alkyl, aryl C_1-C_3 alkyl, 3- to 6-membered heterocyclyl C_1-C_3 alkyl, and heteroaryl C_1-C_3 alkyl; and

alkyl, alkenyl, and alkynyl groups may be unsubstituted or substituted with one or more substituents independently selected from hydroxyl, C_3-C_6 cycloalkyl. C_1-C_5 alkoxy, halo, -CF_3, -CN, -NO_2, -NH_2, aryl, 3- to 6-membered heterocyclyl, heteroaryl, C_3-C_6 cycloalkyl C_1-C_3 alkyl, aryl C_1-C_3 alkyl, 3- to 6-membered heterocyclyl C_1-C_3 alkyl, and heteroaryl C_1-C_3 alkyl;

or a pharmaceutically acceptable salt thereof.

2. The compound according to claim 1, wherein heteroaryl and aryl groups may be unsubstituted or substituted with one or more substituents independently selected from the group consisting of hydroxyl, C_1-C_5 alkyl, C_2-C_5 alkenyl, C_2-C_5 alkynyl, C_3-C_5 cycloalkyl, C_1-C_5 alkoxy, halo, -CF_3, -CN, -NH_2, and -NO_2;

alkyl, alkenyl, and alkynyl groups may be unsubstituted or substituted with one or more substituents independently selected from the group consisting of fluoro, C_3-C_5 cycloalkyl, hydroxyl, and C_1-C_5 alkoxy; and

cycloalkyl and 3-6 membered heterocyclyl may be unsubstituted or substituted with one or more substituents independently selected from the group consisting of fluoro, C_1-C_5 alkyl, hydroxyl, and C_1-C_5 alkoxy.

3. The compound according to claim 1 or 2, wherein

R_2 is hydrogen, hydroxyl, C_1-C_3 alkyl, halo, -CF_3, -SF_5, -OCF_3, -CN, -NO_2, -NH_2, -NH(C_1-C_3 alkyl), -N(C_1-C_3 alkyl)$_2$, C_1-C_3 alkoxy, or -S(C_1-C_3 alkyl);

R_3 is hydrogen, hydroxyl, -OR_{13}, -SR_{13}, -C(O)NH_2, or -O-C(O)R_{16};

R_4 is hydroxyl, -OR_{19}, -SR_{19}, -C(O)NH_2, or -O-C(O)R_{22};

R_5 is hydrogen or C_1-C_2 alkyl; and

R_6 is hydrogen or benzyl, wherein the phenyl ring of benzyl is optionally substituted with 1-5 instances of R_{6a} and each R_{6a} is independently selected for each occurrence from the group consisting of hydroxyl, C_1-C_3 alkyl, C_2-C_3 alkenyl, C_2-C_3 alkynyl, C_3-C_5 cycloalkyl, halo, -CF_3, -SF_5, -OCF_3, C_1-C_3 alkoxy, -S(C_1-C_3 alkyl), -CN, -NO_2, -NH_2, -NH(C_1-C_3 alkyl), -N(C_1-C_3 alkyl)$_2$, -C(O)(C_1-C_3 alkyl), -C(O)O(C_1-C_3 alkyl), -O-C(O)(C_1-C_3 alkyl), -C(O)NH_2, -C(O)NH(C_1-C_3 alkyl), and -C(O)N(C_1-C_3 alkyl)$_2$, or wherein any two adjacent R_{6a} can be taken together with the atoms on which they are attached to form an optionally substituted 4-6-membered cycloalkyl or 4-6-membered heterocyclyl, wherein said heterocyclyl contains 1 or 2 ring heteroatoms selected from oxygen, nitrogen, and sulfur.

4. The compound according to any one of claims 1-3, wherein

R_1 is C_1-C_8 alkyl, C_2-C_8 alkenyl, C_2-C_8 alkynyl, C_3-C_8 cycloalkyl, C_3-C_6 cycloalkyl C_1-C_5 alkyl, -OR_7, -SR_7, halo, -CF_3, -SF_5, -OCF_3, -CN, -NO_2, or -NR_8R_9;

R_2 is hydrogen or C_1-C_3 alkoxy;

R_3 is hydrogen or C_1-C_3 alkoxy;

R_4 is C_1-C_3 alkoxy;

R_5 is hydrogen or C_1-C_2 alkyl;

R_6 is hydrogen or benzyl, wherein the phenyl ring of benzyl is optionally substituted with 1-5 instances of R_{6a} and each R_{6a} is independently selected for each occurrence from the group

consisting of hydroxyl, C_1-C_3 alkyl, halo, and C_1-C_3 alkoxy, or wherein any two adjacent R_{6a} can be taken together with the atoms on which they are attached to form an optionally substituted 4-5-membered cycloalkyl or 4-5-membered heterocyclyl; and

R_7, R_8, and R_9 are independently selected from the group consisting of hydrogen, C_1-C_8 alkyl, C_2-C_8 alkenyl, C_2-C_8 alkynyl, C_3-C_8 cycloalkyl, and C_3-C_6 cycloalkyl C_1-C_5 alkyl.

5. The compound according to any one of claims 1-4, wherein

R_1 is C_1-C_8 alkyl, -S(C_1-C_8 alkyl), halo, -CF_3, -SF_5, -OCF_3, -CN, -NO_2, -NH_2, -NH(C_1-C_4 alkyl), -N(C_1-C_4 alkyl)$_2$;

R_2 is hydrogen or methoxy;

R_3 is hydrogen or methoxy;

R_4 is methoxy;

R_5 is hydrogen or C_1-C_2 alkyl; and

R_6 is hydrogen or benzyl, wherein the phenyl ring of benzyl is optionally substituted with 1-5 instances of R_{6a} and each R_{6a} is independently selected for each occurrence from the group consisting of hydroxyl, halo, and methoxy, or wherein any two adjacent R_{6a} can be taken together with the atoms on which they are attached to form an optionally substituted 5-membered cycloalkyl or 5-membered heterocyclyl.

6. The compound according to any one of claims 1-5, wherein R_1 is C_1-C_8 alkyl, -S(C_1-C_8 alkyl), halo, or -CF_3.

7. The compound according to any one of claims 1-6, wherein

R_1 is C_1-C_8 alkyl, -S(C_1-C_8 alkyl), halo, -CF_3, or -SF_5;

R_2 is hydrogen or methoxy;

R_3 is hydrogen or methoxy;

R_4 is methoxy;

R_5 is hydrogen or C_1-C_2 alkyl; and

R_6 is hydrogen or benzyl, wherein the phenyl ring of benzyl is optionally substituted with 1-2 instances of R_{6a} and each R_{6a} is independently selected for each occurrence from the group consisting of hydroxyl, fluoro, and methoxy, or any two adjacent R_{6a} can be taken together with the atoms on which they are attached to form a methylenedioxy ring.

8. The compound according to any one of claims 1-7, wherein R_1 is C_1-C_6 alkyl, -S(C_1-C_6 alkyl), halo, or -CF_3.

9. The compound according to any one of claims 1-8, wherein R_2 is hydrogen.

10. The compound according to any one of claims 1-9, wherein R_3 and R_4 are methoxy.

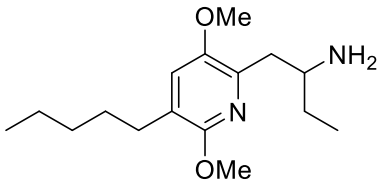
11. The compound according to any one of claims 1-10, wherein R_5 is hydrogen, methyl, or ethyl.

12. The compound according to any one of claims 1-11, wherein R_6 is hydrogen.

13. The compound according to any one of claims 1-11, wherein R_6 is benzyl, wherein the phenyl ring of benzyl is optionally substituted with 1-2 instances of R_{6a} and each R_{6a} is independently selected for each occurrence from the group consisting of hydroxyl, fluoro, and methoxy, or wherein any two adjacent R_{6a} can be taken together with the atoms on which they are attached to form a methylenedioxy ring.

14. The compound according to any one of claims 1-13, wherein all heteroaryl, aryl, alkyl, alkenyl, alkynyl, cycloalkyl, and heterocyclyl groups are unsubstituted.

15. The compound according to claim 1, wherein the compound has the structure:



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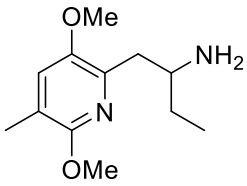

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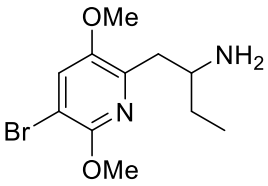

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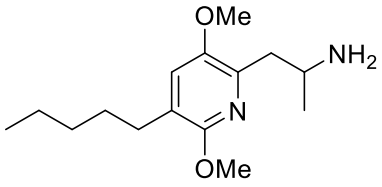

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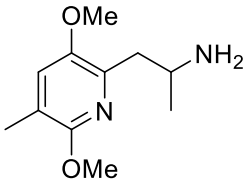

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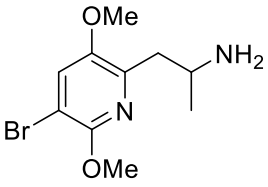

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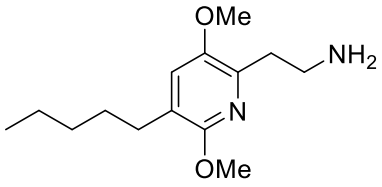

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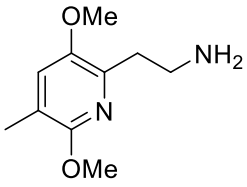

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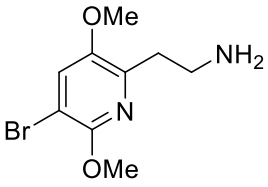

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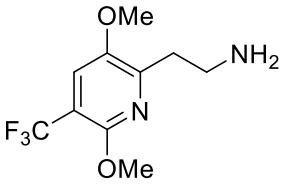

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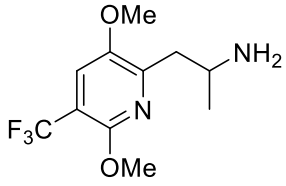

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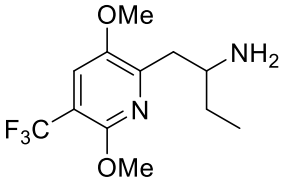

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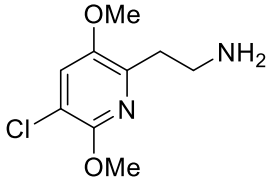

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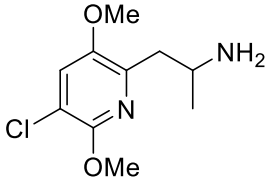

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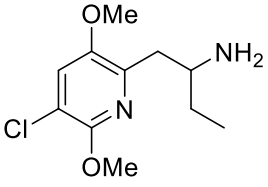

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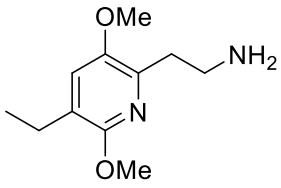

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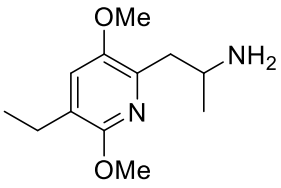

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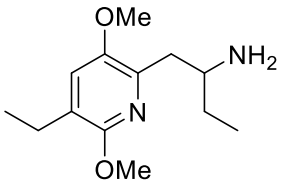

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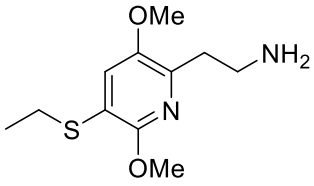

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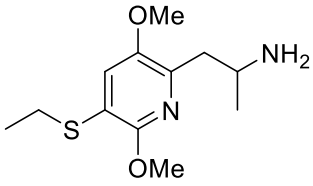

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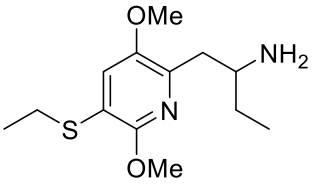

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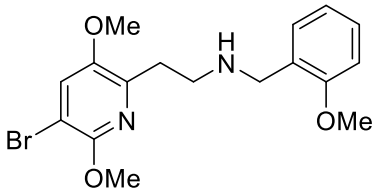

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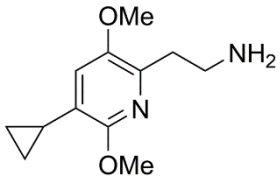

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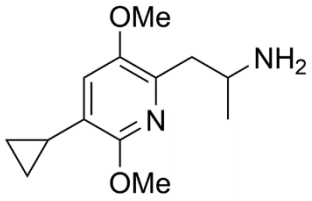

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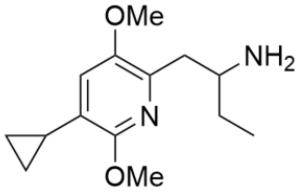

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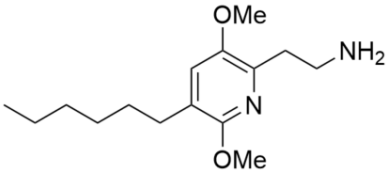

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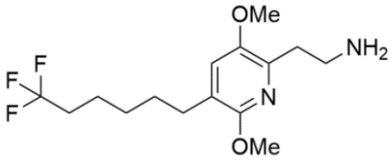

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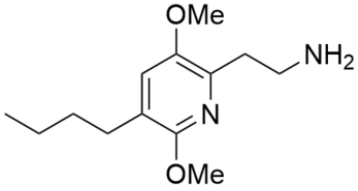

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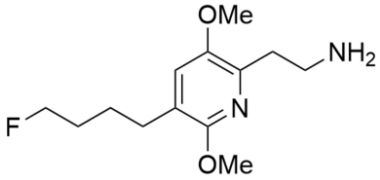

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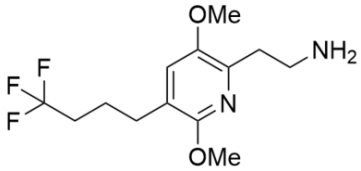

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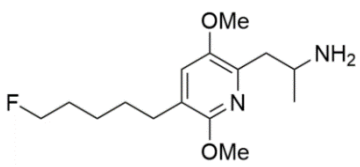
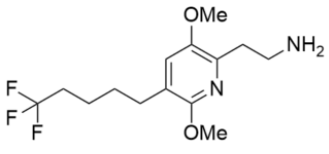
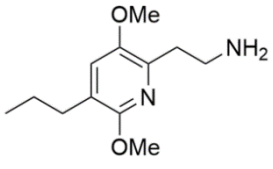
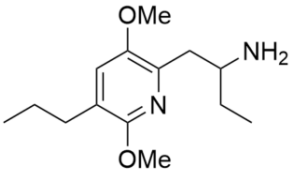
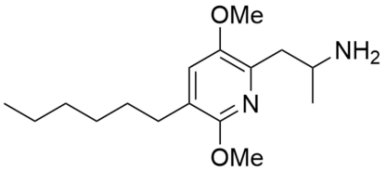


34, 

35, 

36, 

37, or 

38,

or a pharmaceutically acceptable salt thereof.

16. A pharmaceutical composition comprising a pharmaceutically effective amount of a compound according to any one of claims 1-15 and a pharmaceutically acceptable carrier thereof.

17. Use of the compound according to any one of claims 1-15 in the manufacture of a medicament for the treatment of a psychiatric disorder in a subject, wherein an effective amount of the medicament is to be administered to the subject.

18. The use of claim 17 wherein the psychiatric disorder is a depressive disorder, an anxiety disorder, or a substance use disorder and any symptom or disorder associated therewith.

19. A method of activating a 5-HT2A receptor in a cell comprising effecting the administration to said cell of an effective amount of a compound according to any one of claims 1-15.

20. Use of the compound to any one of claims 1-15 as a medicament.