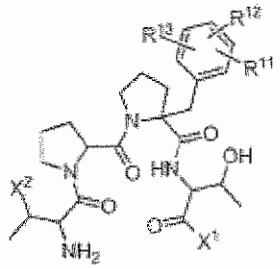
SUMMARY

[0008] Provided herein, at least in part, are compounds that are NMDA modulators, for example, partial agonists of NMDA. ~~For example, disclosed herein are~~In an aspect, a compounds is provided represented by the formula:



wherein

R^{11}, R^{12} and R^{13} are each independently selected from the group consisting of H, halogen, C_{1-3}alkoxy, and C_{1-3}alkyl (optionally substituted by one, two or three halogens);

X^1 is OH or NH_2,

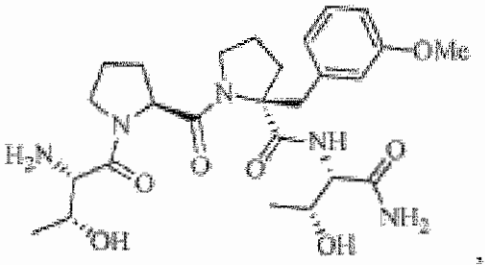
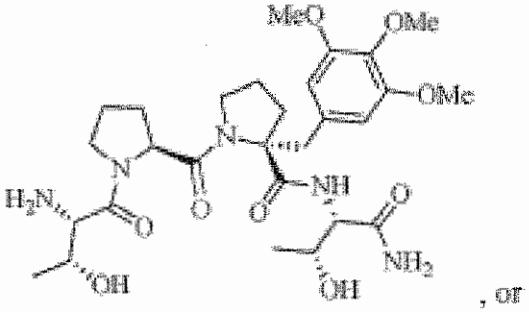
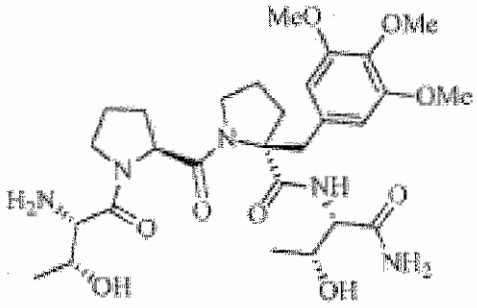
X^2 is H or OH;

and pharmaceutically acceptable salts, stereoisomers and hydrates thereof.

[0009] In some embodiments, a halogen of a contemplated compound may be independently selected from the group consisting of C1, Br, and F. In some instances, X^2 in the above structure may be OH and X^1 in the above structure may be NH^2.

[0010] In some cases, each of R^{11}, R^{12}, and R^{13} in the above structure may be H. Alternatively, R^{11} and R^{13} in the above structure may be H. R^{12} in the above structure may be selected from the group consisting of H, halogen, C_{1-3}alkoxy, and C_{1-3}alkyl (optionally substituted by one, two or three halogens). For example, R^{11} and R^{13} in the above structure may be H, and R^{12} in the above structure may be selected from the group consisting of F, Br, C1, CH_3, CF_3, and -OCH_3.

[0011] In certain embodiments, a contemplated compound may be substantially more efficacious when administered orally as compared to



, or

.

[0015] Also provided herein are pharmaceutically acceptable compositions comprising a disclosed compound, and a pharmaceutically acceptable excipient. In an aspect, there is provided a pharmaceutical composition, comprising: a therapeutically effective amount of a compound as disclosed herein and a pharmaceutically acceptable carrier. For example, such compositions may be suitable for oral administration to a patient. In other embodiments, such compositions may be suitable for injection.

[0016] In another ~~aspect~~embodiment, a method of treating depression, Alzheimer's disease, attention deficit disorder, ADHD, schizophrenia, or anxiety, in a patient in need thereof, is provided comprising administering, e.g., orally, intravenously, or subcutaneously, to said patient a pharmaceutically effective amount of a contemplated compound. In another aspect, there is provided in the use of a compound as disclosed herein in the manufacture of a medicament for treating depression, Alzheimer's disease, attention deficit disorder, ADHD, schizophrenia, or anxiety. In another aspect, there is provided the use of a compound as disclosed herein in the manufacture of a medicament for treating depression, Alzheimer's disease, attention deficit disorder, ADHD, schizophrenia, or anxiety, wherein the medicament is to be administered orally. In another aspect, there is provided the use of a compound as disclosed herein in the manufacture of a medicament for treating depression, Alzheimer's disease, attention deficit disorder, ADHD, schizophrenia, or anxiety, wherein the medicament is to be administered subcutaneously or intravenously.

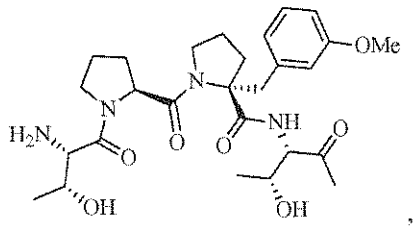
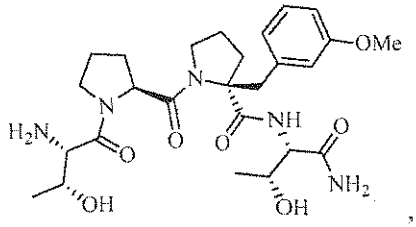
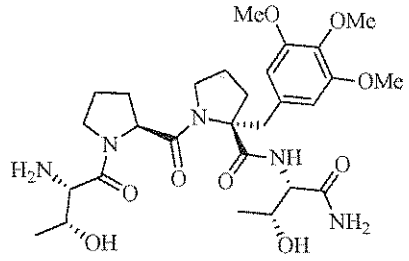
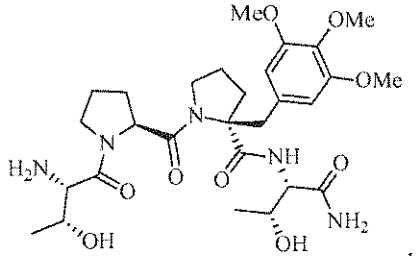
BRIEF DESCRIPTION OF THE FIGURES

[0017] FIG. 1 shows a plot of plasma concentration of CM-4A as a function of post-dosing time.

[0018] FIG. 2 shows dose-dependent plots of a [3H] MK-801 binding assay for assessing agonistic properties of contemplated compounds.

[0019] FIG. 3 shows dose-dependent plots of a [3H] MK-801 binding assay for assessing agonistic properties of contemplated compounds.

[0020] FIG. 4 shows a dose-dependent plot of a [3H] MK-801 binding assay for assessing agonistic properties of a contemplated compound.

12. A pharmaceutical composition, comprising:

a therapeutically effective amount of a compound of any one of claims 1-11 and a pharmaceutically acceptable carrier.

13. The pharmaceutical composition of claim 11, suitable for injection.

14. ~~A method of treating depression, Alzheimer's disease, attention deficit disorder, ADHD, schizophrenia, or anxiety, in a patient in need thereof, comprising administering to said patient:~~

~~a pharmaceutically effective amount~~Use of a compound of any one of claims 1-12 in the manufacture of a medicament for treating depression, Alzheimer's disease, attention deficit disorder, ADHD, schizophrenia, or anxiety.

15. ~~A method of treating depression, Alzheimer's disease, attention deficit disorder, ADHD, schizophrenia, or anxiety, in a patient in need thereof, comprising orally administering to said patient a pharmaceutically effective amount~~Use of a compound of any one of claims 1-6 in the manufacture of a medicament for treating depression, Alzheimer's disease, attention deficit disorder, ADHD, schizophrenia, or anxiety, wherein the medicament is to be administered orally.

16. ~~A method of treating depression, Alzheimer's disease, attention deficit disorder, ADHD, schizophrenia, or anxiety, in a patient in need thereof, comprising administering subcutaneously or intravenously to said patient a pharmaceutically effective amount~~Use of a compound of any one of claims 8-11in the manufacture of a medicament for treating depression, Alzheimer's disease, attention deficit disorder, ADHD, schizophrenia, or anxiety, wherein the medicament is to be administered subcutaneously or intravenously.