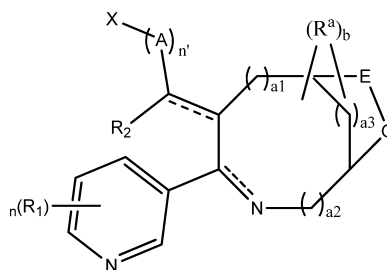
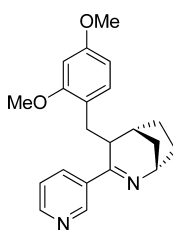
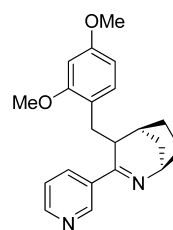
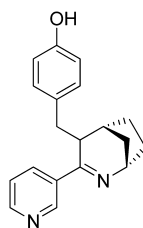
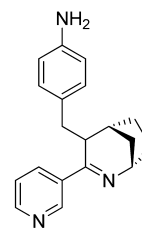


Anabaseine Analogues as Modulators of Nicotinic Acetylcholine Receptor

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Title:	Anabaseine Analogues as Modulators of Nicotinic Acetylcholine Receptor		
Patent/Patent Application Number:	WO 2013/090260 A1	Publication date:	June 20, 2013
Priority Application:	US 2011-569539P	Priority date:	December 12, 2011
Inventors:	Kem, W. R.; Soti, F.; Xing, H.		
Assignee Company:	University of Florida Research Foundation, USA		
Disease Area:	Nervous system diseases or disorders, inflammation, cancer	Biological Target:	Nicotinic Acetylcholine Receptor $\alpha 7$ ($\alpha 7$ nAChR)
Summary:	The patent application claims anabaseine derivatives as modulators of nicotinic acetylcholine receptor for the treatment of a variety of diseases including schizophrenia, Alzheimer's disease, Parkinson's disease, substance addiction, inflammation, and cancer		

Important Compound Classes:**Key Structures:****Compound 12****Compound 13****Compound 14****Compound 16****Received:** July 16, 2013**Published:** August 20, 2013

Recent Review Articles:

Wallace, T. L.; Bertrand, D. Alpha7 neuronal nicotinic receptors as a drug target in schizophrenia. *Expert Opin. Ther. Targets* **2013**, *17* (2), 139–155.

Biological Assays:

Binding affinities for the rat $\alpha 7$ nAChR and the rat $\alpha 4\beta 2$ nAChR were determined using a ligand displacement assay.

Pharmacological Data:

Ligand displacement assay data for rat brain nAChRs

Compound	Rat K_i $\alpha 7$ nAChR (nM)	Rat K_i $\alpha 4\beta 2$ nAChR (nM)
12	16.4	219
13	4400	347
14	34.1	72.5
16	3.43	34.1

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Notes

The authors declare no competing financial interest.