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Patent Highlight

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Novel Pyrroles as Nicotinic Acetylcholine Receptor Modulators

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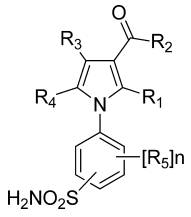
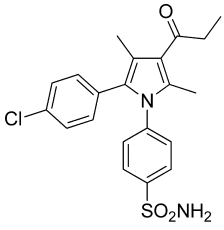
Title:	Novel Pyrroles as Nicotinic Acetylcholine Receptor Modulators		
Patent/Patent Application Number:	WO 2012131576 A1	**Publication Date:**	October 4, 2012
Priority Application:	IN 2011-KO458	**Priority Date:**	March 31, 2011
Inventors:	Sinha, N.; Jana, G.; Tilekar, A. R.; Karche, N. P.; Palle, V. P.; Kamboj, R. K.		
Assignee Company:	Lupin Limited, India		
Disease Area:	Neurodegenerative Disease	**Biological Target:**	Nicotinic Acetylcholine Receptor α7 Subunit (α7 nAChR)

Summary: The patent application claims pyrrole derivatives as modulators of the nicotinic acetylcholine receptor for the treatment of neurodegenerative disorders including Alzheimer's disease and Parkinson's disease.

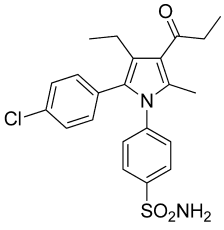
Important Compound Classes:



Key Structures:



Compound 1



Compound 2

Biological Assays: Compounds were tested in a cell-based real-time kinetic assay in human IMR-32 cells with native expression of α7 nAChR.

Pharmacological Data: Compounds showed an increase in the activity (agonist response) between 20- and 25-fold at 1 μM concentration. No additional data were reported.

Claims: Claims 12−16: Use of compounds for the treatment of a variety of diseases such as Huntingtons's disease, Alzheimer's disease, Parkinson's disease, dementia, cognitive impairment, ADHD, and inflammation.

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Notes

The authors declare no competing financial interest.

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