



Biochemical Pharmacology, Volume 78, issue 7, 1 October 2009

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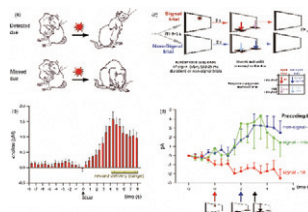
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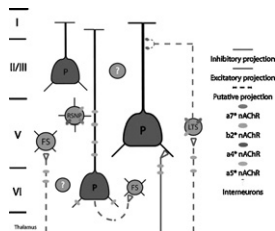
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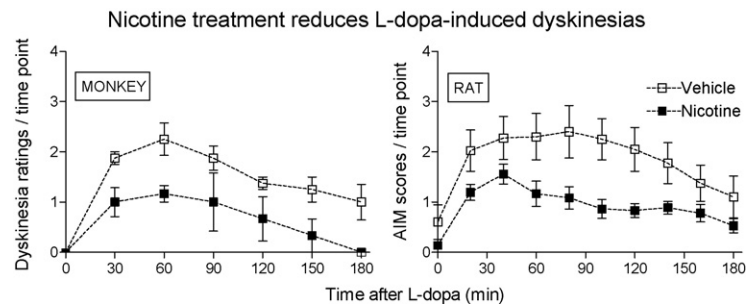
Distributed nicotinic receptor expression by interneurons and pyramidal neurons in the neuronal circuitry of the prefrontal cortex exert stimulating actions on cognitive behaviour.



Multiple roles for nicotine in Parkinson’s disease

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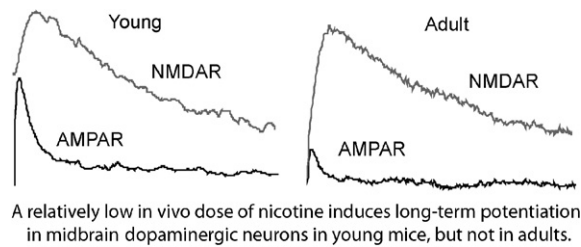
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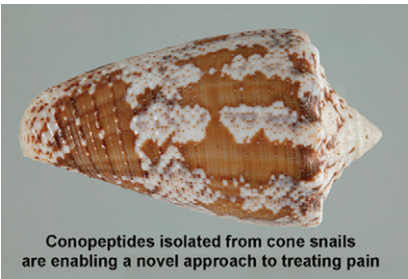
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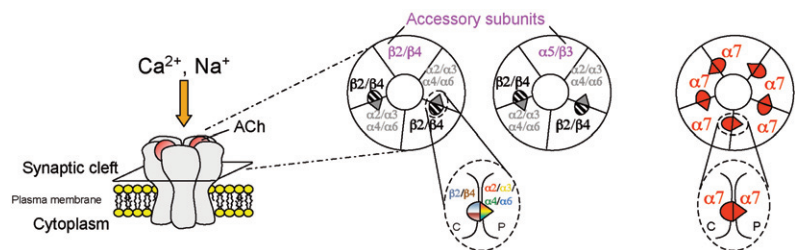
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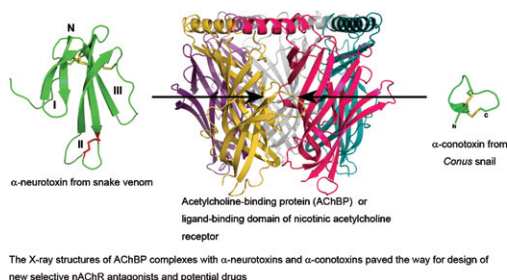
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Targeting $\alpha 9\alpha 10$ nicotinic cholinergic receptors in pathologies of the auditory system.



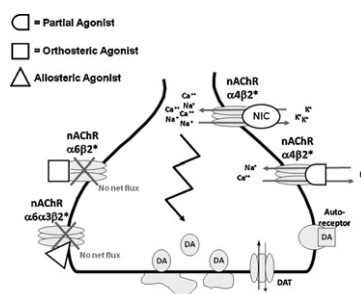
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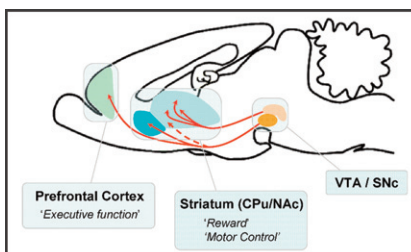
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Nicotinic acetylcholine receptors and the ascending dopamine pathways p 744–755

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Nicotinic acetylcholine receptors (nAChRs) affect dopamine cell firing and release probability in three major ascending pathways; nigrostriatal, mesolimbic and mesocortical. nAChRs are therefore poised to modulate multiple brain functions.

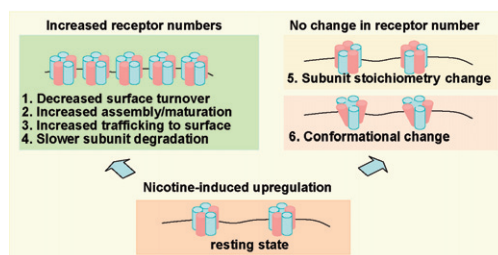


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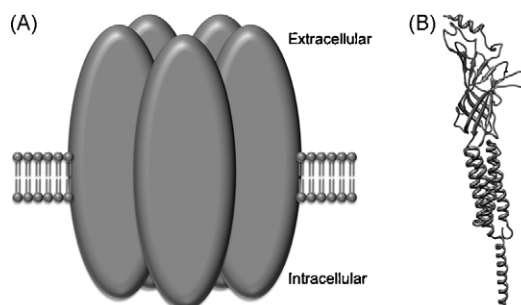
Potential mechanisms underlying nicotine-induced upregulation of nAChRs.



A review of experimental techniques used for the heterologous expression of nicotinic acetylcholine receptors

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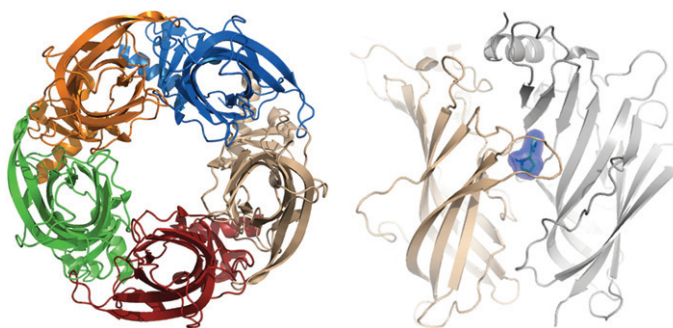
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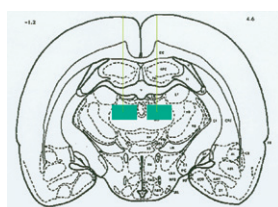


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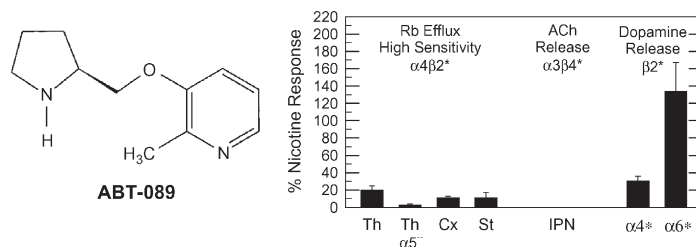
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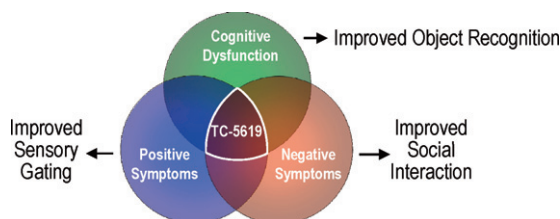
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TC-5619: An $\alpha 7$ neuronal nicotinic receptor-selective agonist that demonstrates efficacy in animal models of the positive and negative symptoms and cognitive dysfunction of schizophrenia p 803–812

T.A. Hauser, A. Kucinski, K.G. Jordan, G.J. Gatto, S.R. Wersinger, R.A. Hesse, E.K. Stachowiak, M.K. Stachowiak, R.L. Papke, P.M. Lippiello, M. Bencherif

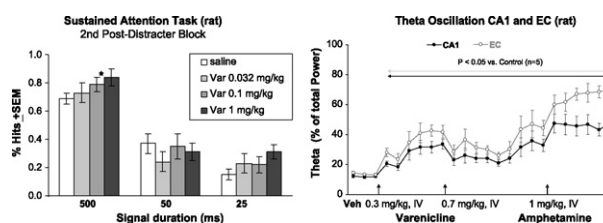
The novel $\alpha 7$ neuronal nicotinic receptor-selective agonist TC-5619 demonstrates efficacy in animal models of the positive and negative symptoms and cognitive dysfunction of schizophrenia.



Preclinical pharmacology of the $\alpha 4\beta 2$ nAChR partial agonist varenicline related to effects on reward, mood and cognition p 813–824

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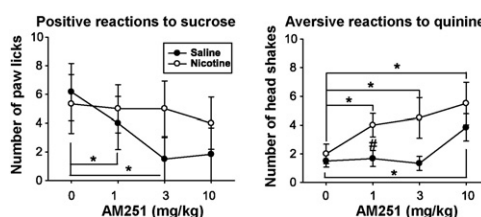
Effects of the $\alpha 4\beta 2$ nAChR partial agonist varenicline, an efficacious smoking cessation aid, in animal models of addiction, depression, cognition and attention.



Measurement of affective state during chronic nicotine treatment and withdrawal by affective taste reactivity in mice: The role of endocannabinoids p 825–835

Victoria C. Wing, Barbara Cagniard, Niall P. Murphy, Mohammed Shoaib

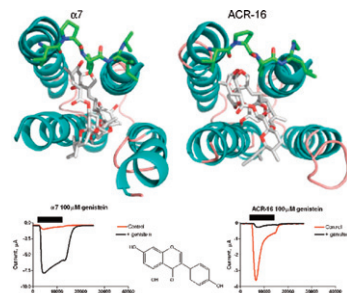
Chronic nicotine treatment and spontaneous withdrawal did not influence taste reactions in mice, whereas AM251 differentially modulated taste reactions in saline and nicotine-treated mice.



Comparative pharmacology and computational modelling yield insights into allosteric modulation of human $\alpha 7$ nicotinic acetylcholine receptors

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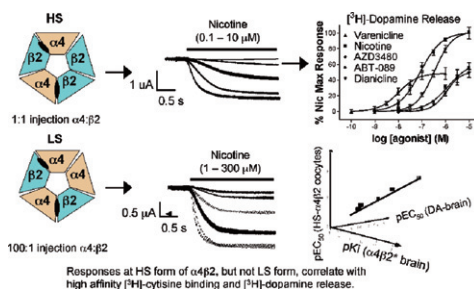
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Stimulation of dopamine release by nicotinic acetylcholine receptor ligands in rat brain slices correlates with the profile of high, but not low, sensitivity $\alpha 4\beta 2$ subunit combination

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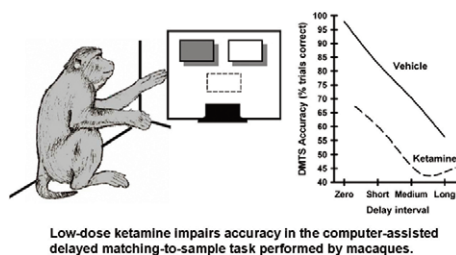
David J. Anderson, John Malysz, Jens Halvard Grønlien, Rachid El Kouhen, Monika Håkerud, Caroline Wetterstrand, Clark A. Briggs, Murali Gopalakrishnan



A reversible model of the cognitive impairment associated with schizophrenia in monkeys: Potential therapeutic effects of two nicotinic acetylcholine receptor agonists

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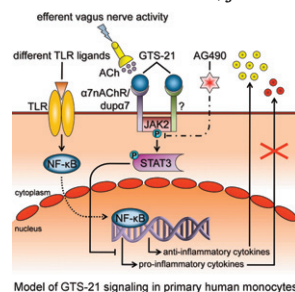


Low-dose ketamine impairs accuracy in the computer-assisted delayed matching-to-sample task performed by macaques.

GTS-21 inhibits pro-inflammatory cytokine release independent of the Toll-like receptor stimulated via a transcriptional mechanism involving JAK2 activation

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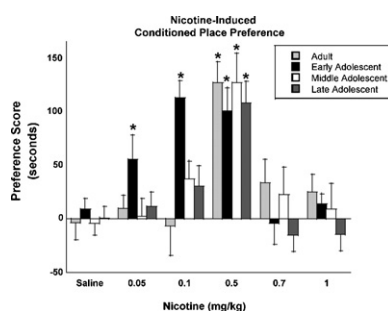


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Enhanced nicotine reward in adulthood after exposure to nicotine during early adolescence in mice

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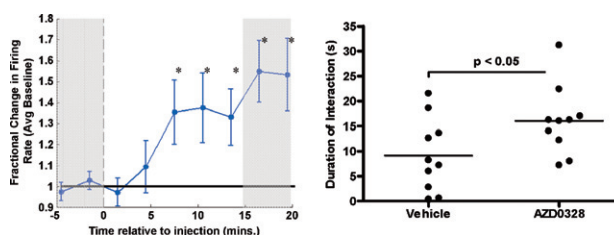
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Selective $\alpha 7$ nicotinic receptor activation by AZD0328 enhances cortical dopamine release and improves learning and attentional processes

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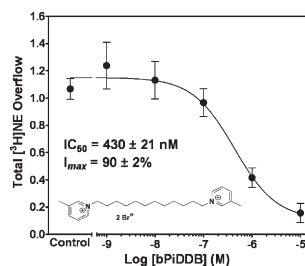
Simon Sydserff, E.J. Sutton, Dekun Song, Michael C. Quirk, Carla Maciag, Chaoying Li, Gerald Jonak, David Gurley, John C. Gordon, Edward P. Christian, James J. Doherty, Tom Hudzik, Edwin Johnson, Ladislav Mrzljak, Tim Piser, Gennady N. Smagin, Yi Wang, Dan Widzowski, Jeffrey S. Smith



The novel nicotinic receptor antagonist, *N,N'*-dodecane-1,12-diyl-*bis*-3-picolinium dibromide (bPiDDb), inhibits nicotine-evoked [^3H]norepinephrine overflow from rat hippocampal slices

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Andrew M. Smith, Gurpreet K. Dhawan, Zhenfa Zhang, Kiran B. Siripurapu, Peter A. Crooks, Linda P. Dwoskin



POSTER ABSTRACTS

Nicotinic Acetylcholine Receptors as Therapeutic Targets: Emerging Frontiers in Basic Research and Clinical Science October 14–16, 2009, Chicago, IL

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