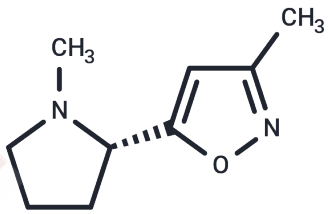
Data Sheet (Cat.No.T26529)

TargetMol

ABT-418

Chemical Properties



CAS No. : 147402-53-7

Formula: C9H14N2O

Molecular Weight: 166.22

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	ABT-418, a nicotinic acetylcholine receptor (nAchR) agonist, is used potentially for the treatment of attention deficit disorder.
Targets(IC50)	Others,Endogenous Metabolite

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.0161 mL	30.0806 mL	60.1612 mL
5 mM	1.2032 mL	6.0161 mL	12.0322 mL
10 mM	0.6016 mL	3.0081 mL	6.0161 mL
50 mM	0.1203 mL	0.6016 mL	1.2032 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Guo T, Yang C, Guo L, Liu K. A comparative study of the effects of ABT-418 and methylphenidate on spatial memory in an animal model of ADHD. Neurosci Lett. 2012 Oct 18;528(1):11-5. doi: 10.1016/j.neulet.2012.08.068. PubMed PMID: 22985505.

Dallanoce C, Magrone P, Matera C, Lo Presti L, De Amici M, Riganti L, Clementi F, Gotti C, De Micheli C. Synthesis of novel chiral Δ2-isoxazoline derivatives related to ABT-418 and estimation of their affinity at neuronal nicotinic acetylcholine receptor subtypes. Eur J Med Chem. 2010 Dec;45(12):5594-601. doi: 10.1016/j.ejmech.2010.09.009. PubMed PMID: 20932609.

Kenney JW, Wilkinson DS, Gould TJ. The enhancement of contextual fear conditioning by ABT-418. Behav Pharmacol. 2010 May;21(3):246-9. doi: 10.1097/FBP.0b013e32833a5b9d. PubMed PMID: 20400893; PubMed Central PMCID: PMC3042125.

Reichel CM, Murray JE, Barr JD, Bevins RA. Extinction with varenicline and nornicotine, but not ABT-418, weakens conditioned responding evoked by the interoceptive stimulus effects of nicotine. Neuropharmacology. 2010 Jun;58 (8):1237-45. doi: 10.1016/j.neuropharm.2010.03.005. PubMed PMID: 20302882; PubMed Central PMCID: PMC2881947.