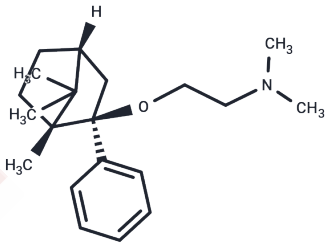
Data Sheet (Cat.No.T10996)

TargetMol

Deramciclane

Chemical Properties



CAS No. : 120444-71-5

Formula: C20H31NO

Molecular Weight: 301.47

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	Deramciclane has high affinity for 5-HT2A and 5-HT2C receptors. It acts as an antagonist in both receptor subtypes and has inverse agonist properties for 5-HT2C receptors, but no direct stimulant agonists.
Targets(IC50)	5-HT Receptor
In vitro	Deramciclane is a new anti-anxiety drug that can bind to 5-HT2A/2C receptor with high affinity. The interaction between deracixan and serotonin 5-HT2C receptor was further characterized using receptor phosphoinositide hydrolysis assay and receptor autoradiography. Deramciclane antagonizes 5-HT2C receptor-mediated 5-HT stimulated phosphoinositide hydrolysis with IC50 value of 168 nM. In the physiological system of the choroid plexus nervous system, diracic clane can also reduce the hydrolysis of basic inositol phosphate by as much as 33% (EC50 = 93 nM), which indicates that deracic clane has inverse agonism at this receptor Agent properties.
In vivo	Compared with basal levels, at any time point, doramamine 3 and 10 mg/kg did not significantly change dopamine levels, while at 40-100 minutes and 160-240 minutes, delamethasone 30 mg/kg was significant Increased dopamine levels (P <0.05). Deramciclane is a putative anti-serotoninergic compound that reduces 5-HT-induced phosphoinositide hydrolysis and multiple effects caused by serotoninergic agonists. The receptor binding curve of Deramciclane is comparable to that of ritanserin. Deramciclane has high affinity for 5-HT2A and 5-HT2C receptors. It acts as an antagonist in both receptor subtypes and has inverse agonist properties for 5-HT2C receptors without direct stimulatory agonist effects. In some animal experiments, deraciciran has been shown to have anxiolytic effects.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3171 mL	16.5854 mL	33.1708 mL
5 mM	0.6634 mL	3.3171 mL	6.6342 mL
10 mM	0.3317 mL	1.6585 mL	3.3171 mL
50 mM	0.0663 mL	0.3317 mL	0.6634 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

P?lvim?ki EP, et al. Deramciclane, a putative anxiolytic drug, is a serotonin 5-HT2C receptor inverse agonist but fails to induce 5-HT2C receptor down-regulation. Psychopharmacology (Berl). 1998 Mar;136(2):99-104.
K??ri?inen TM, et al. Comparison of the effects of deramciclane, ritanserin and buspirone on extracellular dopamine and its metabolites in striatum and nucleus accumbens of freely moving rats. Basic Clin Pharmacol Toxicol. 2008 Jan;102(1):50-8.