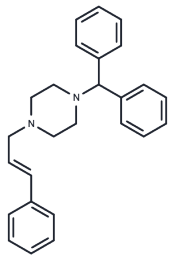
Data Sheet (Cat.No.T0903)

TargetMol

Cinnarizine

Chemical Properties



CAS No. : 298-57-7

Formula: C26H28N2

Molecular Weight: 368.51

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Cinnarizine (Stugeron) is a piperazine derivative having histamine H1-receptor and calcium-channel blocking activity with vasodilating and antiemetic properties but it induces PARKINSONIAN DISORDERS.
Targets(IC50)	Calcium Channel,Histamine Receptor
In vitro	Cinnarizine inhibits melanogenesis in B16 cells by a dose-dependent manner at the non-cytotoxic concentrations and is a histamine receptor antagonists[3].
In vivo	Cinnarizine has anticonvulsive properties in rats and mice. It could provide a direct neuroprotective effect against the damaging influx of calcium and also prevent neuronal damage as a result of MES- and PTZ-induced seizures[2]. Cinnarizine induces behavioural changes such as alopecia, bucolingual dyskinesia and reduction of motor activity in female parkin knock out (PK-KO) mice but not in wild-type (WT) controls.PK-KO mice have high striatal dopamine levels and increased dopamine metabolism in spite of low reduced tyrosine hydroxylase protein. Cinnarizine, which blocks dopamine receptors and increases dopamine release, further increased dopamine metabolism[3]. Its half-life is 4 hours.
Cell Research	MTT assay is performed to examine the viability of cells. Afterwards, the cells are incubated with the samples for 48 h, the culture medium is removed and replaced with 1 mg/mL MTT solution dissolved in phosphate-buffered saline (PBS) and incubated for an additional 2 h. The MTT solution is then removed and DMSO was added, following which the absorbance of the dissolved formazan crystals is determined at 570 nm by a spectrophotometer.(Only for Reference)

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 6.25 mg/mL (16.96 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7136 mL	13.5682 mL	27.1363 mL
5 mM	0.5427 mL	2.7136 mL	5.4273 mL
10 mM	0.2714 mL	1.3568 mL	2.7136 mL
50 mM	0.0543 mL	0.2714 mL	0.5427 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.

Reference

Krzysztof Sendrowski, et al. Pharmacological Reports. 2013, 65(3):730-736.
Brahmane RI, et al. J Pharmacol Pharmacother. 2010, 1(2):78-81.
Serrano A, et al. Neuropharmacology. 2005, 49(2):208-19.