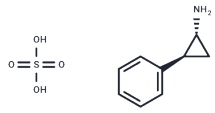
Data Sheet (Cat.No.T7942)

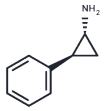
TargetMol

Tranylcypromine hemisulfate

Chemical Properties



CAS No. :	13492-01-8
Formula:	C9H11N 1/2H2SO4
Molecular Weight:	182.23
Storage:	Store at low temperature 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	Tranylcypromine hemisulfate (Tranylcypromine Sulfate) is an inhibitor of monoamine oxidase (MAO) and lysine-specific demethylase 1 (LSD1) with a rapid onset of activity.
Targets(IC50)	Histone Demethylase,MAO,Monoamine Oxidase
In vivo	Tranylcypromine-induced transcriptional and epigenetic regulation modulated RGC survival via the promotion of p38 MAPKγ activity. Therefore, pharmacologic treatments that suppress LSD1 activity may be a novel therapeutic strategy that can be used to treat neurodegenerative diseases[1].
Animal Research	The authors evaluated whether tranylcypromine contributes to neuronal survival following stress-induced damage using primary cultured rat RGCs and in vivo N-methyl-D-aspartate (NMDA)-induced excitotoxicity.?Additionally, the molecules associated with tranylcypromine treatment were assessed by microarray and immunoblot analysis[1].

Solubility Information

Solubility	H2O: 10 mg/mL (54.88 mM),Sonication is recommended. DMSO: 3.33 mg/mL (18.27 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.4876 mL	27.4379 mL	54.8757 mL
5 mM	1.0975 mL	5.4876 mL	10.9751 mL
10 mM	0.5488 mL	2.7438 mL	5.4876 mL
50 mM	0.1098 mL	0.5488 mL	1.0975 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

Takayuki T , Keiichiro I , Hideki H , et al. Potential Neuroprotective Effects of an LSD1 Inhibitor in Retinal Ganglion Cells via p38 MAPK Activity[J]. Investigative Opthalmology & Visual Science, 2016, 57(14):6461-.
Chen X, Chen Z, Li M, et al.Tranylcypromine upregulates Sestrin 2 expression to ameliorate NLRP3-related noise-induced hearing loss.Neural Regeneration Research.2025, 20(5): 1483-1494.
Neuroprotective effects of the monoamine oxidase inhibitor tranylcypromine and its amide derivatives against Aβ (1-42)-induced toxicity[J]. European Journal of Pharmacology, 2015, 764:256-263.