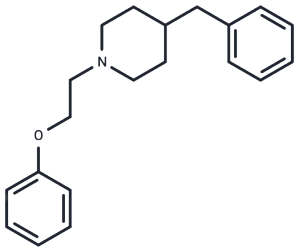
Data Sheet (Cat.No.T74822)

TargetMol

S1R agonist 1

Chemical Properties



CAS No. : 193354-70-0

Formula: C20H25NO

Molecular Weight: 295.42

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	S1R agonist 1 is a selective Sigma-1 receptor (S1R) agonist. It modulates calcium signaling and ER stress, used for Alzheimer's disease and neuropathic pain research.
Targets(IC50)	Sigma receptor
In vitro	S1R agonist 1 (0.1-5 μM) dose-dependently enhances NGF-induced neurite outgrowth. It significantly attenuates SH-SY5Y cell damage induced by Rotenone (1 μM) or NMDA (0.1-5 μM) [1].
In vivo	In zebrafish embryos, 10 μM S1R agonist 1 caused 50% mortality within 120 h, suggesting potential developmental toxicity [1].

Solubility Information

Solubility	DMSO: 80 mg/mL (270.8 mM),Sonication is recommmended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.385 mL	16.9251 mL	33.8501 mL
5 mM	0.677 mL	3.385 mL	6.770 mL
10 mM	0.3385 mL	1.6925 mL	3.385 mL
50 mM	0.0677 mL	0.3385 mL	0.677 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

Linciano P, et al. Novel S1R agonists counteracting NMDA excitotoxicity and oxidative stress: A step forward in the discovery of neuroprotective agents. Eur J Med Chem. 2023 Mar 5;249:115163.