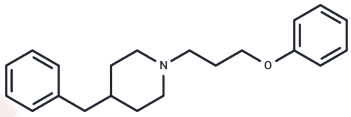
Data Sheet (Cat.No.T72059)

TargetMol

S1R agonist 2

Chemical Properties



CAS No. : 150085-21-5

Formula: C21H27NO

Molecular Weight: 309.45

Storage: Pure form: -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 2 is a selective S1R agonist with a Ki of 88 nM for S2R and 1.1 nM for S1R and is protective against ROS and NMDA-induced neurotoxicity.
Targets(IC50)	NMDAR,ROS,Sigma receptor
In vitro	S1R agonist 2 (Compound 8b; 0.1-5 μM) significantly increases neurite growth induced by nerve growth factor (NGF) in a dose-dependent manner and has a neuroprotective effect on NMDA stimulation in SHSY5Y cells. At 1 μM (24 hours), it significantly inhibits cell damage induced by Rotenone in SHSY5Y cells and shows no cytotoxicity to A549, LoVo, and Panc-1 cells (0-10 μM; 24-72 hours).[1]

Solubility Information

Solubility	DMSO: 50 mg/mL (161.58 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (6.46 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2315 mL	16.1577 mL	32.3154 mL
5 mM	0.6463 mL	3.2315 mL	6.4631 mL
10 mM	0.3232 mL	1.6158 mL	3.2315 mL
50 mM	0.0646 mL	0.3232 mL	0.6463 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;249:115163.