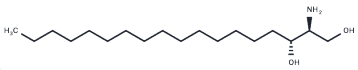
Data Sheet (Cat.No.T13632)

TargetMol

D-Erythro-dihydrosphingosine

Chemical Properties



CAS No. : 764-22-7

Formula: C18H39NO2

Molecular Weight: 301.51

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	D-Erythro-dihydrosphingosine (C18-Dihydrosphingosine) inhibits arachidonic acid release and cPLA2α activity.
Targets(IC50)	Endogenous Metabolite,Phospholipase
In vitro	In PC12 cells, D-Erythro-dihydrosphingosine inhibits mastoparan-stimulated arachidonic acid release. D-Erythro-dihydrosphingosine (100 μM) slightly inhibits [3H] Arachidonic acid release[1].

Solubility Information

Solubility	DMSO: 10 mg/mL (33.17 mM),Sonication is recommended. Ethanol: 20 mg/mL (66.33 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: 1 mg/mL (3.32 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	3.3166 mL	16.5832 mL	33.1664 mL
5 mM	0.6633 mL	3.3166 mL	6.6333 mL
10 mM	0.3317 mL	1.6583 mL	3.3166 mL
50 mM	0.0663 mL	0.3317 mL	0.6633 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

Nakamura H, et al. Inhibition of arachidonic acid release and cytosolic phospholipase A2 alpha activity by D-erythro-sphingosine. Eur J Pharmacol. 2004 Jan 19;484(1):9-17.