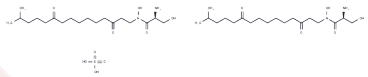
Data Sheet (Cat.No.T26308)

TargetMol

Lipoxamycin hemisulfate

Chemical Properties



CAS No. : 11075-87-9

Formula: C38H74N4O14S

Molecular Weight: 843.08

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	Lipoxamycin hemisulfate (Lipoxamycin) is an inhibitor of serine palmitoyltransferase (IC50 = 21 nM) with antifungal activity.
Targets(IC50)	Antibiotic,Antifungal
In vitro	Lipoxamycin hemisulfate shows antifungal activity against a panel of human pathogenic fungi with better potency against some of the Candida species (MIC = 0.25-16 μg/mL)[1].
In vivo	In Chinese hamster ovary cell mutant, Lipoxamycin hemisulfate is highly toxic in mice when applied subeutaneously or topically[1].

Solubility Information

Solubility	DMSO: 22.3 mg/mL (26.45 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 3.3 mg/mL (3.91 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	1.1861 mL	5.9306 mL	11.8613 mL
5 mM	0.2372 mL	1.1861 mL	2.3723 mL
10 mM	0.1186 mL	0.5931 mL	1.1861 mL
50 mM	0.0237 mL	0.1186 mL	0.2372 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

S M Mandala, et al. Inhibition of Serine Palmitoyl-Transferase Activity by Lipoxamycin. J Antibiot (Tokyo). 1994 Mar; 47(3):376-9.
Whaley HA. The structure of lipoxamycin, a novel antifungal antibiotic. J Am Chem Soc. 1971 Jul 28;93(15):3767-9.
Roy SK, et al. Isolation, structural elucidation and biological properties of neoenactins B1, B2, M1 and M2, neoenactin congeners. J Antibiot (Tokyo). 1987 Mar;40(3):266-74.
Whaley HA, Sebek OK, Lewis C. Production, isolation, characterization, and evaluation of lipoxamycin, a new antifungal agent. Antimicrob Agents Chemother (Bethesda). 1970;10:455-61.