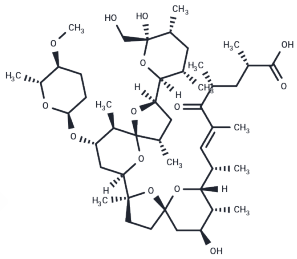
Data Sheet (Cat.No.T8504)

TargetMol

Dianemycin

Chemical Properties



CAS No. : 35865-33-9

Formula: C47H78O14

Molecular Weight: 867.11

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	Dianemycin (Nanchangmycin (free acid)) is a broad spectrum polyether antibiotic, inhibits gram-positive bacteria. Nanchangmycin is a broad spectrum antiviral active against Zika virus
Targets(IC50)	Anti-infection,Antibacterial,Antibiotic

Solubility Information

Solubility	DMSO: 150 mg/mL (172.99 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: 4 mg/mL (4.61 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	1.1533 mL	5.7663 mL	11.5326 mL
5 mM	0.2307 mL	1.1533 mL	2.3065 mL
10 mM	0.1153 mL	0.5766 mL	1.1533 mL
50 mM	0.0231 mL	0.1153 mL	0.2307 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

Hamill R L , Hoenh M M , Pittenger G E , et al. DIANEMYCIN, AN ANTIBIOTIC OF THE GROUP AFFECTING ION TRANSPORT[J]. The Journal of Antibiotics, 1969, 22(4):161-164.

Rausch K, et al. Screening Bioactives Reveals Nanchangmycin as a Broad Spectrum Antiviral Active against Zika Virus. Cell Rep. 2017 Jan 17;18(3):804-815.

Liu T, et al. Mechanism of thioesterase-catalyzed chain release in the biosynthesis of the polyether antibiotic Nanchangmycin. Chem Biol. 2008 May;15(5):449-58.

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