

Amphotericin B methyl ester

Chemical Properties

CAS No. :	36148-89-7
Formula:	C ₄₈ H ₇₅ NO ₁₇
Molecular Weight:	938.12
Storage:	Keep away from direct sunlight Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>

Biological Description

Description	Amphotericin B methyl ester is a methylated derivative of the polyene antibiotic amphotericin B, belonging to cholesterol-binding compounds with potent antifungal activity. It also interferes with HIV-1 viral particle production and blocks HIV-1 replication in vivo.
In vitro	Methods: In vitro experiments were conducted to explore the regulatory effect of Amphotericin B methyl ester on HIV-1 viral particle production, and its influences on the plasma membrane binding, lipid raft localization and multimerization process of Gag protein were detected. Results: Amphotericin B methyl ester could effectively inhibit the production of HIV-1 viral particles, while it did not significantly interfere with the membrane binding, lipid raft enrichment and multimerization progression of Gag protein [1].

Solubility Information

Solubility	DMSO: 80.00 mg/mL (85.28 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.066 mL	5.3298 mL	10.6596 mL
5 mM	0.2132 mL	1.066 mL	2.1319 mL
10 mM	0.1066 mL	0.533 mL	1.066 mL
50 mM	0.0213 mL	0.1066 mL	0.2132 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

Waheed AA, et al. Inhibition of human immunodeficiency virus type 1 assembly and release by the cholesterol-binding compound amphotericin B methyl ester: evidence for Vpu dependence. *J Virol.* 2008 Oct;82(19):9776-81.

Keim GR, et al. Comparative toxicological studies of amphotericin B methyl ester and amphotericin B in mice, rats, and dogs. *Antimicrob Agents Chemother.* 1976 Oct;10(4):687-90.

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481