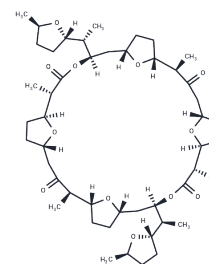


IKD-8344

Chemical Properties

CAS No. : 129046-69-1
 Formula: C₄₈H₇₆O₁₂
 Molecular Weight: 845.124
 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	IKD-8344 is a macrocyclic dilactone originally isolated from an actinomycete species with diverse biological activities, including anticancer, antimicrobial, and anthelmintic properties [1,2,3]. It is cytotoxic to L5178Y murine leukemia cells (IC ₅₀ = 0.54 ng/ml) [1], inhibits growth of the mycelial form of <i>C. albicans</i> (MIC = 6.25 µg/ml), and potentiates the activity of polymyxin B against the multidrug-resistant pathogenic bacterium <i>B. cenocepacia</i> [2,3]. Additionally, it is active against <i>T. spiralis</i> in vitro and in vivo [1].
Targets(IC50)	Others,Antifungal

Solubility Information

Solubility	Ethanol: Soluble Methanol: Soluble DMSO: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.1833 mL	5.9163 mL	11.8326 mL
5 mM	0.2367 mL	1.1833 mL	2.3665 mL
10 mM	0.1183 mL	0.5916 mL	1.1833 mL
50 mM	0.0237 mL	0.1183 mL	0.2367 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

Minami, Y., Yoshida, K., Azuma, R., et al. Structure of a novel macrodiolide antibiotic IKD-8344. *Tetrahedron Lett.* 33(48), 7373-7376 (1992).

Hwang, E.I., Yun, B.S., Yeo, W.H., et al. Compound IKD-8344, a selective growth inhibitor against the mycelial form of *Candida albicans*, isolated from *Streptomyces* sp. A6792. *J. Microbiol. Biotechnol.* 15(4), 909-912 (2005).

Loutet, S.A., El-Halfawy, O.M., Jassem, A.N., et al. Identification of synergists that potentiate the action of polymyxin B against *Burkholderia cenocepacia*. *Int. J. Antimicrob. Agents* 46(4), 376-380 (2015).

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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