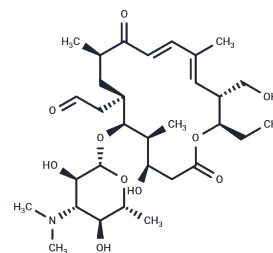


Mycaminosyltylonolide

Chemical Properties

CAS No. :	61257-02-1
Formula:	C ₃₁ H ₅₁ N ₁ O ₁₀
Molecular Weight:	597.74
Storage:	Store at low temperature 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	Mycaminosyltylonolide is a macrolide antibiotic that is tylosin having a beta-D-mycaminosyl residue attached at position 5. Mycaminosyltylonolide is a potent antibiotic with antibacterial activity and inhibits luciferase synthesis.
Targets(IC50)	Antibacterial, Antibiotic
In vitro	Mycaminosyltylonolide (3 μM) inhibits firefly luciferase mRNA translation in E. coli S30 [1]. Mycaminosyltylonolide (0-128 μg/mL) shows antibacterial activity with MIC values of 1, 1, 2, 2, 1, 64 μg/mL for S. aureus FDA209Pa, S. aureus Smitha, S. aureus KUB857c, S. epidermidis KUB795g, E. faecalis ATCC29212h, K. pneumoniae NCTC9632h, respectively [2].

Solubility Information

Solubility	DMSO: 30 mg/mL (50.19 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	1.673 mL	8.3648 mL	16.7297 mL
5 mM	0.3346 mL	1.673 mL	3.3459 mL
10 mM	0.1673 mL	0.8365 mL	1.673 mL
50 mM	0.0335 mL	0.1673 mL	0.3346 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

Shishkina A, et al. Conjugates of amino acids and peptides with 5-o-mycaminosyltylonolide and their interaction with the ribosomal exit tunnel. *Bioconjug Chem.* 2013 Nov 20;24(11):1861-9.

Sugawara A, et al. 5-O-Mycaminosyltylonolide antibacterial derivatives: design, synthesis and bioactivity. *J Antibiot (Tokyo).* 2017 Jul;70(8):878-887.

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