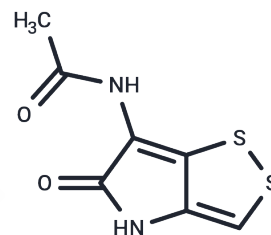


Holomycin

Chemical Properties

CAS No. :	488-04-0
Formula:	C7H6N2O2S2
Molecular Weight:	214.26
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	Holomycin (N-Demethylthiolutin) is a secondary metabolite of dithiopyrrolidone. Holomycin, an antibiotic secondary metabolite, is required for the biofilm formation of natural photogenic <i>Bacillus galathea</i> S2753 and is also a broad-spectrum antibiotic. Holomycin promotes biofilm formation of S2753 through its alene-disthionyl group. Holomycin has antitumor activity and is involved in RNA synthesis.
Targets(IC50)	Antibiotic, DNA/RNA Synthesis

Solubility Information

Solubility	DMSO: 77.5 mg/mL (361.71 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: 7.75 mg/mL (36.17 mM), Solution. 10% DMSO+90% Saline: < 7.75 mg/mL (36.17 mM), Lower concentrations may be soluble, but exact solubility limit is unknown. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.6672 mL	23.3361 mL	46.6723 mL
5 mM	0.9334 mL	4.6672 mL	9.3345 mL
10 mM	0.4667 mL	2.3336 mL	4.6672 mL
50 mM	0.0933 mL	0.4667 mL	0.9334 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

Liras P. Holomycin, a dithiopyrrolone compound produced by *Streptomyces clavuligerus*. *Appl Microbiol Biotechnol.* 2014;98(3):1023-1030.

Oliva B, et al. Antimicrobial properties and mode of action of the pyrrothine holomycin. *Antimicrob Agents Chemother.* 2001;45(2):532-539.

Yin H, et al. Induction of holomycin production and complex metabolic changes by the *argR* mutation in *Streptomyces clavuligerus* NP1. *Appl Environ Microbiol.* 2012;78(9):3431-3441.

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