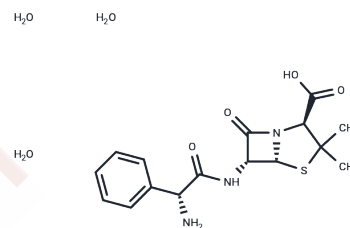


Ampicillin Trihydrate

Chemical Properties

CAS No. :	7177-48-2
Formula:	C ₁₆ H ₁₉ N ₃ O ₄ S·3H ₂ O
Molecular Weight:	403.45
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	Ampicillin Trihydrate (NCI-C56086), a broad-spectrum semisynthetic derivative of aminopenicillin, is a β -lactam antibiotic.
Targets(IC50)	Antibacterial, Antibiotic
In vitro	In sheep and goats, the half-life of Ampicillin Trihydrate (10 mg/kg) is 2.48 and 1.2 hours, respectively. In mice and rats, doses of Ampicillin Trihydrate ranging from (0.18 kg/kg to 3 kg/kg) do not induce diarrhea or cause mortality.
In vivo	When added to SP34, Ampicillin Trihydrate (500 mg) exhibits effective bactericidal activity and inhibits growth.

Solubility Information

Solubility	H ₂ O: 5.4 mg/mL (13.38 mM), Sonication is recommended. DMSO: 4.04 mg/mL (10.01 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	2.4786 mL	12.3931 mL	24.7862 mL
5 mM	0.4957 mL	2.4786 mL	4.9572 mL
10 mM	0.2479 mL	1.2393 mL	2.4786 mL
50 mM	0.0496 mL	0.2479 mL	0.4957 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

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