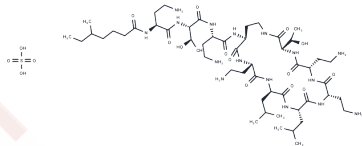


Colistin sulfate

Chemical Properties

CAS No. : 1264-72-8  
Formula: C53H100N16O17S  
Molecular Weight: 1253.51  
Appearance: no data available  
Storage: keep away from moisture  
Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Colistin sulfate (Colistin sulfate (1066-17-7 free base)) is a cyclic polypeptide antibiotic from Bacillus colistinus, composed of Polymyxins E1 and E2.
Targets(IC50)	Cell wall,Antibacterial,Antibiotic,Autophagy
In vitro	In mice, daily intramuscular injections of Colistin sulfate (15 mg/kg) result in granular degeneration in renal and hepatic epithelial tissues. Similarly, in piglets, daily intramuscular injections of Colistin sulfate (15 mg/kg) lead to significant neurotoxic effects.
In vivo	Colistin (2 µg/mL) exhibits broad-spectrum antibacterial activity, effectively inhibiting most strains of Escherichia coli and Pseudomonas aeruginosa, as well as all strains of the genera Enterobacter, Salmonella, Shigella, Pasteurella, Brucella, and Bordetella. Additionally, it is active against strains of the genera Moraxella, Serratia, and Providencia. In 225 strains of P. aeruginosa, the MIC90 and MIC50 of Colistin are 6.3 µg/mL and 1.6 µg/mL, respectively. In Acinetobacter baumannii, Colistin sulfate demonstrates concentration-dependent post-antibiotic effects.

Solubility Information

Solubility	H2O: 10 mM,Sonication is recommended. DMSO: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.7978 mL	3.9888 mL	7.9776 mL
5 mM	0.1596 mL	0.7978 mL	1.5955 mL
10 mM	0.0798 mL	0.3989 mL	0.7978 mL
50 mM	0.016 mL	0.0798 mL	0.1596 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.

## Reference

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