

## Colistin sulfate

## Chemical Properties

CAS No. : 1264-72-8

Formula:

Molecular Weight:

Storage: Keep away from moisture  
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	Colistin sulfate (Colistin sulfate (1066-17-7 free base)) is a cyclic polypeptide antibiotic from <i>Bacillus colistinus</i> , 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 <i>Escherichia coli</i> and <i>Pseudomonas aeruginosa</i> , as well as all strains of the genera <i>Enterobacter</i> , <i>Salmonella</i> , <i>Shigella</i> , <i>Pasteurella</i> , <i>Brucella</i> , and <i>Bordetella</i> . Additionally, it is active against strains of the genera <i>Moraxella</i> , <i>Serratia</i> , and <i>Providencia</i> . In 225 strains of <i>P. aeruginosa</i> , the MIC90 and MIC50 of Colistin are 6.3 µg/mL and 1.6 µg/mL, respectively. In <i>Acinetobacter baumannii</i> , Colistin sulfate demonstrates concentration-dependent post-antibiotic effects.

## Solubility Information

Solubility	H2O: 125.00 mg/mL,Sonication is recommended. DMSO: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Reference

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