

## Polymyxin B nonapeptide acetate

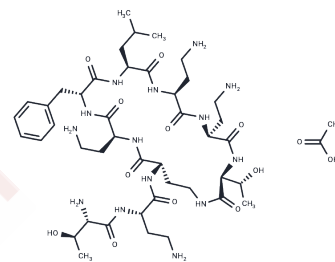
### Chemical Properties

CAS No. :

Formula: C45H78N14O13

Molecular Weight: 1023.19

Storage: Store at low temperature, 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	Polymyxin B nonapeptide acetate is a cationic cyclic peptide. Polyxin B nonapeptide is a derivative produced by enzymatic cleavage of polyxin B. Compared with polyxin B, polyxin B nonapeptide has low toxicity, lacks bactericidal activity and still has the ability to destroy the outer membrane of Gram-negative bacteria.
Targets(IC50)	Antibacterial, Antibiotic
In vitro	Polymyxin B nonapeptide Acetate, a cationic cyclic peptide derived by enzymatic processing from the naturally occurring peptide polymyxin B, is able to increase the permeability of the outer membrane of Gram-negative bacteria toward hydrophobic antibiotics probably by binding to the bacterial lipopolysaccharide (LPS)[1].

### Solubility Information

Solubility	DMSO: 36.07 mg/mL (35.25 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.9773 mL	4.8867 mL	9.7734 mL
5 mM	0.1955 mL	0.9773 mL	1.9547 mL
10 mM	0.0977 mL	0.4887 mL	0.9773 mL
50 mM	0.0195 mL	0.0977 mL	0.1955 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

Tsubery H , Ofek I , Cohen S , et al. Structure-function studies of polymyxin B nonapeptide: implications to sensitization of gram-negative bacteria.[J]. Journal of Medicinal Chemistry, 2000, 43(16):3085-3092.

Ofek I , Cohen S , Rahmani R , et al. Antibacterial synergism of polymyxin B nonapeptide and hydrophobic antibiotics in experimental gram-negative infections in mice.[J]. Antimicrobial Agents and Chemotherapy, 1994, 38 (2):374-377.

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