



Product Information

Product ID C5647

CAS No. 1264-72-8

Chemical Name

Synonym Belcomycin, Colomycin syrup, Polymyxin E Complex

Formula $C_{45}H_{85}N_{13}O_{10} \cdot H_2O_4S$

Formula Wt. 1267.55

Melting Point

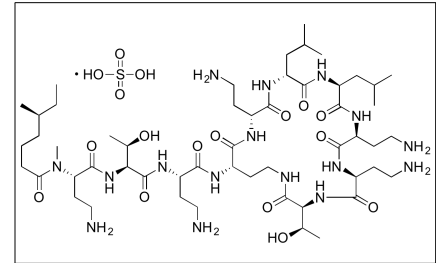
Purity Biological Potency: ≥ 19366

Solubility Soluble in water (50 mg/mL).

Store Temp 4°C

Ship Temp Ambient

Description Colistin is an antimicrobial peptide (AMP); it is a polymyxin-family antibiotic initially produced by species of *Bacillus*. Colistin displays antibacterial efficacy against gram negative bacteria, interacting with the bacterial outer membrane, inducing the formation of pores. This peptide also inhibits NADH quinone oxidoreductase. Colistin is no longer commonly used due to associated neurotoxicity and nephrotoxicity.



Bulk quantities available upon request

Product ID	Size	List Price
C5647	100 mg	
C5647	500 mg	
C5647	1 g	
C5647	5 g	
C5647	25g	

References Deris ZZ, Akter J, Sivanesan S, et al. A secondary mode of action of polymyxins against Gram-negative bacteria involves the inhibition of NADH-quinone oxidoreductase activity. *J Antibiot (Tokyo)*. 2014 Feb;67(2):147-51. PMID: 24169795.

Dai C, Zhang D, Gao R, et al. In vitro toxicity of colistin on primary chick cortex neurons and its potential mechanism. *Environ Toxicol Pharmacol*. 2013 Sep;36(2):659-66. PMID: 23892071.

Manning AJ, Kuehn MJ. Contribution of bacterial outer membrane vesicles to innate bacterial defense. *BMC Microbiol*. 2011 Dec 1;11:258. PMID: 22133164.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.