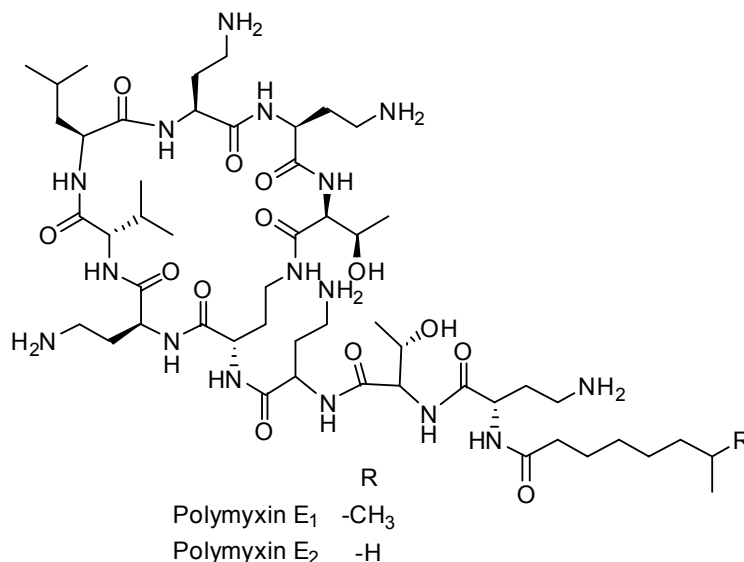


Polymyxin E complex

Code: **BIA-P1319**

Pack sizes: **25 mg, 100 mg**



Synonyms : **Colistin, Colimycin M, Belcomycin, Colymycin, Torazin**

Specifications

CAS # : **1066-17-7**
Molecular Formula : **C₅₃H₁₀₀N₁₆O₁₃ (for Polymyxin E1)**
Molecular Weight : **1169.5 (for Polymyxin E1)**
Source : ***Bacillus polymyxa***
Appearance : **White solid**
Purity : **>95%**
Storage : **-20°C**
Solubility : **Soluble in ethanol, methanol, DMF or DMSO. Good water solubility.**

Application Notes

Polymyxin E (colistin) is a complex of closely related cyclic peptides E1 and E2, with additional minor analogues. Polymyxin E is produced by *Bacillus polymyxa* var. *colistinus* and is a highly basic, atypical cyclic peptide which incorporates the unusual amino acid, diaminobutyric acid. Head-to-tail coupling of lysine completes the macrocycle. Balancing the polar cyclic peptide is a hydrophobic tail with short chain fatty acids. Polymyxin E is a broad spectrum antibiotic active against Gram negative bacteria. The mechanism of action involves disruption of the bacterial outer membrane by a detergent-like effect.

References

1. Studies on the chemical structure of colistin.1. Fractionation, molecular weight determination, amino acid and fatty acid composition. Suzuki T. *et al.* J. Biochem. (Toyko) **1963**, 54, 25.