

PRODUCT DATA SHEET

Code No.: BIA-P1319

Pack sizes.: 25mg, 100mg

Polymyxin E complex

Synonyms:

Colistin, Colimycin M, Belcomycin, Colymycin, Torazin

Specifications

CAS # : 1066-17-7

Molecular Formula : C53H100N16O13(forE1)

Molecular Weight : 1169.5 (fo rE1)

Source : -

Appearance : White solid
Purity : >95% by HPLC

Long Term 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.