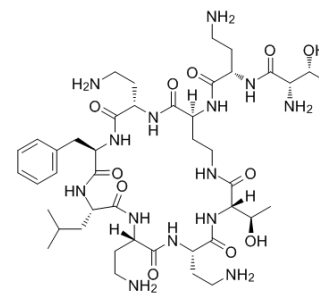


Polymyxin B nonapeptide

Cat. No.:	HY-106783
CAS No.:	86408-36-8
Molecular Formula:	C ₄₃ H ₇₄ N ₁₄ O ₁₁
Molecular Weight:	963.13
Sequence:	Thr-{Dab}-{Dab}-{Dab}-{Dab}-d-Phe-Leu-{Dab}-{Dab}-Thr (Lactam: Dab3-Thr9)
Sequence Shortening:	T-{Dab}-{Dab}-{Dab}-{Dab}-d-FL-{Dab}-{Dab}-T (Lactam: Dab3-Thr9)
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	Polymyxin B nonapeptide is a cyclic peptide obtained from Polymyxin B by proteolytic removal of its terminal amino acyl residue ^[1] . Polymyxin B nonapeptide is less toxic, lacks bactericidal activity, and retains its ability to render gram-negative bacteria susceptible to several antibiotics by permeabilizing their outer membranes ^[2] .
In Vitro	Polymyxin B nonapeptide, 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] .

REFERENCES

- [1]. Tsubery H, et al. Structure-function studies of polymyxin B nonapeptide: implications to sensitization of gram-negative bacteria. *J Med Chem.* 2000 Aug 10;43(16):3085-92.
- [2]. Ofek I, et al. Antibacterial synergism of polymyxin B nonapeptide and hydrophobic antibiotics in experimental gram-negative infections in mice. *Antimicrob Agents Chemother.* 1994 Feb;38(2):374-7.

Caution: Product has not been fully validated for medical applications. For research use only.

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