

PRODUCT DATA SHEET

Code No.: BIA-T1609

Pack sizes: 5 mg, 25 mg

Synonyms

Specifications

CAS # : 8011-61-8

Molecular Formula : C₆₆H₈₇N₁₃O₁₃ (for Tyrocidine A)

Molecular Weight : 1269.7

Source : Bacillus brevis
Appearance : White solid
Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Tyrocidine complex is a family of eight cationic cyclic decapeptides produced by Bacillus brevis, first reported by Dubos in 1941. Tyrocidines exhibit broad antibiotic activity against Gram positive and negative bacteria and are the major component of the tyrothricin complex which is used for treatment of topical infections. Although the mechanism of action of tyrocidines is not fully understood, they are known to act by disturbing lipid bilayers of the bacterial cell membrane.

References

- 1. Studies on a bacterial agent extracted from a soil bacillus. Dubos R.J. J. Exp. Med. 1939, 70, 11.
- 2. The amino-acid composition of tyrocidine. Gordon A.H. et al. Biochem. J. 1943, 37, 313.
- 3. The lytic action of tyrothricin and its derivatives on Stapylococcus aureus. Fong J. & Krueger A.P. J. Gen. Physiol. 1950, 33, 311.
- 4. Interaction between the antibiotic tyrocidine and DNA in vitro. Schazschneider B. et al. Nature 1974, 249, 757.

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