

PRODUCT DATA SHEET

Code No.: BIA-C1455

Pack sizes: 5 mg, 25 mg

Capreomycin sulfate

$$R_1$$
 R_2
 R_1
 R_2
 R_3
 R_4
 R_4
 R_5
 R_4
 R_5
 R_5
 R_7
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 R_8
 R_9
 R_1
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 R_9
 R_1
 R_9
 R_9
 R_9
 R_9
 R_1
 R_9
 R_9

Synonyms : Caprocin

Specifications

CAS # : 1405-37-4

Molecular Formula : C₂₅H₄₈N₁₄O₁₃S₂ (for IB)

Molecular Weight : 816.9 (for IB)

Source : Streptomyces sp.

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

Capreomycin sulfate is a salt of a complex of cyclic pentopeptides isolated from Streptomyces capreolus, first reported in 1962. The sulfate salt is the most commonly accessible formulation of capreomycin and is used for pharmaceutical applications. The complex has two major components, IA and IB, with an exocyclic lysine residue and two minor delysinyl components, IIA and IIB. Capreomycin is a potent antibiotic with activity against mycobateria, Gram positive and Gram negative organisms. Capreomycin acts by binding to the 23S ribosomal subunit, disrupting protein synthesis.

References

- 1. Chemical and biological properties of capreomycin and other peptide antibiotics. Herr E.B. Antimicrob. Agents Chemother. 1962, 1963, 201.
- 2. Molecular basis for the selectivity of antituberculosis compounds capreomycin and viomycin. Akbergenov R. et al., Antimicrob. Agents Chemother. 2011, 55, 4712.

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