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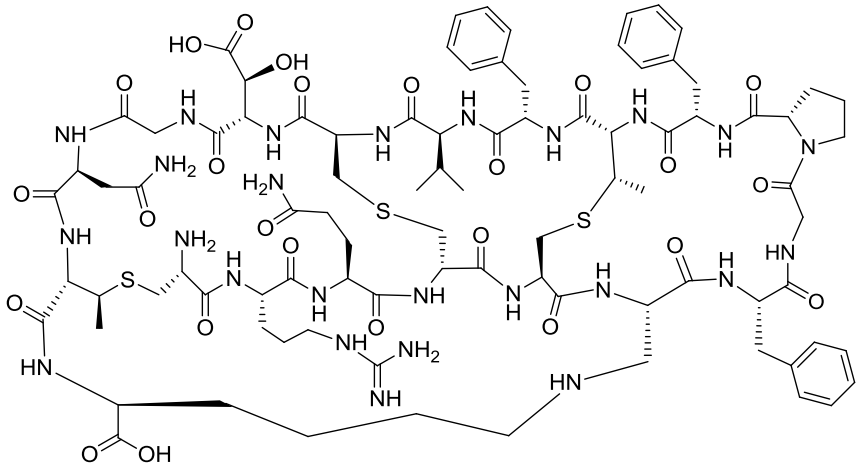
PRODUCT DATA SHEET

Cinnamycin

Code No.: **BIA-C1432**

Pack sizes: **1 mg, 5 mg**



Synonyms : Lanthiopeptin, Ro 09-0198

Specifications

CAS #	:	**110655-58-8**
Molecular Formula	:	**$C_{89}H_{125}N_{25}O_{25}S_3$**
Molecular Weight	:	**2041.3**
Source	:	***Streptomyces* sp.**
Appearance	:	**White to off white solid**
Purity	:	**>98% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.**

Application Notes

Cinnamycin (lanthiopeptin) is a high molecular weight tricyclic antibiotic produced by several species of Streptoverticillium. Cinnamycin is a potent indirect inhibitor of phospholipase A2, acting by specifically sequestering phosphatidylethanolamine (PE), a major component of the mammalian plasma cell membrane. Cinnamycin induces trans-bilayer phospholipid movement in cell membranes to expose internally bound PE. At high surface concentrations of PE, cinnamycin induces membrane reorganisation including membrane fusion and alteration of gross morphology.

References

1. Lanthiopeptin, a new peptide antibiotic. Production, isolation and properties of lanthiopeptin. Naruse N. J. Antibiot. 1989, 42, 837.
2. Duramycins B and C, two new lanthionine containing antibiotics as inhibitors of phospholipase A2. Structural revision of duramycin and cinnamycin. Fredenhagen A. et al. J. Antibiot. 1990, 43, 1403.
3. Mode of action of the lanthionine-containing peptide antibiotics duramycin, duramycin B and C, and cinnamycin as indirect inhibitors of phospholipase A2. Märki F. et al. Biochem. Pharmacol. 1991, 42, 2027.

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