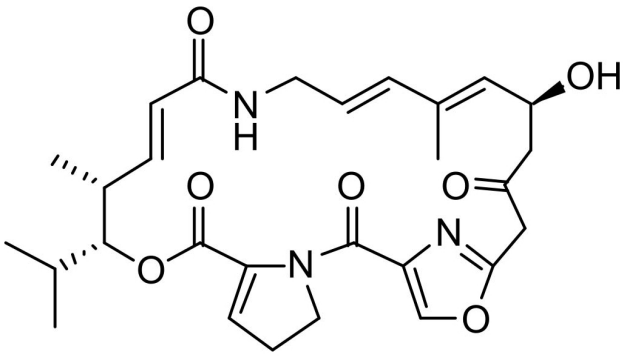
bioaustralis
fine chemicals

PRODUCT DATA SHEET

Code No.: BIA-O1131

Pack sizes.: 5mg, 25mg

Ostreogrycin A



Synonyms:
Mikamycin A, Pristinamycin IIA, Stephylomycin M1, Streptogramin A, Syncothrecin A, Synergistin A1, Virginiamycin M1, Vernamycin A, 14752-2, E129A, PA 114A, 1745Z3A, 547C, Factor M

Specifications

CAS #	**: 21411-53-0**
Molecular Formula	**: C28H35N3O7**
Molecular Weight	**: 525.6**
Source	**: -**
Appearance	**: White solid**
Purity	**: >99% by HPLC**
Long Term Storage	**: -20°C**
Solubility	**: Soluble in DMF or DMSO. Moderately soluble in methanol or ethanol. Poor water solubility.**

Application Notes

Ostreogrycin A (virginiamycin M1, streptogramin A) is the major component of the virginiamycin complex. In the 1950s this complex was independently discovered so many times that the literature became highly confusing. Ostreogrycin A is a macrocyclic lactone antibiotic that acts synergistically with the structurally unrelated cyclic depsipeptides, virginiamycin B (ostreogrycin B, streptogramin B) and virginiamycin S, to inhibit peptide elongation. This is achieved by blocking formation of a peptide bond between the growing peptide chain (peptidyl-tRNA) linked to the 50S ribosome and aminoacyl-tRNA. Ostreogrycin A is highly active against Gram positive bacteria, particularly MRSA.

References

1. Preparation and properties of an antibiotic complex E129. Ball S. 1958, 68, 24P.
2. Virginiamycin: nomenclature. Crooy P. and De Neys R. J. Antibiot. 1972, 25, 371.
3. Sites of interaction of streptogramin A and B antibiotics in the peptidyl transferase loop of 23 S rRNA and the synergism of their inhibitory mechanisms. Porse B.T. and Garrett R.A.J. Mol. Biol. 1999, 286, 375.