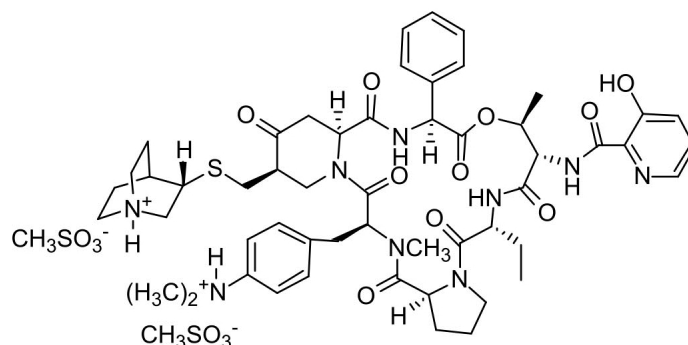


Quinupristin mesylate

Code No.: BIA-Q1354

Pack sizes.: 1mg, 5mg



Synonyms:

-

Specifications

CAS #	: 120138-50-3
Molecular Formula	: C55H75N9O16S3
Molecular Weight	: 1214.4
Source	: -
Appearance	: White to fawn solid
Purity	: >98% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Good water solubility.

Application Notes

Quinupristin is a semi-synthetic analogue of virginiamycin B (ostreogrycin B, pristnamycin IA, streptogramin B) formed by a Mannich condensation and elimination to generate an exocyclic methylene alpha to the ketone of the 4-piperidinone. Addition of quinuclidinylthiol to the methylene group affords quinupristin. The structural changes provide a more hydrophobic compound with a readily ionisable group for generating a salt. Quinupristin is used commercially in synergistic combination with dalfopristin (30:70). There is little published data on the synthesis, biological or antibiotic activity of quinupristin alone, however the combination product is highly effective, including activity against antibiotic resistant strains.

References

1. Quinupristin/dalfopristin (RP 59500): A new streptogramin antibiotic. Chant C. et al., Ann. Pharm. 1995, 29,1022.
2. Quinupristin/dalfopristin: spectrum of activity, pharmacokinetics, and initial chemical experience. Low D. et al., Microb. Drug Resist, 1995, 1, 223.
3. Quinupristin/dalfopristin: a therapeutic review. Allington D.R. & Rivey M.P. Clin. Ther. 2001, 23, 24.