

Dalfopristin mesylate

PRODUCT DATA SHEET

Code No.: BIA-D1355

Pack sizes: 1 mg, 5 mg

Synonyms :

Specifications

CAS # : 112362-50-2 Molecular Formula : $C_{35}H_{54}N_4O_{12}S_2$

Molecular Weight : 787.0

Source : Semi-synthetic

Appearance : White to yellow solid

Purity : >98% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Dalfopristin is a semi-synthetic analogue of ostreogrycin A (virginiamycin M, pristinamycin IIA, streptogramin A) formed by addition of diethylaminoethylthiol to the 2-pyrroline group of ostreogrycin, followed by oxidation to the sulfone. The structural changes provide a more hydrophobic compound with a readily ionisable group for generating a salt. Dalfopristin is used commercially in synergistic combination with quinupristin (70:30). There is little published data on the synthesis, biological or antibiotic activity of dalfopristin 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. Microb. Drug Resist. 1995, 1, 223.
- 3. Quinupristin/dalfopristin: a therapeutic review. Allington D.R. & Rivey M.P. Clin. Ther. 2001, 23, 24.

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