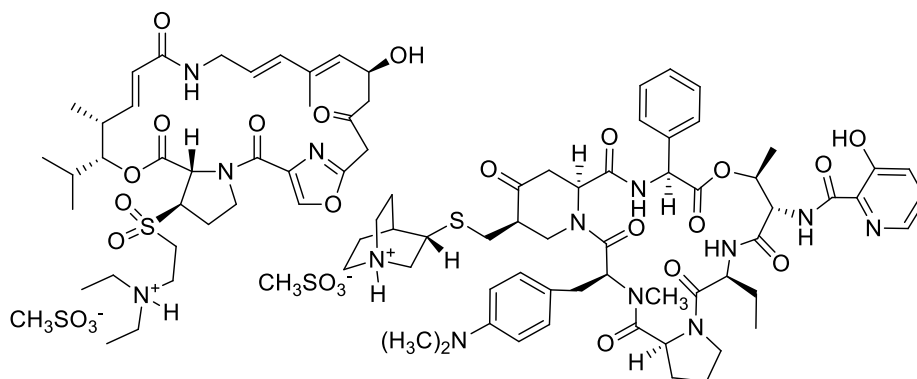


Quinupristin-Dalfopristin mesylate complex

Code No.: **BIA-Q1388**

Pack sizes: **5 mg, 25 mg**



Synonyms : Synercid complex, Dalfopristin-Quinupristin complex

Specifications

CAS #	: 126602-89-9
Molecular Formula	: C₅₄H₇₁N₉O₁₃S₂ (for Quinupristin mesylate); C₃₅H₅₄N₄O₁₂S₂ (for Dalfopristin mesylate)
Molecular Weight	: 1118.3 (for Quinupristin mesylate) ; 786.9 (for Dalfopristin mesylate)
Source	: Semi-synthetic
Appearance	: White to light yellow solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Good water solubility.

Application Notes

Quinupristin-dalfopristin mesylate complex is a 70:30 (w/w) complex of two semi-synthetic analogues marketed as Synercid. Dalfopristin is a semisynthetic analogue of virginiamycin M, while quinupristin is a semi-synthetic analogue of virginiamycin B. To optimise stability, the compounds are presented as the mesylate salts with 10% sodium mesylate excess to provide a buffered aqueous solution. The complex is more hydrophobic than the naturally-occurring virginiamycin complex, with a readily ionisable group for generating a salt for improved solubility. There is little published data on the synthesis and biological activity of individual components of the complex, however the combination is a highly effective antibiotic, including activity against 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.