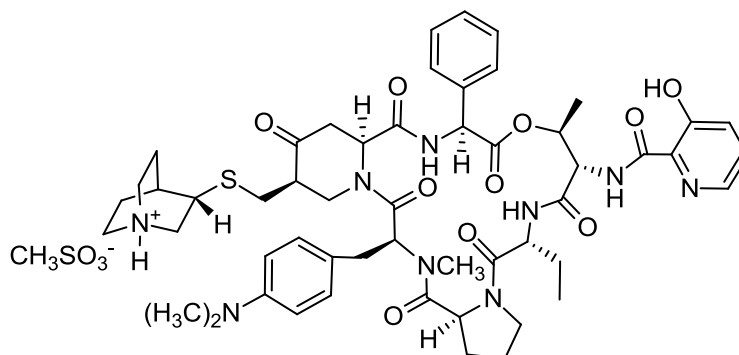


## Quinupristin mesylate

Code No.: **BIA-Q1354**

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



Synonyms :

## Specifications

CAS #	: <b>120138-50-3</b>
Molecular Formula	: <b>C<sub>54</sub>H<sub>71</sub>N<sub>9</sub>O<sub>13</sub>S<sub>2</sub></b>
Molecular Weight	: <b>1118.3</b>
Source	: <b>Semi-synthetic</b>
Appearance	: <b>White to fawn solid</b>
Purity	: <b>&gt;98% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in ethanol, methanol, DMF or DMSO. Good water solubility.</b>

## Application Notes

Quinupristin is a semi-synthetic analogue of virginiamycin B (ostreogrycin B, pristinamycin 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 quinucidinylthiol 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.

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