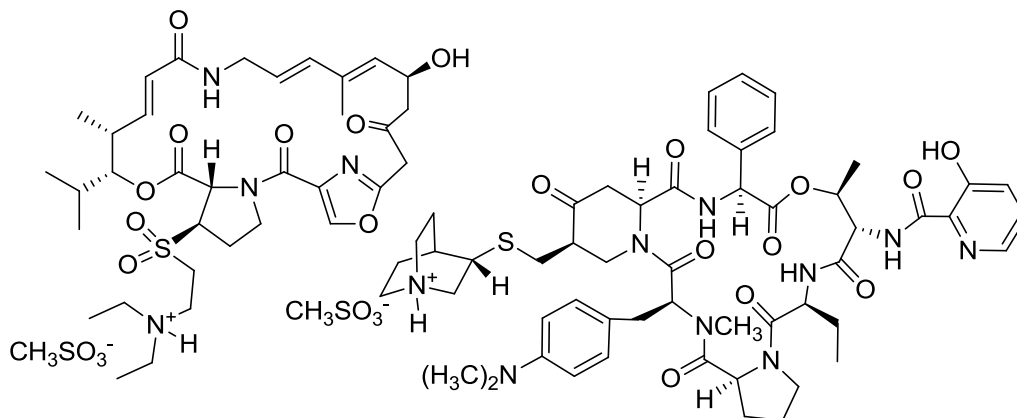


## Quinupristin-Dalfopristin mesylate complex

Code No.: **BIA-Q1388**

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



Synonyms : Synercid complex, Dalfopristin-Quinupristin complex

## Specifications

CAS #	: <b>126602-89-9</b>
Molecular Formula	: <b>C<sub>54</sub>H<sub>71</sub>N<sub>9</sub>O<sub>13</sub>S<sub>2</sub> (for quinupristin mesylate); C<sub>35</sub>H<sub>54</sub>N<sub>4</sub>O<sub>12</sub>S<sub>2</sub> (for dalfopristin mesylate)</b>
Molecular Weight	: <b>1905.2</b>
Source	: <b>Semi-synthetic</b>
Appearance	: <b>White to light yellow 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-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.

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