

# PRODUCT INFORMATION



## Quinupristin (mesylate)

Item No. 19764

**Formal Name:** 4-[4-(dimethylamino)-N-methyl-L-phenylalanine]-5-[(2S,5R)-5-[[[(3S)-1-azabicyclo[2.2.2]oct-3-yl]thio]methyl]-4-oxo-2-piperidinecarboxylic acid]-virginiamycin S1, monomethanesulfonate

**Synonyms:** RP 57669, Streptogramin B

**MF:** C<sub>53</sub>H<sub>68</sub>N<sub>9</sub>O<sub>10</sub>S • CH<sub>3</sub>SO<sub>3</sub>

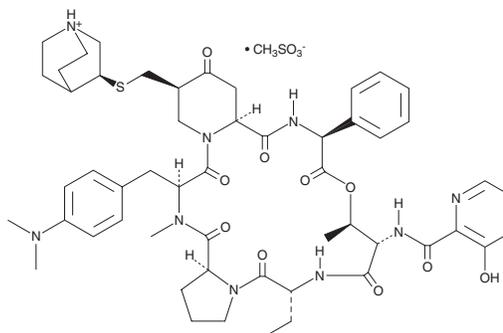
**FW:** 1,118.3

**Purity:** ≥98%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Quinupristin (mesylate) is supplied as a solid. A stock solution may be made by dissolving the quinupristin (mesylate) in the solvent of choice, which should be purged with an inert gas. Quinupristin (mesylate) is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

### Description

Quinupristin is a streptogramin antibiotic that blocks peptide bond formation and peptide extension in bacteria.<sup>1,2</sup> Quinupristin is usually combined with another streptogramin antibiotic, dalfopristin (Item No. 19762), to produce quinupristin-dalfopristin complex, known commercially as Synercid. While both quinupristin and dalfopristin have bacteriostatic effects, they act synergistically to kill Gram-positive bacteria, as well as some Gram-negative and anaerobic bacteria.<sup>2,3</sup>

### References

1. Kohanski, M.A., Dwyer, D.J., and Collins, J.J. How antibiotics kill bacteria: From targets to networks. *Nat. Rev. Microbiol.* **8(6)**, 423-435 (2010).
2. Wilson, D.N. The A-Z of bacterial translation inhibitors. *Crit. Rev. Biochem. Mol. Biol.* **44(6)**, 393-433 (2009).
3. Noeske, J., Huang, J., Olivier, N.B., *et al.* Synergy of streptogramin antibiotics occurs independently of their effects on translation. *Antimicrob. Agents Chemother.* **58(9)**, 5269-5279 (2014).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM