

PRODUCT INFORMATION



Dalfopristin (mesylate)

Item No. 19762

Formal Name: (3R,4R,5E,10E,12E,14S,26R,26aS)-26-[[2-(diethylamino)ethyl]sulfonyl]-8,9,14,15,24,25,26,26a-octahydro-14-hydroxy-4,12-dimethyl-3-(1-methylethyl)-3H-21,18-nitrilo-1H,22H-pyrrolo[2,1-c][1,8,4,19]dioxadiazacyclotetracosine-1,7,16,22(4H,17H)-tetrone, monomethanesulfonate

Synonym: RP 54476

MF: C₃₄H₅₁N₄O₉S • CH₃SO₃

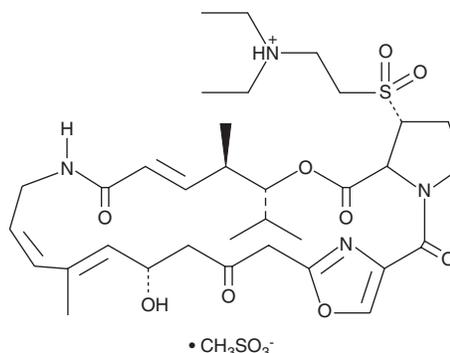
FW: 787.0

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

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

Description

Dalfopristin is a streptogramin antibiotic that blocks peptide bond formation and peptide extension in bacteria.^{1,2} Dalfopristin is usually combined with another streptogramin antibiotic, quinupristin (Item No. 19764), 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.^{2,3}

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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