

Quinupristin-Dalfopristin Complex (mesylate)

Chemical Properties

CAS No. :

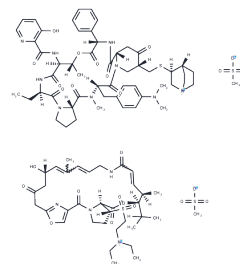
Formula: $C_{34}H_{51}N_4O_9S[CH_3SO_3] \cdot C_{53}H_{68}N_9O_{10}S[CH_3SO_3]$

Molecular Weight: 1905.3

Keep away from moisture

Storage: Powder: $-20^{\circ}C$ for 3 years | In solvent: $-80^{\circ}C$ for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Quinupristin-Dalfopristin Complex is a mixture of two streptogramin antibiotics. Quinupristin-dalfopristin complex is a mixture of two streptogramin antibiotics, dalfopristin, and quinupristin. Streptogramin antibiotics are divided into types A and B, which in combination can act synergistically.
Targets(IC50)	Others
In vitro	In vitro: A previous study compared the molecular interactions of the streptogramin combinations Synercid (type A, dalfopristin; type B, quinupristin) and NXL 103 (type A, flopristin; type B, linopristin) with the Escherichia coli 70S ribosome. Results showed that the streptogramin A and B components in Synercid and NXL 103 exhibited synergistic antimicrobial activity against certain pathogenic bacteria. Moreover, in transcription-coupled translation assays, only combinations including dalfopristin, the streptogramin A component of Synercid, showed synergy [1].
In vivo	In vivo: A previous animal study aimed to investigate the efficacy of quinupristin/dalfopristin in the prevention of prosthetic graft infection in a rat subcutaneous pouch model. Results showed that quinupristin/dalfopristin had significantly higher efficacy than levofloxacin and doxycycline. In addition, only the group treated with quinupristin/dalfopristin combined with levofloxacin or doxycycline showed no evidence of staphylococcal infection [2].

Solubility Information

Solubility	DMSO: Soluble, Ethanol: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.5249 mL	2.6243 mL	5.2485 mL
5 mM	0.105 mL	0.5249 mL	1.0497 mL
10 mM	0.0525 mL	0.2624 mL	0.5249 mL
50 mM	0.0105 mL	0.0525 mL	0.105 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481