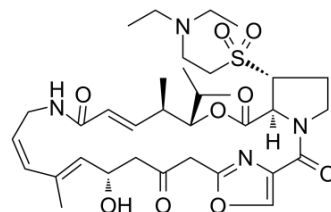


## Dalfopristin

Cat. No.:	HY-A0241		
CAS No.:	112362-50-2		
Molecular Formula:	C <sub>34</sub> H <sub>50</sub> N <sub>4</sub> O <sub>9</sub> S		
Molecular Weight:	690.85		
Target:	Bacterial; Antibiotic		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 125 mg/mL (180.94 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.4475 mL	7.2375 mL	14.4749 mL
	5 mM	0.2895 mL	1.4475 mL	2.8950 mL
	10 mM	0.1447 mL	0.7237 mL	1.4475 mL

Please refer to the solubility information to select the appropriate solvent.

#### In Vivo

- Add each solvent one by one: **10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline**  
Solubility: ≥ 2.08 mg/mL (3.01 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**  
Solubility: ≥ 2.08 mg/mL (3.01 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% corn oil**  
Solubility: ≥ 2.08 mg/mL (3.01 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Dalfopristin is a semi-synthetic streptogramin antibiotic. Quinupristin/Dalfopristin (Q/D) is a valuable alternative antibiotic to vancomycin for the treatment of multi-drug resistant Enterococcus faecium infections.

#### IC<sub>50</sub> & Target

Antibacterial<sup>[1]</sup>

#### In Vitro

Quinupristin/Dalfopristin(Q/D) is a combination of streptogramins B (Quinupristin) and streptogramins A

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(Dalfopristin) at 30:70 ratio<sup>[1]</sup>. Quinupristin/Dalfopristin, a semisynthetic injectable streptogramin, is a combination of 2 synergistic antibiotic components that are derived from pristinamycin: a type B streptogramin (Quinupristin) and a type A streptogramin (Dalfopristin), in a 30:70 weight-to-weight ratio<sup>[2]</sup>.

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## CUSTOMER VALIDATION

- J Antibiot (Tokyo). 2020 Apr 28.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Wang S, et al. Characteristic of Enterococcus faecium clinical isolates with quinupristin/Dalfopristin resistance in China. BMC Microbiol. 2016 Oct 21;16(1):246.

[2]. Sacar M, et al. Comparison of antimicrobial agents as therapy for experimental endocarditis: caused by methicillin-resistant Staphylococcus aureus. Tex Heart Inst J. 2010;37(4):400-4.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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