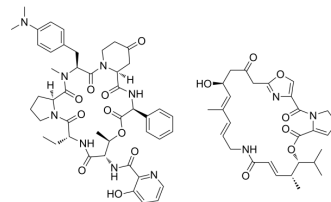


Pristinamycin

Cat. No.:	HY-A0279		
CAS No.:	270076-60-3		
Molecular Formula:	C ₇₃ H ₈₉ N ₁₁ O ₁₇		
Molecular Weight:	1392.55		
Target:	Bacterial; Antibiotic		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (71.81 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	0.7181 mL	3.5905 mL	7.1811 mL
5 mM	0.1436 mL	0.7181 mL	1.4362 mL
10 mM	0.0718 mL	0.3591 mL	0.7181 mL

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

BIOLOGICAL ACTIVITY

Description

Pristinamycin, produced by *Streptomyces pristinaespiralis*, is an orally active streptogramin-like antibiotic consisting of two chemically unrelated components: Pristinamycin I (PI) and Pristinamycin II (PII). Pristinamycin is highly active against many antibiotic-resistant pathogens, particularly Gram-positive bacteria, including Methicillin-resistant *Staphylococcus aureus* (MRSA), Vancomycin-resistant *S. aureus* (VRSA) and *Enterococcus faecium* (VREF)^[1].

In Vitro

In-vitro studies show pristinamycin to inhibit *Staphylococci* and *Streptococci*, including Erythromycin highly-resistant organisms, at a concentration of less than or equal to 0.78 mg/l^[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

To study Pristinamycin activity in vivo, mice infected IP with *C. psittaci*. Mortality in the control group was 70%. Three groups of mice received 25 mg/kg, 50 mg/kg and 100 mg/kg Pristinamycin respectively. The antibiotic was active in the 100 mg/kg dosage which is the therapeutic dosage^[3].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Meng J, et al. Improvement of pristinamycin I (PI) production in *Streptomyces pristinaespiralis* by metabolic engineering approaches. *Synth Syst Biotechnol.* 2017;2(2):130-136. Published 2017 Jun 8.

[2]. Maskell JP, et al. Comparative in-vitro activity of erythromycin, vancomycin and pristinamycin. *Infection.* 1988;16(6):365-370.

[3]. Orfila J, Haider F. Action de la pristinamycine sur les Chlamydia [Action of pristinamycin on Chlamydia]. *Pathol Biol (Paris).* 1984;32(5):443-445.

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

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