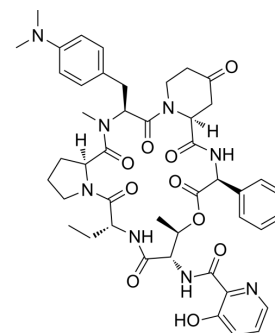


Pristinamycin IA

Cat. No.:	HY-A0279A		
CAS No.:	3131-03-1		
Molecular Formula:	C ₄₅ H ₅₄ N ₈ O ₁₀		
Molecular Weight:	866.96		
Target:	Bacterial; Antibiotic		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 33.33 mg/mL (38.44 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.1535 mL	5.7673 mL	11.5346 mL
	5 mM	0.2307 mL	1.1535 mL	2.3069 mL
	10 mM	0.1153 mL	0.5767 mL	1.1535 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: ≥ 3 mg/mL (3.46 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 3 mg/mL (3.46 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 3 mg/mL (3.46 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Pristinamycin IA (Mikamycin B) is a cycle-peptidic macrolactone antibiotic. Pristinamycin IA is a substrate of P-glycoprotein and inhibits its function. Pristinamycin IA is active against StaphyloEoccus and Srreptococcus^[1].

IC₅₀ & Target

Macrolide

In Vitro

Pristinamycin IA (100 μM, 0-4 h) inhibits the efflux of [³H]vinblastine from Caco-2 cells^[1].
?Pristinamycin IA (100 μM) reduces by 70% the basolateral to apical secretion of [³H]vinblastine across Caco-2 cell

monolayers^[1].

?Pristinamycin IA (4.614?μM) activates ribosome-dependent ribo-regulator (LRR)^[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Microb Biotechnol. 2021 Mar 15.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Xia Cai, et al. Attenuator LRR - a regulatory tool for modulating gene expression in Gram-positive bacteria. Microb Biotechnol. 2021 Nov;14(6):2538-2551.

[2]. Phung-Ba V et al. Interaction of pristinamycin IA with P-glycoprotein in human intestinal epithelial cells. Eur J Pharmacol. 1995 Jan 16;288(2):187-92.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA