

Cefilavancin

Cat. No.:	HY-19466
CAS No.:	1393900-12-3
Molecular Formula:	C ₈₇ H ₉₅ Cl ₃ N ₁₆ O ₂₈ S ₂
Molecular Weight:	1983.26
Target:	Bacterial; Antibiotic
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	Cefilavancin (TD-1792) is a potent multivalent glycopeptide-cephalosporin heterodimer antibiotic with effective activity against Gram-positive bacteria. Cefilavancin has been used to research skin infections ^{[1][2][3]} .	
IC₅₀ & Target	Glycopeptide	
In Vitro	Cefilavancin (TD-1792) has highly active against Methicillin -susceptible Staphylococcus aureus (MIC ₉₀ = 15 ng/mL), Methicillin -resistant Staphylococcus aureus, and heterogeneous Vancomycin -intermediate Staphylococcus aureus (MIC ₉₀ = 30 ng/mL) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	Cefilavancin (0.03-10 mg/kg; s.c.) produces a dose-dependent reduction of thigh bacterial burden in infected mice ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Female NSA mice (18-30 g; neutropenia induced by administering cyclophosphamide, then injected bacteria into the posterior thigh) ^[3]
	Dosage:	0.03-10 mg/kg
	Administration:	s.c.; single dosage (every 24 h) or two (every 12 h), three (every 8 h), or four (every 6 h) divided doses
	Result:	Produced a maximal of approximately 1- to 2-log ₁₀ kill against MRSA ATCC 33591, MSSA ATCC 29213, and MRSE MED 820 and ≥3-log ₁₀ kill against VISA HIP 5836, MSSE SU03, PSSP MED35, PSSP MED1119, and Streptococcus pyogenes MED 2040 strains.

REFERENCES

[1]. Blais J, et al. Antistaphylococcal activity of TD-1792, a multivalent glycopeptide-cephalosporin antibiotic. Antimicrob Agents Chemother. 2012 Mar;56(3):1584-7.

[2]. Stryjewski ME, et al. TD-1792 versus vancomycin for treatment of complicated skin and skin structure infections. Antimicrob Agents Chemother. 2012 Nov;56(11):5476-83.

[3]. Hegde SS, et al. Pharmacodynamics of TD-1792, a novel glycopeptide-cephalosporin heterodimer antibiotic used against Gram-positive bacteria, in a neutropenic murine thigh model. *Antimicrob Agents Chemother.* 2012 Mar;56(3):1578-83.

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