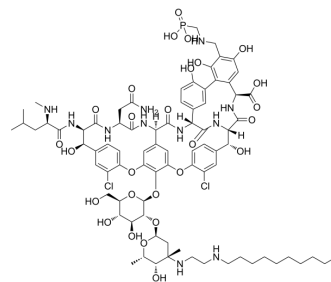


Telavancin

Cat. No.:	HY-112959
CAS No.:	372151-71-8
Molecular Formula:	C ₈₀ H ₁₀₆ Cl ₂ N ₁₁ O ₂₇ P
Molecular Weight:	1755.63
Target:	Antibiotic; Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Telavancin (TD-6424) is a semisynthetic lipoglycopeptide vancomycin-derivative, is a novel antimicrobial agent developed by Theravance for overcoming resistant Gram-positive bacterial infections, specifically methicillin-resistant <i>Staphylococcus aureus</i> (MRSA). Telavancin disrupts cell membrane integrity, can be used for research of complicated skin and skin structure infections (cSSSIs) caused by Gram-positive bacteria ^[1] .	
IC₅₀ & Target	Glycopeptide	
In Vitro	Telavancin has a rapid, concentration-dependent bactericidal effect, due to disruption of cell membrane integrity ^[1] . Telavancin (5 µg/mL) exerts bacteriocidal effect against a MRSA strain (COL) and a VISA strain (HIP5836) at a concentration of 5 µg/mL ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	Telavancin has been tested in various relevant animal models of infection, namely, bacteremia (40 mg/kg/d; s.c.; twice a day, with 12 h space), endocarditis (30 mg/kg/d; i.v.; twice a day, with 12 h space; 4 d), meningitis, and pneumonia with success ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	MRSA bacteremia model in neutropenic mice ^[1]
	Dosage:	40 mg/kg
	Administration:	Subcutaneous injection; twice every day spaced 12 h apart
	Result:	Resulted a significantly higher 14-day survival compared with vancomycin-treated animals.
	Animal Model:	Rabbit model of <i>S. aureus</i> endocarditis ^[1]
	Dosage:	30 mg/kg
	Administration:	Intravenous injection; twice every day, spaced 12 h for 4 days
	Result:	Significantly reduced MRSA densities in all target tissues and increased the percentage of

these organs rendered culture negative.

REFERENCES

[1]. Das B, et al. Telavancin: a novel semisynthetic lipoglycopeptide agent to counter the challenge of resistant Gram-positive pathogens. Ther Adv Infect Dis. 2017 Mar;4(2):49-73.

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