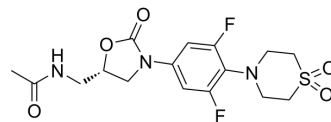


PNU288034

Cat. No.:	HY-101818
CAS No.:	383199-88-0
Molecular Formula:	C ₁₆ H ₁₉ F ₂ N ₃ O ₅ S
Molecular Weight:	403.4
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	PNU288034 is a potent oxazolidinone antibiotic.
In Vitro	In vitro studies conducted to characterize the transporters involved demonstrates PNU-288034 uptake by human organic anion transporter 3 (OAT3; K _m = 44 +/- 5 μM) and human multidrug and toxin extrusion protein 1 (hMATE1; K _m = 340 +/- 55 μM) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	PNU-288034 is metabolically stable in liver microsomes across species, and unchanged drug is cleared in the urine by an apparent active renal secretion process in rat and monkey. Coadministration of PNU-288034 and the OAT3 inhibitor probenecid significantly increases PNU-288034 plasma area under the curve (170%) and reduces both plasma and renal clearance in monkey. Coadministration of PNU-288034 and cimetidine also reduces plasma clearance in rat to a rate comparable with probenecid coadministration ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Lai Y, et al. Preclinical and clinical evidence for the collaborative transport and renal secretion of an oxazolidinone antibiotic by organic anion transporter 3 (OAT3/SLC22A8) and multidrug and toxin extrusion protein 1 (MATE1/SLC47A1). J Pharmacol Exp Ther. 2010 Sep 1;334(3):936-44.

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