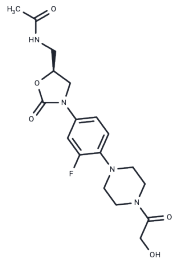
Data Sheet (Cat.No.T15237)

TargetMol

Eperezolid

Chemical Properties



CAS No. : 165800-04-4

Formula: C18H23FN4O5

Molecular Weight: 394.4

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Eperezolid (PNU-100592) is an oxazolidinone antibacterial agent. Eperezolid showed well in vitro inhibitory activity, regardless of methicillin susceptibility for staphylococci (MIC90= 1-4 mg/ml).
Targets(IC50)	Antibacterial,Antibiotic
In vitro	The specific binding of eperezolid is dose-dependent and is proportional to the ribosome concentrations. The binding of eperezolid to the ribosome is competitively inhibited by chloramphenicol and lincomycin. However, unlike chloramphenicol and lincomycin, eperezolid does not inhibit the puromycin reaction, indicating that the oxazolidinones have no effect on peptidyl transferase [2]. Antibiotic Eperezolid binds specifically to the 50S ribosomal subunit of Escherichia coli. eperezolid was found to bind only to the 50S subunit, with similar affinity as to the 70S ribosome, and to have no affinity for the 30S subunit [3].

Solubility Information

Solubility	DMSO: 40 mg/mL (101.42 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5355 mL	12.6775 mL	25.355 mL
5 mM	0.5071 mL	2.5355 mL	5.071 mL
10 mM	0.2535 mL	1.2677 mL	2.5355 mL
50 mM	0.0507 mL	0.2535 mL	0.5071 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Rybak MJ, et al. Comparative in vitro activities and postantibiotic effects of the oxazolidinone compounds eperezolid (PNU-100592) and linezolid (PNU-100766) versus vancomycin against Staphylococcus aureus, coagulase-negative staphylococci, Enterococcus f

Lin AH, et al. The oxazolidinone eperezolid binds to the 50S ribosomal subunit and competes with binding of chloramphenicol and lincomycin. Antimicrob Agents Chemother. 1997 Oct;41(10):2127-31.

Zhou CC, et al. 1H nuclear magnetic resonance study of oxazolidinone binding to bacterial ribosomes. Antimicrob Agents Chemother. 2002 Mar;46(3):625-9.

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