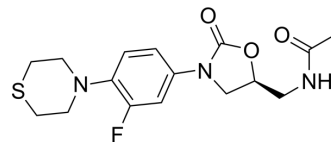


Sutezolid

Cat. No.:	HY-10392		
CAS No.:	168828-58-8		
Molecular Formula:	C ₁₆ H ₂₀ FN ₃ O ₃ S		
Molecular Weight:	353.41		
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 : 50 mg/mL (141.48 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM		2.8296 mL	14.1479 mL	28.2957 mL
		5 mM		0.5659 mL	2.8296 mL	5.6591 mL
10 mM			0.2830 mL	1.4148 mL	2.8296 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (7.07 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.07 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.07 mM); Clear solution 					

BIOLOGICAL ACTIVITY

Description	Sutezolid (PNU-100480), an orally active oxazolidinone antimicrobial agent, acts by inhibiting bacterial protein synthesis. Sutezolid has potent activity against mycobacteria, and is used for the research of drug-resistant tuberculosis ^{[1][2]} .
IC ₅₀ & Target	Oxazolidinone
In Vitro	Sutezolid (PNU-100480) exhibits excellent in vitro activity against multiple clinical isolates of Mycobacterium avium complex (MIC's=0.5-4 µg/mL) ^[1] .

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

In Vivo

Sutezolid (PNU-100480) is a thiomorpholinyl analog of linezolid with superior efficacy against *M. tuberculosis* in the hollow-fiber, mouse, and whole-blood models^[3].

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

CUSTOMER VALIDATION

- Antimicrob Agents Chemother. 2023 Mar 15;e0165522.
- Antimicrob Agents Chemother. 2021 Jan 25;AAC.01445-20.
- Dis Model Mech. 2021 Oct 13;dmm.049145.
- J Pharm Biomed Anal. 2019 May 30;169:196-207.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Barbachyn MR, et al. Identification of a novel oxazolidinone (U-100480) with potent antimycobacterial activity. *J Med Chem.* 1996;39(3):680-685.

[2]. Nicole Salazar-Austin, et al. Sutezolid. In *Kucers the Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal, Antiparasitic, and Antiviral Drugs, Seventh Edition* (pp. 2559-2563). CRC Press.

[3]. Zhu T, et al. Population pharmacokinetic/pharmacodynamic analysis of the bactericidal activities of sutezolid (PNU-100480) and its major metabolite against intracellular *Mycobacterium tuberculosis* in ex vivo whole-blood cultures of patients with pulmonary tuberculosis. *Antimicrob Agents Chemother.* 2014;58(6):3306-3311.

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