

# PNU-101603

Cat. No.: HY-125941 CAS No.: 168828-60-2 Molecular Formula:  $C_{16}H_{20}FN_{3}O_{4}S$ Molecular Weight: 369.41 Target: Bacterial Pathway: Anti-infection

Powder Storage:

-20°C 3 years 2 years

-80°C In solvent 6 months

> -20°C 1 month

**Product** Data Sheet

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (270.70 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.7070 mL	13.5351 mL	27.0702 mL
	5 mM	0.5414 mL	2.7070 mL	5.4140 mL
	10 mM	0.2707 mL	1.3535 mL	2.7070 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (6.77 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.77 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.77 mM); Clear solution

# **BIOLOGICAL ACTIVITY**

Description PNU-101603 is a sulfoxide metabolite of Sutezolid (HY-10392). PNU-101603 alone or combined with SO109 (HY-14989) shows excellent activity against Mycobacterium tuberculosis (MTB), as well as against agent-susceptible and multidrug-resistant  $TB^{[1][2]}$ .

In Vitro PNU-101603 (compound 7, 21 days) inhibits M. tuberculosis activity<sup>[2]</sup>.

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

Cell Viability Assay<sup>[2]</sup>

Cell Line:	M. tuberculosis	
Concentration:	0-1 μg/mL approximately	
Incubation Time:	21 days	
Result:	Inhibited M. tuberculosis with a MIC value ≤0.125 μg/mL.	

# **REFERENCES**

- [1]. Reddy VM, et al. SQ109 and PNU-100480 interact to kill Mycobacterium tuberculosis in vitro. J Antimicrob Chemother. 2012 May;67(5):1163-6.
- [2]. Barbachyn MR, et al. Identification of a novel oxazolidinone (U-100480) with potent antimycobacterial activity. J Med Chem. 1996 Feb 2;39(3):680-5.

Caution: Product has not been fully validated for medical applications. For research use only.

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