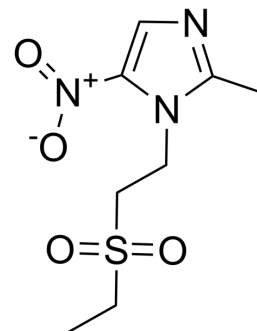


Tinidazole

Cat. No.:	HY-B0177		
CAS No.:	19387-91-8		
Molecular Formula:	C ₈ H ₁₃ N ₃ O ₄ S		
Molecular Weight:	247.27		
Target:	Bacterial; Parasite; 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 (202.21 mM)
 H₂O : 3.33 mg/mL (13.47 mM; Need ultrasonic)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	4.0442 mL	20.2208 mL	40.4416 mL
	5 mM	0.8088 mL	4.0442 mL	8.0883 mL
	10 mM	0.4044 mL	2.0221 mL	4.0442 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 3.25 mg/mL (13.14 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 3.25 mg/mL (13.14 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 3.25 mg/mL (13.14 mM); Clear solution
- Add each solvent one by one: PBS
Solubility: 2 mg/mL (8.09 mM); Clear solution; Need ultrasonic and warming and heat to 60°C

BIOLOGICAL ACTIVITY

Description

Tinidazole, an orally available antibacterial agent, is a 5-nitroimidazole with selective activity against anaerobic bacteria and protozoa^[1].

In Vitro

Tinidazole is one of the most active antibacterial agents against *Bacteroides fragilis* which is one of the most resistant species of anaerobic bacteria. Tinidazole is efficacious in protozoal infections such as trichomonal vaginitis, amoebiasis and giardiasis^[1].

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

CUSTOMER VALIDATION

- Zebrafish. 2023 May 25.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Nord CE, et al. Tinidazole--microbiology, pharmacology and efficacy in anaerobic infections. *Infection*. 1983;11(1):54-60.

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

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