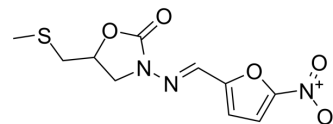


Nifuratel

Cat. No.:	HY-A0059
CAS No.:	4936-47-4
Molecular Formula:	C ₁₀ H ₁₁ N ₃ O ₅ S
Molecular Weight:	285.28
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 (175.27 mM; Need ultrasonic)
 H₂O : < 0.1 mg/mL (insoluble)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		3.5053 mL	17.5266 mL	35.0533 mL
	5 mM		0.7011 mL	3.5053 mL	7.0107 mL
	10 mM		0.3505 mL	1.7527 mL	3.5053 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: ≥ 2.5 mg/mL (8.76 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (8.76 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Nifuratel(NF 113, SAP 113) is a broad antibacterial spectrum agent, which is used as an antibacterial, antifungal, and antiprotozoal (Trichomonas).IC50 Value: 0.125-1 µg/mL(MIC, A. vaginae) [1]Target: Antibacterial; Antiprotozoal in vitro: In vitro, nifuratel is able to inhibit the growth of A. vaginae, with a MIC range of 0.125-1 µg/mL; it is active against G. vaginalis and does not affect lactobacilli [1].in vivo: Patients were randomized to receive a 2-week course of bismuth subcitrate (8 mg/kg/day, q.d.s.), amoxicillin (50 mg/kg/day, q.d.s.), with either nifuratel (15 mg/kg/day, q.d.s.) or furazolidone (10 mg/kg/day, q.d.s.), plus omeprazole (0.5 mg/kg, once daily) [2].Toxicity: There were no serious adverse reactions and were no withdrawals due to any side-effects. All of side-effects were self-limiting (dark stools, urine discoloration, blackening of the tongue, and others) [3].Clinical trial: N/A

CUSTOMER VALIDATION

- Int J Mol Sci. 2023, 24(2), 1635.
- ACS Infect Dis. 2021 Aug 13;7(8):2390-2401.
- Research Square Preprint. 2021 Aug.

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REFERENCES

- [1]. Polatti F. Bacterial vaginosis, Atopobium vaginae and nifuratel. Curr Clin Pharmacol. 2012 Feb 1;7(1):36-40.
- [2]. Nijevitch AA, et al. Helicobacter pylori eradication in childhood after failure of initial treatment: advantage of quadruple therapy with nifuratel to furazolidone. Aliment Pharmacol Ther. 2005 Nov 1;22(9):881-7.
- [3]. Nijevitch AA, et al. Nifuratel-containing initial anti-Helicobacter pylori triple therapy in children. Helicobacter. 2007 Apr;12(2):132-5.
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Caution: Product has not been fully validated for medical applications. For research use only.

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