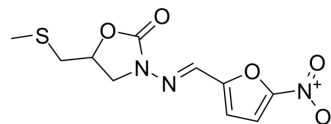


## Nifuratel

|                           |   |       |         |
|---------------------------|---|-------|---------|
| <b>Cat. No.:</b>          | HY-A0059  |       |         |
| <b>CAS No.:</b>           | 4936-47-4   |       |         |
| <b>Molecular Formula:</b> | C <sub>10</sub> H <sub>11</sub> N <sub>3</sub> O <sub>5</sub> S |       |         |
| <b>Molecular Weight:</b>  | 285.28  |       |         |
| <b>Target:</b>            | Bacterial; Parasite; Antibiotic                                 |       |         |
| <b>Pathway:</b>           | Anti-infection  |       |         |
| <b>Storage:</b>           | 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)  
 H<sub>2</sub>O : < 0.1 mg/mL (insoluble)

| Concentration | Mass      |            |            |
|---------------|-----------|------------|------------|
|               | 1 mg      | 5 mg       | 10 mg      |
| 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

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## 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.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

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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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