# Data Sheet (Cat.No.T20702)

TargetMol

## Ormetoprim

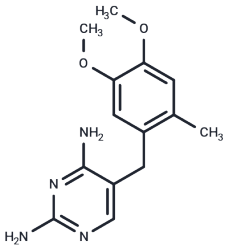
### Chemical Properties

CAS No. : 6981-18-6

Formula: C14H18N4O2

Molecular Weight: 274.32

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.



### Biological Description

| | |
|---|---|
| Description | Ormetoprim (Ro 5-9754), an antibiotic approved for use in the United States, is used to prevent the spread of disease in freshwater aquaculture. |
| Targets(IC50) | Antibiotic |
| In vivo | Ormetoprim (8.3 mg/kg; i.p.) demonstrates an absorption half-life of 5.4 hours, an elimination half-life of 7.5 hours, and a Cmax of 1.2±0.2 μg/mL[3]. When administered orally (8.3 mg/kg; p.o.), it shows an absorption half-life of 3.9 hours, an elimination half-life of 3.9 hours, a Cmax of 1.6±0.4 μg/mL, and an oral availability of 78.5% relative to intraperitoneal administration[3]. |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 3.6 mg/mL (13.12 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 3.6454 mL | 18.2269 mL | 36.4538 mL |
| 5 mM | 0.7291 mL | 3.6454 mL | 7.2908 mL |
| 10 mM | 0.3645 mL | 1.8227 mL | 3.6454 mL |
| 50 mM | 0.0729 mL | 0.3645 mL | 0.7291 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Guerard JJ, Chin YP. Photodegradation of ormetoprim in aquaculture and stream-derived dissolved organic matter. J Agric Food Chem. 2012 Oct 3;60(39):9801-6. doi: 10.1021/jf302564d. Epub 2012 Sep 24. PubMed PMID: 22950359.
Yang YJ, Liu XW, Li B, Li SH, Kong XJ, Qin Z, Li JY. Simultaneous determination of diaveridine, trimethoprim and ormetoprim in feed using high performance liquid chromatography tandem mass spectrometry. Food Chem. 2016 Dec 1;212:358-66. doi: 10.1016/j.foodchem.2016.05.184. Epub 2016 Jun 1. PubMed PMID: 27374543.
Davami A, Peterson RA, Jones WT, Ilardi RL. Compatibility of sulfadimethoxine and ormetoprim with lasalocid and monensin on performance of male broiler chickens. Poult Sci. 1987 Feb;66(2):373-5. PubMed PMID: 3588507.
Bakal RS, Bai SA, Stoskopf MK. Pharmacokinetics of sulfadimethoxine and ormetoprim in a 5:1 ratio following intraperitoneal and oral administration, in the hybrid striped bass (Morone chrysops x Morone saxitalis). J Vet Pharmacol Ther. 2004 Feb;27(1):1-6. PubMed PMID: 14995959.

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