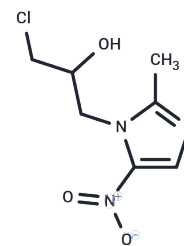


Ornidazole

Chemical Properties

CAS No. :	16773-42-5
Formula:	C ₇ H ₁₀ ClN ₃ O ₃
Molecular Weight:	219.63
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	Ornidazole (Tiberal) is a nitroimidazole antiprotozoal agent used in ameba and trichomonas infections. It is partially plasma-bound and also has radiation-sensitizing action.
Targets(IC50)	Hedgehog/Smoothened,Antibacterial,Antibiotic,Parasite
In vitro	Ornidazole is a 5-nitroimidazole derivative active against protozoa and anaerobic bacteria. It is converted to reduction products that interact with DNA to cause destruction of helical DNA structure and strand leading to a protein synthesis inhibition and cell death in susceptible organisms.

Solubility Information

Solubility	H ₂ O: 2 mg/mL (9.11 mM),Sonication is recommended. Ethanol: 41 mg/mL (186.68 mM),Sonication is recommended. DMSO: 55 mg/mL (250.42 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (9.11 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.5531 mL	22.7656 mL	45.5311 mL
5 mM	0.9106 mL	4.5531 mL	9.1062 mL
10 mM	0.4553 mL	2.2766 mL	4.5531 mL
50 mM	0.0911 mL	0.4553 mL	0.9106 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

Rutgeerts P et al. *Gastroenterology*, 2005, 128(4):856-861.

Lai S, Kumari A, Liu J, et al. Chemical screening reveals Ronidazole is a superior prodrug to Metronidazole for nitroreductase-induced cell ablation system in zebrafish larvae. *Journal of Genetics and Genomics*. 2021

Goldstein EJ et al. *Antimicrob Agents Chemother*, 1978, 14(4), 609-613.

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