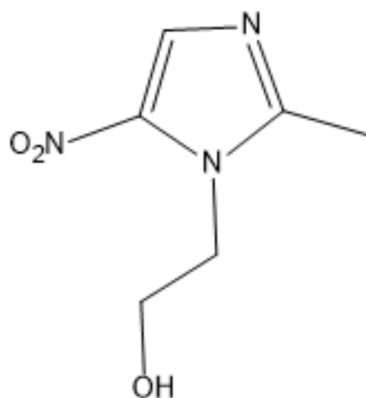


Data Sheet

Product Information

Catalog Number	BP22548
Product Name	Metronidazole
Description	Metronidazole is an orally active nitroimidazole antibiotic. Metronidazole can cross blood brain barrier. Metronidazole can be used for the research of anaerobic infections.
In vitro	Metronidazole displays inhibitory activity towards anaerobic protozoa <i>Trichomonas vaginalis</i> , <i>Entamoeba histolytica</i> , <i>Giardia lamblia</i> , and <i>Balantidium coli</i> . Metronidazole (4-8 µg/mL) inhibits anaerobic bacteria and shows good bactericidal activity. Metronidazole (0.1 µg/mL-0.01 mg/mL; 12-96 h) induces granular formation and triggers apoptosis in <i>Blastocystis</i> sp.
In vivo	Metronidazole (135 mg/kg/d; p.o.; 28 d) can cross the blood brain barrier, and exhibits neurotoxicity under long term administration in rats. Metronidazole (1 g/L; p.o.; 4 weeks) results skeletal muscle atrophy and changes the expression of genes involved in the muscle peripheral circadian rhythm machinery and metabolic regulation.
CAS No.	443-48-1
Chemical Formula	C ₆ H ₉ N ₃ O ₃
Molecular Weight	171.15
Solubility	DMSO: 35 mg/mL (204.50 mM, Need ultrasonic and warming) H ₂ O: 16.67 mg/mL (97.40 mM, Need ultrasonic)
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year

Chemical Structure OR Tested Image	 The chemical structure shows a 1H-imidazole ring substituted with a methyl group at position 3, a nitro group (O₂N-) at position 4, and a 3-hydroxypropyl group (-CH₂CH₂CH₂OH) at position 1. The nitro group is represented as O₂N- and the hydroxyl group as OH.
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v2 Revision on 12/28/2022

Purdue Bioscience Inc.
St, Brooklyn, NY 11220, USA
www.purduebio.com
8.7311
duebio.com
on on 12/28/2022