

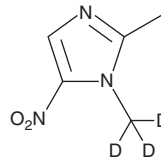
# PRODUCT INFORMATION



## Dimetridazole-d<sub>3</sub>

Item No. 27841

**CAS Registry No.:** 64678-69-9  
**Formal Name:** 2-methyl-1-(methyl-d<sub>3</sub>)-5-nitro-1H-imidazole  
**MF:** C<sub>5</sub>H<sub>4</sub>D<sub>3</sub>N<sub>3</sub>O<sub>2</sub>  
**FW:** 144.1  
**Chemical Purity:** ≥98% (Dimetridazole)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>3</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Dimetridazole-d<sub>3</sub> is intended for use as an internal standard for the quantification of dimetridazole by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Dimetridazole-d<sub>3</sub> is supplied as a solid. A stock solution may be made by dissolving the dimetridazole-d<sub>3</sub> in the solvent of choice, which should be purged with an inert gas. Dimetridazole-d<sub>3</sub> is soluble in the organic solvent DMSO.

### Description

Dimetridazole is a nitroimidazole antiprotozoal agent that has activity against *Bacteroides* species (mean MIC = 2.7 μM).<sup>1</sup> It is also active against 16 clinical isolates of *B. fragilis* (MICs = 0.28-2.82 μg/ml). Formulations containing dimetridazole have been used to treat *Giardia* infections in livestock.

### Reference

1. Jokipii, L. and Jokipii, A.M. Comparative evaluation of the 2-methyl-5-nitroimidazole compounds dimetridazole, metronidazole, secnidazole, ornidazole, tinidazole, carnidazole, and panidazole against *Bacteroides fragilis* and other bacteria of the *Bacteroides fragilis* group. *Antimicrob. Agents Chemother.* **28(4)**, 561-564 (1985).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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