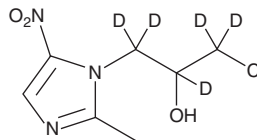


PRODUCT INFORMATION



Ornidazole-d₅ Item No. 33810

CAS Registry No.: 2747915-64-4
Formal Name: α-(chloro(methyl-d₂))-2-methyl-5-nitro-1H-imidazole-1-ethan-α,β,δ₃-ol
Synonym: (±)-Ornidazole-d₅
MF: C₇H₅D₅ClN₃O₃
FW: 224.7
Chemical Purity: ≥98% (Ornidazole)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₅); ≤1% d₀
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

Ornidazole-d₅ is intended for use as an internal standard for the quantification of ornidazole (Item No. 26818) 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).

Ornidazole-d₅ is supplied as a solid. A stock solution may be made by dissolving the ornidazole-d₅ in the solvent of choice, which should be purged with an inert gas. Ornidazole-d₅ is soluble in methanol and DMSO.

Description

Ornidazole is an orally bioavailable 5-nitroimidazole derivative with antibacterial and antiprotozoal activities.^{1,2} Ornidazole inhibits the growth of clinical isolates of *B. fragilis* (MICs = 0.5-5 μM) and various anaerobic bacteria when used at concentrations ranging from less than 0.1 to 3.2 μg/ml.^{2,3} It also inhibits the growth of *Giardia* isolates (IC₅₀s = 0.01-0.47 μg/ml).⁴ Oral administration of ornidazole reduces *T. vaginalis* and *T. foetus* infection in mice and *E. histolytica* infection in rats with curative dose (CD₅₀) values of 37, 3, and 10 mg/kg, respectively.¹ Ornidazole (400 mg/kg per day) induces infertility in male rats within 7 days and inhibits spermatozoa binding to rat oocyte zona pellucida.^{5,6}

References

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4. Majewska, A.C., Kasprzak, W., De Jonckheere, J.F., et al. *Trans. R. Soc. Trop. Med. Hyg.* **85**(1), 67-69 (1991).
5. Oberländer, G., Yeung, C.H., and Cooper, T.G. *J. Reprod. Fertil.* **100**(2), 551-559 (1994).
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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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM