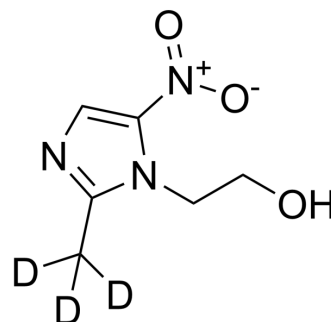


## Metronidazole-d<sub>3</sub>

<b>Cat. No.:</b>	HY-B0318S2
<b>CAS No.:</b>	83413-09-6
<b>Molecular Formula:</b>	C <sub>6</sub> H <sub>6</sub> D <sub>3</sub> N <sub>3</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	174.17
<b>Target:</b>	Apoptosis; Bacterial; Parasite; Antibiotic; Isotope-Labeled Compounds
<b>Pathway:</b>	Apoptosis; Anti-infection; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Metronidazole-d <sub>3</sub> is deuterium labeled Metronidazole.
<b>In Vitro</b>	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Cohen, S.H., et al., Clinical practice guidelines for Clostridium difficile infection in adults: 2010 update by the society for healthcare epidemiology of America (SHEA) and the infectious diseases society of America (IDSA). *Infect Control Hosp Epidemiol*, 2010. 31(5): p. 431-55.
- [3]. <http://www.drugs.com/monograph/metronidazole.html>
- [4]. In Schaechter, M.; Engleberg, N. C.; DiRita, V. J. et al. *Schaechter's Mechanisms of Microbial Disease*. Hagerstown, MD: Lippincott Williams & Wilkins. p. 28.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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