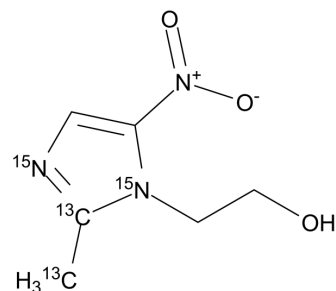


## Metronidazole-<sup>13</sup>C<sub>2</sub>,<sup>15</sup>N<sub>2</sub>

<b>Cat. No.:</b>	HY-B0318S
<b>CAS No.:</b>	1173020-03-5
<b>Molecular Formula:</b>	C <sub>4</sub> <sup>13</sup> C <sub>2</sub> H <sub>9</sub> N <sup>15</sup> N <sub>2</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	175.13
<b>Target:</b>	Apoptosis; Bacterial; Parasite; Antibiotic
<b>Pathway:</b>	Apoptosis; Anti-infection
<b>Storage:</b>	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### BIOLOGICAL ACTIVITY

<b>Description</b>	Metronidazole- <sup>13</sup> C <sub>2</sub> , <sup>15</sup> N <sub>2</sub> is the <sup>13</sup> C-labeled and <sup>15</sup> N-labeled Metronidazole. Metronidazole is a nitroimidazole antibiotic medication used particularly for anaerobic bacteria and protozoa.
<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]. In Schaechter, M.; Engleberg, N. C.; DiRita, V. J. et al. Schaechter's Mechanisms of Microbial Disease. Hagerstown, MD: Lippincott Williams & Wilkins. p. 28.
- [3]. <http://www.drugs.com/monograph/metronidazole.html>
- [4]. 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*,

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

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