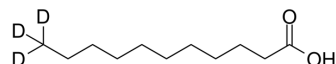


## Undecanoic acid-d3

Cat. No.:	HY-W004282S1
CAS No.:	1219802-11-5
Molecular Formula:	C <sub>11</sub> H <sub>19</sub> D <sub>3</sub> O <sub>2</sub>
Molecular Weight:	189.31
Target:	Fungal; Endogenous Metabolite
Pathway:	Anti-infection; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Undecanoic acid-d3 is the deuterium labeled Undecanoic acid. Undecanoic acid (Undecanoate) is a monocarboxylic acid with antimycotic property, which inhibits the production of exocellular keratinase, lipase and the biosynthesis of several phospholipids in <i>T. rubrum</i> <sup>[1]</sup> .
<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]. Coppa M, et al. Effect of a hay-based diet or different upland grazing systems on milk volatile compounds. *J Agric Food Chem.* 2011 May 11;59(9):4947-54.
- [3]. Das SK, et al. Effect of undecanoic acid on phospholipid metabolism in *Trichophyton rubrum*. *Sabouraudia.* 1982 Dec;20(4):267-72.
- [4]. Das SK, et al. Effect of undecanoic acid on the production of exocellular lipolytic and keratinolytic enzymes by undecanoic acid-sensitive and -resistant strains of *Trichophyton rubrum*. *Sabouraudia.* 1982 Sep;20(3):179-84.
- [5]. Hornung B, et al. Medium chain length fatty acids stimulate triacylglycerol synthesis in tissue culture cells. *Biochem Pharmacol.* 1992 Jan 22;43(2):175-81.

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

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