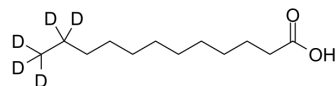


## Lauric acid-d5

Cat. No.:	HY-Y0366S5
CAS No.:	1219804-38-2
Molecular Formula:	C <sub>12</sub> H <sub>19</sub> D <sub>5</sub> O <sub>2</sub>
Molecular Weight:	205.35
Target:	Endogenous Metabolite; Bacterial
Pathway:	Metabolic Enzyme/Protease; Anti-infection
Storage:	4°C, stored under nitrogen * The compound is unstable in solutions, freshly prepared is recommended.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Lauric acid-d5 is the deuterium labeled Lauric acid. Lauric acid is a middle chain-free fatty acid with strong bactericidal properties. The EC50s for <i>P. acnes</i> , <i>S. aureus</i> , <i>S. epidermidis</i> , are 2, 6, 4 µg/mL, respectively.
<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]. Nakatsuji T, et al. Antimicrobial property of lauric acid against *Propionibacterium acnes*: its therapeutic potential for inflammatory acne vulgaris. *J Invest Dermatol.* 2009 Oct;129(10):2480-8.
- [2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.

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

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