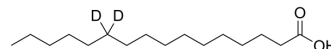


## Palmitic acid-d<sub>2</sub>-5

Cat. No.:	HY-N0830S19
CAS No.:	1219805-64-7
Molecular Formula:	C <sub>16</sub> H <sub>30</sub> D <sub>2</sub> O <sub>2</sub>
Molecular Weight:	258.44
Target:	HSP; Endogenous Metabolite; Isotope-Labeled Compounds
Pathway:	Cell Cycle/DNA Damage; Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Palmitic acid-d <sub>2</sub> -5 is the deuterium labeled Palmitic acid. Palmitic acid is a long-chain saturated fatty acid commonly found in both animals and plants. PA can induce the expression of glucose-regulated protein 78 (GRP78) and CCAAT/enhancer binding protein homologous protein (CHOP) in mouse granulosa cells[1][2].
<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]. Harada H, et al. Antitumor activity of palmitic acid found as a selective cytotoxic substance in a marine red alga. *Anticancer Res.* 2002 Sep-Oct;22(5):2587-90.

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

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