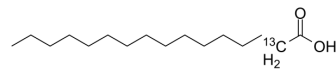


## Palmitic acid-13C

|                           |   |       |          |
|---------------------------|---|-------|----------|
| <b>Cat. No.:</b>          | HY-N0830S9  |       |          |
| <b>CAS No.:</b>           | 287100-87-2   |       |          |
| <b>Molecular Formula:</b> | C <sub>15</sub> <sup>13</sup> CH <sub>32</sub> O <sub>2</sub> |       |          |
| <b>Molecular Weight:</b>  | 257.42  |       |          |
| <b>Target:</b>            | HSP   |       |          |
| <b>Pathway:</b>           | Cell Cycle/DNA Damage; Metabolic Enzyme/Protease              |       |          |
| <b>Storage:</b>           | Powder  | -20°C | 3 years  |
|                           |   | 4°C   | 2 years  |
|                           | In solvent  | -80°C | 6 months |
|                           |   | -20°C | 1 month  |



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (388.47 mM; Need ultrasonic)

| Solvent                   | Mass  | Concentration |            |            |
|---------------------------|-------|---------------|------------|------------|
|                           |       | 1 mg          | 5 mg       | 10 mg      |
| Preparing Stock Solutions | 1 mM  | 3.8847 mL     | 19.4235 mL | 38.8470 mL |
|                           | 5 mM  | 0.7769 mL     | 3.8847 mL  | 7.7694 mL  |
|                           | 10 mM | 0.3885 mL     | 1.9424 mL  | 3.8847 mL  |

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Palmitic acid-13C is the 13C-labeled Palmitic acid. Palmitic acid is a long-chain saturated fatty acid commonly found in both animals and plants. Palmitic acid can induce the expression of glucose-regulated protein 78 (GRP78) and CCAAT/enhancer binding protein homologous protein (CHOP) in mouse granulosa cells<sup>[1][2]</sup>.

### 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.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA