Palmitic acid-d_4

Cat. No.: HY-N0830S7

CAS No.: 75736-49-1

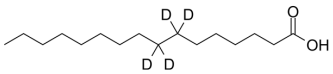
Molecular Formula: $C_{16}H_{28}D_4O_2$

Molecular Weight: 260.45

Target: HSP

Pathway: Cell Cycle/DNA Damage; Metabolic Enzyme/Protease

Storage: 4°C, sealed storage, away from moisture and light
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

Ethanol : ≥ 30 mg/mL (115.19 mM)
Ethanol : ≥ 30 mg/mL (115.19 mM)
DMSO : ≥ 20 mg/mL (76.79 mM)
DMSO : ≥ 20 mg/mL (76.79 mM)
DMF : ≥ 20 mg/mL (76.79 mM)
DMF : ≥ 20 mg/mL (76.79 mM)
* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Concentration \ Solvent \ Mass	1 mg	5 mg	10 mg
1 mM	3.8395 mL	19.1975 mL	38.3951 mL
5 mM	0.7679 mL	3.8395 mL	7.6790 mL
10 mM	0.3840 mL	1.9198 mL	3.8395 mL

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

BIOLOGICAL ACTIVITY

Description

Palmitic acid-d_4 is the deuterium 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 in mouse granulosa cells[1][2].

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.

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