

---

**Product Data Sheet**

---

Product Name: Palmitic acid-d4

Cat. No.: GC67916

**Chemical Properties**

Cas. No. 75736-49-1

Formula  $C_{16}H_{28}D_4O_2$  M.Wt 260.45

Solubility Ethanol :  $\geq 30$  mg/mL (115.19 mM); Ethanol : 25 mg/mL Store  
(95.99 mM; Need ultrasonic); DMSO :  $\geq 20$  mg/mL (76.79 Storage at -  
mM); DMF :  $\geq 20$  mg/mL (76.79 mM) 20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it  
in the ultrasonic bath for a while. Stock solution can be stored below -20°C for  
several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship  
with RT , or blue ice upon request.

Structure **Background**

Palmitic acid-d4 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 mouse granulosa cells<sup>[1][2]</sup>.

[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: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA