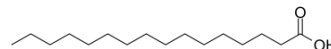


Palmitic acid

Cat. No.:	HY-N0830		
CAS No.:	57-10-3		
Molecular Formula:	C ₁₆ H ₃₂ O ₂		
Molecular Weight:	256.42		
Target:	Endogenous Metabolite; HSP		
Pathway:	Metabolic Enzyme/Protease; Cell Cycle/DNA Damage		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 50 mg/mL (194.99 mM)

H₂O : < 0.1 mg/mL (insoluble)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1 mg	5 mg	10 mg
	1 mM		3.8999 mL	19.4993 mL	38.9985 mL
	5 mM		0.7800 mL	3.8999 mL	7.7997 mL
	10 mM		0.3900 mL	1.9499 mL	3.8999 mL

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

In Vivo

- Add each solvent one by one: **10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline**
Solubility: 2.5 mg/mL (9.75 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**
Solubility: 2.5 mg/mL (9.75 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: **10% DMSO >> 90% corn oil**
Solubility: ≥ 2.5 mg/mL (9.75 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

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 in mouse granulosa cells^{[1][2]}.

CUSTOMER VALIDATION

- Cell Death Dis. 2019 May 28;10(6):416.
- Biochim Biophys Acta Mol Cell Biol Lipids. 2019 Oct 30:158540.
- Mol Med Rep. 2020 Jun.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. 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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