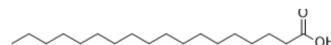


Stearic acid

Cat. No.:	HY-B2219		
CAS No.:	57-11-4		
Molecular Formula:	C ₁₈ H ₃₆ O ₂		
Molecular Weight:	284.48		
Target:	Endogenous Metabolite		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

Ethanol : 25 mg/mL (87.88 mM; Need ultrasonic)
 DMSO : ≥ 14.29 mg/mL (50.23 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.5152 mL	17.5759 mL	35.1519 mL
	5 mM	0.7030 mL	3.5152 mL	7.0304 mL
	10 mM	0.3515 mL	1.7576 mL	3.5152 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: 2.08 mg/mL (7.31 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: 2.08 mg/mL (7.31 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.08 mg/mL (7.31 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Stearic acid is a long chain dietary saturated fatty acid which exists in many animal and vegetable fats and oils.	
IC₅₀ & Target	Microbial Metabolite	Human Endogenous Metabolite

CUSTOMER VALIDATION

- Bioact Mater. 2024 Mar, 33, 85-99.
- Cell Death Dis. 2020 Sep 15;11(9):756.
- Cell Death Dis. 2019 May 28;10(6):416.
- Free Radic Biol Med. 2023 Mar 28;S0891-5849(23)00133-8.
- Mol Nutr Food Res. 2022 Nov 25;e2200429.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Shen MC et al. Dietary stearic acid leads to a reduction of visceral adipose tissue in athymic nude mice. PLoS One. 2014 Sep 15;9(9):e104083.

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

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