Data Sheet (Cat.No.T2P2923)



Stearic acid

Chemical Properties

CAS No.: 57-11-4

Formula: C18H36O2

Molecular Weight: 284.48

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

H₂C OH

Biological Description

Description	1. Stearic acid (Cetylacetic acid) can reduce metastatic tumor burden. 2. Stearic acid leads to dramatically reduced visceral fat likely by causing the apoptosis of preadipocytes. 3. Stearic acid and its derivatives have been used as gelators in food and pharmaceutical gel formulations. 4. Stearic acid is a potent phosphatase 1B inhibitor, possibly causing an enhancement in the insulin receptor signaling to stimulate glucose uptake into adipocytes. 5. Stearic acid has the potential to increase dry matter intake and yields of milk and milk components, without affecting conversion of feed to milk, body condition score, or body weight.
Targets(IC50)	Endogenous Metabolite,Phosphatase

Solubility Information

Solubility	DMSO: 16.67 mg/mL (58.59 mM), Sonication is recommended.
	(< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.5152 mL	17.5759 mL	35.1519 mL
5 mM	0.703 mL	3.5152 mL	7.0304 mL
10 mM	0.3515 mL	1.7576 mL	3.5152 mL
50 mM	0.0703 mL	0.3515 mL	0.703 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Ming-Che S, Xiangmin Z, Siegal GP, et al. Dietary Stearic Acid Leads to a Reduction of Visceral Adipose Tissue in Athymic Nude Mice[J]. PLoS ONE, 2014, 9(9):e104083-.

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