Product Data Sheet

Product Name: Stearic acid-d3
Cat. No.: GC67942

Chemical Properties

Cas. No.	62163-39-7		
Formula	$C_{18}H_{33}D_3O_2$	M.Wt	287.5
Solubility	DMSO : 12.5 mg/mL (43.48 mM; ultrasonic and warming and heat to 60°C)	Storage	Store at -20°C, protect from light
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	Stearic acid-d3		

Background

Stearic acid-d3 is a deuterium-labeled stearic acid, serving as a stable isotope-labeled derivative of stearic acid. Stearic acid-d3 can be used as a tracer to trace the metabolic processes of stearic acid in biological systems, and also serves as an internal standard in NMR, GC-MS, or LC-MS analyses for quantitative analysis[1-3].

References:
[1] Shen MC, Zhao X, Siegal GP, 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.
[2] Russak EM, Bednarczyk EM. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.
[3] Dumont A, de Rosny C, Kieu TL, et al. Docosahexaenoic acid inhibits both NLRP3 inflammasome assembly and JNK-mediated mature IL-1β secretion in 5-fluorouracil-treated MDSC: implication in cancer treatment. Cell Death Dis. 2019 Jun 19;10(7):485.

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