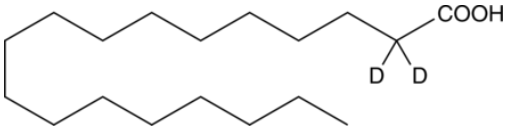
Product Data Sheet

Product Name: Stearic Acid-d2
Cat. No.: GC45568

Chemical Properties

Cas. No.	19905-58-9		
SMILES	CCCCCCCCCCCCCCCCC([2H])([2H])C(O)=O		
Formula	C18H34D2O2	M.Wt	286.5
Solubility	DMF: 30 mg/ml,DMSO: 10mg/mL,Ethanol: 20 mg/ml	Storage	Store at -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

Stearic Acid-d2 is intended for use as an internal standard for the quantification of stearic acid by GC- or LC-MS. Stearic acid is a long-chain saturated fatty acid. It is a major component of cocoa butter and has also been found in beef fat and vegetable oils.1,2,3 Unlike many long-chain saturated fatty acids, dietary stearic acid does not induce hypercholesterolemia or raise LDL-cholesterol.4

References

1. Chuparova, E., Chobanov, D., and Popov, A. Quantitative analysis of fatty acids by liquid-partition chromatography. Izv. Inst. Org. Khim. Bulgar. Akad. Nauk 2, 31-35 (1965).
2. Westerling, D.B., and Hedrick, H.B. Fatty acid composition of bovine lipids as influenced by diet, sex and anatomical location and relationship to sensory characteristics. J. Anim. Sci. 48(6), 1343-1348 (1979).
3. Demirba•, A. Chemical and fuel properties of seventeen vegetable oils. Energy Sources 25(7), 721-728 (2003).
4. Grundy, S.M. Influence of stearic acid on cholesterol metabolism relative to other long-chain fatty

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