

Product Data Sheet

Product Name: Stearic Acid-9,10-d₂

Cat. No.: GC48104

Chemical Properties

Cas. No. 57396-97-1

SMILES CCCCCCCCC([2H])C([2H])CCCCCCCC(O)=O

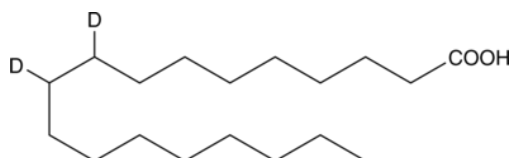
Formula C₁₈H₃₄D₂O₂ M.Wt 286.5

Solubility DMF: 25 mg/ml, DMF:PBS (pH 7.2) (1:1): 0.25 mg/ml, DMSO: 10 mg/ml, Ethanol: 25 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-9,10-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

1. Chuparova, E., Chobanov, D., and Popov, A. Quantitative analysis of fatty acids by liquid-partition chromatography. *Izv. Inst. Org. Khim. Bulgar. Akad. Nauk* 231-35 (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

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

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acidsAm. J. Clin. Nutr.60(Suppl. 6)986S-990S(1994)

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