PRODUCT INFORMATION

9,10-Dihydroxystearic Acid
Item No. 28612

CAS Registry No.: 120-87-6
Formal Name: 9,10-dihydroxy-octadecanoic acid
Synonym: NSC 60305
MF: C_{18}H_{36}O_{4}
FW: 316.5
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

9,10-Dihydroxystearic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the 9,10-dihydroxystearic acid in the solvent of choice, which should be purged with an inert gas. 9,10-Dihydroxystearic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 9,10-dihydroxystearic acid in these solvents is approximately 5, 10, and 25 mg/ml, respectively.

9,10-Dihydroxystearic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 9,10-dihydroxystearic acid should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 9,10-Dihydroxystearic acid has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

9,10-Dihydroxystearic acid is an oxidation product of oleic acid (Item Nos. 90260 | 24659) that can be formed from oleic acid in HepG2 cells.\textsuperscript{1} It activates peroxisome proliferator-activated receptor α (PPARα) in CV-1 cells when used at concentrations ranging from 50 to 100 μM.\textsuperscript{2} 9,10-Dihydroxystearic acid (4% in the diet) decreases blood glucose levels, increases insulin sensitivity, and decreases body weight in high-fat diet-fed KKAY diabetic mice.

References


WARNING
This product is for research only - not for human or veterinary diagnostic or therapeutic use.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman’s Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.