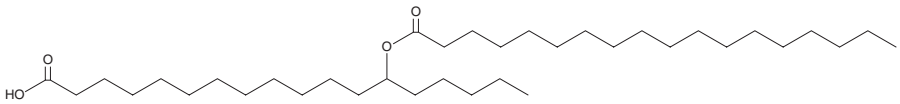
PRODUCT INFORMATION

13-SAHSA

Item No. 17110

CAS Registry No.: 2108907-29-3
Formal Name: 13-[(1-oxooctadecyl)oxy]-octadecanoic acid
MF: $C_{36}H_{70}O_4$
FW: 567.0
Purity: ≥95%
Supplied as: A solution in methyl acetate
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

13-SAHSA is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the 13-SAHSA under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of 13-SAHSA in DMSO is approximately 15 mg/ml and approximately 20 mg/ml in ethanol and DMF.

13-SAHSA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, evaporate the methyl acetate and dissolve in ethanol. The ethanolic solution of 13-SAHSA should be diluted with the aqueous buffer of choice. 13-SAHSA has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Branched fatty acid esters of hydroxy fatty acids (FAHFAs) are newly identified endogenous lipids regulated by fasting and high-fat feeding and associated with insulin sensitivity.[1] 13-SAHSA is a FAHFA consisting of stearic acid esterified to 13-hydroxy stearic acid. The levels of SAHSA are moderately elevated in the serum of glucose tolerant AG4OX mice, which overexpress the Glut4 glucose transporter specifically in adipose tissue.[1] As other FAHFAs improve glucose tolerance, stimulate insulin secretion, and have anti-inflammatory effects, 13-SAHSA may be a bioactive lipid with roles in metabolic syndrome and inflammation.[1]

Reference

1. Yore, M.M., Syed, I., Moraes-Vieira, P.M., *et al*. Discovery of a class of endogenous mammalian lipids with anti-diabetic and anti-inflammatory effects. *Cell* **159(2)**, 318-332 (2014).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM