

PRODUCT INFORMATION



12-OAHSA-d₁₇ Item No. 17195

Formal Name: 9Z-octadecenoic-11,11',12,12',13,13',
14,14',15,15',16,16',17,17',18,18,18-d₁₇
acid, 11-carboxy-1-hexylundecyl ester

MF: C₃₆H₅₁D₁₇O₄

FW: 582.0

Chemical Purity: ≥95% (12-OAHSA)

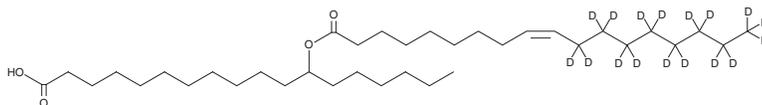
Deuterium

Incorporation: ≥99% deuterated forms (d₁-d₁₇); ≤1% d₀

Supplied as: A 1 mg/ml solution in methyl acetate

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

12-OAHSA-d₁₇ is intended for use as an internal standard for the quantification of 12-OAHSA (Item No. 17108) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled). *NOTE: Please be advised that this product will elute 3-5 minutes sooner than its corresponding non-deuterated standard when using the analytical method described by Yore, M.M., et al.*¹

12-OAHSA-d₁₇ is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate 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 12-OAHSA-d₁₇ in ethanol and DMF is approximately 20 mg/ml and approximately 15 mg/ml in DMSO.

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 Structurally, these esters are comprised of a C-16 or C-18 fatty acid (e.g., palmitoleic, palmitic, oleic, or stearic acid) linked to either a C-16 or C-18 hydroxy substituent. 12-OAHSA is a FAHFA in which oleic acid is esterified at the 12th carbon of hydroxy stearic acid. Among the FAHFA family members, OAHSAs are the most abundantly expressed in the serum of glucose tolerant AG4OX mice, which overexpress the Glut4 glucose transporter specifically in adipose tissue.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).

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.

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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