

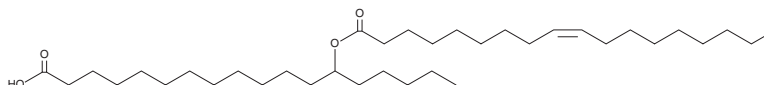
# PRODUCT INFORMATION



## 13-OAHSA

Item No. 17112

**CAS Registry No.:** 1997286-67-5  
**Formal Name:** 9Z-octadecenoic acid,  
12-carboxy-1-pentyl dodecyl ester  
**MF:** C<sub>36</sub>H<sub>68</sub>O<sub>4</sub>  
**FW:** 564.9  
**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-OAHSA 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 13-OAHSA in ethanol and DMF is approximately 20 mg/ml and approximately 15 mg/ml in DMSO.

13-OAHSA 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-OAHSA should be diluted with the aqueous buffer of choice. 13-OAHSA 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.<sup>1</sup> 13-OAHSA is a form of FAHFA in which oleic acid is esterified to 13-hydroxy stearic acid. Among the FAHFA family members, OAHSA are the most abundantly expressed in the serum of glucose tolerant AG4OX mice, which overexpress the Glut4 glucose transporter specifically in adipose tissue.<sup>1</sup> As other FAHFAs improve glucose tolerance, stimulate insulin secretion, and have anti-inflammatory effects, 13-OAHSA may be a bioactive lipid with roles in metabolic syndrome and inflammation.<sup>1</sup>

### 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