

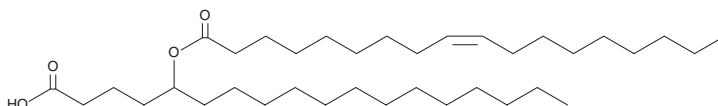
# PRODUCT INFORMATION



## 5-OAHSA

Item No. 17115

CAS Registry No.: 1997286-66-4  
Formal Name: (9Z)-9-octadecenoic acid,  
1-(3-carboxypropyl)tetradecyl ester  
MF:  $C_{36}H_{68}O_4$   
FW: 564.9  
Purity:  $\geq 95\%$   
Supplied as: A solution in methyl acetate  
Storage:  $-20^{\circ}\text{C}$   
Stability:  $\geq 2$  years



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

### Laboratory Procedures

5-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 5-OAHSA in ethanol and DMF is approximately 20 mg/ml and approximately 15 mg/ml and DMSO.

5-OAHSA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 5-OAHSA should be diluted with the aqueous buffer of choice. 5-OAHSA has a solubility of 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 in mice.<sup>1</sup> 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. 5-OAHSA is a FAHFA in which oleic acid is esterified at the 5<sup>th</sup> carbon of 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>

### 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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