# PRODUCT INFORMATION



# 10-OAHSA

Item No. 19975

CAS Registry No.: 2005487-34-1

Formal Name: 9Z-octadecenoic acid, 9-carboxy-

1-octylnonyl 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.

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## **Laboratory Procedures**

10-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 10-OAHSA in ethanol and DMF is approximately 20 mg/ml and approximately 15 mg/ml in DMSO.

10-OAHSA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 10-OAHSA should be diluted with the aqueous buffer of choice. 10-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

10-OAHSA is a newly identified endogenous lipid that belongs to a collection of branched fatty acid esters of hydroxy fatty acids (FAHFAs). It is a FAHFA in which oleic acid (Item No. 90260) is esterified to 10-hydroxy stearic acid. Among the FAHFA family members, PAHSAs are the most abundant in the adipose tissue of glucose tolerant AG4OX mice, which overexpress the Glut4 glucose transporter specifically in adipose tissue. As other FAHFAs improve glucose tolerance, stimulate insulin secretion, and have anti-inflammatory effects, 10-OAHSA 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).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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