# PRODUCT INFORMATION



# 9-SAHSA

Item No. 17109

CAS Registry No.: 1895916-79-6

Formal Name: 9-[(1-oxooctadecyl)oxy]-

octadecanoic acid

MF:  $C_{36}H_{70}O_4$ FW: 566.9 **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**

9-SAHSA 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 9-SAHSA in ethanol and DMF is approximately 20 mg/ml and approximately 15 mg/ml in DMSO.

9-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 9-SAHSA should be diluted with the aqueous buffer of choice. 9-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. 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. 9-SAHSA is a FAHFA in which stearic acid is esterified at the 9th carbon of 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.<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.

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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