

PRODUCT INFORMATION



1-Palmitoyl-2-12-OAHSA-3-Oleoyl-*sn*-glycerol

Item No. 29407

Formal Name: 18-(((R)-1-(oleoyloxy)-3-(palmitoyloxy)propan-2-yl)oxy)-18-oxooctadecan-7-yl oleate

Synonyms: 16:0-12-OAHSA-18:1-TG, TG(16:0/12-OAHSA/18:1)

MF: C₇₃H₁₃₆O₈

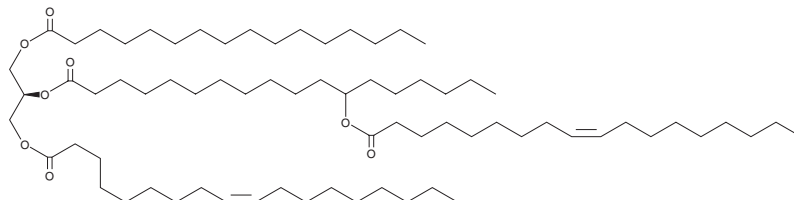
FW: 1,141.9

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

1-Palmitoyl-2-12-OAHSA-3-oleoyl-*sn*-glycerol 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 1-palmitoyl-2-12-OAHSA-3-oleoyl-*sn*-glycerol in ethanol and DMF is approximately 20 mg/ml and approximately 15 mg/ml in DMSO.

For maximum solubility in aqueous buffers, evaporate the methyl acetate and dissolve in ethanol. The ethanolic solution of 1-palmitoyl-2-12-OAHSA-3-oleoyl-*sn*-glycerol should be diluted with the aqueous buffer of choice. 1-Palmitoyl-2-12-OAHSA-3-oleoyl-*sn*-glycerol has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method.

Description

1-Palmitoyl-2-12-OAHSA-3-oleoyl-*sn*-glycerol is a triacylglycerol that contains palmitic acid (Item No. 10006627), the fatty acid ester of hydroxy fatty acids (FAHFA) 12-OASHA (Item No. 17108), and oleic acid (Item Nos. 90260 | 24659) at the *sn*-1, *sn*-2, and *sn*-3 positions, respectively. It is an endogenous triacylglycerol that has been found in the lipid extract of mouse adipose tissue.¹ FAHFA-containing triacylglycerol levels are greater than 100-fold higher than non-esterified FAHFAs in mouse adipose tissues, indicating that triacylglycerols act as intracellular storage reservoirs for FAHFAs.

Reference

1. Tan, D., Ertunc, M.E., Konduri, S., *et al.* Discovery of FAHFA-containing triacylglycerols and their metabolic regulation. *J. Am. Chem. Soc.* **141**(22), 8798-8806 (2019).

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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