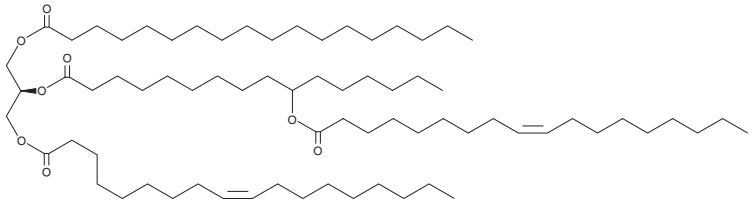
PRODUCT INFORMATION

1-Palmitoyl-2-10-OAHSA-3-Oleoyl-*sn*-glycerol

Item No. 29406

Formal Name: 16-(((R)-1-(oleoyloxy)-3-(stearoyloxy)propan-2-yl)oxy)-16-oxohexadecan-7-yl oleate
Synonyms: 16:0-10-OAHSA-18:1-TG, TG(16:0/10-OAHSA/18:1)
MF: $C_{73}H_{136}O_8$
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-2-10-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-2-10-OAHSA-3-oleoyl-*sn*-glycerol in ethanol and DMF is approximately 20 mg/ml and approximately 15 mg/ml in DMSO.

1-Palmitoyl-2-10-OAHSA-3-oleoyl-*sn*-glycerol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 1-palmitoyl-2-10-OAHSA-3-oleoyl-*sn*-glycerol should be diluted with the aqueous buffer of choice. 1-Palmitoyl-2-10-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-2-10-OAHSA-3-oleoyl-*sn*-glycerol is a triacylglycerol that contains palmitic acid (Item No. 10006627) at the *sn*-1 position, the fatty acid ester of hydroxy fatty acid (FAHFA) 10-OAHSA (Item No. 19975) at the *sn*-2 position, and oleic acid (Item Nos. 90260 | 24659) at the *sn*-3 position. FAHFA-containing triacylglycerol levels are greater than 100-fold higher than non-esterified FAHFAs in mouse adipose tissues, indicating the triacylglycerols act as intracellular storage reservoirs for FAHFAs.[1]

Reference

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

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