



1-Palmitoyl-2-stearoyl-rac-glycerol

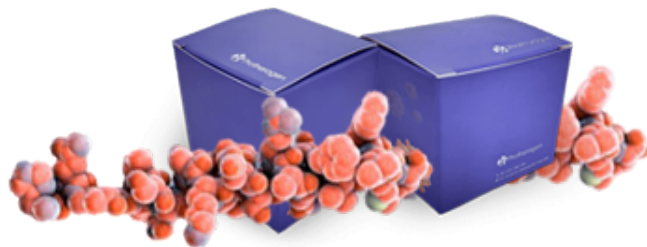
Cat. No.:	OB0626WX-1597
Appearance:	Solid
Purity:	≥98%
Identity:	Confirmed by NMR and HPLC.
Size:	1 mg; 5 mg; 10 mg; 25 mg

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description	1-Palmitoyl-2-stearoyl-rac-glycerol is an asymmetric diacylglycerol holding a saturated palmitic acid tail at the sn-1 position and a saturated stearic acid tail at the sn-2 position. This structurally pure glyceride serves as a vital biochemical tool for determining how specific diacylglycerol fatty acyl chain lengths and conformational properties govern the activation kinetics of ADP-ribosylation factor 1 GTPase-activating proteins.
Synonyms	1-Palmitin-2-Stearin; DG(16:0/18:0/0:0); 1-Palmito-2-stearin; 2-Stearo-1-palmitin; Glycerol 1-Palmitate-2-stearate; DG 16:0_18:0; octadecanoic acid, 1-(hydroxymethyl)-2-[(1-oxohexadecyl)oxy]ethyl ester; Octadecanoic Acid 1-(Hydroxymethyl)-2-[(1-oxohexadecyl)oxy]ethyl Ester; 1-(Hydroxymethyl)-2-[(1-oxohexadecyl)oxy]ethyl octadecanoate; (1-hexadecanoyloxy-3-hydroxypropan-2-yl) octadecanoate; [1-(hexadecanoyloxymethyl)-2-hydroxy-ethyl] octadecanoate; Glycerides, C16-18 mono- and di-; Glycerides, C16-18, mono- and di-; Glycerides, C16-18 monoglycerides and diglycerides; C16-18 MONO-AND DI-GLYCERIDES; Glyceryl mono and dipalmitostearate; Mono- and di-glycerides; IMWITOR 900; CITHROL 0795; POEM V 200; BC 130; 20296-26-8
CAS No.	20296-26-8
Compound CID	3086206
Formula	$C_{37}H_{72}O_5$
Formula Weight	597

Specification



Solubility in DMSO	7 mg/mL
Solubility in Ethanol	0.25 mg/mL
Solubility in DMF	20 mg/mL
Solubility in Other Solvents	PBS: 0.7 mg/mL
IUPAC Name	(1-hexadecanoyloxy-3-hydroxypropan-2-yl) octadecanoate
InChI	InChI=1S/C37H72O5/c1-3-5-7-9-11-13-15-17-18-20-22-24-26-28-30-32-37(40)42-35(33-38)34-41-36(39)31-29-27-25-23-21-19-16-14-12-10-8-6-4-2/h35,38H,3-34H2,1-2H3
InChI Key	ONCLVQFEAFTXMN-UHFFFAOYSA-N
Canonical SMILES	<chem>OCC(OC(CCCCCCCCCCCCCCCCCC)=O)COC(CCCCCCCCCCCCCCCCCC)=O</chem>
Stability	1 year
Storage	Storage at -20°C.
Applications	1-Palmitoyl-2-stearoyl-rac-glycerol operates as a fully saturated diacylglycerol reference lipid for exploring membrane microdomain configurations, phase separation characteristics, and the physical constraints of lipid bilayers during high-resolution biophysical characterization.