



1-Oleoyl-2-Palmitoyl-sn-glycero-3-PC

Cat. No.:	OB0626WX-3977
Appearance:	Crystalline solid
Purity:	≥95%
Identity:	Confirmed by NMR, TLC, and HPLC.
Size:	5 mg; 10 mg; 25 mg; 50 mg

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

Product Overview

Description

1-Oleoyl-2-palmitoyl-sn-glycero-3-PC is a mixed-chain zwitterionic phospholipid incorporating a mono-unsaturated oleoyl group and a saturated palmitoyl group at the sn-1 and sn-2 positions, respectively. Naturally integrated into biological bilayer architectures, this fluidic phospholipid serves as a critical structural component for assembling model membranes to characterize phospholipase kinetics and investigate bacterial toxin pore assembly.

Synonyms

4-hydroxy-N,N,N-trimethyl-10-oxo-7*R*-[(1-oxohexadecyl)oxy]-3,5,9-trioxo-4-phosphaheptacos-18*Z*-en-1-aminium 4-oxide, inner salt; L-α-1-Oleoyl-2-Palmitoyl-Phosphatidylcholine; 1,2-OPPC; 1-Oleoyl-2-palmitoyl-sn-glycero-3-phosphocholine; OPPC; 59491-62-2; PC(18:1(9*Z*)/16:0); [(2*R*)-2-hexadecanoyloxy-3-[(*Z*)-octadec-9-enoyl]oxypropyl] 2-(trimethylazaniumyl)ethyl phosphate; PC(18:1/16:0); Phosphatidylcholine(18:1/16:0); 1-(9*Z*-octadecenoyl)-2-hexadecanoyl-sn-glycero-3-phosphocholine; 18:1-16:0 PC; PC(18:1omega9/16:0); phosphatidylcholine(18:1omega9/16:0); PC 18:1(9*Z*)/16:0; 1-C18:1(omega-9)-2-C16:0-phosphatidylcholine; 1-(9*Z*)-octadecenoyl-2-hexadecanoyl-sn-glycero-3-phosphocholine; 1-(*Z*)-octadec-9-enoyl-2-hexadecanoyl-sn-glycero-3-phosphocholine; (*R*)-3-(oleoyloxy)-2-(palmitoyloxy)propyl 2-(trimethylammonio)ethyl phosphate; (2*R*)-3-[(9*Z*)-octadec-9-enoyloxy]-2-(palmitoyloxy)propyl 2-(trimethylazaniumyl)ethyl phosphate; L-alpha-1-Oleoyl-2-palmitoyl phosphatidylcholine; PC(34:1); PC(16:0_18:1)

CAS No. 59491-62-2



Compound CID	24778933
Formula	C ₄₂ H ₈₂ NO ₈ P
Formula Weight	760.1

Specification

Solubility in Ethanol	25 mg/mL
IUPAC Name	[(2 <i>R</i>)-2-hexadecanoyloxy-3-[(<i>Z</i>)-octadec-9-enoyl]oxypropyl] 2-(trimethylazaniumyl)ethyl phosphate
InChI	InChI=1S/C42H82NO8P/c1-6-8-10-12-14-16-18-20-21-23-24-26-28-30-32-34-41(44)48-38-40(39-50-52(46,47)49-37-36-43(3,4)5)51-42(45)35-33-31-29-27-25-22-19-17-15-13-11-9-7-2/h20-21,40H,6-19,22-39H2,1-5H3/b21-20-/t40-/m1/s1
InChI Key	RRVPPYNAZJRZFR-VYOBOKEXSA-N
Canonical SMILES	<chem>O=C(CCCCCC/C=C\CCCCCCC)OC[C@H](OC(CCCCCCCCCCCCCC)=O)COP(OCC[N+](C)(C)C)([O-])=O</chem>
Stability	1 year
Storage	Storage at -20°C.
Applications	1-Oleoyl-2-Palmitoyl-sn-glycero-3-PC serves as a mixed-chain phosphatidylcholine standard for investigations of membrane structure, phospholipid metabolism, and lipid organization. It supports lipidomic profiling, analytical method development, and preparation of model membrane systems.