



16:0-18:1(n10) PC

Cat. No.:	OB0626WX-4383
Appearance:	Liquid
Purity:	>97%
Size:	10 mg; 20 mg; 50 mg

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

Product Overview

Description

16:0-18:1(n10) PC is a mixed-chain synthetic zwitterionic phosphatidylcholine isomer featuring a saturated 16-carbon palmitoyl chain at the sn-1 position and a non-canonical mono-unsaturated 18-carbon oleoyl variant with a cis-double bond locked at the n-10 position of the sn-2 tail. This highly precise positional double-bond modification alters the intramolecular kink angle and hydrophobic packing density within the core bilayer, offering a refined structural framework for dissecting how specific fatty acid double-bond geography influences liquid-crystalline phase behavior.

Formulation

Chloroform solution

Synonyms

1-palmitoyl-2-(8Z-octadecenoyl)-sn-glycero-3-phosphocholine; (2-(((2R)-3-(hexadecanoyloxy)-2-((8Z)-octadec-8-enoyloxy)propyl phosphonato)oxy)ethyl)trimethylazanium; (2-(((2R)-3-(hexadecanoyloxy)-2-((8Z)-octadec-8-enoyloxy)propyl phosphonato)oxy)ethyl)trimethylazanium; (R,Z)-2-(Octadec-8-enoyloxy)-3-(palmitoyloxy)propyl (2-(trimethylammonio)ethyl) Phosphate

CAS No. 2389048-49-9

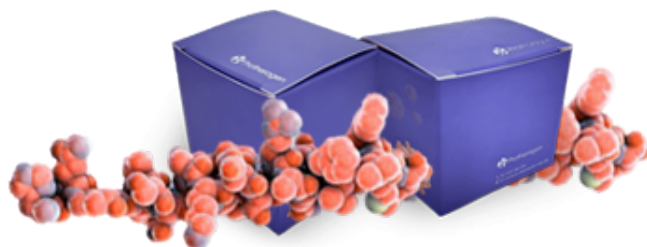
Compound CID 168006651

Formula $C_{42}H_{82}NO_8P$

Formula Weight 760.09

Specification

Hygroscopic No



Light Sensitive	No
IUPAC Name	[(2 <i>R</i>)-3-hexadecanoyloxy-2-[(<i>Z</i>)-octadec-8-enoyl]oxypropyl] 2-(trimethylazaniumyl)ethyl phosphate
InChI	InChI=1S/C42H82NO8P/c1-6-8-10-12-14-16-18-20-21-23-25-27-29-31-33-35-42(45)51-40(39-50-52(46,47)49-37-36-43(3,4)5)38-48-41(44)34-32-30-28-26-24-22-19-17-15-13-11-9-7-2/h21,23,40H,6-20,22,24-39H2,1-5H3/b23-21-/t40-/m1/s1
InChI Key	FNCGJGDCVBZNMN-GPIBEQEUSA-N
Canonical SMILES	CCCCCCCCCCCCCCCC(=O)OC[C@H](COP(=O)([O-])OCC[N+](C)(C)C)OC(=O)CCCCC/C=C\CCCCCCC
Stability	1 year
Storage	Storage at -20°C.
Applications	16:0-18:1(n10) PC serves as a reference phosphatidylcholine species for lipidomic profiling and structural characterization. It supports LC-MS/MS analysis, quantitative phospholipid measurement, and investigation of unsaturated phosphatidyl choline molecular species.