



1-Linoleoyl-d₁₁-2-linoleoyl-sn-glycero-3-PC

Cat. No.:	OB0626WX-3733
Appearance:	Liquid
Purity:	≥99% (deuterated forms, d1-d11)
Identity:	Confirmed by TLC and HPLC.
Size:	100 µg; 500 µg; 1 mg; 2 mg

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

Product Overview

Description	1-Linoleoyl-d ₁₁ -2-linoleoyl-sn-glycero-3-PC is a stable isotope-labeled internal standard featuring eleven deuterium atoms on the fatty acid chain, optimized for high-precision mass spectrometric quantification. The unlabeled counterpart is a polyunsaturated diacylphosphatidylcholine containing linoleic acid at both the sn-1 and sn-2 positions, which serves as a critical structural component for formulating biomimetic micelles, liposomes, and sophisticated artificial membrane models.
Formulation	Chloroform solution (1 mg/mL)
Labeling	Stable isotope-labeled
Synonyms	(7R,18Z,21Z)-4-hydroxy-N,N,N-trimethyl-10-oxo-7-[[[(9Z,12Z)-1-oxo-9,12-octadecadien-14,14,15,15,16,16,17,17,18,18,18-d ₁₁ -[sub>-1-yl]oxy]-trioxa-4-phosphaheptacos-18,21-dien-1-aminium, inner salt, 4-oxide; 1,2-Dilinoleoyl-sn-glycero-3-Phosphocholine-d ₁₁ ; DLPC-d ₁₁ ; 18:2 (n-6) PC-d ₁₁]
Formula	C ₄₄ H ₆₉ D ₁₁ NO ₈ P
Formula Weight	793.2

Specification

Solubility in Other Solvents	Soluble in chloroform.
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InChI	InChI=1S/C44H80NO8P/c1-6-8-10-12-14-16-18-20-22-24-26-28-30-32-34-36-43(46)50-40-42(41-52-54(48,49)51-39-38-45(3,4)5)53-44(47)37-35-33-31-29-27-25-23-21-19-17-15-13-11-9-7-2/h14-17,20-23,42H,6-13,18-19,24-41H2,1-5H3/b16-14-,17-15-,22-20-,23-21-/t42-/m1/s1/i1D3,6D2,8D2,10D2,12D2
InChI Key	FVXDQWZBHIXIEJ-NVLVOZRVSA-N
Canonical SMILES	<chem>O=P(OCC[N+](C)(C)C)([O-])OC([C@H])(OC(CCCCCC/C=C\C/C=C\CCCC)=O)COC(CCCCCC/C=C\C/C=C\([2H])([2H])C([2H])([2H])C([2H])([2H])C([2H])([2H])C([2H])([2H])C([2H])([2H])[2H])=O</chem>
Stability	1 year
Storage	Storage at -20°C.
Applications	1-Linoleoyl-d ₁₁ -2-linoleoyl-sn-glycero-3-PC serves as a stable isotope e-labeled phospholipid reference compound for quantitative lipidomics, isotope dilution analysis, and analytical method development. It supports accurate identification and quantification of phosphatidylcholine species in LC-MS/MS workflows and facilitates lipid metabolism studies through reliable signal normalization and calibration.