



1,2-Didecanoyl-sn-glycero-3-PC

Cat. No.:	OB0626WX-4056
Appearance:	Liquid
Purity:	≥98%
Identity:	Confirmed by TLC and HPLC.
Size:	5 mg; 10 mg; 25 mg; 50 mg; 100 mg

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

Product Overview

Description	1,2-Didecanoyl-sn-glycero-3-PC is a synthetic, short-chain zwitterionic phosphatidylcholine incorporating symmetric, saturated 10-carbon decanoyl chains across its glycerol structure. Due to its reduced hydrophobicity and unique interfacial activity, this amphiphilic molecule alters epithelial tight junctions to serve as a high-efficiency absorption enhancer, markedly augmenting the cross-membrane bioavailability and transport kinetics of co-administered macromolecular peptides and therapeutic protein hormones.
Formulation	Ethanol solution (500 µg/mL)
Synonyms	1,2-bis(O-decanoyl)-sn-glyceryl-3-phosphorylcholine; 1,2-Didecanoyl Phosphatidylcholine; Didecanoyl Lecithin; 1,2-Didecanoyl PC; 1,2-DPC; Didecanoylphosphatidylcholine; DDPC; 3436-44-0
CAS No.	3436-44-0
Compound CID	16219892
Formula	C ₂₈ H ₅₆ NO ₈ P
Formula Weight	565.7

Specification

Solubility in DMSO	20 mg/mL
Solubility in Ethanol	30 mg/mL
Solubility in DMF	20 mg/mL



Solubility in Other Solvents	Ethanol:PBS mixture: 0.5 mg/mL
IUPAC Name	[(2 <i>R</i>)-2,3-di(decanyloxy)propyl] 2-(trimethylazaniumyl)ethyl phosphate
InChI	InChI=1S/C28H56NO8P/c1-6-8-10-12-14-16-18-20-27(30)34-24-26(25-36-38(32,33)35-23-22-29(3,4)5)37-28(31)21-19-17-15-13-11-9-7-2/h26H,6-25H2,1-5H3/t26-/m1/s1
InChI Key	MLKLDGSYMHFAOC-AREMUKBSSA-N
Canonical SMILES	CCCCCCCCC(=O)OC[C@H](COP(=O)(O)OCC[N+](C)(C)C)OC(=O)CCCCCCCCC
Stability	1 year
Storage	Storage at -20°C.
Applications	1,2-Didecanoyl-sn-glycero-3-PC serves as a medium-chain phosphatidylcholine reagent for membrane biophysics and lipid formulation research. It facilitates membrane model construction, phospholipid characterization, lipidomic method development, and investigations of membrane organization.