

PRODUCT INFORMATION



1-Palmitoyl-2-linoleoyl-*sn*-glycero-3-PC

Item No. 20962

CAS Registry No.: 17708-90-6

Formal Name: (7R,17Z,20Z)-4-hydroxy-N,N,N-trimethyl-9-oxo-7-[[[(1-oxohexadecyl)oxy]methyl]-3,5,8-trioxa-4-phosphahexacos-17,20-dien-1-aminium-4-oxide, inner salt

Synonyms: 1-Palmitoyl-2-linoleoyl-*sn*-glycero-3-Phosphatidylcholine, 16:0-18:2 PC, PLPC

MF: $C_{42}H_{80}NO_8P$

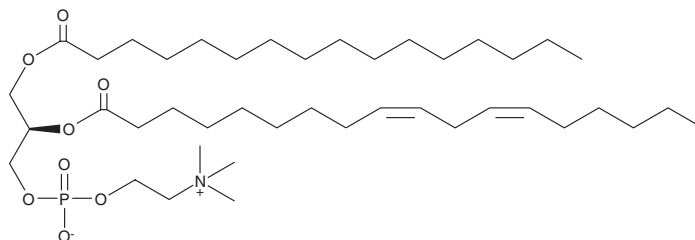
FW: 758.1

Purity: $\geq 95\%$

Supplied as: A solution in chloroform

Storage: -80°C

Stability: As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly



Laboratory Procedures

1-Palmitoyl-2-linoleoyl-*sn*-glycero-3-PC (PLPC) is supplied as a solution in chloroform. To change the solvent, simply evaporate the chloroform under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol purged with an inert gas can be used. The solubility of PLPC in ethanol is approximately 50 mg/ml.

PLPC is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PLPC should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. PLPC has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PLPC is a phospholipid containing palmitic (16:0) and linoleic (18:2) acids inserted at the *sn*-1 and *sn*-2 positions, respectively. It can be used in the generation of micelles, liposomes, and other types of artificial membranes and has been particularly useful in the study of lipid peroxidation.¹⁻³

References

1. Conte, E., Megli, F.M., Khandelia, H., *et al.* Lipid peroxidation and water penetration in lipid bilayers: A W-band EPR study. *Biochimica et Biophysica Acta* **1828**, 510-517 (2013).
2. Milne, G.L., Seal, J.R., Havrilla, C.M., *et al.* Identification and analysis of products formed from phospholipids in the free radical oxidation of human low density lipoproteins. *J. Lipid Res.* **46**, 307-319 (2005).
3. Høyup, P., Mouritsen, O.G., and Jørgensen, K. Phospholipase A₂ activity towards vesicles of DPPC and DMPC-DSPC containing small amounts of SMPC. *Biochim. Biophys. Acta* **1515**(2), 133-143 (2001).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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