

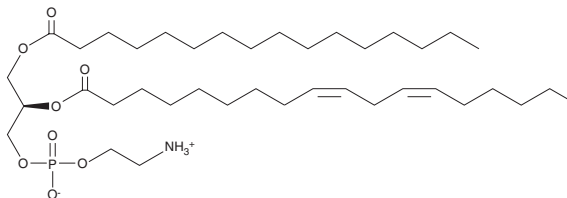
Product Information



1-Palmitoyl-2-linoleoyl PE

Catalog No. 10007072

CAS Registry No.: 26662-95-3
Formal Name: (1R)-1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-2-[(1-oxohexadecyl)oxy]ethyl ester, 9Z,12Z-octadecadienoic acid
Synonyms: Phosphatidyl Ethanolamine (1-palmitoyl, 2-linoleoyl); PLPE
MF: C₃₉H₇₄NO₈P
FW: 716.0
Purity: ≥98%
Stability: ≥6 months at -20°C
Supplied as: A solution in chloroform



Laboratory Procedures

For long term storage, we suggest that 1-palmitoyl-2-linoleoyl PE (PLPE) be stored as supplied at -20°C. It should be stable for at least six months.

PLPE is supplied as a solution in chloroform. PLPE is sparingly soluble in aqueous buffers. Therefore, further dilutions of the organic solvent solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Phosphatidylethanolamines are important components of cell membranes and biochemical pathways of fatty acid synthesis. 1-Palmitoyl-2-linoleoyl PE (PLPE) is one of the many phosphatidylethanolamines that may be present in cellular membranes. It has been used in studies involving the biosynthesis of anandamide *via* the phospholipase A₂ (PLA₂) and lysoPLD pathways.¹ PLPE can also be used as a specific substrate to assess the activity of sPLA₂-IIA in the presence of other phospholipids.²

References

1. Sun, Y.-X., Tsubio, K., Okamoto, Y., *et al.* Biosynthesis of anandamide and N-palmitoylethanolamide by sequential actions of phospholipase A₂ and lysophosphase D. *J. Biochem.* **380**, 749-755 (2004).
2. Yang, H.-C., Mosior, M., Johnson, C.A., *et al.* Group-specific assays that distinguish between the four major types of mammalian phospholipase A₂. *Anal. Biochem.* **269**, 278-288 (1999).

Related Products

PtdIns-(3,4,5)-P₃ (1,2-dipalmitoyl) (sodium salt) - Cat. No. 64920 • PtdIns-(3)-P₁ (1,2-dipalmitoyl) (ammonium salt) - Cat. No. 64921 • PtdIns-(3,4)-P₂ (1,2-dipalmitoyl) (sodium salt) - Cat. No. 64922 • PtdIns-(4)-P₁ (1,2-dipalmitoyl) (ammonium salt) - Cat. No. 64923 • PtdIns-(4,5)-P₂ (1,2-dipalmitoyl) (ammonium salt) - Cat. No. 64924 • PtdIns-(5)-P₁ (1,2-dipalmitoyl) (ammonium salt) - Cat. No. 64925

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WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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