

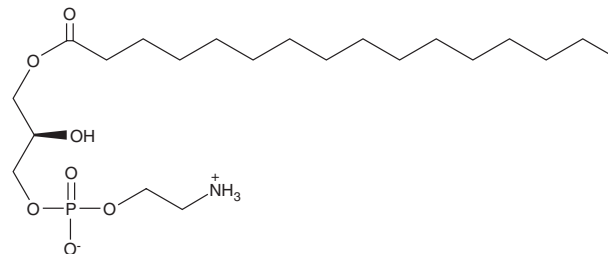
PRODUCT INFORMATION



1-Palmitoyl-2-hydroxy-*sn*-glycero-3-PE

Item No. 26011

CAS Registry No.: 53862-35-4
Formal Name: hexadecanoic acid, (2R)-3-[[[(2-aminoethoxy) hydroxyphosphinyl]oxy]-2-hydroxypropyl ester
Synonyms: 1-Hexadecanoyl-*sn*-glycero-3-Phosphoethanolamine, 16:0 LPE, 16:0 Lyso-PE, 1-Palmitoyl-2-hydroxy-*sn*-glycero-3-Phosphoethanolamine
MF: C₂₁H₄₄NO₇P
FW: 453.6
Purity: ≥95% (9:1 mixture of 1-acyl and 2-acyl)
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

1-Palmitoyl-2-hydroxy-*sn*-glycero-3-PE is supplied as a solid. A stock solution may be made by dissolving the 1-palmitoyl-2-hydroxy-*sn*-glycero-3-PE in the solvent of choice, which should be purged with an inert gas. 1-Palmitoyl-2-hydroxy-*sn*-glycero-3-PE is slightly soluble in DMSO, dimethyl formamide, and chloroform.

Description

1-Palmitoyl-2-hydroxy-*sn*-glycero-3-PE is a naturally occurring lysophospholipid.¹ It inhibits the growth of *L. donovani* promastigotes (GIC₅₀ = 8 μM).² 1-Palmitoyl-2-hydroxy-*sn*-glycero-3-PE serum levels are decreased in a mouse model of alcohol-induced liver injury and in a hepatocellular carcinoma mouse xenograft model.³ Human serum levels are also decreased immediately after completing a three-day exercise regimen of 2.5 hours of running per day, as well as 14 hours after completing the regimen.¹ 1-Palmitoyl-2-hydroxy-*sn*-glycero-3-PE has been used as an internal standard for the quantification of saturated lysophosphoethanolamines.⁴

References

1. Nieman, D.C., Shanely, R.A., Gillitt, N.D., *et al.* Serum metabolic signatures induced by a three-day intensified exercise period persist after 14 h of recovery in runners. *J. Proteome Res.* **12**(10), 4577-4584 (2013).
2. Achterberg, V. and Gercken, G. Cytotoxicity of ester and ether lysophospholipids on *Leishmania donovani* promastigotes. *Mol. Biochem. Parasitol.* **23**(2), 117-122 (1987).
3. Li, S., Liu, H., Jin, Y., *et al.* Metabolomics study of alcohol-induced liver injury and hepatocellular carcinoma xenografts in mice. *J. Chromatogr. B Analyt. Technol. Biomed. Life Sci.* **879**(24), 2369-2375 (2011).
4. Avadhani, M., Geyer, R., White, D.C., *et al.* Lysophosphatidylethanolamine is a substrate for the short-chain alcohol dehydrogenase SocA from *Myxococcus xanthus*. *J. Bacteriol.* **188**(24), 8543-8550 (2006).

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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