

PRODUCT INFORMATION

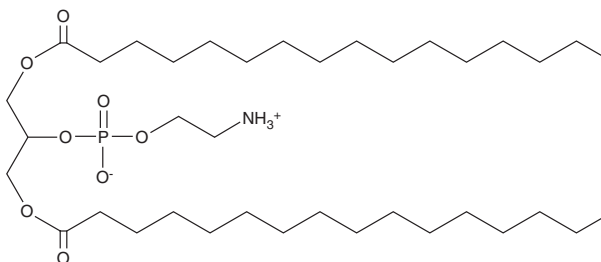


1,3-Dipalmitoyl glycerol-2-PE

Item No. 15093

CAS Registry No.: 67303-93-9
Formal Name: hexadecanoic acid, 1,1'-[2-[[[2-aminoethoxy]hydroxyphosphinyl]oxy]-1,3-propanediyl] ester

Synonym: 1,3-DPPE
MF: C₃₇H₇₄NO₈P
FW: 692.0
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

1,3-Dipalmitoyl glycerol-2-PE is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,3-dipalmitoyl glycerol-2-PE in the solvent of choice, which should be purged with an inert gas. 1,3-Dipalmitoyl glycerol-2-PE is soluble in the organic solvent chloroform at a concentration of approximately 3 mg/ml.

Description

Phosphatidylethanolamines (PEs) are phospholipids found in biological membranes that serve both structural and functional roles.^{1,2} Different types of PE are commonly used in the generation of micelles, liposomes, and other types of artificial membranes.^{3,4} 1,3-Dipalmitoyl glycerol-2-PE is a phospholipid containing the saturated long-chain (16:0) stearic acid inserted at the *sn*-1 and *sn*-3 positions and PE at the *sn*-2 site.

References

1. Vance, J.E. and Tasseva, G. Formation and function of phosphatidylserine and phosphatidylethanolamine in mammalian cells. *Biochim. Biophys. Acta* **1831(3)**, 543-554 (2013).
2. Wellner, N., Diep, T.A., Janfelt, C., et al. N-acylation of phosphatidylethanolamine and its biological functions in mammals. *Biochim. Biophys. Acta* **1831(3)**, 652-662 (2013).
3. Simões, S., Moreira, J.N., Fonseca, C., et al. On the formulation of pH-sensitive liposomes with long circulation times. *Adv. Drug Deliv. Rev.* **56(7)**, 947-965 (2004).
4. Fattal, E., Couvreur, P., and Dubernet, C. "Smart" delivery of antisense oligonucleotides by anionic pH-sensitive liposomes. *Adv. Drug Deliv. Rev.* **56(7)**, 931-946 (2004).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM