

PRODUCT INFORMATION



1,2-Dipalmitoyl-*sn*-glycero-3-PC

Item No. 10009473

CAS Registry No.: 63-89-8
Formal Name: (7R)-4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-3,5,9-trioxa-4-phosphapentacosan-1-aminium 4-oxide, inner salt

Synonyms: 1,2-DPPC, 1,2-Dipalmitoyl-*sn*-glycerol-3-Phosphocholine, L-Dipalmitoyl Lecithin, 16:0/16:0-PC, PC(16:0/16:0)

MF: C₄₀H₈₀NO₈P

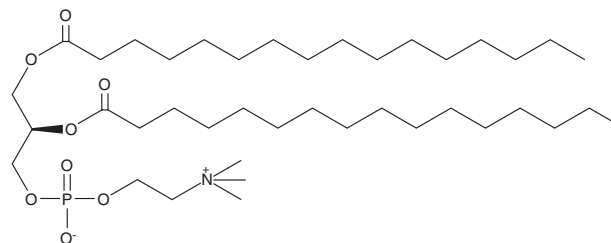
FW: 734.1

Purity: ≥95%

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

1,2-Dipalmitoyl-*sn*-glycero-3-PC (1,2-DPPC) is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,2-DPPC in the solvent of choice, which should be purged with an inert gas. 1,2-DPPC is soluble in the organic solvent ethanol at a concentration of approximately 30 mg/ml.

Description

1,2-DPPC is a zwitterionic glycerophospholipid commonly used in the formation of lipid monolayers, bilayers, and liposomes for use in a variety of applications.¹⁻⁴ It has been used in the formation of proteoliposomes for implantation of γ -glutamyl transpeptidase into human erythrocyte membranes.³ Incorporation of glycosphingolipid antigens into 1,2-DPPC-containing liposomes increases the immunogenicity of the antigens in mice.⁴

References

1. Ege, C. and Lee, K.Y.C. Insertion of Alzheimer's A β 40 peptide into lipid monolayers. *Biophys. J.* **87**(3), 1732-1740 (2004).
2. Leekumjorn, S. and Sum, A.K. Molecular simulation study of structural and dynamic properties of mixed DPPC/DPPE bilayers. *Biophys. J.* **90**(11), 3951-3965 (2006).
3. Kalra, V.K., Sikka, S.C., and Sethi, G.S. Transport of amino acids in γ -glutamyl transpeptidase-implanted human erythrocytes. *J. Biol. Chem.* **256**(11), 5567-5571 (1981).
4. Uemura, A., Watarai, S., Iwasaki, T., et al. Induction of immune responses against glycosphingolipid antigens: Comparison of antibody responses in mice immunized with antigen associated with liposomes prepared from various phospholipids. *J. Vet. Med. Sci.* **67**(12), 1197-1201 (2005).

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