

PRODUCT INFORMATION



1,2-Dipalmitoyl-*sn*-glycero-3-PC (solution)

Item No. 43865

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, inner salt, 4-oxide

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

MF: $C_{40}H_{80}NO_8P$

FW: 734.1

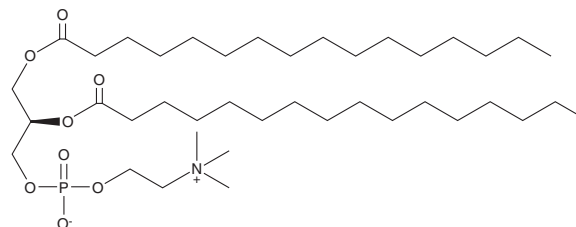
Purity: ≥ 95

Supplied as: A 25 mM solution in ethanol

Storage: -20°C

Stability: ≥ 4 years

Special Conditions: Product may crash out of solution when cold. To restore the solution, gently warm and agitate the vial.



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

Description

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