

PRODUCT INFORMATION



1-Palmitoyl-d₉-2-Palmitoyl-*sn*-glycero-3-PC

Item No. 28154

Formal Name: (7R)-4-hydroxy-N,N,N-trimethyl-10-oxo-7-[(1-oxohexadecyl)oxy]-3,5,9-trioxa-4-phosphapentacosan-

Synonyms: DPPC-d₉, PC(16:0-d₉/16:0), 16:0-d₉/16:0-PC, 1-Hexadecanoyl-d₉-2-Hexadecanoyl-*sn*-glycero-3-Phosphatidylcholine, 1-Hexadecanoyl-d₉-2-Hexadecanoyl-*sn*-glycero-3-Phosphocholine

MF: C₄₀H₇₁D₉NO₈P

FW: 743.1

Chemical Purity: ≥95% (1,2-Dipalmitoyl-*sn*-glycero-3-PC)

Deuterium

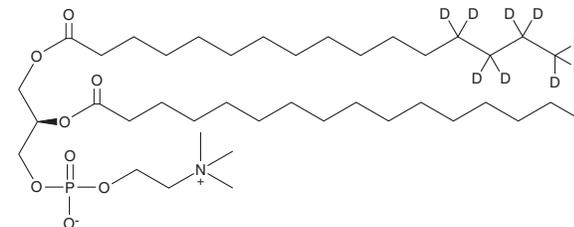
Incorporation: ≥99% deuterated forms (d₁-d₉); ≤1% d₀

Supplied as: A 1 mg/ml solution in chloroform

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-Palmitoyl-d₉-2-palmitoyl-*sn*-glycero-3-PC is intended for use as an internal standard for the quantification of 1,2-dipalmitoyl-*sn*-glycero-3-PC (Item No. 10009473) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

1-Palmitoyl-d₉-2-palmitoyl-*sn*-glycero-3-PC is supplied as a solution in chloroform. To change the solvent, simply evaporate the chloroform under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol purged with an inert gas can be used. The solubility of 1-Palmitoyl-d₉-2-palmitoyl-*sn*-glycero-3-PC in ethanol is approximately 30 mg/ml.

Description

1,2-Dipalmitoyl-*sn*-glycero-3-PC (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 DPPC-containing liposomes increases the immunogenicity of the antigens in mice.⁴

References

1. Ege, C. and Lee, K.Y.C. *Biophys. J.* **87**(3), 1732-1740 (2004).
2. Leekumjorn, S. and Sum, A.K. *Biophys. J.* **90**(11), 3951-3965 (2006).
3. Kalra, V.K., Sikka, S.C., and Sethi, G.S. *J. Biol. Chem.* **256**(11), 5567-5571 (1981).
4. Uemura, A., Watarai, S., Iwasaki, T., et al. *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.

WARRANTY AND LIMITATION OF REMEDY

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