PRODUCT INFORMATION



1,2-Dihexanoyl-sn-glycero-3-PC

Item No. 25585

CAS Registry No.: 34506-67-7

Formal Name: 4-hydroxy-N,N,N-trimethyl-10-oxo-7R-[(1-

oxohexyl)oxy]-3,5,9-trioxa-4-phosphapentadecan-

1-aminium, inner salt, 4-oxide

Synonyms: DHPC-C6, L-1,2-Dihexanoyllecithin,

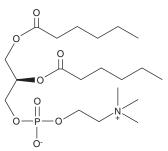
1,2-Dihexanoyl-sn-glycero-3-Phosphocholine

MF: $C_{20}H_{40}NO_{8}P$ FW: 453.5 **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-Dihexanoyl-sn-glycero-3-PC (DHPC-C6) is supplied as a crystalline solid. A stock solution may be made by dissolving the DHPC-C6 in the solvent of choice, which should be purged with an inert gas. DHPC-C6 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of DHPC-C6 in these solvents is approximately 30, 7, and 20 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of DHPC-C6 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of DHPC-C6 in PBS, pH 7.2, is approximately 0.25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

DHPC-C6 is a synthetic phospholipid containing the short-chain (6:0) caproic acid inserted at the sn-1 and sn-2 positions. It is a substrate for phospholipase C isolated from B. cereus as well as phospholipase A2 isolated from A. halys blomhoffi and N. naja atra snake venom. 1,2 DHPC is commonly used in the generation of micelles, liposomes, and other types of artificial membranes.³

References

- 1. Little, C. Phospholipase C from Bacillus cereus. Action on some artificial lecithins. Acta Chem. Scand. B **31(4)**, 267-272 (1977).
- Teshima, K., Kitagawa, Y., Samejima, Y., et al. Role of Ca²⁺ in the substrate binding and catalytic functions of snake venom phospholipases A₂. J. Biochem. 106(3), 518-527 (1989).
- 3. Batenjany, M.M., O'Leary, T.J., Levin, I.W., et al. Packing characteristics of two-component bilayers composed of ester- and ether-linked phospholipids. Biophys. J. 72(4), 1695-1700 (1997).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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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