

PRODUCT INFORMATION



1-O-hexadecyl-2-Docosahexaenoyl-*sn*-glycero-3-PC

Item No. 60903

CAS Registry No.: 132213-85-5
Formal Name: 1-O-hexadecyl-2-O-(4Z,7Z,10Z,13Z,16Z,19Z-docosahexaenoyl)-*sn*-glyceryl-3-phosphorylcholine
Synonyms: 1-O-hexadecyl-2-Docosahexaenoyl-*sn*-glycero-3-phosphocholine, 1-O-hexadecyl-2-Docosahexaenoyl-*sn*-glycero-phosphocholine, 1-O-hexadecyl-2-Docosahexaenoyl-*sn*-glyceryl-phosphocholine, 1-O-hexadecyl-2-O-Docosahexaenoyl-*sn*-glycero-PC, 1-O-hexadecyl-2-O-Docosahexaenoyl-*sn*-glyceryl-PC, PC(O-16:0/22:6)

MF: C₄₆H₈₂NO₇P

FW: 792.1

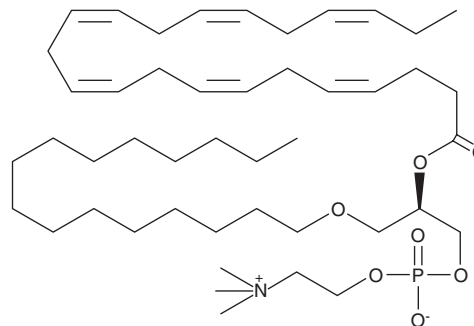
Purity: ≥98%

Supplied as: A solution in ethanol containing 0.1% BHT

Storage: -20°C

Stability: ≥2 years

Special Conditions: Hygroscopic



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

Laboratory Procedures

1-O-hexadecyl-2-Docosahexaenoyl-*sn*-glycero-3-PC is supplied as a solution in ethanol containing 0.1% BHT. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of 1-O-hexadecyl-2-docosahexaenoyl-*sn*-glycero-3-PC in DMSO is approximately 2.5 mg/ml and approximately 14.3 mg/ml in DMF.

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. If an organic solvent-free solution of 1-O-hexadecyl-2-docosahexaenoyl-*sn*-glycero-3-PC is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 1-O-hexadecyl-2-docosahexaenoyl-*sn*-glycero-3-PC in PBS (pH 7.2), acidic PBS, and basic PBS is approximately 0.05 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

1-O-hexadecyl-2-Docosahexaenoyl-*sn*-glycero-3-PC is a PAF analog which contains docosahexaenoate at the *sn*-2 position rather than the acetate moiety found in PAF C-16. 1-O-hexadecyl-2-Docosahexaenoyl-*sn*-glycero-3-PC can be oxidatively fragmented resulting in the production of phospholipids with PAF-like activity.^{1,2}

References

1. Tanaka, T., Iimori, M., Tsukatani, H., *et al.* Platelet-aggregating effects of platelet-activating factor-like phospholipids formed by oxidation of phosphatidylcholines containing an *sn*-2-polyunsaturated fatty acyl group. *Biochim. Biophys. Acta* **1210**(2), 202-208 (1994).
2. Tanaka, T., Tokumura, A., and Tsukatani, H. Platelet-activating factor (PAF)-like phospholipids formed during peroxidation of phosphatidylcholines from different foodstuffs. *Biosci. Biotechnol. Biochem.* **59**(8), 1389-1393 (1995).

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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