

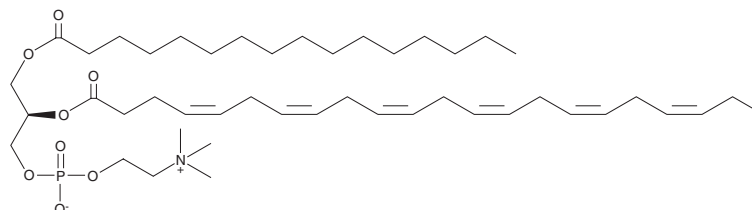
PRODUCT INFORMATION



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

Item No. 31982

CAS Registry No.: 59403-54-2
Formal Name: (7R,12Z,15Z,18Z,21Z,24Z,27Z)-4-hydroxy-N,N,N-trimethyl-9-oxo-7-[[[(1-oxohexadecyl)oxy]methyl]-3,5,8-trioxa-4-phosphatriaconta-12,15,18,21,24,27-hexaen-1-aminium, 4-oxide, inner salt
Synonyms: 1-Palmitoyl-2-Docosahexaenoyl-*sn*-glycero-3-Phosphocholine, 1-Palmitoyl-2-Docosahexaenoyl-*sn*-glycero-3-Phosphatidylcholine, PC(16:0/22:6), 16:0/22:6-PC, PDPC



MF: C₄₆H₈₀NO₈P
FW: 806.1
Purity: ≥95%
Supplied as: A solution in chloroform
Storage: -80°C
Stability: ≥2 years

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

Description

1-Palmitoyl-2-docosahexaenoyl-*sn*-glycero-3-PC (PDPC) is a phospholipid that contains palmitic acid (Item No. 10006627) and docosahexaenoic acid (Item No. 90310) at the *sn*-1 and *sn*-2 positions, respectively. It is a component of LDL and HDL and has been found in atherosclerotic plaques.^{1,2} Enrichment of PDPC in recombinant HDLs decreases cholesterol ester formation by lecithin:cholesterol acyltransferase (LCAT) *in vitro*.^{3,4}

References

1. Davis, B., Koster, G., Douet, L.J., *et al.* Electrospray ionization mass spectrometry identifies substrates and products of lipoprotein-associated phospholipase A₂ in oxidized human low density lipoprotein. *J. Biol. Chem.* **283**(10), 6428-6437 (2008).
2. Ménégaut, L., Masson, D., Abello, N., *et al.* Specific enrichment of 2-arachidonoyl-lysophosphatidylcholine in carotid atheroma plaque from type 2 diabetic patients. *Atherosclerosis* **251**, 339-347 (2016).
3. Parks, J.S., Thuren, T.Y., and Schmitt, J.D. Inhibition of lecithin:cholesterol acyltransferase activity by synthetic phosphatidylcholine species containing eicosapentaenoic acid or docosahexaenoic acid in the *sn*-2 position. *J. Lipid Res.* **33**(6), 879-887 (1992).
4. Parks, J.S. and Gebre, A.K. Long-chain polyunsaturated fatty acids in the *sn*-2 position of phosphatidylcholine decrease the stability of recombinant high density lipoprotein apolipoprotein A-I and the activation energy of the lecithin:cholesterol acyltransferase reaction. *J. Lipid Res.* **38**(2), 266-275 (1997).

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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