

PRODUCT INFORMATION



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

Item No. 25658

CAS Registry No.: 35418-58-7

Formal Name: (7R,13Z,16Z,19Z,22Z)-4-hydroxy-N,N,N-trimethyl-9-oxo-7-[[[(1-oxohexadecyl)oxy]methyl]-3,5,8-trioxa-4-phosphaoctacos-13,16,19,22-tetraen-1-aminium 4-oxide, inner salt

Synonyms: 1-Palmitoyl-2-Arachidonoyl-*sn*-glycero-3-Phosphocholine, PAPC, PC(16:0/20:4)

MF: C₄₄H₈₀NO₈P

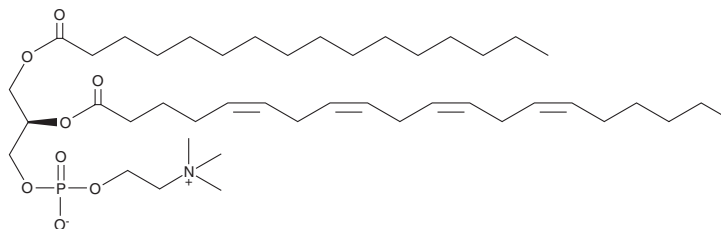
FW: 782.1

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

PAPC is a phospholipid containing palmitic acid (16:0) (Item No. 10006627) and arachidonic acid (20:4) (Item No. 90010) at the *sn*-1 and *sn*-2 positions, respectively, that is found in biological membranes.¹ PAPC is oxidized *in vivo*, and its oxidation products are involved in chronic inflammation and vascular disease.¹⁻³ PAPC has been used to study signaling of oxidized phospholipids. Levels of PAPC are decreased in isolated human multiple myeloma cells.⁴

References

1. Bretscher, P., Egger, J., Shamshiev, A., *et al.* Phospholipid oxidation generates potent anti-inflammatory lipid mediators that mimic structurally related pro-resolving eicosanoids by activating Nrf2. *EMBO Mol. Med.* **7(5)**, 593-607 (2015).
2. Miller, Y.I. and Shyy, J.Y.-J. Context-dependent role of oxidized lipids and lipoproteins in inflammation. *Trends Endocrinol. Metab.* **28(2)**, 143-152 (2017).
3. Gugiu, B.G., Mouiflesseaux, K., Duong, V., *et al.* Protein targets of oxidized phospholipids in endothelial cells. *J. Lipid Res.* **49(3)**, 510-520 (2008).
4. Hossen, M.A., Nagata, Y., Waki, M., *et al.* Decreased level of phosphatidylcholine (16:0/20:4) in multiple myeloma cells compared to plasma cells: A single-cell MALDI-IMS approach. *Anal. Bioanal. Chem.* **407(18)**, 5273-5280 (2015).

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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