

PRODUCT INFORMATION



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

Item No. 26012

CAS Registry No.: 59491-62-2

Formal Name: 4-hydroxy-N,N,N-trimethyl-10-oxo-7R-[(1-oxohexadecyl)oxy]-3,5,9-trioxa-4-phosphaheptacos-18Z-en-1-aminium 4-oxide, inner salt

Synonyms: 1-Oleoyl-2-Palmitoyl-*sn*-glycero-3-Phosphocholine, L- α -1-Oleoyl-2-Palmitoyl-Phosphatidylcholine, 1,2-OPPC, PC(18:1(9Z)/16:0)

MF: $C_{42}H_{82}NO_8P$

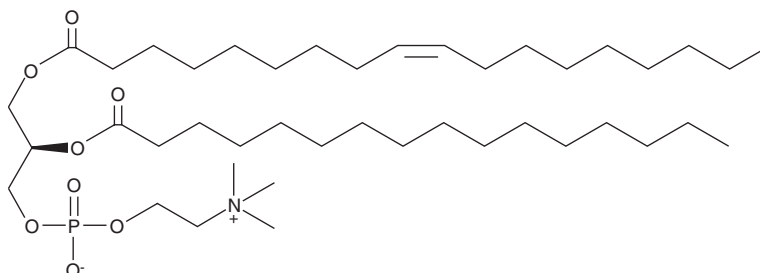
FW: 760.1

Purity: $\geq 95\%$

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-Oleoyl-2-palmitoyl-*sn*-glycero-3-PC (1,2-OPPC) is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,2-OPPC in the solvent of choice, which should be purged with an inert gas. 1,2-OPPC is soluble in the organic solvent ethanol at a concentration of approximately 25 mg/ml.

Description

1,2-OPPC is a phospholipid containing oleic acid (Item No. 90260) and palmitic acid (Item No. 10006627) at the *sn*-1 and *sn*-2 positions, respectively, that is found in biological membranes.¹ It can be used in the generation of liposomes and other artificial membranes.²⁻⁴ Artificial membranes containing 1,2-OPPC have been used to study *S. aureus* α -toxin assembly and the effects of phytol on membranes, as well as for the characterization of phospholipase A₂.

References

1. Kuge, H., Akahori, K., Yagyu, K., *et al.* Functional compartmentalization of the plasma membrane of neurons by a unique acyl chain composition of phospholipids. *J. Biol. Chem.* **289**(39), 26783-26793 (2014).
2. Tomita, T., Watanabe, M., and Yasuda, T. Influence of membrane fluidity on the assembly of *Staphylococcus aureus* α -toxin, a channel-forming protein, in liposome membrane. *J. Biol. Chem.* **267**(19), 13391-13397 (1992).
3. Bayburt, T., Yu, B.-Z., Lin, H.-K., *et al.* Human nonpancreatic secreted phospholipase A₂: Interfacial parameters, substrate specificities, and competitive inhibitors. *Biochemistry* **32**(2), 573-582 (1993).
4. Picquart, M. and Lefèvre, T. Raman and Fourier transform infrared study of phytol effects on saturated and unsaturated lipid multibilayers. *J. Raman Spectrosc.* **34**(1), 4-12 (2003).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/01/2022

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