

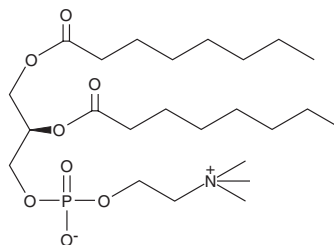
Product Information



1,2-Dioctanoyl PC

Catalog No. 10009874

CAS Registry No.:	19191-91-4
Formal Name:	1,2- <i>bis</i> (O-octanoyl)- <i>sn</i> -glyceryl-phosphorylcholine
Synonyms:	1,2-Dioctanoyl Phosphatidylcholine
MF:	C ₂₄ H ₄₈ NO ₈ P
FW:	509.6
Purity:	≥98%
Stability:	≥1 year at -20°C
Supplied as:	A solution in ethanol



Laboratory Procedures

For long term storage, we suggest that 1,2-dioctanoyl PC be stored as supplied at -20°C. It will be stable for at least one year.

1,2-Dioctanoyl PC is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of 1,2-dioctanoyl PC in ethanol is approximately 30 mg/ml and approximately 20 mg/ml in DMSO and DMF.

1,2-Dioctanoyl PC is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 1,2-dioctanoyl PC should be diluted with the aqueous buffer of choice. 1,2-Dioctanoyl PC has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Phosphatidylcholine (PC) species are a common class of phospholipids that comprise the mammalian cell membrane. 1,2-Dioctanoyl PC is a synthetic analog of natural PC species containing saturated C8:O fatty acids in the *sn*-1 and *sn*-2 positions of the glycerol backbone. It exhibits a critical micelle concentration (CMC) value of 0.25 mM at 27°C.¹ 1,2-Dioctanoyl PC serves as an efficient substrate for phospholipase D (PLD) as well as sPLA₂ isozymes from bovine pancreas and bee venom.^{1,2}

References

1. Lin, G., Noel, J., Loffredo, W., *et al.* Use of short-chain cyclopentano-phosphatidylcholines to probe the mode of activation of phospholipase A₂ from bovine pancreas and bee venom. *J. Biol. Chem.* **263**(26), 13208-13214 (1988).
2. Davis, L.L., Maglio, J.J., and Horwitz, J. Phospholipase D hydrolyzes short-chain analogs of phosphatidylcholine in the absence of detergent. *Lipids* **33**, 223-227 (1998).

Related Products

POV-PC - Cat. No. 10031 • PGPC - Cat. No. 10044 • Lyso-PC - Cat. No. 10172 • 1,2-Dioctanoyl-*sn*-glycerol - Cat. No. 62225 • 10-Pyrene-PC - Cat. No. 62245 • PAz-PC - Cat. No. 62924 • KDdiA-PC - Cat. No. 62935 • KOdiA-PC - Cat. No. 62945 • 1,2-Didecanoyl PC - Cat. No. 10009879

WARNING: THIS PRODUCT IS NOT FOR HUMAN OR ANIMAL DISEASE DIAGNOSIS OR THERAPEUTIC DRUG USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy located on our website and in our catalog**.

Copyright Cayman Chemical Company, 01/11/2008

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com