

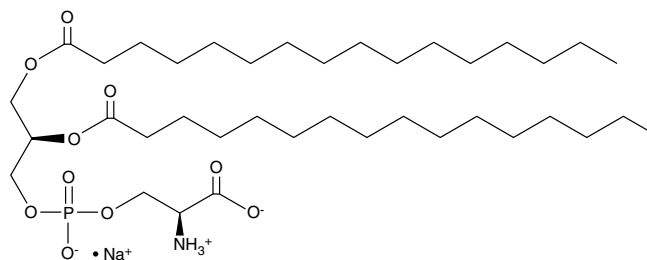
Product Information



1,2-Dipalmitoyl-*sn*-glycero-3-PS (sodium salt)

Item No. 15088

CAS Registry No.: 145849-32-7
Formal Name: 1,2-dipalmitoyl-*sn*-glycero-3-phospho-L-serine, monosodium salt
Synonyms: 1,2-Dipalmitoyl-*sn*-glycero-3-phospho-L-serine, 1,2-DPPS
MF: C₃₈H₇₃NO₁₀P • Na
FW: 758.0
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that 1,2-dipalmitoyl-*sn*-glycero-3-PS (1,2-DPPS) (sodium salt) be stored as supplied at -20°C. It should be stable for at least two years.

1,2-DPPS (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,2-DPPS (sodium salt) in the solvent of choice. 1,2-DPPS (sodium salt) is soluble in chloroform at a concentration of approximately 0.5 mg/ml.

1,2-DPPS (sodium salt) is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Phosphatidylserine (PS) is an anionic phospholipid that is normally restricted to the inner leaflet of the plasma membrane bilayer of cells, appearing on the outer leaflet early in apoptosis and thus available for recognition by phagocytes.^{1,2} 1,2-DPPS is a form of PS that contains the abundant long-chain (16:0) palmitic acid inserted at the *sn*-1 and *sn*-2 positions. It is commonly used in the generation of liposomes and other types of artificial membranes.^{3,4}

References

1. Fadok, V.A., Bratton, D.L., Frasch, S.C., *et al.* The role of phosphatidylserine in recognition of apoptotic cells by phagocytes. *Cell Death Differ.* **5(7)**, 551-562 (1998).
2. Savill, J. Recognition and phagocytosis of cells undergoing apoptosis. *Br. Med. Bull.* **53(3)**, 491-508 (1997).
3. Shen, H.-H., Crowston, J.G., Huber, F., *et al.* The influence of dipalmitoyl phosphatidylserine on phase behaviour of and cellular response to lyotropic liquid crystalline dispersions. *Biomaterials* **31(36)**, 9473-9481 (2010).
4. Marr, J.M., Li, F., Petlick, A.R., *et al.* The role of lateral tension in calcium induced DPPS vesicle rupture. *Langmuir* **28(32)**, 11874-11880 (2012).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/15088

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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 Safety Data Sheet, which has been sent via email to 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, 12/05/2013

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