

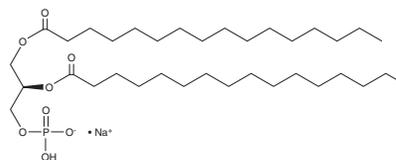
PRODUCT INFORMATION



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

Item No. 15082

CAS Registry No.: 169051-60-9
Formal Name: 1,2-dipalmitoyl-*sn*-glycero-3-phosphatidic acid, monosodium salt
Synonyms: 1,2-Dipalmitoyl-*sn*-glycero-3-phosphatidic Acid, 1,2-Dipalmitoyl-*sn*-glycero-3-phosphate, 1,2-DPPA, 16:0/16:0-PA
MF: C₃₅H₆₈O₈P • Na
FW: 670.9
Purity: ≥98%
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

1,2-Dipalmitoyl-*sn*-glycero-3-PA (DPPA) (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the DPPA (sodium salt) in the solvent of choice, which should be purged with an inert gas. DPPA (sodium salt) is soluble in the organic solvent chloroform at a concentration of approximately 1.6 mg/ml.

Description

Phosphatidic acids can be formed by the acylation of lysophosphatidic acids, the phosphorylation of diacylglycerols, or the removal of the choline group from phosphatidylcholine.¹ They have important roles in intracellular and extracellular signaling.^{2,3} DPPA is a phospholipid containing the long-chain (16:0) palmitic acid inserted at the *sn*-1 and *sn*-2 positions. It is used in the generation of micelles, liposomes, and artificial membranes.^{4,5}

References

1. Athenstaedt, K. and Daum, G. Phosphatidic acid, a key intermediate in lipid metabolism. *Eur. J. Biochem.* **266**(1), 1-16 (1999).
2. English, D. Phosphatidic acid: A lipid messenger involved in intracellular and extracellular signalling. *Cell. Signal.* **8**(5), 341-347 (1996).
3. Gomez-Cambronero, J. New concepts in phospholipase D signaling in inflammation and cancer. *ScientificWorldJournal* **10**, 1356-1369 (2010).
4. Sierra-Valdez, F.J., Forero-Quintero, L.S., Zapata-Morin, P.A., *et al.* The influence of non polar and polar molecules in mouse motile cells membranes and pure lipid bilayers. *PLoS One* **8**(4), e59364 (2013).
5. Jing, W., Prenner, E.J., Vogel, H.J., *et al.* Headgroup structure and fatty acid chain length of the acidic phospholipids modulate the interaction of membrane mimetic vesicles with the antimicrobial peptide protegrin-1. *J. Pept. Sci.* **11**(11), 735-743 (2005).

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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