

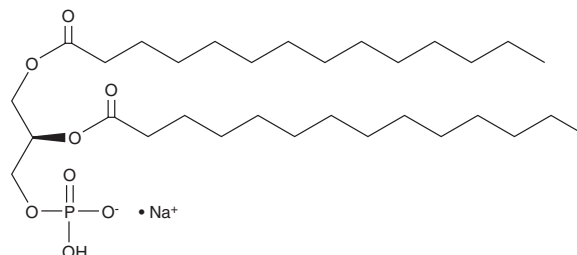
PRODUCT INFORMATION



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

Item No. 15081

CAS Registry No.: 80724-31-8
Formal Name: 1,2-dimyristoyl-*sn*-glycero-3-phosphate, monosodium salt
Synonyms: 1,2-Dimyristoyl-*sn*-glycero-3-phosphate, 1,2-Dimyristoyl-*sn*-glycero-3-phosphatidic Acid, 1,2-DPPA, 14:0/14:0-PA, PA(14:0/14:0)
MF: C₃₁H₆₀O₈P • Na
FW: 614.8
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-Dimyristoyl-*sn*-glycero-3-PA (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,2-dimyristoyl-*sn*-glycero-3-PA (sodium salt) in the solvent of choice. 1,2-Dimyristoyl-*sn*-glycero-3-PA (sodium salt) is soluble in chloroform at a concentration of approximately 1.6 mg/ml.

1,2-Dimyristoyl-*sn*-glycero-3-PA (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.

Description

Phosphatidic acids (PAs) 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} 1,2-Dimyristoyl-*sn*-glycero-3-PA (sodium salt) is a phospholipid containing the long-chain (14:0) myristic acid inserted at the *sn*-1 and *sn*-2 positions. It may be useful in evaluating the role of PAs in micelles, liposomes, and artificial membranes.

References

1. Athenstaedt, K. and Daum, G. Phosphatidic acid, a key intermediate in lipid metabolism. *Eur. J. Biochem.* **266**, 1-16 (1999).
2. English, D. Phosphatidic acid: A lipid messenger involved in intracellular and extracellular signalling. *Cell. Signal.* **8**, 341-347 (1996).
3. Gomez-Cambronero, J. New concepts in phospholipase D signaling in inflammation and cancer. *ScientificWorldJournal* **10**, 1356-1369 (2010).

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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