

PRODUCT INFORMATION



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

Item No. 20955

CAS Registry No.: 105405-50-3

Formal Name: (2S,8R)-5-oxide, 2-amino-5-hydroxy-11-oxo-8-[(1-oxotetradecyl)oxy]-4,6,10-trioxa-5-phosphatetracosanoic acid, monosodium salt

Synonyms: 1,2-Dimyristoyl-*sn*-glycero-3-phospho-L-serine, 1,2-Ditetradecanoyl-*sn*-glycero-phosphatidylserine, 1,2-Ditetradecanoyl-*sn*-glycero-phosphoserine, DMPS, 14:0 PS, 14:0/14:0-PS, PS(14:0/14:0)

MF: C₃₄H₆₅NO₁₀P • Na

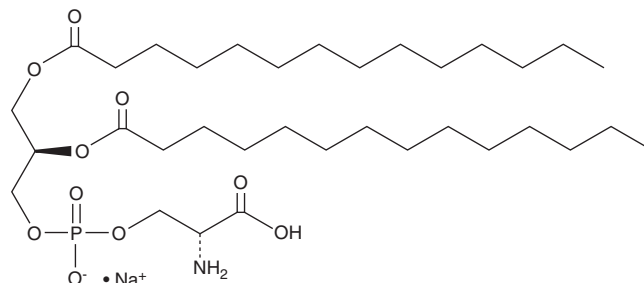
FW: 701.9

Purity: ≥95%

Supplied as: A crystalline solid

Storage: -20°C

Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



Laboratory Procedures

1,2-Dimyristoyl-*sn*-glycero-3-PS (DMPS) (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the DMPS (sodium salt) in the solvent of choice. DMPS (sodium salt) is sparingly soluble in the organic solvent chloroform, which should be purged with an inert gas, at a concentration of approximately 0.5 mg/ml.

Description

DMPS is an anionic phospholipid containing myristic acid (14:0) inserted at the *sn*-1 and *sn*-2 positions. It can be used in the generation of micelles, liposomes, and other types of artificial membranes.^{1,2}

References

1. Mattai, J., Hauser, H., Demel, R.A., *et al.* Interactions of metal ions with phosphatidylserine bilayer membranes: Effect of hydrocarbon chain unsaturation. *Biochemistry* **28(5)**, 2322-2330 (1989).
2. Tapia, M.J., Monteserin, M., Burrows, H.D., *et al.* Effect of the phospholipid chain length and head group on beta-phase formation of poly(9,9-dioctylfluorene) enclosed in liposomes. *Photochem. Photobiol.* **89(6)**, 1471-1478 (2013).

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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