

PRODUCT INFORMATION



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

Item No. 15085

CAS Registry No.: 200880-40-6

Formal Name: 1,2-dimyristoyl-*sn*-glycero-3-phosphoglycerol, monosodium salt

Synonyms: 1,2-Dimyristoyl-*sn*-glycero-3-phosphoglycerol, 1,2-Dimyristoyl-*sn*-glycero-3-phospho-(1'-*rac*-glycerol), DMPG

MF: C₃₄H₆₆O₁₀P • Na

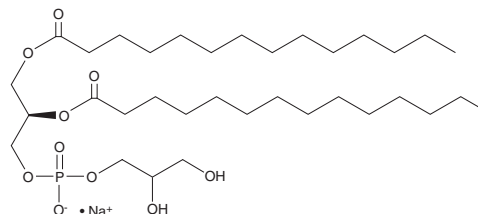
FW: 688.9

Purity: ≥98%

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

DMPG (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

DMPG is a phospholipid containing the saturated long-chain (14:0) myristic acid 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. Van Dijck, P.W., Ververgaert, P.H., Verkleji, A.J., *et al.* Influence of Ca²⁺ and Mg²⁺ on the thermotropic behaviour and permeability properties of liposomes prepared from dimyristoyl phosphatidylglycerol and mixtures of dimyristoyl phosphatidylglycerol and dimyristoyl phosphatidylcholine. *Biochim. Biophys. Acta.* **406(4)**, 465-478 (1975).
2. Rodrigues, C., Gameiro, P., Reis, S., *et al.* Derivative spectrophotometry as a tool for the determination of drug partition coefficients in water/dimyristoyl-L- α -phosphatidylglycerol (DMPG) liposomes. *Biophys. Chem.* **94(1-2)**, 97-106 (2001).

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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