

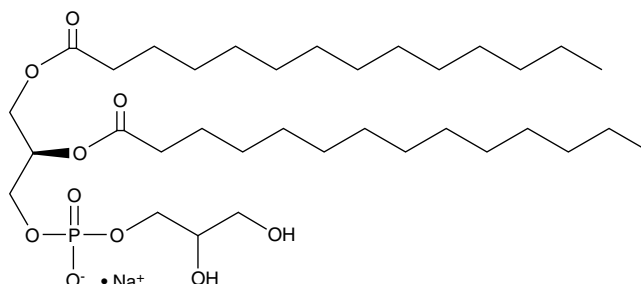
Product Information



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, DMPG
MF: C₃₄H₆₆O₁₀P • Na
FW: 688.9
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

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

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.

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).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/15085

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

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