

PRODUCT INFORMATION



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

Item No. 29983

CAS Registry No.: 90693-88-2
Formal Name: (2S,8R,19Z)-2-amino-5-hydroxy-11-oxo-8-[[[(9Z)-1-oxo-9-octadecenyl]oxy]-4,6,10-trioxa-5-phosphaoctacos-19-enoic acid, 5-oxide, monosodium salt

Synonyms: DOPS, 18:1/18:1-PS; PS(18:1/18:1), 1,2-Dioctadecenoyl-*sn*-glycero-3-Phosphoserine, 1,2-Dioctadecenoyl-*sn*-glycero-3-Phosphatidylserine

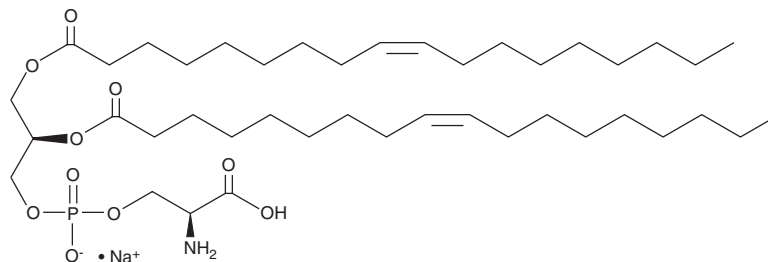
MF: C₄₂H₇₇NO₁₀P • Na
FW: 810

Purity: ≥95%

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

1,2-Dioleoyl-*sn*-glycero-3-PS (DOPS) (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the DOPS (sodium salt) in the solvent of choice, which should be purged with an inert gas. DOPS (sodium salt) is soluble in the organic solvent chloroform at a concentration of approximately 10 mg/ml.

Description

DOPS is a phospholipid containing oleic acid (Item Nos. 90260 | 24659) at the *sn*-1 and *sn*-2 positions. Nanovesicles composed of DOPS and the lysosomal protein saposin C (SapC) are cytotoxic to SK-MEL-28 cells *in vitro* and decrease tumor volume in a squamous cell carcinoma mouse xenograft model.¹ DOPS has been used in the formation of unilamellar vesicles to study the effect of curvature on membrane structure and in the formation of supported lipid bilayers to study the effects of various support materials on lipid redistribution between membrane leaflets.^{2,3}

References

1. Abu-Baker, S., Chu, Z., Stevens, A.M., *et al.* Cytotoxicity and selectivity in skin cancer by SapC-DOPS nanovesicles. *J. Cancer Ther.* **3(4)**, 321-326 (2012).
2. Kucerka, N., Pencer, J., Sachs, J.N., *et al.* Curvature effect on the structure of phospholipid bilayers. *Langmuir* **23(3)**, 1292-1299 (2007).
3. Richter, R.P., Maury, N., and Brisson, A.R. On the effect of the solid support on the interleaflet distribution of lipids in supported lipid bilayers. *Langmuir* **21(1)**, 299-304 (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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