

PRODUCT INFORMATION



1-Stearoyl-2-Arachidonoyl-*sn*-glycero-3-PE

Item No. 25871

CAS Registry No.: 61216-62-4
Formal Name: 5Z,8Z,11Z,14Z-eicosatetraenoic acid, (1R)-1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-2-[(1-oxooctadecyl)oxy]ethyl ester

Synonyms: 18:0/20:4-PE, PE(18:0/20:4), SAPE, 1-Stearoyl-2-Arachidonoyl-*sn*-glycero-3-Phosphatidylethanolamine, 1-Stearoyl-2-Arachidonoyl-*sn*-glycero-3-Phosphoethanolamine

MF: C₄₃H₇₈NO₈P

FW: 768.1

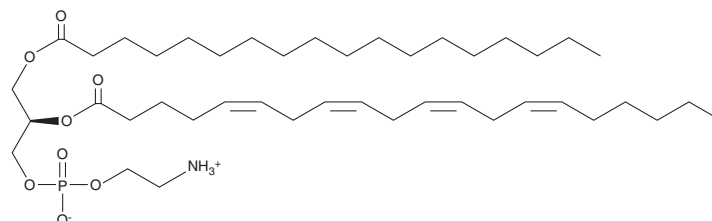
Purity: ≥95%

Supplied as: A 10 mg/ml solution in methanol:chloroform (30:70) and 0.1% amylenes

Storage: -20°C

Stability: ≥2 years

Special Conditions: Light sensitive



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

Laboratory Procedures

1-Stearoyl-2-arachidonoyl-*sn*-glycero-3-PE is supplied as a solution in methanol:chloroform (30:70) and 0.1% amylenes. To change the solvent, simply evaporate the methanol:chloroform (30:70) and 0.1% amylenes under a gentle stream of nitrogen and immediately add the solvent of choice. 1-Stearoyl-2-arachidonoyl-*sn*-glycero-3-PE is soluble in the organic solvent methanol at a concentration of approximately 10 mg/ml.

1-Stearoyl-2-arachidonoyl-*sn*-glycero-3-PE is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methanol:chloroform (30:70) and 0.1% amylenes solution of 1-stearoyl-2-arachidonoyl-*sn*-glycero-3-PE should be diluted with the aqueous buffer of choice. 1-Stearoyl-2-arachidonoyl-*sn*-glycero-3-PE has a solubility of 1 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

1-Stearoyl-2-arachidonoyl-*sn*-glycero-3-PE is a naturally-occurring phospholipid that is formed *via* the phosphatidylserine decarboxylation pathway in mammalian cells.¹ It has been used in the generation of giant unilamellar vesicles for use in the study of biological membranes.²

References

1. Bleijerveld, O.B., Brouwers, J.F., Vaandrager, A.B., *et al.* The CDP-ethanolamine pathway and phosphatidylserine decarboxylation generate different phosphatidylethanolamine molecular species. *J. Biol. Chem.* **282**(39), 28362-28372 (2007).
2. Billerit, C., Jeffries, G.D.M., Orwar, O., *et al.* Formation of giant unilamellar vesicles from spin-coated lipid films by localized IR heating. *Soft Matter* **8**(42), 10823-10826 (2012).

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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