PRODUCT INFORMATION



1-Stearoyl-2-Arachidonoyl-d₁₁-sn-glycero-3-PE

Item No. 27929

CAS Registry No.:		
Formal Name:	5Z,8Z,11Z,14Z-eicosatetraenoic-	
	16,16,17,17,18,18,19,19,20,20,20-d ₁₁ acid, (1R)-1-[[[(2-	
	aminoethoxy)hydroxyphosphinyl]oxy]methyl]-2-[(1-	
	oxooctadecyl)oxy]ethyl ester	0
Synonyms:	18:0/20:4-d ₁₁ -PE, PE(18:0/20:4-d ₁₁), SAPE-d ₁₁ ,	
	1-Stearoyl-2-Arachidonoyl-d ₁₁ -sn-glycero-3-	
	Phosphatidylethanolamine, 1-Stearoyl-2-Arachidonoyl-	
	d ₁₁ -sn-glycero-3-Phosphoethanolamine	0
MF:	C ₄₃ H ₆₇ D ₁₁ NO ₈ P	
FW:	779.1	0-
Chemical Purity:	≥95% (1-Stearoyl-2-Arachidonoyl- <i>sn</i> -glycero-3-PE)	
Deuterium		
Incorporation:	≥99% deuterated forms (d ₁ -d ₁₁); ≤1% d ₀	
Supplied as:	A solution in ethanol	
Storage:	-80°C	
Stability:	≥2 years	

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

Laboratory Procedures

1-Stearoyl-2-arachidonoyl-d₁₁-sn-glycero-3-PE is intended for use as an internal standard for the quantification of 1-stearoyl-2-arachidonoyl-sn-glycero-3-PE (Item No. 25871) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

1-Stearoyl-2-arachidonoyl-d₁₁-sn-glycero-3-PE is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as methanol purged with an inert gas can be used. The solubility of 1-stearoyl-2-arachidonoyl- d_{11} -sn-glycero-3-PE in this solvent is approximately 10 mg/ml.

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.

SAFFTY 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.

WARRANTY AND LIMITATION OF REMEDY

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