PRODUCT INFORMATION



Lyso-PAF C-16-d₄

Item No. 360906

CAS Registry No.:	201216-37-7
Formal Name:	1-O-hexadecyl-(7,7,8,8-d ₄)-sn-glyceryl-
	3-phosphorylcholine
Synonym:	Lyso-Platelet-activating Factor C-16-d ₄ \bigcirc \bigcirc \bigcirc
MF:	$C_{24}H_{48}D_4NO_6P$
FW:	485.7
Chemical Purity:	≥95% (PAF C-16)
Deuterium	
Incorporation:	≥99% deuterated forms (d ₁ -d ₄); ≤1% d ₀
Supplied as:	A solution in ethanol
Storage:	-20°C
Stability:	≥2 years
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

Laboratory Procedures

Lyso-PAF C-16-d₄ is intended for use as an internal standard for the quantification of PAF C-16 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).

Lyso-PAF C-16-d₄ 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 ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of lyso-PAF C-16-d₄ in these solvents is approximately 10 mg/ml.

Description

Lyso-PAF C-16-d₄ contains four deuterium atoms at the 7, 7', 8, and 8' positions of the hexadecyl moiety. Lyso-PAF C-16 can be formed by either the action of PAF-AH on PAF C-16 or by the action of a CoA-independent transacylase on 1-O-hexadecyl-2-acyl-glycerophosphocholine.¹⁻³ Lyso-PAF C-16 is a substrate for either PAF C-16 formation by the remodeling pathway or selective acylation with arachidonic acid by a CoA-independent transacylase.^{4,5}

References

- 1. Stafforini, D.M., Prescott, S.M., and McIntyre, T.M. Human plasma platelet-activating factor acetylhydrolase. J. Biol. Chem. 262(9), 4223-4230 (1987).
- 2. Uemura, Y., Lee, T., and Snyder, F. A coenzyme A-independent transacylase is linked to the formation of platelet-activating factor (PAF) by generating the lyso-PAF intermediate in the remodeling pathway. J. Biol. Chem. 266(13), 8268-8272 (1991).
- 3. Venable, M.E., Nieto, M.L., Schmitt, J.D., et al. Conversion of 1-O-[³H]alkyl-2-arachidonoyl-sn-glycero-3phosphorylcholine to lyso platelet-activating factor by the CoA-independent transacylase in membrane fractions of human neutrophils. J. Biol. Chem. 266(28), 18691-18698 (1991).
- 4. Prescott, S.M., Zimmerman, G.A., and McIntyre, T.M. Platelet-activating factor. J. Biol. Chem. 265(29), 17381-17384 (1990).
- 5. Venable, M.E., Olson, S.C., Nieto, M.L., et al. Enzymatic studies of lyso platelet-activation factor acylation in human neutrophils and changes upon stimulation. J. Biol. Chem. 268(11), 7965-7975 (1993).

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.

WARRANTY AND LIMITATION OF REMEDY

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