

PRODUCT INFORMATION



1-Palmitoyl-2-oleoyl-*sn*-glycero-3-phosphoethanol (sodium salt)

Item No. 45187

CAS Registry No.: 322647-55-2

Formal Name: 9Z-octadecenoic acid, (1R)-1-
[[[ethoxyhydroxyphosphinyl]oxy]methyl]-2-[[1-oxohexadecyl]oxy]ethyl ester, monosodium salt

Synonyms: 16:0-18:1 Phosphatidylethanol-IsoPure,
1-Hexadecanoyl-2-(9Z)-octadecenoyl-*sn*-
glycero-3-phosphoethanol, 1-Palmitoyl-2-
Oleoyl Phosphatidylethanol, PEth-(1-palmitoyl,
2-oleoyl), PEth(16:0/18:1), PEth(16:0/18:1(9Z))

MF: C₃₉H₇₄O₈P • Na

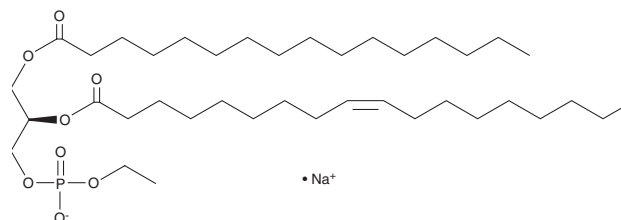
FW: 725.0

Purity: ≥98%

Supplied as: A 10 mg/ml solution in chloroform

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

1-Palmitoyl-2-oleoyl-*sn*-glycero-3-phosphoethanol (sodium salt) is supplied as a solution in chloroform. To change the solvent, simply evaporate the chloroform under a gentle stream of nitrogen and immediately add the solvent of choice. 1-Palmitoyl-2-oleoyl-*sn*-glycero-3-phosphoethanol (sodium salt) is slightly soluble (0.1-1 mg/ml) in 2:1 solution of chloroform:methanol.

Description

1-Palmitoyl-2-oleoyl-*sn*-glycero-3-phosphoethanol is a glycerophospholipid formed by phospholipase D in the presence of ethanol.^{1,2} It has commonly been used as a biomarker of alcohol consumption and can be detected in the blood for approximately one month.³

References

1. Gustavsson, L. and Alling, C. Formation of phosphatidylethanol in rat brain by phospholipase D. *Biochem. Biophys. Res. Commun.* **142**(3), 958-963 (1987).
2. Stenton, J., Walther, L., Hansson, T., *et al.* Inter individual variation and factors regulating the formation of phosphatidylethanol. *Alcohol. Clin. Exp. Res.* **43**(11), 2322-2331 (2019).
3. Bantle, M., Long, J.O.T., Brydon, S.C., *et al.* Isomer composition assessment of synthetic phosphatidylethanol by collision-induced and ozone-induced dissociation mass spectrometry. *Drug Test. Anal.* **18**(4), 501-509 (2026).

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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