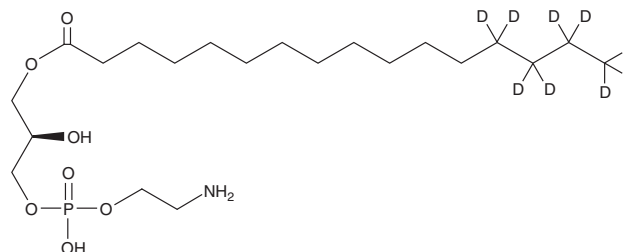


# PRODUCT INFORMATION



## 1-Palmitoyl-d<sub>9</sub>-2-hydroxy-sn-glycero-3-PE Item No. 27588

**CAS Registry No.:** 2747981-09-3  
**Formal Name:** hexadecanoic acid-13,13,14,14,15,15,16,16,16-d<sub>9</sub>, (2R)-3-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]-2-hydroxypropyl ester  
**Synonyms:** 1-Hexadecanoyl-d<sub>9</sub>-sn-glycero-3-Phosphoethanolamine, 16:0 LPE-d<sub>9</sub>, 16:0 Lyso-PE-d<sub>9</sub>, 1-Palmitoyl-d<sub>9</sub>-2-hydroxy-sn-glycero-3-Phosphoethanolamine  
**MF:** C<sub>21</sub>H<sub>35</sub>D<sub>9</sub>NO<sub>7</sub>P  
**FW:** 462.6  
**Chemical Purity:** ≥95% (1-Palmitoyl-2-hydroxy-sn-glycero-3-PE)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>9</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** A crystalline solid  
**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-d<sub>9</sub>-2-hydroxy-sn-glycero-3-PE is intended for use as an internal standard for the quantification of 1-palmitoyl-2-hydroxy-sn-glycero-3-PE (Item No. 26011) 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-Palmitoyl-d<sub>9</sub>-2-hydroxy-sn-glycero-3-PE is supplied as a crystalline solid. A stock solution may be made by dissolving the 1-palmitoyl-d<sub>9</sub>-2-hydroxy-sn-glycero-3-PE in the solvent of choice, which should be purged with an inert gas. 1-palmitoyl-d<sub>9</sub>-2-hydroxy-sn-glycero-3-PE is soluble in the organic solvent chloroform at a concentration of approximately 3 mg/ml.

### Description

1-Palmitoyl-2-hydroxy-sn-glycero-3-PE is a naturally occurring lysophospholipid.<sup>1</sup> It inhibits the growth of *L. donovani* promastigotes (GI<sub>50</sub> = 8 μM).<sup>2</sup> 1-Palmitoyl-2-hydroxy-sn-glycero-3-PE serum levels are decreased in a mouse model of alcohol-induced liver injury and in a hepatocellular carcinoma mouse xenograft model.<sup>3</sup> Human serum levels are also decreased immediately after completing a three-day exercise regimen of 2.5 hours of running per day, as well as 14 hours after completing the regimen.<sup>1</sup> 1-Palmitoyl-2-hydroxy-sn-glycero-3-PE has been used as an internal standard for the quantification of saturated lysophosphoethanolamines.<sup>4</sup>

### References

1. Nieman, D.C., Shanely, R.A., Gillitt, N.D., et al. *J. Proteome Res.* **12**(10), 4577-4584 (2013).
2. Achterberg, V. and Gercken, G. *Mol. Biochem. Parasitol.* **23**(2), 117-122 (1987).
3. Li, S., Liu, H., Jin, Y., et al. *J. Chromatogr. B Analyt. Technol. Biomed. Life Sci.* **879**(24), 2369-2375 (2011).
4. Avadhani, M., Geyer, R., White, D.C., et al. *J. Bacteriol.* **188**(24), 8543-8550 (2006).

#### 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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