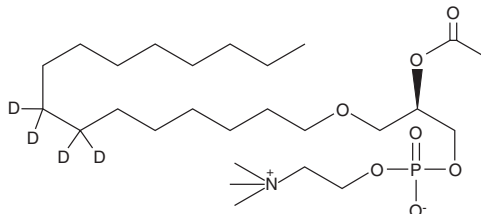


# PRODUCT INFORMATION

**PAF C-16-d<sub>4</sub>**  
Item No. 360900

**CAS Registry No.:** 211106-54-6  
**Formal Name:** 1-O-hexadecyl-(7,7,8,8-d<sub>4</sub>)-2-O-acetyl-sn-glycerol-3-phosphorylcholine  
**MF:** C<sub>26</sub>H<sub>50</sub>D<sub>4</sub>NO<sub>7</sub>P  
**FW:** 527.7  
**Chemical Purity:** ≥98%  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>4</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** A solution in ethanol  
**Storage:** -20°C  
**Stability:** ≥2 years  
**Special Conditions:** Hygroscopic



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

## Laboratory Procedures

PAF C-16-d<sub>4</sub> 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).

PAF C-16-d<sub>4</sub> 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 (DMF) purged with an inert gas can be used. The solubility of PAF C-16-d<sub>4</sub> in these solvents is approximately 10 mg/ml.

## Description

PAF C-16 is a naturally occurring phospholipid produced upon stimulation through two distinct pathways known as the 'remodeling' and 'de novo' pathways.<sup>1</sup> It is a potent mediator of neutrophil migration,<sup>2</sup> the production of reactive oxygen species,<sup>3</sup> and IL-6<sup>4</sup> in human macrophages. It is a more potent mediator of platelet aggregation than PAF C-18.<sup>5</sup> Pathological processes involving PAF include necrotizing enterocolitis,<sup>6</sup> inflammation, asthma, and allergy.<sup>7</sup>

## References

1. Prescott, S.M., Zimmerman, G.A., and McIntyre, T.M. *J. Biol. Chem.* **265**, 17381-17384 (1990).
2. Carolan, E.J. and Casale, T.B. *J. Immunol.* **145**, 2561-2565 (1990).
3. Rouis, M., Nigon, F., and Chapman, M.J. *Biochem. Biophys. Res. Commun.* **156**, 1293-1301 (1988).
4. Thivierge, M. and Rola-Pleszczynski, M. *J. Allergy Clin. Immunol.* **90**, 796-802 (1992).
5. Stewart, A.G. and Grigoriadis, G. *J. Lipid Mediat.* **4**, 299-308 (1991).
6. Wang, H., Tan, X.-D., Qu, X.-W., et al. *Pediatr. Res.* **42**, 597-603 (1997).
7. Sturk, A., Wouter Ten Cate, J., Hosford, D., et al. *Adv. Lipid Res.* **23**, 219-276 (1989).

### 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/16/2024

### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM