

PRODUCT INFORMATION



PAF C-16 Carboxylic Acid

Item No. 15392

CAS Registry No.: 129879-41-0

Formal Name: (R)-7-(acetyloxy)-24-carboxy-4-hydroxy-N,N,N-trimethyl-3,5,9-trioxa-4-phosphatetracosan-1-aminium, inner salt, 4-oxide

Synonyms: CPAGP, Platelet-activating Factor C-16 Carboxylic Acid

MF: $C_{26}H_{52}NO_9P$

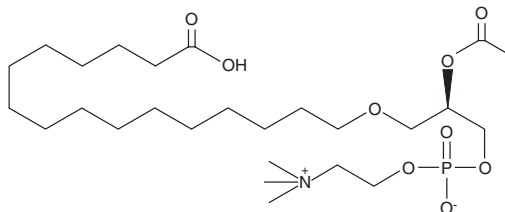
FW: 553.7

Purity: $\geq 95\%$

Supplied as: A solution in ethanol

Storage: -20°C

Stability: As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly



Laboratory Procedures

PAF C-16 Carboxylic acid 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 PAF C-16 carboxylic acid in these solvents is approximately 25, 15, and 1 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of PAF C-16 carboxylic acid is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of PAF C-16 carboxylic acid in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PAF C-16 is a naturally occurring phospholipid produced upon stimulation through two distinct pathways known as the 'remodeling' and 'de novo' pathways.¹ It is a potent mediator of neutrophil migration and the production of reactive oxygen species and IL-6.²⁻⁴ Pathological processes involving PAF include necrotizing enterocolitis, inflammation, asthma, and allergy.^{5,6} PAF C-16 Carboxylic acid is modified with a carboxylic acid group terminating the C-16 alkyl chain. This provides a convenient site for chemical crosslinking.

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. Wang, H., Tan, X.-D., Qu, X.-W., et al. *Pediatr. Res.* **42**, 597-603 (1997).
6. 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, 04/27/2016

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