

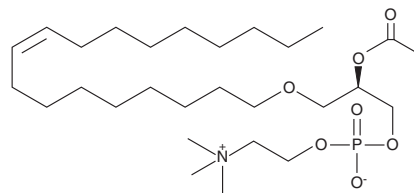
PRODUCT INFORMATION



PAF C-18:1

Item No. 18779

CAS Registry No.: 85966-90-1
Formal Name: 7R-(acetyloxy)-4-hydroxy-N,N,N-trimethyl-3,5,9-trioxa-4-phosphaheptacos-18Z-en-1-aminium, 4-oxide inner salt
Synonyms: 1-Oleoyl-2-acetyl-*sn*-glycero-3-phosphorylcholine, Platelet-activating Factor C-18:1
MF: C₂₈H₅₆NO₇P
FW: 549.7
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A solution in ethanol



Laboratory Procedures

For long term storage, we suggest that PAF C-18:1 be stored as supplied at -20°C. It should be stable for at least two years.

PAF C-18:1 is supplied as a solution in ethanol. To change the solvent, simply evaporate the PAF C-18:1 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-18:1 in these solvents is approximately 10 mg/ml. PAF C-18:1 is also soluble in water at a concentration of 20 mg/ml.

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-18:1 is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of PAF C-18:1 in PBS, pH 7.2, is approximately 20 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PAF C-18:1 is a naturally occurring phospholipid produced by cells upon stimulation and plays a role in the establishment and maintenance of the inflammatory response. It is less potent than PAF C-16 (Item No. 60900) and PAF C-18 (Item No. 60910) in the induction of neutrophil chemotaxis, but is equipotent to PAF C-16 and PAF C-18 in promoting eosinophil migration.^{1,2} PAF C-18:1 activates the PAF receptor and has been used in antibody binding experiments to determine the importance of an acyl linkage at the *sn*-2 position for recognition at this receptor.³

References

1. Carolan, E.J. and Casale, T.B. Degree of platelet activating factor-induced neutrophil migration is dependent upon the molecular species. *J. Immunol.* **145**, 2561-2565 (1990).
2. Erger, R.A. and Casale, T.B. Eosinophil migration in response to three molecular species of platelet activating factor. *Inflamm. Res.* **45(6)**, 265-267 (1996).
3. Smal, M.A., Baldo, B.A., and Harle, D.G. The specificity of the binding of platelet activating factor (PAF) to anti-PAF antibodies. *J. Mol. Recognit.* **3**, 169-173 (1990).

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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