

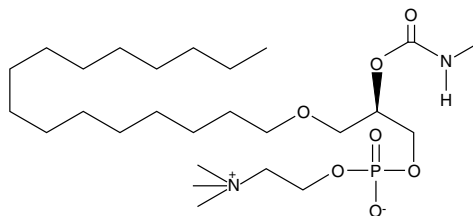
Product Information



Methylcarbamyl PAF C-16

Item No. 60908

CAS Registry No.: 91575-58-5
Formal Name: 1-O-hexadecyl-2-O-(N-methylcarbamoyl)-*sn*-glyceryl-3-phosphorylcholine
MF: C₂₆H₅₅N₂O₇P
FW: 538.7
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A solution in ethanol



Laboratory Procedures

For long term storage, we suggest that methylcarbamyl PAF C-16 be stored as supplied at -20°C. It will be stable for at least one year.

Methylcarbamyl PAF C-16 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 DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of methylcarbamyl PAF C-16 in these solvents is approximately 25 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 methylcarbamyl PAF C-16 is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of methylcarbamyl PAF C-16 in PBS (pH 7.2) is approximately 25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Methylcarbamyl PAF C-16 is a stable analog of PAF C-16 with a half-life greater than 100 minutes in platelet poor plasma due to its resistance to degradation by PAF-AH.^{1,2} It is nearly equipotent with PAF C-16 in its ability to induce platelet aggregation both in isolated platelets and in platelet-rich plasma.¹ In NRK-49 cells overexpressing the PAF receptor, both PAF C-16 and methylcarbamyl PAF C-16 cause the induction of *c-myc* and *c-fos* and the activation of mitogen-activated protein kinase.² Methylcarbamyl PAF C-16 induces G1 phase cell cycle arrest, suggesting a potential role for PAF in the inhibition of oncogenic transformation.²

References

1. Hadváry, P., Cassal, J.-M., Hirth, G., *et al.* Structural requirements for the activation of blood platelets by analogues of platelet-activating factor (PAF-acether). *Platelet-Activating Factor INSERM Symposium* **23**, 57-64 (1983).
2. Kume, K. and Shimizu, T. Platelet-activating factor (PAF) induces growth stimulation, inhibition, and suppression of oncogenic transformation in NRK cells overexpressing the PAF receptor. *J. Biol. Chem.* **272**, 22898-22904 (1997).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/60908

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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