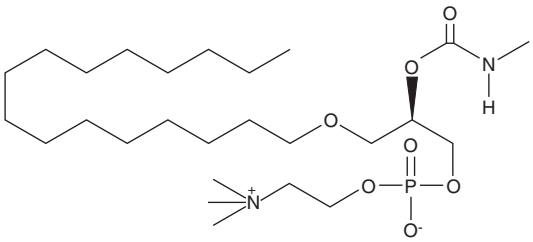
PRODUCT INFORMATION

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: $C_{26}H_{55}N_2O_7P$
FW: 538.7
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

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.

Methylcarbamyl PAF C-16 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of methylcarbamyl PAF C-16 should be diluted with the aqueous buffer of choice. 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.

Description

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 G_1 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(36)**, 22898-22904 (1997).

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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