

PRODUCT INFORMATION



16-phenoxy tetranor Prostaglandin F_{2α} methyl amide

Item No. 10010562

Formal Name: 9α,11α,15R-trihydroxy-16-phenoxy-17,18,19,20-tetranor-prosta-5Z,13E-dien-1-oic acid, methyl amide

Synonym: 16-phenoxy tetranor PGF_{2α} methyl amide

MF: C₂₃H₃₃NO₅

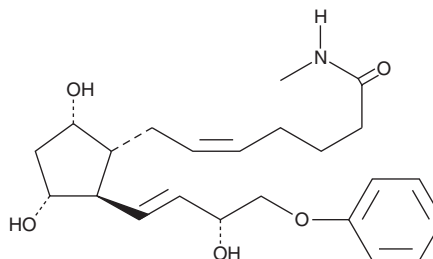
FW: 403.5

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

16-phenoxy tetranor Prostaglandin F_{2α} methyl amide 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 16-phenoxy tetranor prostaglandin F_{2α} methyl amide in these solvents is approximately 100 mg/ml.

16-phenoxy tetranor Prostaglandin F_{2α} methyl amide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 16-phenoxy tetranor prostaglandin F_{2α} methyl amide should be diluted with the aqueous buffer of choice. The solubility of 16-phenoxy tetranor prostaglandin F_{2α} methyl amide in PBS (pH 7.2) is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Prostaglandin F_{2α} (PGF_{2α}) drives luteolysis and smooth muscle contraction by activating the FP receptor. Stable, lipophilic analogs of PGF_{2α} are used to modulate luteolysis and treat glaucoma. 16-phenoxy tetranor PGF_{2α} is a metabolically stable form of PGF_{2α} containing a 16-phenoxy group at the ω-terminus. It binds to the FP receptor on ovine luteal cells with much greater affinity (440%) than PGF_{2α}.¹ 16-phenoxy tetranor PGF_{2α} methyl amide is a lipophilic analog of 16-phenoxy tetranor PGF_{2α}. Methyl amides of PGs may serve as prodrugs, as they are hydrolyzed in certain tissues to generate the bioactive free acid.

Reference

1. Balapure, A.K., Rexroad, C.E., Jr., Kawada, K., *et al.* Structural requirements for prostaglandin analog interaction with the ovine corpus luteum prostaglandin F_{2α} receptor. *Biochem. Pharmacol.* **38(14)**, 2375-2381 (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.

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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