

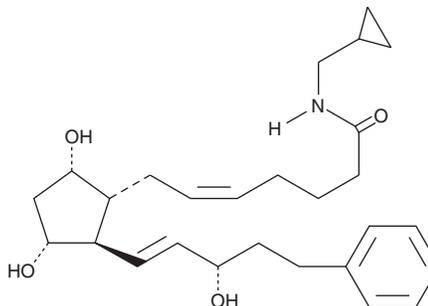
PRODUCT INFORMATION



17-phenyl trinor Prostaglandin F_{2α} cyclopropyl methyl amide

Item No. 10010810

CAS Registry No.: 1138395-10-4
Formal Name: 9α,11α,15S-trihydroxy-17-phenyl-18,19,20-trinor-prosta-5Z,13E-dien-1-cyclopropyl methyl amide
Synonym: 17-phenyl trinor PGF_{2α} cyclopropyl methyl amide
MF: C₂₇H₃₉NO₄
FW: 441.6
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

17-phenyl trinor Prostaglandin F_{2α} (PGF_{2α}) cyclopropyl 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 acetonitrile, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 17-phenyl trinor PGF_{2α} cyclopropyl methyl amide in acetonitrile is approximately 3 mg/ml and approximately 25 mg/ml in DMSO and DMF.

17-phenyl trinor PGF_{2α} cyclopropyl methyl amide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 17-phenyl trinor PGF_{2α} cyclopropyl methyl amide should be diluted with the aqueous buffer of choice. The solubility of 17-phenyl trinor PGF_{2α} cyclopropyl methyl amide in PBS (pH 7.2) is approximately 0.25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PGF_{2α} activates the FP receptor, promoting smooth muscle contraction and luteolysis. 17-phenyl trinor PGF_{2α} binds the FP receptor on ovine luteal cells with a relative potency of 756% compared to that of PGF_{2α}.¹ It is produced *in vivo* by the hydrolysis of 17-phenyl trinor PGF_{2α} ethyl amide.² 17-phenyl trinor PGF_{2α} ethyl amide is used to reduce intraocular pressure related to glaucoma.³ 17-phenyl trinor PGF_{2α} cyclopropyl methyl amide is a lipophilic analog of 17-phenyl trinor PGF_{2α}. Amides of PGs may serve as prodrugs, as they are hydrolyzed in certain tissues to generate the bioactive free acid.

References

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).
2. Camras, C.B., Toris, C.B., Sjoquist, B., *et al.* Detection of the free acid of bimatoprost in aqueous humor samples from human eyes treated with bimatoprost before cataract surgery. *Ophthalmology* **111(12)**, 2193-2198 (2004).
3. Woodward, D.F., Krauss, A.H.P., Chen, J., *et al.* Pharmacological characterization of a novel antiglaucoma agent, bimatoprost (AGN 192024). *J. Pharmacol. Exp. Ther.* **305(2)**, 772-785 (2003).

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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