

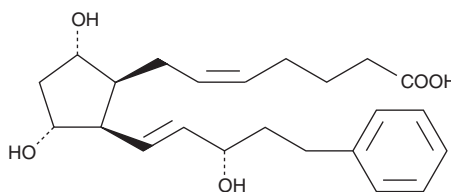
PRODUCT INFORMATION



8-iso-17-phenyl trinor Prostaglandin F_{2α}

Item No. 10008435

Formal Name: 9α,11α,15S-trihydroxy-17-phenyl-18,19,20-trinor-(8β)-prosta-5Z,13E-dien-1-oic acid
MF: C₂₃H₃₂O₅
FW: 388.5
Purity: ≥98%
Supplied as: A solution in methyl acetate
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

8-iso-17-phenyl trinor Prostaglandin F_{2α} (8-iso-17-phenyl trinor PGF_{2α}) is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate 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 8-iso-17-phenyl trinor PGF_{2α} in these solvents is approximately 50 mg/ml.

8-iso-17-phenyl trinor PGF_{2α} is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 8-iso-17-phenyl trinor PGF_{2α} should be diluted with the aqueous buffer of choice. The solubility of 8-iso-17-phenyl trinor PGF_{2α} in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

8-iso-17-phenyl trinor PGF_{2α} is the C-8 epimer of bimatoprost (free acid), a metabolically stable analog of PGF_{2α}. Bimatoprost (free acid) binds to the FP receptor on ovine luteal cells with a relative potency of 756% compared to that of PGF_{2α}.¹ At the rat recombinant FP receptor expressed in CHO cells bimatoprost inhibits PGF_{2α} binding with a K_i of 1.1 nM.² There are no published studies of the pharmacological properties of 8-iso-17-phenyl trinor PGF_{2α}.

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. Lake, S., Gullberg, H., Wahlqvist, J., *et al.* Cloning of the rat and human prostaglandin F_{2α} receptors and the expression of the rat prostaglandin F_{2α} receptor. *FEBS Lett.* **355(3)**, 317-325 (1994).

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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