

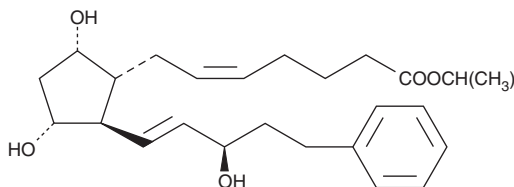
PRODUCT INFORMATION



15(R)-17-phenyl trinor Prostaglandin F_{2α} isopropyl ester

Item No. 16825

CAS Registry No.: 130273-87-9
Formal Name: 9α,11α,15R-trihydroxy-17-phenyl-18,19,20-trinor-prosta-5Z,13E-dien-1-oic acid, isopropyl ester
Synonyms: 15-*epi* Bimatoprost isopropyl ester, 15(R)-Bimatoprost isopropyl ester, 15(R)-17-phenyl trinor PGF_{2α} isopropyl ester
MF: C₂₆H₃₈O₅
FW: 430.6
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

15(R)-17-phenyl trinor Prostaglandin F_{2α} isopropyl ester (15(R)-17-phenyl trinor PGF_{2α} isopropyl ester) 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 (DMF) purged with an inert gas can be used. The solubility of 15(R)-17-phenyl trinor PGF_{2α} isopropyl ester in ethanol and DMF is approximately 30 mg/ml and approximately 25 mg/ml in DMSO.

15(R)-17-phenyl trinor PGF_{2α} isopropyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 15(R)-17-phenyl trinor PGF_{2α} isopropyl ester should be diluted with the aqueous buffer of choice. The solubility of 15(R)-17-phenyl trinor PGF_{2α} isopropyl ester in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

15(R)-17-phenyl trinor PGF_{2α} isopropyl ester is the latanoprost-related isomer containing both a double bond at 13,14 and an inverted (β) hydroxyl group at C-15. Similar to 15(S)-latanoprost, 15(R)-17-phenyl trinor PGF_{2α} isopropyl ester is a potential impurity in most commercial preparations of the latanoprost bulk drug product. The IC₅₀ values for the free acid forms of 15(S)-17-phenyl trinor PGF_{2α} and 15(R)-17-phenyl trinor PGF_{2α} were determined to be 0.71 nM and 30 nM, respectively, in a FP receptor binding assay using the cat iris sphincter muscle.¹ A 3 μg dose of 15(R)-17-phenyl trinor PGF_{2α} caused a 1.9 mmHg reduction of IOP in normotensive cynomolgus monkeys.¹

Reference

1. Resul, B., Stjenschantz, J., No, K., *et al.* Phenyl-substituted prostaglandins: Potent and selective antiglaucoma agents. *J. Med. Chem.* **36(2)**, 243-248 (1993).

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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