

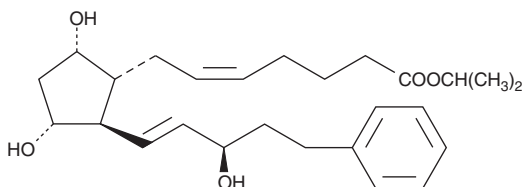
Product Information



15(R)-17-phenyl 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%
Stability: ≥2 years at -20°C
Supplied as: A solution in methyl acetate



Laboratory Procedures

For long term storage, we suggest that 15(R)-17-phenyl trinor prostaglandin F_{2α} isopropyl ester (15(R)-17-phenyl trinor PGF_{2α} isopropyl ester) be stored as supplied at -20°C. It should be stable for at least two years.

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 purged with an inert gas can be used. The solubility of 15(R)-17-phenyl trinor PGF_{2α} isopropyl ester in these solvents is approximately 25 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of 15(R)-17-phenyl trinor PGF_{2α} isopropyl ester is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. 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.

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 (b) 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)-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., Stjerschantz, J., No, K., *et al.* Phenyl-substituted prostaglandins: Potent and selective antiglaucoma agents. *J. Med. Chem.* **36**, 243-248 (1993).

Related Products

17-phenyl trinor Prostaglandin F_{2α} - Item No. 16810 • 15(R)-17-phenyl trinor Prostaglandin F_{2α} - Item No. 16814 • 17-phenyl trinor Prostaglandin F_{2α} ethyl amide - Item No. 16820 • 17-phenyl trinor Prostaglandin F_{2α} amide - Item No. 16821 • 17-phenyl trinor Prostaglandin F_{2α} diethyl amide - Item No. 16823 • 17-phenyl trinor Prostaglandin F_{2α} isopropyl ester - Item No. 16824 • 17-phenyl trinor Prostaglandin F_{2α}-d₄ - Item No. 316810 • 17-phenyl trinor Prostaglandin F_{2α} ethyl amide-d₄ - Item No. 316820 • 17-phenyl trinor Prostaglandin F_{2α} ethyl amide EIA Kit - Item No. 516821 • 17-phenyl trinor Prostaglandin F_{2α} ethyl amide EIA Kit (Solid Plate) - Item No. 516821.1 • 17-phenyl trinor Prostaglandin F_{2α} cyclohexyl amide - Item No. 9000686 • 17-phenyl trinor Prostaglandin F_{2α} serinol amide - Item No. 10004237 • 15(R)-17-phenyl trinor Prostaglandin F_{2α} ethyl amide - Item No. 10008127 • 5-*trans*-17-phenyl trinor Prostaglandin F_{2α} ethyl amide - Item No. 10008132 • 15-keto-17-phenyl trinor Prostaglandin F_{2α} ethyl amide - Item No. 10010405 • 17-trifluoromethylphenyl Prostaglandin F_{2α} ethyl amide - Item No. 10010601 • 17-phenyl trinor Prostaglandin F_{2α} cyclopropyl amide - Item No. 10010605

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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