

PRODUCT INFORMATION



17-trifluoromethylphenyl trinor Prostaglandin F2 α isopropyl ester

Item No. 10010062

Formal Name: 9 α ,11 α ,15S-trihydroxy-17-trifluoromethyl-phenyl-18,19,20-trinor-prosta-5Z,13E-dien-1-oic acid, isopropyl ester

Synonym: 17-trifluoromethylphenyl trinor PGF_{2 α} isopropyl ester

MF: C₂₇H₃₇F₃O₅

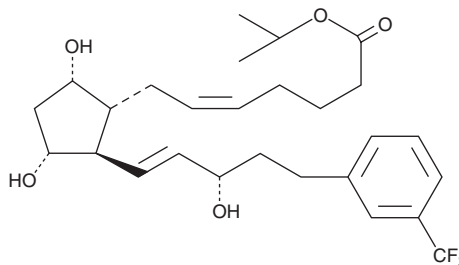
FW: 498.6

Purity: \geq 98%

Supplied as: A solution in ethanol

Storage: -20°C

Stability: \geq 2 years



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

Laboratory Procedures

17-trifluoromethylphenyl trinor PGF_{2 α} isopropyl ester 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 17-trifluoromethylphenyl trinor PGF_{2 α} isopropyl ester in these solvents is approximately 10 mg/ml.

17-trifluoromethylphenyl trinor PGF_{2 α} isopropyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 17-trifluoromethylphenyl trinor PGF_{2 α} isopropyl ester should be diluted with the aqueous buffer of choice. 17-trifluoromethylphenyl trinor PGF_{2 α} isopropyl ester has a solubility of approximately 0.2 mg/ml in a 1:5 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PGF_{2 α} , acting through the FP receptor, causes smooth muscle contraction and exhibits potent luteolytic activity.¹⁻³ 17-trifluoromethylphenyl trinor PGF_{2 α} is an analog of PGF_{2 α} that shares the meta-trifluoromethyl group of travoprost with the 17-phenyl trinor modification of latanoprost. It is anticipated to be a potent and selective agonist of the FP receptor, with potential applications in glaucoma and luteolysis. 17-trifluoromethylphenyl trinor PGF_{2 α} isopropyl ester is a lipophilic analog of 17-trifluoromethylphenyl trinor PGF_{2 α} . Isopropyl esters of PGs can serve as prodrugs, as they can be efficiently hydrolyzed in certain tissues to generate the bioactive free acid.

References

1. Samuelsson, B., Goldyne, M., Granström, E., *et al.* Prostaglandins and thromboxanes. *Annu. Rev. Biochem.* **47**, 997-1029 (1978).
2. Speroff, L. and Ramwell, P.W. Prostaglandins in reproductive physiology. *Am. J. Obstet. Gynecol.* **107**, 1111-1130 (1970).
3. Crankshaw, D.J. and Gaspar, V. Pharmacological characterization *in vitro* of prostanoid receptors in the myometrium of nonpregnant ewes. *J. Reprod. Fertil.* **103**, 55-61 (1995).

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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