

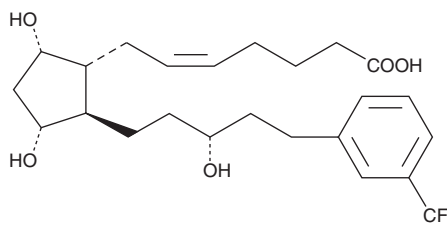
# PRODUCT INFORMATION



## 17-trifluoromethylphenyl-13,14-dihydro trinor Prostaglandin F<sub>2α</sub>

Item No. 16895

**CAS Registry No.:** 294856-01-2  
**Formal Name:** (5Z)-7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-[3-(trifluoromethyl)phenyl]pentyl]cyclopentyl]-5-heptenoic acid  
**Synonym:** 17-trifluoromethylphenyl-13,14-dihydro trinor PGF<sub>2α</sub>  
**MF:** C<sub>24</sub>H<sub>33</sub>O<sub>5</sub>F<sub>3</sub>  
**FW:** 458.5  
**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

17-trifluoromethylphenyl-13,14-dihydro trinor Prostaglandin F<sub>2α</sub> (17-trifluoromethylphenyl-13,14-dihydro trinor PGF<sub>2α</sub>) 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 17-trifluoromethylphenyl-13,14-dihydro trinor PGF<sub>2α</sub> in these solvents is approximately 50, 25, and 30 mg/ml, respectively.

17-trifluoromethylphenyl-13,14-dihydro trinor PGF<sub>2α</sub> is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 17-trifluoromethylphenyl-13,14-dihydro trinor PGF<sub>2α</sub> should be diluted with the aqueous buffer of choice. The solubility of 17-trifluoromethylphenyl-13,14-dihydro trinor PGF<sub>2α</sub> in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

A number of 17-phenyl trinor PGF<sub>2α</sub> derivatives have been approved for the treatment of glaucoma.<sup>1-3</sup> Of these, the ones wherein the 13,14-double bond has been hydrogenated retain relatively good potency, but show a significantly reduced incidence of local irritant side effects.<sup>4</sup> 17-trifluoromethylphenyl-13,14-dihydro trinor PGF<sub>2α</sub> bears an aromatic ring which is reminiscent of the trifluoromethyl-phenoxy ring of travoprost ((+)-fluprostenol isopropyl ester). As an ocular hypotensive agent, it would be expected that 17-trifluoromethylphenyl-13,14-dihydro trinor PGF<sub>2α</sub> would act very much like the free acid of latanoprost.

### References

1. Woodward, D.F., Krauss, A.H., Chen, J., *et al.* The pharmacology of bimatoprost (Lumigan™). *Surv. Ophthalmol.* **45(Suppl. 4)**, S337-S345 (2001).
2. Stjernschantz, J.W. From PGF<sub>2α</sub>-isopropyl ester to latanoprost: A review of the development of xalatan. The proper lecture. *Invest. Ophthalmol. Vis. Sci.* **42(6)**, 1134-1145 (2001).
3. Sorbera, L.A. and Castañer, J. Travoprost. *Drugs Future* **25(1)**, 41-45 (2000).
4. Resul, B., Stjernschantz, 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM