

# PRODUCT INFORMATION



## 17-trifluoromethylphenyl trinor Prostaglandin F<sub>2α</sub> ethyl amide

Item No. 10010061

**CAS Registry No.:** 1621369-73-0  
**Formal Name:** 9α,11α,15S-trihydroxy-17-trifluoromethylphenyl-18,19,20-trinor-prosta-5Z,13E-dien-1-oic acid, ethyl amide

**Synonym:** 17-trifluoromethylphenyl trinor PGF<sub>2α</sub> ethyl amide

**MF:** C<sub>26</sub>H<sub>36</sub>F<sub>3</sub>NO<sub>4</sub>

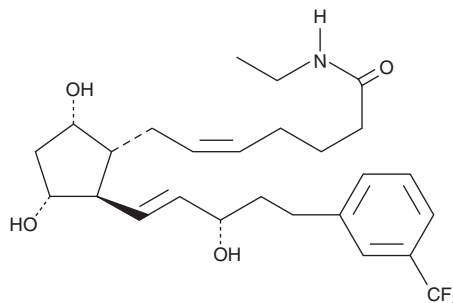
**FW:** 483.6

**Purity:** ≥98%

**Supplied as:** A solution in ethanol

**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 trinor Prostaglandin F<sub>2α</sub> ethyl amide (17-trifluoromethylphenyl trinor PGF<sub>2α</sub> ethyl amide) 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<sub>2α</sub> ethyl amide 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 17-trifluoromethylphenyl trinor PGF<sub>2α</sub> ethyl amide is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 17-trifluoromethylphenyl trinor PGF<sub>2α</sub> ethyl amide in PBS, pH 7.2, is approximately 0.15 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

PGF<sub>2α</sub> acting through the FP receptor, causes smooth muscle contraction and exhibits potent luteolytic activity.<sup>1-3</sup> 17-trifluoromethylphenyl trinor PGF<sub>2α</sub> is an analog of PGF<sub>2α</sub> 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<sub>2α</sub> ethyl amide is a lipophilic analog of 17-trifluoromethylphenyl trinor PGF<sub>2α</sub>. Ethyl amides of PGs can serve as prodrugs, as they are 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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