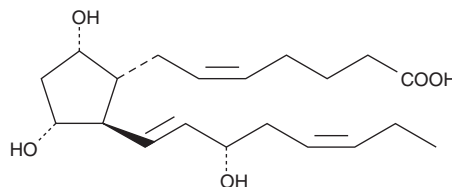


# PRODUCT INFORMATION



## Prostaglandin F<sub>3α</sub> Item No. 16990

**CAS Registry No.:** 745-64-2  
**Formal Name:** 9α,11α,15S-trihydroxy-prosta-5Z,13E,17Z-trien-1-oic acid  
**Synonym:** PGF<sub>3α</sub>  
**MF:** C<sub>20</sub>H<sub>32</sub>O<sub>5</sub>  
**FW:** 352.5  
**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

Prostaglandin F<sub>3α</sub> (PGF<sub>3α</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 PGF<sub>3α</sub> in these solvents is approximately 100 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 PGF<sub>3α</sub> is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of PGF<sub>3α</sub> in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

PGF<sub>3α</sub> is a COX product of EPA. The biosynthesis of PGF<sub>3α</sub> from EPA was demonstrated *in vitro* in human and rabbit ocular tissues.<sup>1</sup> It has only 25% affinity at the ovine luteal FP receptor compared to PGF<sub>2α</sub>.<sup>2</sup>

### References

1. Kulkarni, P.S. and Srinivasan, B.D. Eicosapentaenoic acid metabolism in human and rabbit anterior uvea. *Prostaglandins* **31(6)**, 1159-1164 (1986).
2. Balapure, A.K., Rexroad, C.E., Jr., Kawada, K., et al. Structural requirements for prostaglandin analog interaction with the ovine corpus luteum prostaglandin F<sub>2α</sub> receptor. *Biochem. Pharmacol.* **38(14)**, 2375-2381 (1989).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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