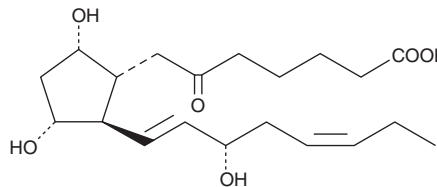


# PRODUCT INFORMATION



## $\Delta^{17}$ -6-keto Prostaglandin F<sub>1 $\alpha$</sub> Item No. 15230

**CAS Registry No:** 68324-95-8  
**Formal Name:** 6-oxo-9 $\alpha$ ,11 $\alpha$ ,15S-trihydroxy-prosta-13E,17Z-dien-1-oic acid  
**Synonym:**  $\omega$ -3 6-keto PGF<sub>2 $\alpha$</sub>   
**MF:** C<sub>20</sub>H<sub>32</sub>O<sub>6</sub>  
**FW:** 368.5  
**Purity:**  $\geq$ 98%  
**Supplied as:** A solution in methyl acetate  
**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

$\Delta^{17}$ -6-keto Prostaglandin F<sub>1 $\alpha$</sub>  ( $\Delta^{17}$ -6-keto PGF<sub>1 $\alpha$</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 (DMF) purged with an inert gas can be used. The solubility of  $\Delta^{17}$ -6-keto PGF<sub>1 $\alpha$</sub>  in these is approximately >75 mg/ml and approximately >50 mg/ml in DMSO and DMF.

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  $\Delta^{17}$ -6-keto PGF<sub>1 $\alpha$</sub>  is needed, the methyl acetate can be evaporated under a stream of nitrogen and the neat oil dissolved in the buffer of choice.  $\Delta^{17}$ -6-keto PGF<sub>1 $\alpha$</sub>  is soluble in PBS (pH 7.2) at a concentration of approximately 2.1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

$\Delta^{17}$ -6-keto PGF<sub>1 $\alpha$</sub>  is a cyclooxygenase (COX) product of eicosapentaenoic acid (EPA) in various tissues such as seminal vesicles, lung, Polymorphonuclear leukocytes, and ocular tissues.<sup>1,2</sup>  $\Delta^{17}$ -6-keto PGF<sub>1 $\alpha$</sub>  and other 3-series COX products from EPA, such as PGF<sub>3 $\alpha$</sub> , PGE<sub>3</sub>, and thromboxane B<sub>3</sub>, may be involved in the reduced incidence of glaucoma in patients on a marine-rich (EPA-rich) diet.<sup>2</sup>

### References

1. Kulkarni, P.S., Kaufman, P.L., Srinivasan, B.D. Eicosapentaenoic acid metabolism in cynomolgus and rhesus conjunctiva and eyelid. *J. Ocul. Pharmacol.* **3**, 349-356 (1987).
2. Kulkarni, P.S. and Srinivasan, B.D. Eicosapentaenoic acid metabolism in human and rabbit anterior uvea. *Prostaglandins* **31**, 1159-1164 (1986).

#### 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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