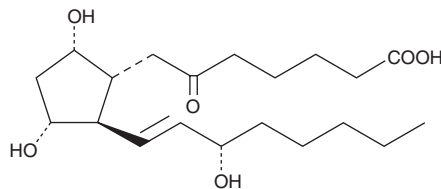


# PRODUCT INFORMATION



## 6-keto Prostaglandin F<sub>1α</sub> Item No. 15210

**CAS Registry No.:** 58962-34-8  
**Formal Name:** 9α,11α,15S-trihydroxy-6-oxo-prost-13E-en-1-oic acid  
**Synonym:** 6-keto PGF<sub>1α</sub>  
**MF:** C<sub>20</sub>H<sub>34</sub>O<sub>6</sub>  
**FW:** 370.5  
**Purity:** ≥98%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

6-keto Prostaglandin F<sub>1α</sub> (6-keto PGF<sub>1α</sub>) is supplied as a crystalline solid. A stock solution may be made by dissolving the 6-keto PGF<sub>1α</sub> in the solvent of choice, which should be purged with an inert gas. 6-keto PGF<sub>1α</sub> is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 6-keto PGF<sub>1α</sub> in these solvents is approximately 16.6, 50, and 100 mg/ml, respectively.

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. Organic solvent-free aqueous solutions of 6-keto PGF<sub>1α</sub> can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 6-keto PGF<sub>1α</sub> in PBS (pH 7.2) is approximately 3.3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

6-keto PGF<sub>1α</sub> is the inactive, non-enzymatic hydrolysis product of PGI<sub>2</sub>.<sup>1,2</sup> 6-keto PGF<sub>1α</sub> serves as a useful marker of PGI<sub>2</sub> biosynthesis *in vivo*.<sup>3</sup> When [<sup>3</sup>H]-PGI<sub>2</sub> is injected into healthy human males, 6.6% of the radioactivity is recovered from urine as [<sup>3</sup>H]-6-keto PGF<sub>1α</sub>.<sup>3</sup>

### References

1. Pace-Asciak, C.R. Isolation, structure, and biosynthesis of 6-ketoprostaglandin F<sub>1α</sub> in the rat stomach. *J. Am. Chem. Soc.* **98**(8), 2348-2349 (1976).
2. Johnson, R.A., Morton, D.R., Kinner, J.H., *et al.* The chemical structure of prostaglandin X (prostacyclin). *Prostaglandins* **12**(6), 915-928 (1976).
3. Brash, A.R., Jackson, E.K., Saggese, C.A., *et al.* Metabolic disposition of prostacyclin in humans. *J. Pharmacol. Exp. Ther.* **226**(1), 78-87 (1983).

#### 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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