

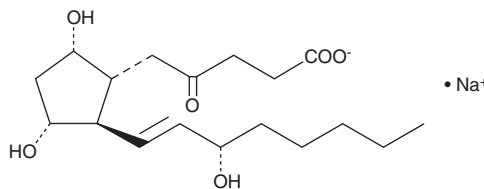
# PRODUCT INFORMATION



## 2,3-dinor-6-keto Prostaglandin F<sub>1α</sub> (sodium salt)

Item No. 15120

**Formal Name:** 6-oxo-9α,11α,15S-trihydroxy-2,3-dinor-prost-13E-en-1-oic acid, monosodium salt  
**Synonym:** 2,3-dinor-6-keto PGF<sub>1α</sub>  
**MF:** C<sub>18</sub>H<sub>29</sub>O<sub>6</sub> • Na  
**FW:** 364.4  
**Purity:** ≥95%  
**Supplied as:** A lyophilized powder  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

2,3-dinor-6-keto prostaglandin F<sub>1α</sub> (2,3-dinor-6-keto PGF<sub>1α</sub>) (sodium salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the 2,3-dinor-6-keto PGF<sub>1α</sub> (sodium salt) in the solvent of choice, which should be purged with an inert gas. 2,3-dinor-6-keto PGF<sub>1α</sub> (sodium salt) is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide (DMF). The solubility of 2,3-dinor-6-keto PGF<sub>1α</sub> (sodium salt) in ethanol and methanol is approximately 1 mg/ml and approximately 10 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. Organic solvent-free aqueous solutions of 2,3-dinor-6-keto PGF<sub>1α</sub> (sodium salt) can be prepared by directly dissolving the lyophilized powder in aqueous buffers. The solubility of 2,3-dinor-6-keto PGF<sub>1α</sub> (sodium salt) in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

2,3-dinor-6-keto PGF<sub>1α</sub> is the β-oxidation product of 6-keto PGF<sub>1α</sub> and the major urinary metabolite of PGI<sub>2</sub> in humans.<sup>1,2</sup> 2,3-dinor-6-keto PGF<sub>1α</sub> makes up 23% of the recovered radioactivity in urine after administration of labeled 6-keto PGF<sub>1α</sub> and 20.5% after administration of labeled PGI<sub>2</sub>.<sup>2</sup> In healthy human subjects, the average excreted 2,3-dinor-6-keto PGF<sub>1α</sub> level is ~100 pg/mg creatinine.<sup>3</sup>

### References

1. Fitzgerald, G.A., Lawson, J., Blair, I.A., *et al.* Analysis of urinary metabolites of thromboxane and prostacyclin by negative-ion chemical-ionization gas chromatography/mass spectrometry. *Adv. Prostaglandin Thromboxane Leukot. Res.* **15**, 87-90 (1985).
2. Rosenkranz, B., Fischer, C., Reimann, I., *et al.* Identification of the major metabolite of prostacyclin and 6-ketoprostaglandin F<sub>1α</sub> in man. *Biochim. Biophys. Acta* **619**(2), 207-213 (1980).
3. Wennmalm, Å., Benthin, G., Granström, E.F., *et al.* 2,3-Dinor metabolites of thromboxane A<sub>2</sub> and prostacyclin in urine from healthy human subjects: Diurnal variation and relation to 24h excretion. *Clin. Sci. (Lond.)* **83**(4), 461-465 (1992).

#### 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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