

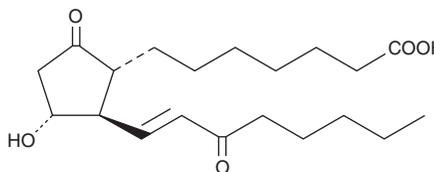
# PRODUCT INFORMATION



## 15-keto Prostaglandin E<sub>1</sub>

Item No. 13680

**CAS Registry No.:** 22973-19-9  
**Formal Name:** (11 $\alpha$ ,13E)-11-hydroxy-9,15-dioxo-prost-13-en-1-oic acid  
**Synonym:** 15-keto PGE<sub>1</sub>  
**MF:** C<sub>20</sub>H<sub>32</sub>O<sub>5</sub>  
**FW:** 352.5  
**Purity:**  $\geq$ 98%  
**UV/Vis.:**  $\lambda_{\max}$ : 229 nm  
**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

15-keto Prostaglandin E<sub>1</sub> (15-keto PGE<sub>1</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 15-keto PGE<sub>1</sub> in ethanol and DMSO is approximately 50 mg/ml and approximately 100 mg/ml in 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 15-keto PGE<sub>1</sub> is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 15-keto PGE<sub>1</sub> in PBS (pH 7.2) is approximately 1.6 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

15-keto PGE<sub>1</sub> is the inactive metabolite of PGE<sub>1</sub> produced by 15-hydroxy PGDH. It has greatly diminished biological activity compared to PGE<sub>1</sub>.<sup>1,2</sup>

### References

- Westwick, J. The effect of pulmonary metabolites of prostaglandins E<sub>1</sub>, E<sub>2</sub> and F<sub>2 $\alpha$</sub>  on ADP-induced aggregation of human and rabbit platelets. *Br. J. Pharmacol.* **58(2)**, 297P-298P (1976).
- Änggård, E. The biological activities of three metabolites of prostaglandin E<sub>1</sub>. *Acta Physiol. Scand.* **66(4)**, 509-510 (1966).

#### 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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