

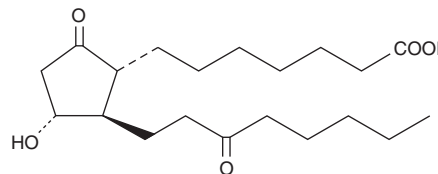
# PRODUCT INFORMATION



## 13,14-dihydro-15-keto Prostaglandin E<sub>1</sub>

Item No. 13650

**CAS Registry No.:** 5094-14-4  
**Formal Name:** 11 $\alpha$ -hydroxy-9,15-dioxo-prostan-1-oic acid  
**Synonyms:** 11 $\alpha$ -Hydroxy-9,15-diketoprostanic Acid, 15-keto-PGE<sub>0</sub>, 13,14-dihydro-15-keto PGE<sub>1</sub>, 15-keto-dihydro-PGE<sub>1</sub>, 15-keto Prostaglandin E<sub>0</sub>  
**MF:** C<sub>20</sub>H<sub>34</sub>O<sub>5</sub>  
**FW:** 354.5  
**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

13,14-dihydro-15-keto Prostaglandin E<sub>1</sub> (PGE<sub>1</sub>) is supplied as a solution in methyl acetate. A stock solution may be made by dissolving the methyl acetate in the solvent of choice, which should be purged with an inert gas. 13,14-dihydro-15-keto PGE<sub>1</sub> is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 13,14-dihydro-15-keto PGE<sub>1</sub> in DMF is approximately 100 mg/ml and approximately 50 mg/ml in ethanol and DMSO.

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 13,14-dihydro-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 13,14-dihydro-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

13,14-dihydro-15-keto PGE<sub>1</sub> is an inactive metabolite of PGE<sub>1</sub> (Item No. 13010).<sup>1</sup> It only weakly inhibits ADP-induced platelet aggregation in isolated human platelet-rich plasma (IC<sub>50</sub> = 14.8  $\mu$ g/ml) compared with PGE<sub>1</sub>.

### Reference

1. Katzenschlager, R., Weiss, K., Rogatti, W., *et al.* Synergism between PGE<sub>1</sub>-metabolites (13,14-dihydro-prostaglandin E<sub>1</sub>, 15-keto prostaglandin E<sub>1</sub>, 15-keto-13,14-dihydro-prostaglandin E<sub>1</sub>) and nitric oxide (NO) on platelet aggregation. *Prostaglandins Leukot. Essent. Fatty Acids* **45(3)**, 207-210 (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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