

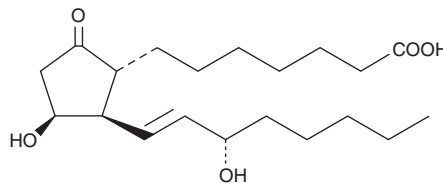
# PRODUCT INFORMATION



## 11 $\beta$ -Prostaglandin E<sub>1</sub>

Item No. 13450

**CAS Registry No.:** 24570-01-2  
**Formal Name:** 9-oxo-11 $\beta$ ,15S-dihydroxy-prost-13E-en-1-oic acid  
**Synonyms:** 11 $\beta$ -PGE<sub>1</sub>, 11-*epi* PGE<sub>1</sub>  
**MF:** C<sub>20</sub>H<sub>34</sub>O<sub>5</sub>  
**FW:** 354.5  
**Purity:**  $\geq$ 95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years



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

### Laboratory Procedures

11 $\beta$ -Prostaglandin E<sub>1</sub> (11 $\beta$ -PGE<sub>1</sub>) is supplied as a crystalline solid. A stock solution may be made by dissolving the 11 $\beta$ -PGE<sub>1</sub> in the solvent of choice, which should be purged with an inert gas. 11 $\beta$ -PGE<sub>1</sub> is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 11 $\beta$ -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. Organic solvent-free aqueous solutions of 11 $\beta$ -PGE<sub>1</sub> can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 11 $\beta$ -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

11 $\beta$ -PGE<sub>1</sub> is an epimerized form of PGE<sub>1</sub> at the C-11 position. 11 $\beta$ -PGE<sub>1</sub> is a less potent isomer of PGE<sub>1</sub>. It is 13% and 3.6% as potent as PGE<sub>1</sub> in contracting the rat uterus and guinea pig ileum, respectively.

### Reference

1. Ramwell, P.W., Shaw, J.E., Corey, E.J., *et al.* Biological activity of synthetic prostaglandins. *Nature* **221**(5187), 1251-1253 (1969).

#### 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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