# PRODUCT INFORMATION



## 15(R)-Prostaglandin E<sub>2</sub>

Item No. 14710

CAS Registry No.: 38873-82-4

Formal Name: 11α,15R-dihydroxy-9-oxo-prosta-

5Z,13E-dien-1-oic acid

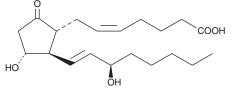
Synonyms: 15-epi PGE<sub>2</sub>, 15(R)-PGE<sub>2</sub>

MF:  $C_{20}H_{32}O_5$ FW: 352.5 **Purity:** ≥98%

Supplied as: A solution in methyl acetate

Storage: -20°C Stability: ≥2 years

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



### **Laboratory Procedures**

15(R)-Prostaglandin E<sub>2</sub> (15(R)-PGE<sub>2</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 purged with an inert gas can be used. The solubility of 15(R)-PGE<sub>2</sub> in these solvents is approximately 100 mg/ml.

15(R)-PGE $_2$  is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 15(R)-PGE2 should be diluted with the aqueous buffer of choice. The solubility of 15(R)-PGE<sub>2</sub> in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

15(R)-PGE2 is the opposite C-15 stereoisomer of the 15(S)-PGE2. 15(R)-PGE2 is much less potent than the natural stereoisomer in most biological assays. In hamsters, a dose of 0.20 mg of PGE<sub>2</sub> (Item No. 14010) inhibits fertility by 100%, whereas a dose of 1.0 mg of 15(R)-PGE<sub>2</sub> inhibits fertility by only 17%. 15(R)-PGE<sub>2</sub> occurs as a minor impurity in some pharmaceutical formulations of PGE2 used in obstetrics.

#### Reference

1. Miller, W.L. and Sutton, M.J. Relative biological activity of certain prostaglandins and their enantiomers. Prostaglandins 11(1), 77-84 (1976).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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