

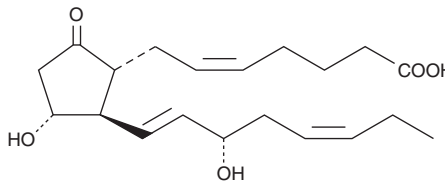
PRODUCT INFORMATION



Prostaglandin E₃

Item No. 14990

CAS Registry No.: 802-31-3
Formal Name: 11 α ,15S-dihydroxy-9-oxo-prosta-5Z,13E,17Z-trien-1-oic acid
Synonym: PGE₃
MF: C₂₀H₃₀O₅
FW: 350.5
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

Prostaglandin E₃ (PGE₃) 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 PGE₃ in these solvents is approximately 100 mg/ml.

PGE₃ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of PGE₃ should be diluted with the aqueous buffer of choice. The solubility of PGE₃ in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

PGE₃ is formed via the cyclooxygenase (COX) metabolism of eicosapentaenoic acid.¹ In human ocular tissue, it comprises 2.4% of the COX products formed.¹ When applied to the eyes of a rabbit, a 1 μ g dose of PGE₃ decreases intraocular pressure from 21 mmHg to about 17 mmHg.²

References

1. Kulkarni, P.S. and Srinivasan, B.D. Eicosapentaenoic acid metabolism in human and rabbit anterior uvea. *Prostaglandins* **31(6)**, 1159-1164 (1986).
2. Kulkarni, P.S. and Srinivasan, B.D. Prostaglandins E₃ and D₃ lower intraocular pressure. *Invest. Ophthalmol. Vis. Sci.* **26(8)**, 1178-1182 (1985).

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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