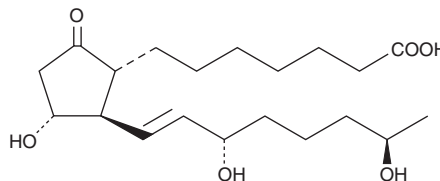


PRODUCT INFORMATION



19(R)-hydroxy Prostaglandin E₁ Item No. 13910

CAS Registry No.: 64625-55-4
Formal Name: 9-oxo-11 α ,15S,19R-trihydroxy-
prost-13E-en-1-oic acid
Synonym: 19(R)-hydroxy PGE₁
MF: C₂₀H₃₄O₆
FW: 370.5
Purity: \geq 95%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: \geq 1 year



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

Laboratory Procedures

19(R)-hydroxy Prostaglandin E₁ (19(R)-hydroxy PGE₁) is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 19(R)-hydroxy PGE₁ in these solvents is approximately 50 and 10 mg/ml, respectively.

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 19(R)-hydroxy PGE₁ is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 19(R)-hydroxy PGE₁ 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

19(R)-hydroxy PGE₁ is the major prostaglandin found in the semen of primates, including man. It is an agonist for the EP₁ and EP₃ receptor subtypes, and exhibits contractile activity on smooth muscle preparations.^{1,2} It has an EC₅₀ of 320 nM for contracting guinea pig ileum, which express EP₁ receptors, and an EC₅₀ of 80 nM for contracting chick ileum, which express EP₃ receptors.²

References

1. Kelly, R.W., Taylor, P.L., Hearn, J.P., *et al.* 19-Hydroxyprostaglandin E₁ as a major component of the semen of primates. *Nature* **260(5551)**, 544-545 (1976).
2. Woodward, D.F., Protzman, C.E., Krauss, A.H.P., *et al.* Identification of 19(R)-OH prostaglandin E₂ as a selective prostanoid EP₂-receptor agonist. *Prostaglandins* **46(4)**, 371-383 (1993).

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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