PRODUCT INFORMATION



19(R)-hydroxy Prostaglandin E₂

Item No. 14910

CAS Registry No.: 64625-54-3

Formal Name: 11α,15S,19R-trihydroxy-9-oxo-

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

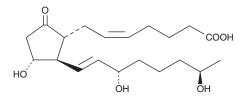
Synonyms: 19(R)-hydroxy PGE₂, 19(R)-OH PGE₂

MF: $C_{20}H_{32}O_6$ FW: 368.5 **Purity:** ≥98%

Supplied as: A solution in ethanol

Storage: -20°C Stability: ≥2 vears

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



Laboratory Procedures

19(R)-hydroxy Prostaglandin E₂ (19(R)-hydroxy PGE₂) 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 ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 19(R)-hydroxy PGE₂ in these solvents is approximately 100 mg/ml.

19(R)-hydroxy PGE₂ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 19(R)-hydroxy PGE_2 should be diluted with the aqueous buffer of choice. The solubility of 19(R)-hydroxy PGE₂ in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

19(R)-hydroxy PGE₂ is found in the semen of primates, including man.¹ It is a potent smooth muscle relaxant and a selective agonist for the EP $_2$ receptor. 1,2 It has an EC $_{50}$ value of 200 nM for relaxing cat tracheal rings which express EP $_2$ 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.

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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