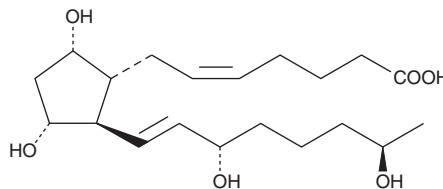


PRODUCT INFORMATION



19(R)-hydroxy Prostaglandin F_{2α} Item No. 16910

CAS Registry No.: 64625-53-2
Formal Name: 9α,11α,15S,19R-tetrahydroxy-prosta-5Z,13E-dien-1-oic acid
Synonym: 19(R)-hydroxy PGF_{2α}
MF: C₂₀H₃₄O₆
FW: 370.5
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

19(R)-hydroxy Prostaglandin F_{2α} 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 prostaglandin F_{2α} in these solvents is approximately 100 mg/ml. The solubility of 19(R)-hydroxy prostaglandin F_{2α} in 10 mM Na₂CO₃ is approximately 6.5 mg/ml.

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 prostaglandin F_{2α} 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 prostaglandin F_{2α} in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

19(R)-hydroxy PGF_{2α} is an ω-1 hydroxylase metabolite of PGF_{2α} found in human semen. The concentration of 19(R)-hydroxy PGF_{2α} compounds (F_{2α} and F_{1α} together) in fresh human semen is about 20 μg/ml.¹ 19(R)-hydroxy PGF_{2α} exhibits no activity at the FP receptor of the cat iris sphincter muscle at concentrations up to 1 μM.²

References

1. Taylor, P.L. and Kelly, R.W. The occurrence of 19-hydroxy F prostaglandins in human semen. *FEBS Lett.* **57(1)**, 22-25 (1975).
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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