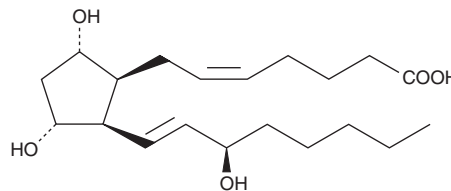


PRODUCT INFORMATION



8-iso-15(R)-Prostaglandin F_{2α} Item No. 16395

CAS Registry No.: 214748-65-9
Formal Name: (8β)-9α,11α,15R-trihydroxy-prosta-5Z,13E-dien-1-oic acid
Synonym: 8-iso-15-*epi* PGF_{2α}
MF: C₂₀H₃₄O₅
FW: 354.5
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

8-iso-15(R)-Prostaglandin F_{2α} (8-iso-15(R) PGF_{2α}) 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 8-iso-15(R) PGF_{2α} in these solvents is approximately 100 mg/ml.

8-iso-15(R) PGF_{2α} is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 8-iso-15(R) PGF_{2α} should be diluted with the aqueous buffer of choice. The solubility of 8-iso-15(R) PGF_{2α} in PBS (pH 7.2) is approximately 10 mg/ml. The solubility of 8-iso-15(R) PGF_{2α} in 10 mM Na₂CO₃ is approximately 6.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

8-iso-15(R) PGF_{2α} is one member of a large family of prostaglandin-like eicosanoids formed by the free radical peroxidation of arachidonic acid in membrane phospholipids.¹ It is the C-15 epimer of 8-iso PGF_{2α}, the only isoprostane isomer which has been studied in depth in a variety of biological systems.²

References

1. Morrow, J.D., Harris, T.M., and Roberts, L.J., II Noncyclooxygenase oxidative formation of a series of novel prostaglandins: Analytical ramifications for measurement of eicosanoids. *Anal. Biochem.* **184(1)**, 1-10 (1990).
2. Morrow, J.D., Minton, T.A., and Roberts, L.J., II The F₂-isoprostane, 8-*epi*-prostaglandin F_{2α}, a potent agonist of the vascular thromboxane/endoperoxide receptor, is a platelet thromboxane/endoperoxide receptor antagonist. *Prostaglandins* **44(2)**, 155-163 (1992).

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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