

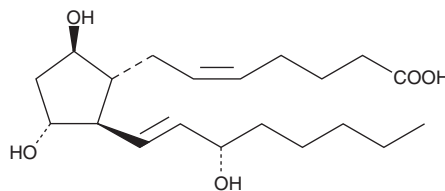
Product Information



Prostaglandin F_{2β} Lipid Maps MS Standard Catalog No. 10007232



CAS Registry No.: 4510-16-1
Formal Name: 9β,11α,15S-trihydroxy-prosta-5Z,13E-dien-1-oic acid
Synonyms: 9β-Prostaglandin F_{2α}, PGF_{2β}
MF: C₂₀H₃₄O₅
FW: 354.5
Purity: ≥99%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that prostaglandin F_{2β} (PGF_{2β}) be stored as supplied at -20°C. It should be stable for at least two years.

PGF_{2β} is supplied as a crystalline solid. A stock solution may be made by dissolving the PGF_{2β} in an organic solvent. PGF_{2β} is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of PGF_{2β} in these solvents is approximately 100 mg/ml. PGF_{2β} will be stable for at least six months in these solvents if stored at -20°C.

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. Organic solvent-free aqueous solutions of PGF_{2β} can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of PGF_{2β} in PBS is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

PGF_{2β} is the 9β-hydroxy stereoisomer of PGF_{2α}. PGF_{2β} is much less active than PGF_{2α} in antifertility and bronchoconstrictor activities.¹⁻³ PGF_{2β} exhibits bronchodilating activity in guinea pigs and cats and antagonizes the bronchoconstrictor activity of PGF_{2α}.³

References

1. Miller, W.L. and Sutton, M.J. Relative biological activity of certain prostaglandins and their enantiomers. *Prostaglandins* **11**, 77-84 (1976).
2. Gardiner, P.J. and Collier, H.O.J. Specific receptors for prostaglandins in airways. *Prostaglandins* **19**, 819-841 (1980).
3. Rosenthale, M.E., Dervinis, A., Kassari, J., *et al.* Bronchodilating properties of the prostaglandin F_{2β} in the guinea pig and cat. *Prostaglandins* **3**, 767-772 (1973).

Related Products

Prostaglandin Metabolite HPLC Mixture - Cat. No. 10005 • Prostaglandin F_{2α} - Cat. No. 16010 • 5-*trans* Prostaglandin F_{2β} - Cat. No. 16250 • 8-*iso* Prostaglandin F_{2β} - Cat. No. 16370 • Prostaglandin F_{2β} - Cat. No. 16410 • Prostaglandin F_{2β} (tromethamine salt) - Cat. No. 16420 • 16,16-dimethyl Prostaglandin F_{2β} - Cat. No. 16470 • 11-deoxy Prostaglandin F_{2β} - Cat. No. 16510 • 13,14-dihydro Prostaglandin F_{2α} - Cat. No. 16660 • 15-cyclohexyl pentanor Prostaglandin F_{2α} - Cat. No. 16710 • 20-ethyl Prostaglandin F_{2α} - Cat. No. 16940

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WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

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