

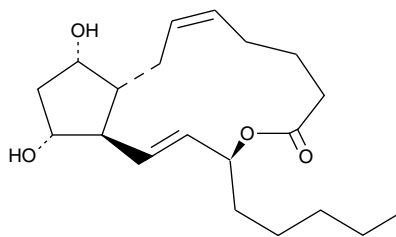
Product Information



Prostaglandin F_{2α} 1,15-lactone

Item No. 16120

CAS Registry No.: 55314-49-3
Formal Name: 9α,11α,15S-trihydroxy-prosta-5Z,13E-dien-1-oic acid, 1,15-lactone
Synonym: PGF_{2α} 1,15-lactone
MF: C₂₀H₃₂O₄
FW: 336.5
Purity: ≥99%
Stability: ≥1 year at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

Prostaglandin F_{2α} 1,15-lactone (PGF_{2α} 1,15-lactone) is an internal ester of PGF_{2α}. For long term storage, we suggest that PGF_{2α} 1,15-lactone be stored as supplied at -20°C. It will be stable for at least one year.

PGF_{2α} 1,15-lactone is supplied as a crystalline solid. Stock solutions of PGF_{2α} 1,15-lactone can be made by dissolving the crystalline compound in the solvent of choice. Solvents such as ethanol, DMSO, or dimethyl formamide purged with an inert gas can be used. The solubility of PGF_{2α} 1,15-lactone in these solvents is approximately 10 mg/ml. PGF_{2α} 1,15-lactone is stable for at least six months in these solvents if stored at -20°C.

PGF_{2α} 1,15-lactone is not directly soluble in aqueous buffers. 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. Store aqueous solutions of PGF_{2α} 1,15-lactone on ice and use within 12 hours of preparation. Although the aqueous solutions of PGF_{2α} 1,15-lactone may be stable for more than 12 hours, we strongly recommend using a fresh preparation each day.

Due to its structure, PGF_{2α} 1,15-lactone is protected from metabolic inactivation.¹ In rhesus monkeys, a total dose of 15 mg of PGF_{2α} 1,15-lactone terminates early pregnancy, whereas PGF_{2α} is ineffective.²

References

1. Bundy, G.L., Peterson, D.C., Cornette, J.C., *et al.* Synthesis and biological activity of prostaglandin lactones. *J. Med. Chem.* **26**, 1089-1099 (1983).
2. Spilman, C.H., Beuing, D.C., Forbes, A.D., *et al.* Effects of PGF_{2α} and PGF_{2α} 1,15 lactone on the corpus luteum and on early pregnancy in the rhesus monkey. *Prostaglandins* **14**, 477-488 (1977).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/16120

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

SAFETY DATA

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 Safety Data Sheet, which has been sent via email to your institution.

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