

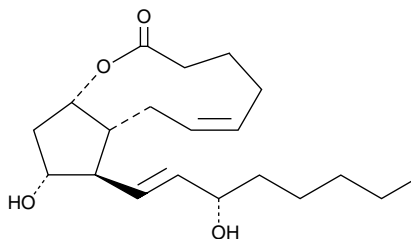
Product Information



Prostaglandin F_{2α} 1,9-lactone

Item No. 16130

CAS Registry No: 55314-48-2
Formal Name: 9α,11α,15S-trihydroxy-prosta-5Z,13E-dien-1-oic acid, 1,9-lactone
Synonym: PGF_{2α} 1,9-lactone
MF: C₂₀H₃₂O₄
FW: 336.5
Purity: ≥99%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

Prostaglandin F_{2α} 1,9-lactone (PGF_{2α} 1,9-lactone) is a lipid-soluble internal ester of PGF_{2α}. For long term storage, we suggest that PGF_{2α} 1,9-lactone be stored as supplied at -20°C. It will be stable for at least two years.

PGF_{2α} 1,9-lactone is supplied as a crystalline solid. A stock solution may be made by dissolving the PGF_{2α} 1,9-lactone in an organic solvent purged with an inert gas. PGF_{2α} 1,9-lactone is soluble in organic solvents such as ethanol (100 mg/ml), DMSO (10 mg/ml), and dimethyl formamide (20 mg/ml). PGF_{2α} 1,9-lactone will be stable for at least six months in these solvents if stored at -20°C.

PGF_{2α} 1,9-lactone is sparingly soluble in aqueous buffers.

For maximum solubility in aqueous buffers, PGF_{2α} 1,9-lactone should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. PGF_{2α} 1,9-lactone has a solubility of approximately 8 mg/ml in a 30:70 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

PGF_{2α} 1,9-lactone is resistant to hydrolysis by human plasma esterases even after incubation for twenty hours under physiological conditions.¹ PGF_{2α} 1,9-lactone exhibits little antifertility and vasoactivity compared to PGF_{2α}.¹

Reference

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).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/16130

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SAFETY DATA

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