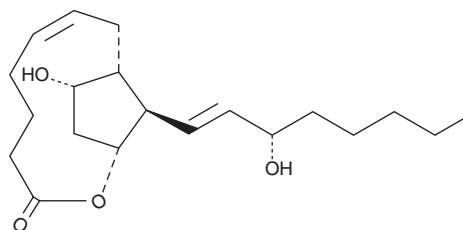


PRODUCT INFORMATION



Prostaglandin F_{2α} 1,11-lactone Item No. 16110

CAS Registry No.: 62410-84-8
Formal Name: 9α,11α,15S-trihydroxy-prosta-5Z,13E-dien-1-oic acid, 1-lactone
Synonym: PGF_{2α} 1,11-lactone
MF: C₂₀H₃₂O₄
FW: 336.5
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

Prostaglandin F_{2α} (PGF_{2α}) 1,11-lactone 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 PGF_{2α} 1,11-lactone in these solvents is approximately 100, 10, and 20 mg/ml, respectively.

PGF_{2α} 1,11-lactone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of PGF_{2α} 1,11-lactone should be diluted with the aqueous buffer of choice. The solubility of PGF_{2α} 1,11-lactone in PBS (pH 7.2) is approximately 0.05 mg/ml. PGF_{2α} 1,11-lactone has a solubility of 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.

Description

PGF_{2α} 1,11-lactone is a lipid-soluble internal ester of PGF_{2α}. Hydrolysis of the lactone by plasma esterases readily produces free PGF_{2α} in rats and monkeys, but not in humans.¹ PGF_{2α} 1,11-lactone is active as an antifertility agent with greatly reduced 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**(8), 1089-1099 (1983).

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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