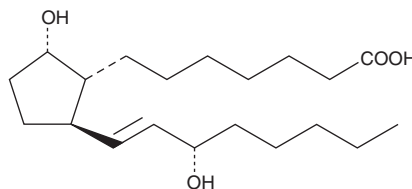


PRODUCT INFORMATION



11-deoxy Prostaglandin F_{1α} Item No. 15512

CAS Registry No.: 37785-98-1
Formal Name: 9α,15S-dihydroxy-prost-13E-en-1-oic acid
Synonym: 11-deoxy PGF_{1α}
MF: C₂₀H₃₆O₄
FW: 340.5
Purity: ≥99%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

11-deoxy Prostaglandin F_{1α} (11-deoxy PGF_{1α}) is supplied as a crystalline solid. A stock solution may be made by dissolving the 11-deoxy PGF_{1α} in the solvent of choice, which should be purged with an inert gas. 11-deoxy PGF_{1α} is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 11-deoxy PGF_{1α} in ethanol is approximately 75 mg/ml and approximately 50 mg/ml in DMSO and DMF.

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 11-deoxy PGF_{1α} can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 11-deoxy PGF_{1α} in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

11-deoxy PGF_{1α} is a synthetic analog of PGF_{1α}. In whole animal studies, a dose of 32 mg/kg inhibited gastric acid secretion by 35%.¹ 11-deoxy PGF_{1α} is also known to cause rat uterine contractions at a dose 0.3 times that of PGF_{1α}.² It also exhibits vasopressor and bronchoconstrictor activities at about half the potency of PGF_{2α} in guinea pigs.³

References

1. Lippmann, W. Inhibition of gastric acid secretion in the rat by synthetic prostaglandins. *J. Pharm. Pharmacol.* **21(5)**, 335-336 (1969).
2. Broughton, B.J., Caton, M.P.L., Christmas, A.J., *et al.* Uterine stimulant action of some ω-chain modified (±)-11-deoxyprostaglandins. *Prostaglandins* **22(1)**, 53-64 (1981).
3. Hall, D.W.R. and Jaitly, K.D. Structure-activity relationships in a series of 11-deoxy prostaglandins. *Prostaglandins* **11(3)**, 573-587 (1976).

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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