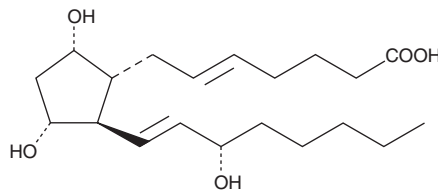


PRODUCT INFORMATION



5-*trans* Prostaglandin F_{2α} Item No. 16210

CAS Registry No.: 36150-01-3
Formal Name: 9α,11α,15S-trihydroxy-prosta-5E,13E-dien-1-oic acid
Synonym: 5,6-*trans* PGF_{2α}
MF: C₂₀H₃₄O₅
FW: 354.5
Purity: ≥98%
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

5-*trans* Prostaglandin F_{2α} (5-*trans* PGF_{2α}) is supplied as a crystalline solid. A stock solution may be made by dissolving the 5-*trans* PGF_{2α} in the solvent of choice, which should be purged with an inert gas. 5-*trans* PGF_{2α} is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 5-*trans* PGF_{2α} in these solvents is approximately 100 mg/ml. The solubility of 5-*trans* PGF_{2α} in 10mM Na₂CO₃ is approximately 6.5 mg/ml.

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 5-*trans* PGF_{2α} can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 5-*trans* PGF_{2α} in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

5-*trans* PGF_{2α} is the more thermodynamically stable C-5 olefin isomer of PGF_{2α} and is a common impurity in commercial lots of PGF_{2α}. 5-*trans* PGF_{2α} administered intravenously to anesthetized rabbits caused a substantial (ten-fold) increase in respiratory rate, but this attribute was common to a number of F-series compounds and analogs.¹

Reference

1. Brookes, L.G. and Marshall, R.C. The effects of some prostaglandins on respiration in the rabbit. *J. Pharm. Pharmacol.* **26(Suppl)**, 80P-81P (1974).

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.

WARRANTY AND LIMITATION OF REMEDY
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