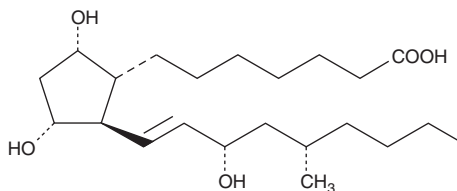


PRODUCT INFORMATION



17,20-dimethyl Prostaglandin F_{1α} Item No. 15790

Formal Name:	9α,11α,15S-trihydroxy-17S,20-dimethyl-prost-13E-en-1-oic acid
Synonym:	17,20-dimethyl PGF _{1α}
MF:	C ₂₂ H ₄₀ O ₅
FW:	384.6
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

17,20-dimethyl Prostaglandin F_{1α} (17,20-dimethyl PGF_{1α}) is supplied as a crystalline solid. A stock solution may be made by dissolving the 17,20-dimethyl PGF_{1α} in the solvent of choice, which should be purged with an inert gas. 17,20-dimethyl PGF_{1α} is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 17,20-dimethyl PGF_{1α} in these solvents is approximately 50, 130, and 30 mg/ml, respectively.

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 17,20-dimethyl PGF_{1α} can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 17,20-dimethyl 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

17,20-dimethyl PGF_{1α} is an analog of the limaprost family with structural modifications intended to give it a prolonged half-life and greater potency. Limaprost is an analog of PGE₁ which is orally active in both rats and guinea pigs.¹ The additional methyl groups in the lower side chain confer a 10-1,000 fold increase in potency over the parent compound.¹ 17,20-dimethyl PGF_{1α} has lower side chain modifications identical to limaprost. There are no published reports describing the pharmacology of 17,20-dimethyl PGF_{1α}.

Reference

1. Tsuboi, T., Hatano, N., Nakatsuji, K., *et al.* Pharmacological evaluation of OP 1206, a prostaglandin E₁ derivative, as an antianginal agent. *Arch. Int. Pharmacodyn. Ther.* **247(1)**, 89-102 (1980).

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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