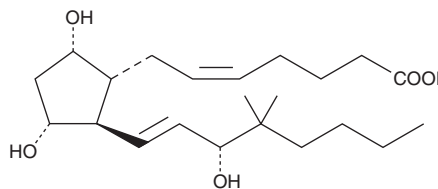


PRODUCT INFORMATION



16,16-dimethyl Prostaglandin F_{2α} Item No. 16750

CAS Registry No.: 39746-23-1
Formal Name: 9α,11α,15R-trihydroxy-16,16-dimethylprosta-5Z,13E-dien-1-oic acid
Synonym: 16,16-dimethyl PGF_{2α}
MF: C₂₂H₃₈O₅
FW: 382.5
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

16,16-dimethyl Prostaglandin F_{2α} (16,16-dimethyl PGF_{2α}) is supplied as a crystalline solid. A stock solution may be made by dissolving the 16,16-dimethyl PGF_{2α} in the solvent of choice, which should be purged with an inert gas. 16,16-dimethyl PGF_{2α} is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 16,16-dimethyl PGF_{2α} in these solvents is approximately 100 mg/ml. 16,16-dimethyl PGF_{2α} is soluble in 10 mM Na₂CO₃ at a concentration of 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 16,16-dimethyl PGF_{2α} can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 16,16-dimethyl 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

16,16-dimethyl PGF_{2α} is a metabolically stable analog of PGF_{2α}. It binds to the FP receptor on ovine luteal cells with slightly better affinity (159%) than PGF_{2α}.¹

Reference

1. Balapure, A.K., Rexroad, C.E., Jr., Kawada, K., *et al.* Structural requirements for prostaglandin analog interaction with the ovine corpus luteum prostaglandin F_{2α} receptor. *Biochem. Pharmacol.* **38(14)**, 2375-2381 (1989).

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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