

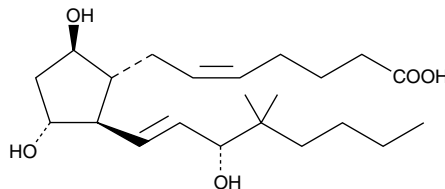
Product Information



16,16-dimethyl Prostaglandin F_{2β}

Item No. 16470

CAS Registry No: 59769-89-0
Formal Name: 9β,11α,15R-trihydroxy-16,16-dimethyl-prosta-5Z,13E-dien-1-oic acid
Synonyms: 9β,16,16-dimethyl Prostaglandin F_{2α}, 16,16-dimethyl PGF_{2β}
MF: C₂₂H₃₈O₅
FW: 382.5
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A solution in methyl acetate



Laboratory Procedures

16,16-dimethyl Prostaglandin F_{2β} (16,16-dimethyl PGF_{2β}) is a metabolically stable analog of PGF_{2β}. For long term storage, we suggest that 16,16-dimethyl PGF_{2β} be stored as supplied at -20°C. It will be stable for at least one year.

16,16-dimethyl PGF_{2β} 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 16,16-dimethyl PGF_{2β} in these solvents is approximately 100 mg/ml. 16,16-dimethyl PGF_{2β} is stable for approximately six months in these solvents if stored at -20°C.

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. If an organic solvent-free solution of 16,16-dimethyl PGF_{2β} is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 16,16-dimethyl PGF_{2β} in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

16,16-dimethyl PGF_{2β} prevents bronchospasm in asthmatics, but is less potent than PGE₂.¹

Reference

1. Allegra, L. and Bianco, S. Prostanoids preventing induced bronchospasm. *Prog. Resp. Res.* **14**, 215-223 (1980).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/16470

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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