

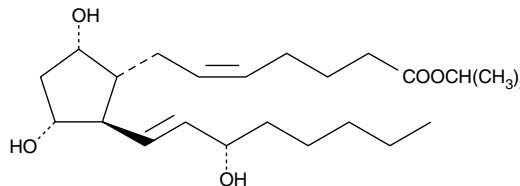
# Product Information



## Prostaglandin F<sub>2α</sub> isopropyl ester

Item No. 16030

**CAS Registry No.:** 53764-90-2  
**Formal Name:** 9α,11α,15S-trihydroxy-prosta-5Z,13E-dien-1-oic acid, isopropyl ester  
**Synonym:** PGF<sub>2α</sub> isopropyl ester  
**MF:** C<sub>23</sub>H<sub>40</sub>O<sub>5</sub>  
**FW:** 396.6  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A solution in methyl acetate



### Laboratory Procedures

For long term storage, we suggest that prostaglandin F<sub>2α</sub> isopropyl ester (PGF<sub>2α</sub> isopropyl ester) be stored as supplied at -20°C. It should be stable for at least two years.

PGF<sub>2α</sub> isopropyl ester 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, or dimethyl formamide purged with an inert gas can be used. The solubility of PGF<sub>2α</sub> isopropyl ester in these solvents is at least 50 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 PGF<sub>2α</sub> isopropyl ester can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of PGF<sub>2α</sub> isopropyl ester in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Due to better corneal penetration, PGF<sub>2α</sub> isopropyl ester is rapidly replacing PGF<sub>2α</sub> tromethamine salt in studies on intraocular pressure (IOP). When administered topically to the eyes of cynomolgus monkeys, a 5 µg dose reduces IOP by 68% after the fourth day of treatment.<sup>1</sup>

### Reference

1. Crawford, K.S. and Kaufman, P.L. Dose-related effects of prostaglandin F<sub>2α</sub> isopropylester on intraocular pressure, refraction, and pupil diameter in monkeys. *Invest. Ophthalmol. Vis. Sci.* **32**, 510-519 (1991).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/16030](http://www.caymanchem.com/catalog/16030)

**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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