

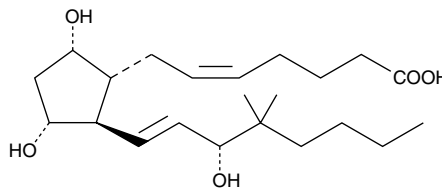
# Product Information



## 16,16-dimethyl Prostaglandin F<sub>2α</sub>

Item No. 16750

**CAS Registry No:** 39746-23-1  
**Formal Name:** 9α,11α,15R-trihydroxy-16,16-dimethyl-prosta-5Z,13E-dien-1-oic acid  
**MF:** C<sub>22</sub>H<sub>38</sub>O<sub>5</sub>  
**FW:** 382.5  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid



### Laboratory Procedures

16,16-dimethyl Prostaglandin F<sub>2α</sub> (16,16-dimethyl PGF<sub>2α</sub>) is a metabolically stable analog of PGF<sub>2α</sub>. For long term storage, we suggest that 16,16-dimethyl PGF<sub>2α</sub> be stored as supplied at -20°C. It will be stable for at least two years.

16,16-dimethyl PGF<sub>2α</sub> is supplied as a crystalline solid. A stock solution may be made by dissolving the 16,16-dimethyl PGF<sub>2α</sub> in an organic solvent purged with an inert gas. 16,16-dimethyl PGF<sub>2α</sub> is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 16,16-dimethyl PGF<sub>2α</sub> in these solvents is approximately 100 mg/ml. 16,16-dimethyl PGF<sub>2α</sub> will be stable for at least 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. Organic solvent-free aqueous solutions of 16,16-dimethyl PGF<sub>2α</sub> can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of 16,16-dimethyl PGF<sub>2α</sub> 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<sub>2α</sub> binds to the FP receptor on ovine luteal cells with slightly better affinity (159%) than PGF<sub>2α</sub>.<sup>1</sup>

### Reference

1. Balpure, A.K., Rexroad, C.E., Jr., Kawada, K., *et al.* Structural requirements for prostaglandin analog interaction with the ovine corpus luteum prostaglandin F<sub>2α</sub> receptor. *Biochem. Pharmacol.* **38**, 2375-2381 (1989).

### Related Products

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

#### SAFETY DATA

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