

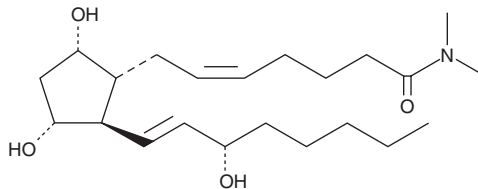
# PRODUCT INFORMATION



## Prostaglandin F<sub>2α</sub> dimethyl amide

Item No. 16032

**CAS Registry No.:** 68192-15-4  
**Formal Name:** N,N-dimethyl-9α,11α,15S-trihydroxy-prosta-5Z,13E-dien-1-amide  
**Synonym:** PGF<sub>2α</sub> dimethyl amide  
**MF:** C<sub>22</sub>H<sub>39</sub>NO<sub>4</sub>  
**FW:** 381.6  
**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> (PGF<sub>2α</sub>) dimethyl amide be stored as supplied at -20°C. It should be stable for at least two years.

PGF<sub>2α</sub> dimethyl amide 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> dimethyl amide in these solvents is approximately 20 mg/ml. PGF<sub>2α</sub> dimethyl amide is 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. If an organic solvent-free aqueous solution of PGF<sub>2α</sub> dimethyl amide is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of PGF<sub>2α</sub> dimethyl amide in PBS (pH 7.2) is approximately 3 mg/ml. Store aqueous solutions of PGF<sub>2α</sub> dimethyl amide on ice and use within 12 hours of preparation. Although the aqueous solutions of PGF<sub>2α</sub> dimethyl amide may be stable for more than 12 hours, we strongly recommend using a fresh preparation each day.

### Description

PGF<sub>2α</sub> dimethyl amide is a weak FP receptor antagonist.<sup>1</sup> In gerbil colon, PGF<sub>2α</sub> dimethyl amide inhibits at a dose of 3.2 μg/ml inhibits the contractile effects of PGF<sub>2α</sub> (at 6 ng/ml) by 50%.<sup>1</sup>

### Reference

1. Maddox, Y.T., Ramwell, P.T., Shiner, C.S., *et al.* Amide and l-amino derivatives of F prostaglandins as prostaglandin antagonists. *Nature* **273**, 549-552 (1978).

#### 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM