

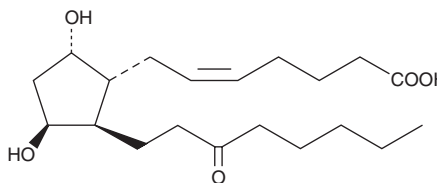
# Product Information



## 13,14-dihydro-15-keto Prostaglandin F<sub>2α</sub> Lipid Maps MS Standard Catalog No. 10007226



**CAS Registry No.:** 27376-76-7  
**Formal Name:** 9α,11α-dihydroxy-15-oxo-prost-5-en-1-oic acid  
**Synonyms:** 13,14-dh-15-k PGF<sub>2α</sub>, 13,14-dihydro-15-keto PGF<sub>2α</sub>, PGFM  
**MF:** C<sub>20</sub>H<sub>34</sub>O<sub>5</sub>  
**FW:** 354.5  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A solution in methyl acetate



### Laboratory Procedures

For long term storage, we suggest that 13,14-dihydro-15-keto prostaglandin F<sub>2α</sub> (13,14-dh-15-k PGF<sub>2α</sub>) be stored as supplied at -20°C. It should be stable for at least two years.

13,14-dh-15-k PGF<sub>2α</sub> 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 DMSO, dimethyl formamide, or ethanol purged with an inert gas can be used. The solubility of 13,14-dh-15-k PGF<sub>2α</sub> in these solvents is approximately 100 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 solutions of 13,14-dh-15-k PGF<sub>2α</sub> can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 13,14-dh-15-k 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.

13,14-dh-15-k PGF<sub>2α</sub> is the first prominent plasma metabolite of PGF<sub>2α</sub> in the 15-hydroxy PGDH pathway.<sup>1</sup> Measurement of 13,14-dh-15-k PGF<sub>2α</sub> in plasma can be used as a marker of the *in vivo* production of PGF<sub>2α</sub>.<sup>1-3</sup>

### References

1. Samuelsson, B., Goldyne, M., Granström, E., *et al.* Prostaglandins and thromboxanes. *Annu. Rev. Biochem.* **47**, 997-1029 (1978).
2. Meyer, H.H.D., Eisele, K., and Osaso, J. A biotin-streptavidin amplified enzyme immunoassay for 13,14-dihydro-15-keto-PGF<sub>2α</sub>. *Prostaglandins* **38**, 375-383 (1989).
3. Del Vecchio, R.P., Maxey, K.M., and Lewis, G.S. A quantitative solid-phase enzymeimmunoassay for 13,14-dihydro-15-keto-prostaglandin F<sub>2α</sub> in plasma. *Prostaglandins* **43**, 321-330 (1992).

### Related Product

Prostaglandin Metabolite HPLC Mixture - Cat. No. 10005 • 8-*iso*-13,14-dihydro-15-keto Prostaglandin F<sub>2α</sub> - Cat. No. 16380 • 13,14-dihydro-15-keto Prostaglandin F<sub>2α</sub> - Cat. No. 16670 • tetranor-PGFM - Cat. No. 16840 • 13,14-dihydro-15-keto Prostaglandin F<sub>2α</sub>-d<sub>4</sub> - Cat. No. 10007793

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

#### MATERIAL 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 Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees. Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy** located on our website and in our catalog.

Copyright Cayman Chemical Company, 01/21/2009

### Cayman Chemical

#### Mailing address

1180 E. Ellsworth Road  
Ann Arbor, MI  
48108 USA

#### Phone

(800) 364-9897  
(734) 971-3335

#### Fax

(734) 971-3640

#### E-Mail

custserv@caymanchem.com

#### Web

www.caymanchem.com