# **Product Information**



# 6-keto Prostaglandin $F_{1\alpha}$

Item No. 15210

CAS Registry No.:	58962-34-8	
Formal Name:	6-oxo-9α,11α,15S-trihydroxy-prost-13-en-1-	ОН
	oic acid	Соон
Synonym:	6-keto PGF <sub>1a</sub>	
MF:	$C_{20}H_{34}O_{6}$	
FW:	370.5	
Purity:	≥98%	HO • • •
Stability:	≥2 years at -20°C	OH
Supplied as:	A crystalline solid	

#### Laboratory Procedures

For long term storage, we suggest that 6-keto  $PGF_{1\alpha}$  be stored as supplied at -20°C. It should be stable for at least two years.

6-keto PGF<sub>1 $\alpha$ </sub> is supplied as a crystalline solid. Stock solutions of 6-keto PGF<sub>1 $\alpha$ </sub> can be made by dissolving the crystalline compound in the solvent of choice. Solvents such as ethanol, DMSO, or dimethyl formamide purged with an inert gas can be used. The solubility of 6-keto  $PGF_{1\alpha}$  in these solvents is approximately 16, 50, and 100 mg/ml, respectively.

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 6-keto  $PGF_{1\alpha}$  is needed, it can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of 6-keto  $PGF_{1\alpha}$  in PBS (pH 7.2) is approximately 3.3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

6-keto  $PGF_{1\alpha}$  is the inactive, non-enzymatic hydrolysis product of  $PGI_2$ .<sup>1,2</sup> 6-keto  $PGF_{1\alpha}$  serves as a useful marker of PGI<sub>2</sub> biosynthesis in vivo.<sup>3</sup> When [<sup>3</sup>H]-PGI<sub>2</sub> is injected into healthy human males, 6.6% of the radioactivity is recovered from urine as [<sup>3</sup>H]-6-keto PGF<sub>1a</sub>.<sup>3</sup>

#### References

- 1. Pace-Asciak, C.R. Isolation, structure, and biosynthesis of 6-ketoprostaglandin  $F_{1\alpha}$  in the rat stomach. J. Am. Chem. Soc. 98, 2348-2349 (1976).
- Johnson, R.A., Morton, D.R., Kinner, J.H., et al. The chemical structure of prostaglandin X (prostacyclin). 2. Prostaglandins 12, 915-928 (1976).
- 3. Brash, A.R., Jackson, E.K., Saggese, C.A., et al. Metabolic disposition of prostacyclin in humans. J. Pharmacol. Exp. Ther. 226, 78-87 (1983).

#### **Related Products**

DIAGNOSTIC OR THERAPEUTIC USE

WARRANTY AND LIMITATION OF REMEDY

MATERIAL SAFETY DATA

For a list of related products please visit: www.caymanchem.com/catalog/15210

### Cayman Chemical

**Mailing address** 1180 E. Ellsworth Road Ann Arbor, MI 48108 USA

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

Fax (734) 971-3640

Web

E-Mail custserv@caymanchem.com

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 <u>meet our specification</u>. purpose, suitability and merchaniaum, which excluse or yourn are description of the 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, indicating 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 <u>refund</u> of the purchase price, or at Cayman's option, the <u>replacement</u>, at no cost to Buyer, of all material that

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, <u>but not all</u>. of the information required for the safe and proper use of this material. Before use, the user <u>must</u> review the <u>complete</u> Material Safety Data Sheet, which has been sent via e mail to via minit to vour institution.

WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary

Said refund or replacements. 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, 10/10/2012

## www.caymanchem.com