

Product Information



8-*iso* Prostaglandin F_{2α} Ethanolamide

Catalog No. 10005764

Formal Name: N-(2-hydroxyethyl)-9α,11α,15S-trihydroxy-(8β)-prosta-5Z,13E-dien-1-amide

Synonyms: iPF_{2α}-III Ethanolamide;
8-*iso* PGF_{2α} Ethanolamide;
8-*epi* PGF_{2α} Ethanolamide

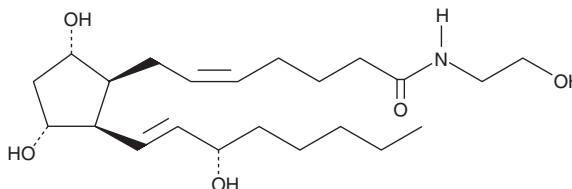
MF: C₂₂H₃₉NO₅

FW: 397.5

Purity: ≥98%

Stability: ≥1 year at -20°C

Supplied as: A solution in ethanol



Laboratory Procedures

For long term storage, we suggest that 8-*iso* prostaglandin F_{2α} ethanolamide (8-*iso* PGF_{2α} ethanolamide) be stored as supplied at -20°C. It should be stable for at least one year.

8-*iso* PGF_{2α} ethanolamide is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 8-*iso* PGF_{2α} ethanolamide in these solvents is approximately 20 mg/ml.

8-*iso* PGF_{2α} ethanolamide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 8-*iso* PGF_{2α} ethanolamide should be diluted with the aqueous buffer of choice. 8-*iso* PGF_{2α} ethanolamide has a solubility of approximately 0.1 mg/ml in a 1:8 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

It has been reported that anandamide (AEA) can be used directly by cyclooxygenase-2 and specific PGH₂ isomerases to produce ethanolamide congeners of the classical PGs, including PGF_{2α}.¹ PGF_{2α} ethanolamide has also been reported to be biosynthesized by this mechanism when AEA was infused into the lung and liver of fatty acid amide hydrolase-deficient mice.² However, the accumulation of AEA can also lead to isoprostane-type peroxidative decomposition. 8-*iso* PGF_{2α} ethanolamide is a standard that allows one to distinguish these non-enzymatic decomposition products from “prostamides” that could be of enzymatic origin.

References

1. Bachur, N.R., Masek, K., Melmon, K.L., *et al.* Fatty acid amides of ethanolamine in mammalian tissues. *J. Biol. Chem.* **240**, 1019-1024 (1965).
2. Weber, A., Ni, J., Ling, K.-H.J., *et al.* Formation of prostamides from anandamide in FAAH knockout mice analyzed HPLC with tandem mass spectrometry. *J. Lipid Res.* **45**, 757-763 (2004).

Related Products

Prostaglandin F_{2α} Ethanolamide - Cat. No. 16013 • 8-*iso* Prostaglandin F_{2α} - Cat. No. 16350 • Prostaglandin F_{2α} Ethanolamide-d₄ - Cat. No. 316013

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

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 via email to 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, 02/05/2010