# **PRODUCT** INFORMATION



8-iso Prostaglandin F<sub>1a</sub>

Item No. 15350

CAS Registry No.:	26771-96-0	
Formal Name:	(8β)-9α,11α,15S-trihydroxy-prost-	
	13E-en-1-oic acid	OH
Synonyms:	8-epi PGF <sub>1a</sub> , 8-iso PGF <sub>1a</sub>	Соон
MF:	$C_{20}H_{36}O_5$	
FW:	356.5	
Purity:	≥99%	
Supplied as:	A crystalline solid	ю́н
Storage:	-20°C	
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis		

# Laboratory Procedures

8-iso Prostaglandin  $F_{1\alpha}$  (8-iso PGF<sub>1\alpha</sub>) is supplied as a crystalline solid. A stock solution may be made by dissolving the 8-iso PGF<sub>1a</sub> in the solvent of choice, which should be purged with an inert gas. 8-iso PGF<sub>1a</sub> is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 8-iso PGF10 in these solvents is approximately 50 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 aqueous solutions of 8-iso  $PGF_{1\alpha}$  can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 8-iso PGF<sub>1g</sub> in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

# Description

8-iso  $PGF_{1\alpha}$  is an isoprostane that was first identified in human semen.<sup>1</sup> It is a member of the isoprostane family, which are eicosanoids of non-cyclooxygenase origin. 8-iso PGF<sub>1a</sub> is present along with its 19-hydroxy congener at 5-10  $\mu$ g/ml of seminal plasma.<sup>2</sup>

# References

- 1. Svanborg, K., Bygdeman, M., and Eneroth, P. The F and 19-hydroxy F prostaglandins and their 8β-isomers in human seminal plasma: Data on chromatography and mass spectrometry. Biomed. Mass Spectrom. 10(9), 495-498 (1983).
- 2. Taylor, P.L. The 8-isoprostaglandins: Evidence for eight compounds in human semen. Prostaglandins 17(2), 259-267 (1979).

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.

# WARRANTY AND LIMITATION OF REMEDY

uyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 02/01/2024

# 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