# PRODUCT INFORMATION



## 8-iso Prostaglandin F<sub>18</sub>

Item No. 15370

CAS Registry No.: 26771-95-9

Formal Name: 9β,11α,15S-trihydroxy-(8β)-prost-

13E-en-1-oic acid

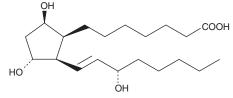
Synonyms: 8-epi-9β-PGF1α, 8-iso PGF<sub>1β</sub>

MF: 356.5 FW: **Purity:** ≥99%

Supplied as: A crystalline solid

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  $F_{1\beta}$  (8-iso  $PGF_{1\beta}$ ) is supplied as a crystalline solid. A stock solution may be made by dissolving the 8-iso  $PGF_{18}$  in the solvent of choice, which should be purged with an inert gas. 8-iso  $PGF_{18}$ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 8-iso PGF<sub>18</sub> in ethanol is approximately 75 mg/ml and approximately 50 mg/ml in DMSO and DMF.

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  $PGF_{1\beta}$  can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 8-iso  $PGF_{1\beta}$  in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

8-iso  $PGF_{1\beta}$  is an isoprostane. It is a potential autooxidation product of the  $\omega$ -6 fatty acid dihomo- $\gamma$ -linolenic acid (DGLA; Item No. 90230). 8-iso  $PGF_{1\beta}$  (10  $\mu$ M) induces contractions in isolated neonatal porcine pulmonary arteries.<sup>1</sup>

#### Reference

1. González-Luis, G., Pérez-Vizcaíno, F., García-Muñoz, F., et al. Age-related differences in vasoconstrictor responses to isoprostanes in piglet pulmonary and mesenteric vascular smooth muscle. Pediatr. Res. 57(6), 845-852 (2005).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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

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