

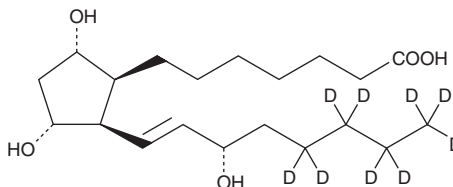
# PRODUCT INFORMATION



## 8-iso Prostaglandin F<sub>1α</sub>-d<sub>9</sub>

Item No. 10008935

**Formal Name:** 9α,11α,15S-trihydroxy-(8β)-prost-13E-en-1-oic-17,17,18,18,19,19,20,20,20-d<sub>9</sub> acid  
**Synonyms:** 8-*epi* PGF<sub>1α</sub>-d<sub>9</sub>, 8-*iso* PGF<sub>1α</sub>-d<sub>9</sub>  
**MF:** C<sub>20</sub>H<sub>27</sub>D<sub>9</sub>O<sub>5</sub>  
**FW:** 365.6  
**Chemical Purity:** ≥98%  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>9</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** A solution in methyl acetate  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

8-iso Prostaglandin F<sub>1α</sub>-d<sub>9</sub> (8-iso PGF<sub>1α</sub>-d<sub>9</sub>) is intended for use as an internal standard for the quantification of 8-iso PGF<sub>1α</sub> (Item No. 15350) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

8-iso PGF<sub>1α</sub>-d<sub>9</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 ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of 8-iso PGF<sub>1α</sub>-d<sub>9</sub> in these solvents is approximately 50 mg/ml.

### Description

8-iso PGF<sub>1α</sub> 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>1α</sub> is present along with its 19-hydroxy congener at 5-10 μg/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. *Biomedical Mass Spectrometry* **10**, 495-498 (1983).
2. Taylor, P.L. The 8-isoprostaglandins: Evidence for eight compounds in human semen. *Prostaglandins* **17**, 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.

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