# PRODUCT INFORMATION



## 13,14-dihydro-15-keto Prostaglandin F<sub>2a</sub>

Item No. 16670

CAS Registry No.: 27376-76-7

Formal Name: 9a,11a-dihydroxy-15-oxo-prost-

5-en-1-oic acid

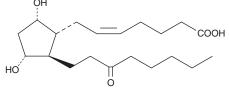
Synonyms: 13,14-dihydro-15-keto PGF<sub>2a</sub>,

MF:  $C_{20}H_{34}O_{5}$ FW: 354.5 Purity: ≥95%

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**

13,14-dihydro-15-keto Prostaglandin  $F_{2\alpha}$  (13,14-dihydro-15-keto PGF $_{2\alpha}$ ) 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 DMSO, dimethyl formamide, or ethanol purged with an inert gas can be used. The solubility of 13,14-dihydro-15-keto PGF<sub>2a</sub> in these solvents is approximately 100 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 solutions of 13,14-dihydro-15-keto  $PGF_{2\alpha}$  can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of 13,14-dihydro-15-keto  $PGF_{2\alpha}$  in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

13,14-dihydro-15-keto  $PGF_{2\alpha}$  is the first prominent plasma metabolite of  $PGF_{2\alpha}$  in the 15-hydroxy PGDH pathway. Measurement of 13,14-dihydro-15-keto  $PGF_{2\alpha}$  in plasma can be used as a marker of the in vivo production of PGF<sub>2a</sub>.1-3

#### References

- 1. Samuelsson, B., Goldyne, M., Granström, E., et al. Prostaglandins and thromboxanes. Annu. Rev. Biochem. **47**, 997-1029 (1978).
- 2. Meyer, H.H.D., Eisele, K., and Osaso, J. A biotin-streptavidin amplified enzyme immunoassay for 13,14-dihydro-15-keto-PGF<sub>2a</sub> Prostaglandins **38**, 375-383 (1989).
- 3. Del Vecchio, R.P., Maxey, K.M., and Lewis, G.S. A quantitative solid-phase enzymeimmunoassay for 13,14-dihydro-15-keto-prostaglandin  $F_{2a}$  in plasma. Prostaglandins 43, 321-330 (1992).

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.

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