# PRODUCT INFORMATION



## 15-keto Prostaglandin F<sub>1a</sub>

Item No. 15710

CAS Registry No.: 21562-58-3

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

13E-en-1-oic acid

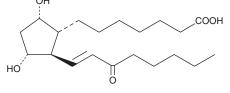
15-keto PGF<sub>1a</sub> Synonym: MF:  $C_{20}H_{34}O_{5}$ 354.5 FW: ≥98% **Purity:** 

UV/Vis.:  $\lambda_{\text{max}}$ : 232 nm

Supplied as: A solution in methyl acetate

Storage: Stability: ≥2 years

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



### **Laboratory Procedures**

15-keto Prostaglandin  $F_{1a}$  (15-keto  $PGF_{1a}$ ) 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 15-keto PGF<sub>1a</sub> in ethanol is approximately 75 mg/ml and approximately 50 mg/ml in DMSO and DMF.

15-keto  $PGF_{1\alpha}$  is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 15-keto PGF $_{1a}$  should be diluted with the aqueous buffer of choice. The solubility of 15-keto PGF $_{1a}$  in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

15-keto  $PGF_{1\alpha}$  is the initial metabolite of  $PGF_{1\alpha}$  via 15-hydroxy PGDH. In mammals, oxidation of C-15 markedly attenuates receptor binding and activity. In fish, the 15-keto compounds serve as post-ovulatory pheromones and are more active than the parent prostaglandins.<sup>1</sup>

#### Reference

1. Sorensen, P.W., Hara, T.J., Goetz, F.W., et al. F prostaglandins function as potent olfactory stimulants that comprise the postovulatory female sex pheromone in goldfish. Biol. Reprod. 39(5), 1039-1050 (1988).

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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