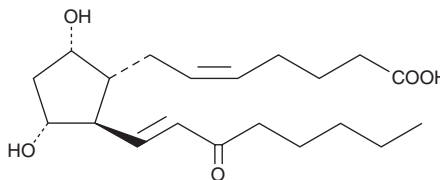


# PRODUCT INFORMATION



## 15-keto Prostaglandin F<sub>2α</sub> Item No. 16720

**CAS Registry No.:** 35850-13-6  
**Formal Name:** 9α,11α-dihydroxy-15-oxo-prosta-5Z,13E-dien-1-oic acid  
**Synonym:** 15-keto PGF<sub>2α</sub>  
**MF:** C<sub>20</sub>H<sub>32</sub>O<sub>5</sub>  
**FW:** 352.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 234 nm  
**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

15-keto Prostaglandin F<sub>2α</sub> (15-keto PGF<sub>2α</sub>) is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the 15-keto PGF<sub>2α</sub> under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 15-keto PGF<sub>2α</sub> in these solvents is approximately 100 mg/ml.

15-keto PGF<sub>2α</sub> is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 15-keto PGF<sub>2α</sub> should be diluted with the aqueous buffer of choice. The solubility of 15-keto PGF<sub>2α</sub> in PBS, pH 7.2, is approximately 10 mg/ml. The solubility of 15-keto PGF<sub>2α</sub> in 10 mM Na<sub>2</sub>CO<sub>3</sub> is approximately 6.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

15-keto PGF<sub>2α</sub> is the first metabolite of PGF<sub>2α</sub> in the 15-hydroxy PGDH pathway. It is one of the critical components in the goldfish and Atlantic salmon postovulatory pheromone.<sup>1,2</sup> 15-keto PGF<sub>2α</sub> stimulates the male goldfish and salmon olfactory receptors with detection thresholds of 10<sup>-12</sup> and 10<sup>-8</sup> M, respectively.<sup>1,2</sup> 15-keto PGF<sub>2α</sub> is 10-fold less active than PGF<sub>2α</sub> in decreasing rabbit intraocular pressure.<sup>3</sup>

### References

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).
2. Moore, A. and Waring, C.P. Electrophysiological and endocrinological evidence that F-series prostaglandins function as priming pheromones in mature male Atlantic salmon (*Salmo salar*) PARR. *J. Exp. Biol.* **199(Pt. 10)**, 2307-2316 (1996).
3. Woodward, D.F., Williams, L.S., Chen, J. Marked differential effects of prostanoid metabolites on rabbit intraocular pressure. *Ophthalmic Res.* **21(6)**, 428-435 (1989).

#### 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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