

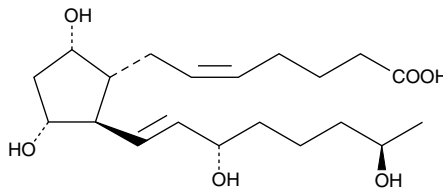
# Product Information



## 19(R)-hydroxy Prostaglandin F<sub>2α</sub>

Item No. 16910

**CAS Registry No:** 64625-53-2  
**Formal Name:** 9α,11α,15S,19R-tetrahydroxy-prosta-5Z,13E-dien-1-oic acid  
**Synonym:** 19(R)-hydroxy PGF<sub>2α</sub>  
**MF:** C<sub>20</sub>H<sub>34</sub>O<sub>6</sub>  
**FW:** 370.5  
**Purity:** ≥98%  
**Stability:** ≥1 year at -20°C  
**Supplied as:** A solution in ethanol



### Laboratory Procedures

For long term storage, we suggest that 19(R)-hydroxy prostaglandin F<sub>2α</sub> (19(R)-hydroxy PGF<sub>2α</sub>) be stored as supplied at -20°C. It should be stable for at least one year.

19(R)-hydroxy PGF<sub>2α</sub> is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO or dimethyl formamide purged with an inert gas can be used. The solubility of 19(R)-hydroxy PGF<sub>2α</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. If an organic solvent-free aqueous solution of 19(R)-hydroxy PGF<sub>2α</sub> is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 19(R)-hydroxy PGF<sub>2α</sub> in PBS (pH 7.2) is approximately 6 mg/ml. To obtain higher aqueous concentrations, we suggest using basic buffers. Store aqueous solutions of 19(R)-hydroxy PGF<sub>2α</sub> on ice and use within 12 hours of preparation. Although the aqueous solutions of 19(R)-hydroxy PGF<sub>2α</sub> may be stable for more than 12 hours, we strongly recommend using a fresh preparation each day.

19(R)-hydroxy PGF<sub>2α</sub> is a metabolite of PGF<sub>2α</sub> found in human semen. 19(R)-hydroxy PGF<sub>2α</sub> is present in fresh semen with 19(R)-hydroxy PGF<sub>1α</sub> for a combined concentration of 20 μg/ml.<sup>1</sup> 19(R)-hydroxy PGF<sub>2α</sub> exhibits no activity at the FP receptor of the cat iris sphincter muscle at concentrations up to 1 μM.<sup>2</sup>

### References

1. Taylor, P.L. and Kelly, R.W. The occurrence of 19-hydroxy F prostaglandins in human semen. *FEBS Lett.* **57**, 22-25 (1975).
2. Woodward, D.F., Protzman, C.E., Krauss, A.H.-P., *et al.* Identification of 19 (R)-OH prostaglandin E<sub>2</sub> as a selective prostanoid EP<sub>2</sub>-receptor agonist. *Prostaglandins* **46**, 371-383 (1993).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/16910](http://www.caymanchem.com/catalog/16910)

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### SAFETY DATA

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