

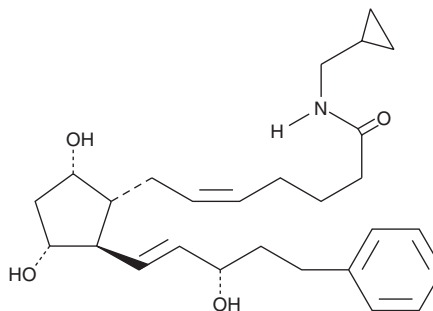
# Product Information



## 17-phenyl trinor Prostaglandin F<sub>2α</sub> cyclopropyl methyl amide

Item No. 10010810

**CAS Registry No.:** 1138395-10-4  
**Formal Name:** 9α,11α,15S-trihydroxy-17-phenyl-18,19,20-trinor-prosta-5Z,13E-dien-1-cyclopropyl methyl amide  
**Synonym:** 17-phenyl trinor PGF<sub>2α</sub> cyclopropyl methyl amide  
**MF:** C<sub>27</sub>H<sub>39</sub>NO<sub>4</sub>  
**FW:** 441.6  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid



### Laboratory Procedures

For long term storage, we suggest that 17-phenyl trinor prostaglandin F<sub>2α</sub> cyclopropyl methyl amide (17-phenyl trinor PGF<sub>2α</sub> cyclopropyl methyl amide) be stored as supplied at -20°C. It should be stable for at least two years.

17-phenyl trinor PGF<sub>2α</sub> cyclopropyl methyl amide is supplied as a crystalline solid. A stock solution may be made by dissolving the 17-phenyl trinor PGF<sub>2α</sub> cyclopropyl methyl amide in the solvent of choice. 17-phenyl trinor PGF<sub>2α</sub> cyclopropyl methyl amide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of 17-phenyl trinor PGF<sub>2α</sub> cyclopropyl methyl amide in these solvents is approximately 25 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 aqueous solutions of 17-phenyl trinor PGF<sub>2α</sub> cyclopropyl methyl amide can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 17-phenyl trinor PGF<sub>2α</sub> cyclopropyl methyl amide in PBS, pH 7.2, is approximately 0.25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Prostaglandin F<sub>2α</sub> (PGF<sub>2α</sub>) activates the FP receptor, promoting smooth muscle contraction and luteolysis. 17-phenyl trinor PGF<sub>2α</sub> binds the FP receptor on ovine luteal cells with a relative potency of 756% compared to that of PGF<sub>2α</sub>.<sup>1</sup> It is produced *in vivo* by the hydrolysis of 17-phenyl trinor PGF<sub>2α</sub> ethyl amide.<sup>2</sup> 17-phenyl trinor PGF<sub>2α</sub> ethyl amide is used to reduce intraocular pressure related to glaucoma.<sup>3</sup> 17-phenyl trinor PGF<sub>2α</sub> cyclopropyl methyl amide is a lipophilic analog of 17-phenyl trinor PGF<sub>2α</sub>. Amides of PGs may serve as prodrugs, as they are hydrolyzed in certain tissues to generate the bioactive free acid.

### References

1. Balapure, A.K., Rexroad, C.E., Jr., Kawada, K., *et al.* Structural requirements for prostaglandin analog interaction with the ovine corpus luteum prostaglandin F<sub>2α</sub> receptor. *Biochem. Pharmacol.* **38**, 2375-2381 (1989).
2. Camras, C.B., Toris, C.B., Sjoquist, B., *et al.* Detection of the free acid of bimatoprost in aqueous humor samples from human eyes treated with bimatoprost before cataract surgery. *Ophthalmology* **111**(12), 2193-2198 (2004).
3. Woodward, D.F., Krauss, A.H.P., Chen, J., *et al.* Pharmacological characterization of a novel antiglaucoma agent, bimatoprost (AGN 192024). *J. Pharmacol. Exp. Ther.* **305**(2), 772-785 (2003).

### Related Products

17-phenyl trinor Prostaglandin F<sub>2α</sub> - Item No. 16810 • 17-phenyl trinor Prostaglandin F<sub>2α</sub> ethyl amide - Item No. 16820 • 17-phenyl trinor Prostaglandin F<sub>2α</sub> amide - Item No. 16821 • 17-phenyl trinor Prostaglandin F<sub>2α</sub> diethyl amide - Item No. 16823 • 17-phenyl trinor Prostaglandin F<sub>2α</sub> isopropyl ester - Item No. 16824 • 17-phenyl trinor Prostaglandin F<sub>2α</sub>-d<sub>4</sub> - Item No. 316810 • 17-phenyl trinor Prostaglandin F<sub>2α</sub> ethyl amide-d<sub>4</sub> - Item No. 316820 • 17-phenyl trinor Prostaglandin F<sub>2α</sub> EIA Kit - Item No. 516821 • 17-phenyl trinor Prostaglandin F<sub>2α</sub> cyclohexyl amide - Item No. 9000686 • 17-phenyl trinor Prostaglandin F<sub>2α</sub> serinol amide - Item No. 10004237 • 17-phenyl trinor Prostaglandin F<sub>2α</sub> cyclopropyl amide - Item No. 10010605

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

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