

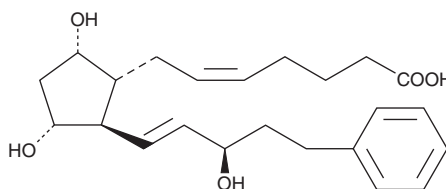
# PRODUCT INFORMATION



## 15(R)-17-phenyl trinor Prostaglandin F<sub>2α</sub>

Item No. 16814

**CAS Registry No.:** 41639-71-8  
**Formal Name:** 9α,11α,15R-trihydroxy-17-phenyl-18,19,20-trinor-prosta-5Z,13E-dien-1-oic acid  
**Synonyms:** 15-epi Bimatoprost (free acid), 15(R)-Bimatoprost (free acid), 15(R)-17-phenyl trinor PGF<sub>2α</sub>  
**MF:** C<sub>23</sub>H<sub>32</sub>O<sub>5</sub>  
**FW:** 388.5  
**Purity:** ≥98%  
**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(R)-17-phenyl trinor Prostaglandin F<sub>2α</sub> (15(R)-17-phenyl trinor PGF<sub>2α</sub>) 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(R)-17-phenyl trinor PGF<sub>2α</sub> in ethanol and DMF is approximately 30 mg/ml and approximately 25 mg/ml in DMSO.

15(R)-17-phenyl trinor PGF<sub>2α</sub> is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 15(R)-17-phenyl trinor PGF<sub>2α</sub> should be diluted with the aqueous buffer of choice. The solubility of 15(R)-17-phenyl trinor PGF<sub>2α</sub> in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

15(R)-17-phenyl trinor Prostaglandin F<sub>2α</sub> (15(R)-17-phenyl trinor PGF<sub>2α</sub>) is the 15(R) isomer of the FP receptor agonist 17-phenyl trinor PGF<sub>2α</sub> (Item No. 16810). 17-phenyl trinor PGF<sub>2α</sub> is an active metabolite of the prodrug 17-phenyl trinor PGF<sub>2α</sub> ethyl amide (Item No. 16820).<sup>1</sup> It is formed from 17-phenyl trinor PGF<sub>2α</sub> ethyl amide by amidases. 15(R)-17-phenyl trinor PGF<sub>2α</sub> is a potential agonist of the FP receptor. It induces relaxation of isolated cat iris sphincter muscles (EC<sub>50</sub> = 30 nM).<sup>2</sup>

### References

1. Maxey, K.M., Johnson, J., and LaBrecque, J., The hydrolysis of bimatoprost in corneal tissue generates a potent prostanoid FP receptor agonist. *Surv. Ophthalmol.* **47(Suppl. 1)**, S34-S40 (2002).
2. Resul, B., Stjerschantz, J., No, K., et al. Phenyl-substituted prostaglandins: Potent and selective antiglaucoma agents. *J. Med. Chem.* **36(2)**, 243-248 (1993).

#### 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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