

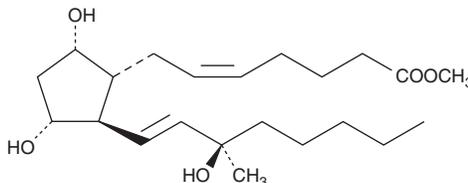
# PRODUCT INFORMATION



## 15(R)-15-methyl Prostaglandin F<sub>2α</sub> methyl ester

Item No. 16734

**CAS Registry No.:** 35700-22-2  
**Formal Name:** 9α,11α,15R-trihydroxy-15-methyl-prosta-5Z,13E-dien-1-oic acid, methyl ester  
**Synonyms:** 15(R)-Methyl carboprost, 15(R)-15-methyl PGF<sub>2α</sub> methyl ester  
**MF:** C<sub>22</sub>H<sub>38</sub>O<sub>5</sub>  
**FW:** 382.5  
**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)-15-methyl Prostaglandin F<sub>2α</sub> methyl ester (15(R)-15-methyl PGF<sub>2α</sub> methyl ester) 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 purged with an inert gas can be used. The solubility of 15(R)-15-methyl PGF<sub>2α</sub> methyl ester in these solvents is approximately 50 mg/ml.

15(R)-15-methyl PGF<sub>2α</sub> methyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 15(R)-15-methyl PGF<sub>2α</sub> methyl ester should be diluted with the aqueous buffer of choice. The solubility of 15(R)-15-methyl PGF<sub>2α</sub> methyl ester in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

15(R)-15-methyl PGF<sub>2α</sub> methyl ester is a lipid soluble prodrug form of 15(R)-15-methyl PGF<sub>2α</sub> (Item No. 16730) 15(S)-15-methyl PGF<sub>2α</sub> methyl ester (Item No. 16744) with increased membrane permeability. Acid-catalyzed epimerization of 15(R)-15-methyl PGF<sub>2α</sub> methyl ester and hydrolysis of the ester converts it into the active 15(S)-15-methyl PGF<sub>2α</sub> (Item No. 16743).<sup>1,2</sup>

### References

1. Plaisted, S.M., DeZwaan, J., and Snider, B.G. High-performance liquid chromatographic determination of acid-catalyzed degradation products of methyl carboprost in a polymeric controlled-release device. *J. Chromatogr.* **314**, 369-377 (1984).
2. Hamberg, M., Zhang, L.-Y., and Bergström, S. On the pH-dependent degradation of 15(S)-15-methyl-prostaglandin F<sub>2α</sub> (carboprost). *Eur. J. Pharm. Sci.* **3(1)**, 27-38 (1995).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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