

# PRODUCT INFORMATION



## 13(S),14(S)-epoxy Fluprostenol isopropyl ester

Item No. 11170

**Formal Name:** (Z)-isopropyl 7-((1R,2R,3R,5S)-3,5-dihydroxy-2-((2S,3S)-3-((S)-1-hydroxy-2-(3-(trifluoromethyl)phenoxy)ethyl)oxiran-2-yl)cyclopentyl)hept-5-enoate

**Synonyms:** Epoxy Derivative 2,  
13(S),14(S)-epoxy Travoprost

**MF:** C<sub>26</sub>H<sub>35</sub>F<sub>3</sub>O<sub>7</sub>

**FW:** 516.6

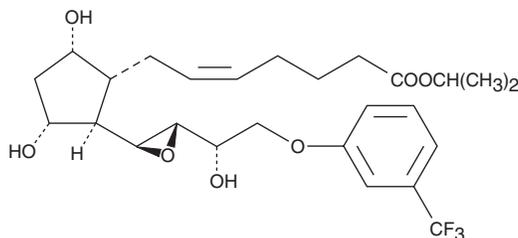
**Purity:** ≥95%

**UV/Vis.:** λ<sub>max</sub>: 222, 276 nm

**Supplied as:** A 10 mg/ml 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

13(S),14(S)-epoxy Fluprostenol isopropyl 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 (DMF) purged with an inert gas can be used. The solubility of 13(S),14(S)-epoxy fluprostenol isopropyl ester in ethanol and DMF is approximately 30 mg/ml and approximately 5 mg/ml in DMSO.

13(S),14(S)-epoxy Fluprostenol isopropyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of 13(S),14(S)-epoxy fluprostenol isopropyl ester should be diluted with the aqueous buffer of choice. 13(S),14(S)-epoxy Fluprostenol isopropyl ester has a solubility of 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Fluprostenol isopropyl ester (Item No. 16769) is a potent F-series prostaglandin receptor agonist prodrug that finds clinical use as an ocular hypotensive agent for the treatment of glaucoma.<sup>1,2</sup> 13,14-epoxy Fluprostenol isopropyl ester (Item No. 13679) is an impurity generated in the production of fluprostenol isopropyl ester. This product is a chiral enantiomer of the epoxide. The pharmacology of 13(S),14(S)-epoxy fluprostenol isopropyl ester has not been studied extensively to date.

### References

1. Sorbera, L.A. and Castañer, J. Travoprost. *Drugs Future* **25(1)**, 41-45 (2000).
2. Hellberg, M.R., Sallee, V.L., McLaughlin, M.A., et al. Preclinical efficacy of travoprost, a potent and selective FP prostaglandin receptor agonist. *J. Ocul. Pharmacol. Ther.* **17(5)**, 421-432 (2001).

#### 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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