

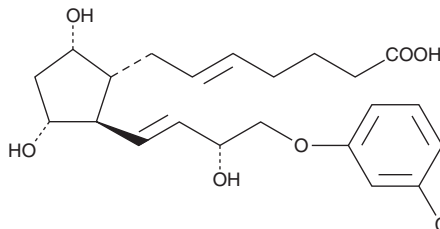
# Product Information



## (+)-5-*trans* Cloprostenol

Item No. 10004970

**CAS Registry No.:** 57968-81-7  
**Formal Name:** (+)-9 $\alpha$ ,11 $\alpha$ ,15R-trihydroxy-16-(3-chlorophenoxy)-17,18,19,20-tetranorprosta-5E,13E-dien-1-oic acid  
**Synonyms:** D-Cloprostenol, (+)-5,6-*trans* Cloprostenol, (+)-5-*trans*-16-*m*-chlorophenoxy tetranor PGF<sub>2 $\alpha$</sub>   
**MF:** C<sub>22</sub>H<sub>29</sub>ClO<sub>6</sub>  
**FW:** 424.9  
**Purity:**  $\geq$ 98%  
**Stability:**  $\geq$ 1 year at -20°C  
**Supplied as:** A solution in ethanol



### Laboratory Procedures

For long term storage, we suggest that (+)-5-*trans* cloprostenol be stored as supplied at -20°C. It should be stable for at least one year.

(+)-5-*trans* Cloprostenol 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 ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of (+)-5-*trans* cloprostenol 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 solution of (+)-5-*trans* cloprostenol is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of (+)-5-*trans* cloprostenol in PBS, pH 7.2, is approximately 16 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Cloprostenol is a synthetic derivative of prostaglandin F<sub>2 $\alpha$</sub>  that is used in veterinary medicine as a luteolytic agent for the induction of estrus and in the treatment of reproductive disorders in cattle, swine, and horses. (+)-5-*trans* Cloprostenol is a minor impurity produced in the synthesis of (+)-cloprostenol. The (+)-5-*trans* isomer is 20-fold less active than the 5-*cis* form in terminating pregnancy in the hamster.<sup>1</sup>

### Reference

1. Bowler, J., Brown, E.D., Crossley, N.S., *et al.* Double bond isomers of cloprostenol. *Prostaglandins* **17(6)**, 789-800 (1979).

### Related Products

Cloprostenol (sodium salt) - Item No. 16764 • (+)-Cloprostenol - Item No. 16765 • (+)-Cloprostenol (sodium salt) - Item No. 16766 • (+)-15-*epi* Cloprostenol - Item No. 10006692 • (+)-Cloprostenol methyl ester - Item No. 10010115 • (+)-Cloprostenol methyl amide - Item 10010495

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

#### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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