

# PRODUCT INFORMATION



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

Item No. 10004970

**CAS Registry No.:** 57968-81-7  
**Formal Name:** [1R-[1 $\alpha$ (E),2 $\beta$ (1E,3R\*),3 $\alpha$ ,5 $\alpha$ ]]-7-[2-[4-(3-chlorophenoxy)-3-hydroxy-1-butenyl]-3,5-dihydroxycyclopentyl]-5-heptenoic acid

**Synonyms:** D-Cloprostenol, (+)-5,6-*trans* Cloprostenol, (+)-5-*trans*-16-*m*-chlorophenoxy tetranor PGF<sub>2 $\alpha$</sub> , (+)-5-*trans*-16-*m*-chlorophenoxy tetranor Prostaglandin F<sub>2 $\alpha$</sub>

**MF:** C<sub>22</sub>H<sub>29</sub>ClO<sub>6</sub>

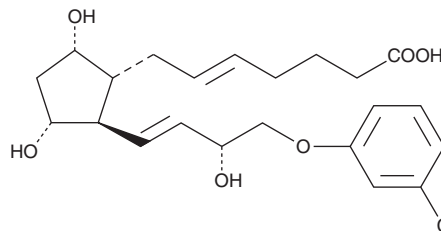
**FW:** 424.9

**Purity:**  $\geq$ 98%

**Supplied as:** A solution in ethanol

**Storage:** -20°C

**Stability:**  $\geq$ 2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

(+)-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 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.

(+)-5-*trans* Cloprostenol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of (+)-5-*trans* cloprostenol should be diluted with the aqueous buffer of choice. 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.

### Description

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).

#### 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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