

Product Information



(+)-5-*trans* Cloprostenol

Item No. 10004970

CAS Registry No.: 57968-81-7

Formal Name: (+)-9 α ,11 α ,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_{2 α}

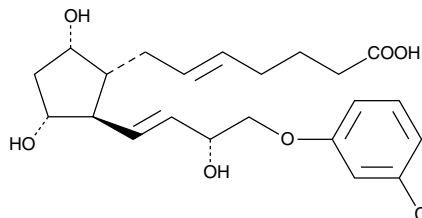
MF: C₂₂H₂₉ClO₆

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_{2 α} 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.¹

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

For a list of related products please visit: www.caymanchem.com/catalog/10004970

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

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 Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery.**

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

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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