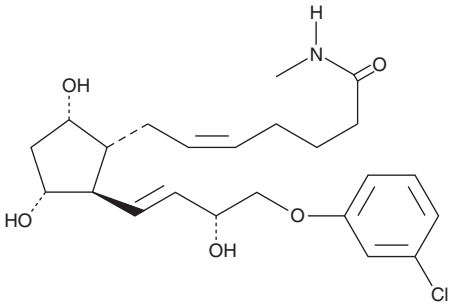
PRODUCT INFORMATION

(+)-Cloprostenol methyl amide

Item No. 10010495

Formal Name:	(+)-9α,11α,15R-trihydroxy-16-(3-chlorophenoxy)-17,18,19,20-tetranor-prosta-5Z,13E-dien-1-oic acid, methyl amide
Synonyms:	D-Cloprostenol methyl amide, (+)-16-m-Chlorophenoxy tetranor $PGF_{2\alpha}$ methyl amide
MF:	$C_{23}H_{32}ClNO_5$
FW:	438.0
Purity:	≥98%
Supplied as:	A solution in ethanol
Storage:	-20°C
Stability:	≥2 years



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

Laboratory Procedures

(+)-Cloprostenol methyl amide 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 (+)-cloprostenol methyl amide in these solvents is approximately 100 mg/ml.

(+)-Cloprostenol methyl amide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of (+)-cloprostenol methyl amide should be diluted with the aqueous buffer of choice. The solubility of (+)-cloprostenol methyl amide in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

(+)-Cloprostenol is a synthetic analog of prostaglandin $F_{2\alpha}$ ($PGF_{2\alpha}$). It is an FP receptor agonist and a potent luteolytic agent in rats and hamsters. It is 200 times and 100 times more potent than $PGF_{2\alpha}$ in terminating pregnancy in hamsters and rats, respectively, without the side effects associated with $PGF_{2\alpha}$.[1] (+)-Cloprostenol is a synthetic analog of $PGF_{2\alpha}$. It is an FP receptor agonist and a potent luteolytic agent in rats and hamsters. It is 200 times and 100 times more potent than $PGF_{2\alpha}$ in terminating pregnancy in hamsters and rats, respectively, without the side effects associated with $PGF_{2\alpha}$.[1] Cloprostenol is also used in veterinary medicine as a luteolytic agent for the induction of estrus and the treatment of reproductive disorders in cattle, swine, and horses. (+)-Cloprostenol methyl amide is a more lipid soluble form of (+)-cloprostenol. Amides of PGs may serve as prodrugs, under the condition they are hydrolyzed appropriately in certain tissues to generate the bioactive free acid.

Reference

1. Dukes, M., Russell, W., and Walpole, A.L. Potent luteolytic agents related to prostaglandin $F_{2\alpha}$. *Nature* **250(464)**, 330-331 (1974).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM