Cloprostenol Sodium (Synonyms: DL-Cloprostenol; Catalog: TBS0002)

DESCRIPTION

Cloprostenol sodium (Synonyms: DL-Cloprostenol; ICI 80996) is a more water solute, crystalline form of cloprostenol than the free acid. It is a synthetic analog of prostaglandin F2α (PGF2α), and selective agonist of PGF2α receptor.

CHEMICAL NAME

(±)-9α,11α,15R-trihydroxy-16-(3-chlorophenoxy)-17,18,19,20-tetranor-prosta- 5Z,13E-dien-1-oic acid, monosodium salt.

PACKAGE SIZE

Sku#	Size
TBS0002-50MG	50 MG
TBS0002-100MG	100 MG

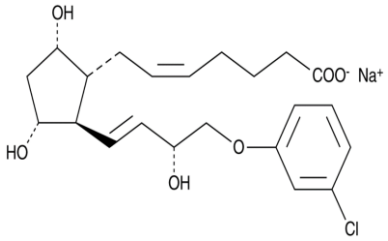
CHEMISTRY

CAS No.: 55028-72-3

Molecular Formula: C22H28O6ClNa

Molecular Weight: 446.9

Molecular Structure:



APPLICATIONS

Target: PGF2α receptor

SOLUBILITY

Soluble in ethanol (10 mg/ml), DMSO (50 mg/ml), DMF (50 mg/ml), water (50 mg/ml), and PBS (pH 7.2) (1 mg/ml).

PHYSICAL APPEARANCE

White crystalline powder

STORAGE CONDITIONS

The product is shipped on RT; Store at -20°C for 2 years.

BIOLAGICAL ACTIVITY

Cloprostenol is a synthetic analog of prostaglandin F2α(PGF2α). It is 200 times and 100 times more potent than PGF2α in terminating pregnancy in hamsters and rats, respectively, without the side effects associated with PGF2α. The subcutaneous dose required for interrupting early pregnancy is species dependent, requiring approximately 1.25 μg/kg and 270 μg/kg in hamsters and rats, respectively. Cloprostenol is also a potent inhibitor of rat adipose precursor differentiation in primary cultures.

REFERENCES

1. Manca R, et al. Intra-vesicle administration of D-cloprostenol for induction of abortion in mid-gestation bitches. Anim Reprod Sci. 2008; 106:133-42.
2. Re G, et al. Specific binding of dl-cloprostenol and d-cloprostenol to PGF2 alpha receptors in bovine corpus luteum and myometrial cell membranes. J Vet Pharmacol Ther. 1994; 17:455-8.

RELATED PRODUCTS

TBS2001: Resazurin Cell Viability Kit

TBS2002: LDH Cytotoxicity Assay

TBS2003: MTT Cell Viability Assay

TBS2030: Caspase-3 Colorimetric Assay kit

For research use only.