Carboprost

Cat. No.: HY-128428

CAS No.: 35700-23-3

Molecular Formula: $C_{21}H_{36}O_5$

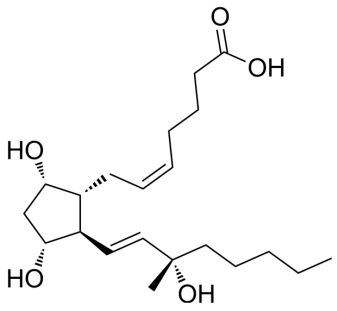
Molecular Weight: 368.51

Target: Prostaglandin Receptor

Pathway: GPCR/G Protein

Storage: -20°C, stored under nitrogen

* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (271.36 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.7136 mL	13.5682 mL	27.1363 mL
	5 mM	0.5427 mL	2.7136 mL	5.4273 mL
	10 mM	0.2714 mL	1.3568 mL	2.7136 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (6.78 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.78 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.78 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Carboprost (15(S)-15-Methyl Prostaglandin F2α) is a metabolically stable synthetic analog of prostaglandin F2α. Carboprost stimulates uterine contractions and induces abortion. Carboprost is used for postpartum hemorrhage due to uterine atony and for the termination of pregnancy in the second trimester[1][2].

IC_{50} & Target

FP

In Vivo

The methyl ester of Carboprost (15(S)-15-Methyl Prostaglandin F2α; 15M-PGF2 alpha, 12.5 mg/monkey) loweres serum progesterone to 12% of pretreatment values within 24 hours, however progesterone returnes to normal limits within 48 hours[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. S J Carlan, et al. Effect of Intramuscular 15-methyl Prostaglandin F2 Alpha After Second-Trimester Delivery. Obstet Gynecol. 1997 Jan;89(1):5-9.

[2]. J W Wilks, et al. Inhibition of the Monkey Corpus Luteum With 15-methyl Prostaglandins. Prostaglandins. 1980 Nov;20(5):793-805.

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