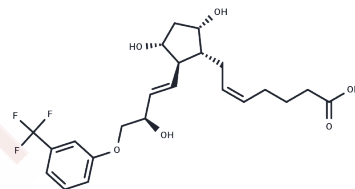


## (+)-Fluprostenol

## Chemical Properties

CAS No. :	54276-17-4
Formula:	C <sub>23</sub> H <sub>29</sub> F <sub>3</sub> O <sub>6</sub>
Molecular Weight:	458.47
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	(+)-Fluprostenol (AL-5848), an analogue of prostaglandin F <sub>2</sub> alpha, is a prostaglandin F <sub>2</sub> α receptor PTGFR agonist and decreases the expression of Oviductal glycoprotein 1 (OVGP1).
Targets(IC50)	Prostaglandin Receptor
In vivo	(+)-Fluprostenol(s.c. to rats on day 18 of pregnancy) increased cervical creep, or softness, by the following day. Doses of (+)-Fluprostenol 100-fold larger were necessary to increase uterine contractions. (+)-Fluprostenol produced falls in serum progesterone concentrations, increases in 20 alpha-dihydroprogesterone concentrations, no changes in oestradiol or relaxin concentrations and a reduction in the ovarian human chorionic gonadotrophin binding capacity in vitro. (+)-Fluprostenol was less potent in inducing cervical softness when administered per vaginam, and a dose which produced softening in pregnant rats was ineffective in ovariectomized steroid-maintained pregnant or pro-oestrous rats[3].

## Solubility Information

Solubility	DMSO: 325 mg/mL (708.88 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 8 mg/mL (17.45 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1812 mL	10.9058 mL	21.8117 mL
5 mM	0.4362 mL	2.1812 mL	4.3623 mL
10 mM	0.2181 mL	1.0906 mL	2.1812 mL
50 mM	0.0436 mL	0.2181 mL	0.4362 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

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Ahmad SF, Akoum A, Horne AW. Selective modulation of the prostaglandin F2 $\alpha$  pathway markedly impacts on endometriosis progression in a xenograft mouse model. *Mol Hum Reprod*. 2015 Dec;21(12):905-16. doi: 10.1093/molehr/gav056. Epub 2015 Oct 15. PubMed PMID: 26472819.

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