

**Product Name:** Treprostinil

**Catalog No.:** 5349

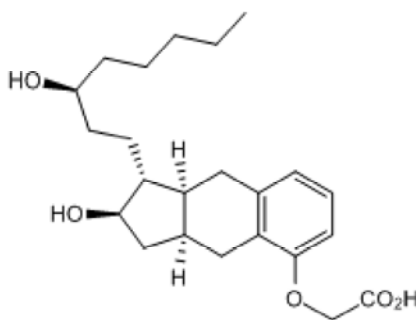
**Batch No.:** 2

CAS Number: 81846-19-7

IUPAC Name: 2-[[[(1*R*,2*R*,3*aS*,9*aS*)-2,3,3*a*,4,9,9*a*-Hexahydro-2-hydroxy-1-[(3*S*)-3-hydroxyoctyl]-1*H*-benz[*f*]inden-5-yl]oxy]acetic acid

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>23</sub>H<sub>34</sub>O<sub>5</sub>  
**Batch Molecular Weight:** 390.51  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 50 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = +34 (Concentration = 1, Solvent = Ethanol)  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	70.74	8.78	
Found	70.59	8.78	

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Potent prostacyclin (PGI<sub>2</sub>) analog (EC<sub>50</sub> values are 0.6, 1.9 and 6.2 nM at DP<sub>1</sub>, IP and EP<sub>2</sub> receptors respectively). Causes vasodilation of human pulmonary arteries and inhibits NFκB nuclear translocation in human alveolar macrophages in vitro.

**Physical and Chemical Properties:**

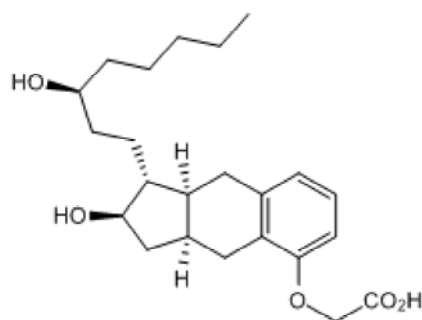
Batch Molecular Formula: C<sub>23</sub>H<sub>34</sub>O<sub>5</sub>

Batch Molecular Weight: 390.51

Physical Appearance: White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 100 mM  
ethanol to 50 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Whittle et al** (2012) Binding and activity of the prostacyclin receptor (IP) agonists, trepros. and iloprost, at human prostanoid receptors: trepros. is a potent DP<sub>1</sub> and EP<sub>2</sub> agonist. *Biochem.Pharmacol.* **84** 68. PMID: 22480736.

**Fontana et al** (2007) Treprostinil potentiates the positive inotropic effect of catecholamines in adult rat ventricular cardiomyocytes. *Br.J.Pharmacol.* **151** 779. PMID: 17533419.

**Raychaudhuri et al** (2002) The prostacyclin analogue trepros. blocks NFκB nuclear translocation in human alveolar macrophages. *J.Biol.Chem.* **277** 33344. PMID: 12082102.

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