

Product Name: Treprostinil

Catalog No.: 5349

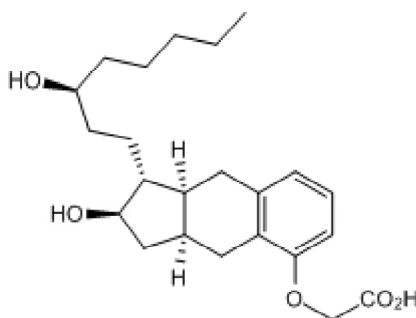
Batch No.: 3

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 ₂₃ H ₃₄ O ₅
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 99.2% purity
¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure
Optical Rotation:	[α] _D = +36.6 (Concentration = 1, Solvent = Ethanol)

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

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CAS Number: 81846-19-7

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

Description:

Treprostinil is a potent prostacyclin (PGI₂) analog (EC₅₀ values are 0.6, 1.9 and 6.2 nM at DP₁, IP and EP₂ receptors respectively). Causes vasodilation of human pulmonary arteries and inhibits NFκB nuclear translocation in human alveolar macrophages in vitro.

Physical and Chemical Properties:

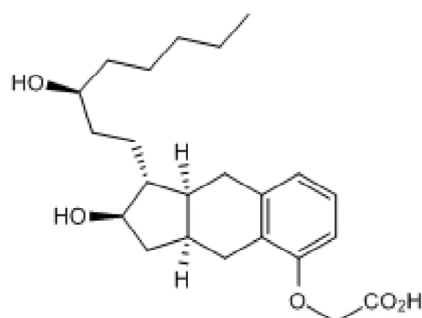
Batch Molecular Formula: C₂₃H₃₄O₅

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 DP₁ and EP₂ 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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