



Certificate of Analysis

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Product Name: Alprostadil Catalog No.: 1620 Batch No.: 4

CAS Number: 745-65-3 EC Number: 212-017-2

IUPAC Name: $(11\alpha, 13E, 15S)-11, 15$ -Dihydroxy-9-oxo-prost-13-en-1-oic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{20}H_{34}O_5$ Batch Molecular Weight:354.49Physical Appearance:White solid

Solubility: ethanol to 50 mM

DMSO to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 67.76 9.67 Found 67.9 9.69



Product Information

Print Date: Jun 25th 2019

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CAS Number: 745-65-3 EC Number: 212-017-2

IUPAC Name: $(11\alpha, 13E, 15S)$ -11,15-Dihydroxy-9-oxo-prost-13-en-1-oic acid

Description:

Prostaglandin with some selectivity for EP₃ and EP₄ receptors (K_i values are 1.1, 2.1, 36, 10 and 33 nM for mouse EP₃, EP₄, EP₁, EP₂ and IP receptors respectively). Inhibits platelet aggregation and is a vasodilator in vivo.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₀H₃₄O₅ Batch Molecular Weight: 354.49 Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

ethanol to 50 mM DMSO to 100 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:

Kiriyama et al (1997) Ligand binding specificities of the eight types and subtypes of the mouse prostanoid receptors expressed in Chinese hamster ovary cells. Br.J.Pharmacol. 122 217. PMID: 9313928.

Kirtland (1988) Prostaglandin E₁: a review. Prostaglandins Leukot. Essent. Fatty Acids 32 165. PMID: 2901111.

Whittle et al (1985) Specificity between the anti-aggregatory actions of prostacyclin, prostaglandin E₁ and D₂ on platelets. Adv.Exp.Med.Biol. 192 109. PMID: 2871707.