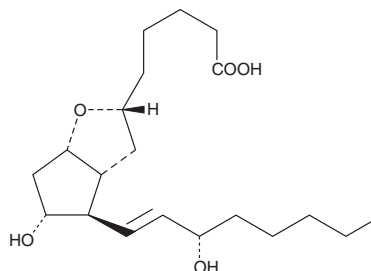


Product Information



6 α -Prostaglandin I₁ Catalog No. 18110

CAS Registry No.:	62777-90-6
Formal Name:	6R,9 α -epoxy-11 α ,15S-dihydroxy-prost-13E-en-1-oic acid
Synonym:	5,6 α -dihydro PGI ₂
MF:	C ₂₀ H ₃₄ O ₅
FW:	354.5
Purity:	≥99%
Stability:	≥2 years at -20°C
Supplied as:	A crystalline solid



Laboratory Procedures

For long term storage, we suggest that 6 α -prostaglandin I₁ (6 α -PGI₁) be stored as supplied at -20°C. It should be stable for at least two years.

is supplied as a crystalline solid. A stock solution may be made by dissolving the 6 α -PGI₁ in an organic solvent purged with an inert gas. 6 α -PGI₁ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 6 α -PGI₁ in these solvents is approximately 20, 5, and 10 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 6 α -PGI₁ can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of 6 α -PGI₁ in PBS (pH 7.2) is approximately 80 μ g/ml. We do not recommend storing the aqueous solution for more than one day.

6 α -PGI₁ is a stable PGI₂ analog resistant to hydrolysis in aqueous solutions. 6 α -PGI₁ promotes cAMP accumulation in human thyroid slices and cells in a concentration dependent manner. However, it is about 10-fold less potent than the β -isomer and 100-fold less potent than PGI₂ in eliciting the response.¹ 6 α -PGI₁ exhibits an IC₅₀ value of 350 ng/ml for inhibition of ADP-induced platelet aggregation, which is nearly 900-fold higher than that observed for PGI₂ (0.4 ng/ml).²

References

1. Patrono, C., Rotella, C.M., Toccafondi, R.S., *et al.* Prostacyclin stimulates the adenylate cyclase system of human thyroid tissue. *Prostaglandins* **22(1)**, 105-115 (1981).
2. Whittle, B.J.R. and Moncada, S. Prostacyclin and its analogues for the therapy of thromboembolic disorders. *Adv. Exp. Med. Bio.* **164**, 193-209 (1984).

Related Products

6 α -Prostaglandin I₁ - Cat. No. 18120 • Prostaglandin I₂ (sodium salt) - Cat. No. 18220

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery.**

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

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Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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