



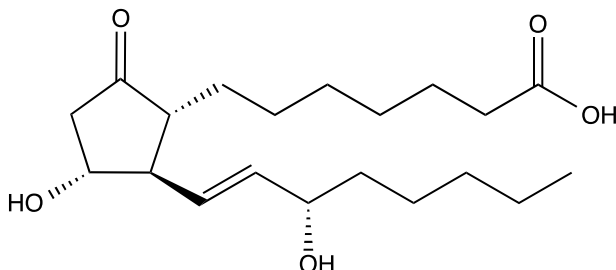
Catalog # 10-4455

Prostaglandin E₁

CAS# 745-65-3

PGE₁; Alprostadil; (11a, 13E, 15S)-11,15-Dihydroxy-9-oxo-prost-13-en-1-oic acid

Lot # FBS2059



PGE₁ is an endogenous prostaglandin with vasodilatory, anti-platelet, and, anti-hypertensive activities.^{1,2} It is in clinical use for the treatment of erectile dysfunction³ and the emergency management of infants with patent ductus arteriosus⁴. It has also been used in the treatment of peripheral arterial occlusive disease (PAD).⁵

- 1) Kirtland (1988) *Prostaglandin E1: 1 review*; Prostaglandins Leukot.Essent.Fatty Acids; **32** 165
- 2) Schermuly *et al.* (2005) *Prostanoids and Phosphodiesterase Inhibitors in Experimental Pulmonary Hypertension*; Curr.Top.Dev.Biol. **67** 251
- 3) Urciuoli *et al* (2004) *Prostaglandin E1 for treatment of erectile dysfunction*; Cochrane Database Syst.Rev. CD001784
- 4) Huang *et al.* (2013) *Reappraisal of the prostaglandin E1 dose for early newborns with patent ductus arteriosus-dependent pulmonary circulation*; Pediatr.Neonatol. **54** 102
- 5) Schroer and Hohlfeld (2004) *Mechanisms of anti-ischemic action of prostaglandin E1 in peripheral arterial occlusive disease*; Vasa **33** 119

PHYSICAL DATA

Molecular Weight: 354.49
Molecular Formula: C₂₀H₃₄O₅
Purity: >99% by HPLC
NMR: (Conforms)
Solubility: DMSO (>25 mg/ml) and ethanol (15 mg/mL)
Physical Description: White solid
Storage and Stability: Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

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