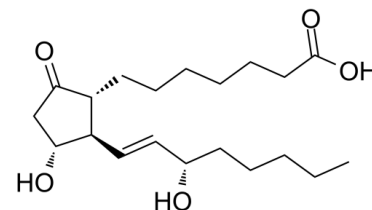


Data Sheet

Product Name:	Prostaglandin E1
Cat. No.:	CS-1905
CAS No.:	745-65-3
Molecular Formula:	C ₂₀ H ₃₄ O ₅
Molecular Weight:	354.48
Target:	Endogenous Metabolite; Prostaglandin Receptor
Pathway:	GPCR/G Protein; Metabolic Enzyme/Protease
Solubility:	Ethanol : 100 mg/mL (282.10 mM; Need ultrasonic); DMSO : 100 mg/mL (282.10 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Prostaglandin E1 (Alprostadil) is a prostaglandin, which is used in the treatment of erectile dysfunction and has vasodilatory properties. Target: Prostaglandin Receptor Prostaglandin E1 (PGE₁), known pharmaceutically as alprostadil, is a prostaglandin. It is a drug used in the treatment of erectile dysfunction and has vasodilatory properties. In healthy humans, prostaglandin E1 is biosynthesized "on demand" at its intended site of action from dihomo- γ -linolenic acid. Alprostadil is a naturally occurring prostaglandin used in the treatment of infants with congenital heart defects to maintain the patency of the ductus arteriosus until palliative or corrective surgery can be performed. In infants with defects restricting pulmonary blood flow (cyanotic), alprostadil improves arterial blood oxygenation. In infants with defects restricting systemic blood flow, alprostadil improves arterial blood pH, urine output, and femoral arterial pulses. Alprostadil is administered by continuous intraarterial or intravenous infusion, usually at a starting dose of 0.1 microgram/kg/min, with maintenance doses as low as 0.002 microgram/kg/min.

References:

- [1]. Cawello W, et al. Dose proportional pharmacokinetics of alprostadil (prostaglandin E1) in healthy volunteers following intravenous infusion. Br J Clin Pharmacol. 1995 Sep;40(3):273-6.
- [2]. Roehl SL, et al. Alprostadil (Prostin VR Pediatric Sterile Solution, The Upjohn Company). Drug Intell Clin Pharm. 1982 Nov;16(11):823-32.
- [3]. Harding LM, et al. Comparison of a needle-free high-pressure injection system with needle-tipped injection of intracavernosal alprostadil for erectile dysfunction. Int J Impot Res. 2002 Dec;14(6):498-501.

CAIndexNames:

Prost-13-en-1-oic acid, 11,15-dihydroxy-9-oxo-, (11 α ,13E,15S)-

SMILES:

CCCCC[C@H](O)/C=C/[C@@H]1[C@H](C(C[C@H]1O)=O)CCCCC(O)=O

Caution: Product has not been fully validated for medical applications. For research use only.

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