

Prostaglandin E1

Chemical Properties

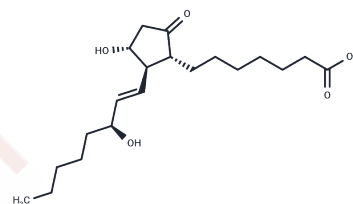
CAS No. : 745-65-3

Formula: C₂₀H₃₄O₅

Molecular Weight: 354.48

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Prostaglandin E1 (Alprostadi) is the naturally occurring prostaglandin E1 (PGE1) which displays a variety of pharmacologic actions. Prostaglandin E1 is a potent vasodilator agent that increases peripheral blood flow, inhibits platelet aggregation, and induces bronchodilation. Used in the treatment of erectile dysfunction, this agent produces corporal smooth muscle relaxation by binding to PGE receptors, resulting in the activation of adenylate cyclase and the subsequent accumulation of 3'5'-cAMP.
Targets(IC50)	Endogenous Metabolite,Prostaglandin Receptor

Solubility Information

Solubility	DMSO: 100 mg/mL (282.1 mM) Ethanol: 100 mg/mL (282.1 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.821 mL	14.1052 mL	28.2103 mL
5 mM	0.5642 mL	2.821 mL	5.6421 mL
10 mM	0.2821 mL	1.4105 mL	2.821 mL
50 mM	0.0564 mL	0.2821 mL	0.5642 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

- Dijkstra BG, et al. Invest Ophthalmol Vis Sci. 1999 Oct; 40(11):2622-6.
- Zhang T, Liu L, Huang X, et al. Application of microfluidic chip technology to study the inhibitory effect of tetramethylpyrazine on platelet aggregation, activation, and phosphatidylserine exposure mediated by pathological high shear rate. Blood Coagulation & Fibrinolysis. 2023, 34(1): 47-60.
- Zhang T, Liu L, Huang X, et al. The rapid change of shear rate gradient is beneficial to platelet activation. Platelets. 2024, 35(1): 2288679.
- Zhang Y, Zhang J X, Xiao L X, et al. The Synergistic Effect of Huangqi Gegen Decoction on Thrombosis relates to the Astragalus Polysaccharide-improved Oral Delivery of Puerarin. Journal of Ethnopharmacology. 2024: 118622.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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