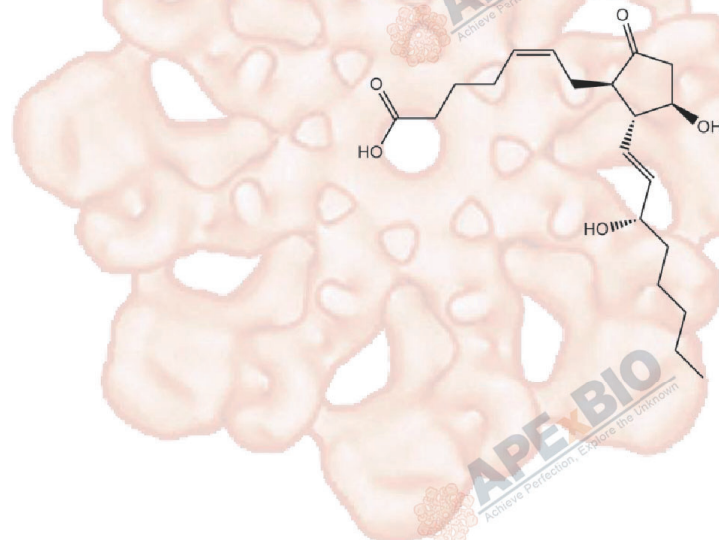


Product Data Sheet

Prostaglandin E2

Cat. No.:	B7005
CAS No.:	363-24-6
Formula:	C20H32O5
M.Wt:	352.47
Synonyms:	
Target:	GPCR/G protein
Pathway:	Prostanoid Receptors
Storage:	Store at -20°C



Solvent & Solubility

≥35.2 mg/mL in EtOH; insoluble in H2O; ≥42.8 mg/mL in DMSO

In Vitro	Preparing Stock Solutions	Mass			
		Solvent Concentration	1mg	5mg	10mg
		1 mM	2.8371 mL	14.1856 mL	28.3712 mL
		5 mM	0.5674 mL	2.8371 mL	5.6742 mL
		10 mM	0.2837 mL	1.4186 mL	2.8371 mL

Please refer to the solubility information to select the appropriate solvent

Biological Activity

Shortsummary	Endogenous prostaglandin	
IC ₅₀ & Target		
In Vitro	Cell Viability Assay	
	Cell Line:	HEK293 cells
	Preparation method:	The solubility of this compound in DMSO is > 10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	N/A	

	Applications:	In HEK293 cells, prostaglandin E2 bound the FP receptor with Ki value of 119 nM. PGE2 production in the kidney is critical for normal renal function by preserving renal blood flow and glomerular filtration rate in settings of physiological stress, modulating salt and water transport in the distal tubule, and stimulating renin release from the juxtaglomerular apparatus.
In Vivo	Animal experiment	
	Dosage form:	oral 1 mg three times daily or 0.33 mg three times daily
	Applications:	In patients with rheumatic diseases, the indomethacin-induced bleeding was reduced to control level by concomitant oral PGE2 1 mg three times daily and was significantly reduced by 0.33 mg three times daily.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

- [1] Hata AN, Breyer RM. Pharmacology and signaling of prostaglandin receptors: multiple roles in inflammation and immune modulation. *Pharmacol Ther*. 2004 Aug;103(2):147-66.
- [2] Johansson C, Kollberg B. Clinical trials with prostaglandin E2. *Prostaglandins*. 1981;21 Suppl:161-4.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

