Prostaglandin E_2

Prostanoid receptor ligand

Biosynthesis in numerous cell types. Potent vasodilator. Exerts both anti- and proinflammatory activities by inhibition of mediator release and enhancement of mediator action. Stimulates bone resorption. Synergizes with LTB4. Facilitates replication of AIDS virus. Regulates sleep/wake cycle. Thermoregulatory action in the CNS. Induces LHRH release from rat median eminence. Regulates renal hemodynamics and sodium excretion. One of the primary cyclooxygenase (COX) products of arachidonic acid and one of the most widely investigated prostaglandins.

Its activity influences inflammation, fertility and parturition, gastric mucosal integrity and immune modulation. The effects of PGE2 are transduced by at least four distinct receptors designated EP1, EP2, EP3, and EP4. Affinity constants (Kd) of PGE2 for these receptors range from 1-10nM depending on the receptor subtype and tissue. Regulates vertebrate hematopoietic stem cell homeostasis.

Citations: 8 View Online »

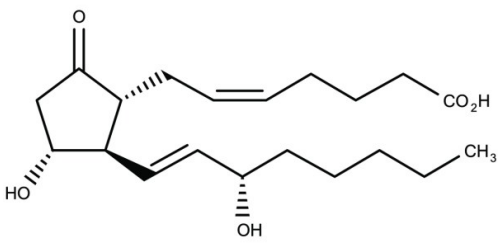
Ordering Information

Order Online »

BML-PG007-0001	1mg
BML-PG007-0010	10mg

Manuals, SDS & CofA

View Online »


O
CO2H
CH3
HO
OH

Handling & Storage

Use/Stability	As indicated on product label or CoA when stored as recommended. Stable for at least 2 years after receipt when stored at -20°C. Avoid basic solutions (pH > 7.4), since Prostaglandin E2 will degrade to PGA and PGB. We do not recommend storing aqueous solutions for more than one day.
Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	PGE2
Appearance	White to off-white crystalline powder.
CAS	363-24-6
Couple Target	Prostanoid receptor
Couple Type	Ligand
Formula	$C_{20}H_{32}O_5$
MI	**14:** 7877
MW	352.5
Purity	≥97% (HPLC)
Solubility	Soluble in 100% ethanol, DMSO or dimethylformamide (100mg/ml); soluble in acetone. Sparingly soluble in PBS, pH 7.2 (5mg/ml).

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ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com

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