

# Prostaglandin E<sub>2</sub>

## 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 LTB<sub>4</sub>. 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 PGE<sub>2</sub> are transduced by at least four distinct receptors designated EP<sub>1</sub>, EP<sub>2</sub>, EP<sub>3</sub>, and EP<sub>4</sub>. Affinity constants (K<sub>d</sub>) of PGE<sub>2</sub> for these receptors range from 1-10nM depending on the receptor subtype and tissue. Regulates vertebrate hematopoietic stem cell homeostasis.

Citations: 8

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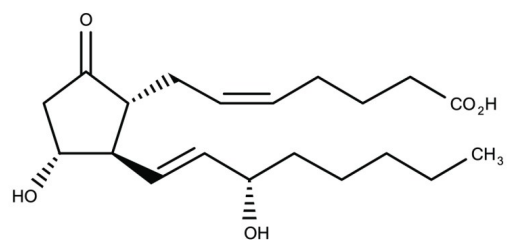
## Ordering Information

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

## Manuals, SDS & CofA

[View Online »](#)



## 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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