

**Goat Anti-PTGER3 / EP3 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1880a****Specification**

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**Goat Anti-PTGER3 / EP3 Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">P43115</a>
Other Accession	<a href="#">NP_942006</a> , <a href="#">5733</a>
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	43310

**Goat Anti-PTGER3 / EP3 Antibody - Additional Information****Gene ID** 5733**Other Names**

Prostaglandin E2 receptor EP3 subtype, PGE receptor EP3 subtype, PGE2 receptor EP3 subtype, PGE2-R, Prostanoid EP3 receptor, PTGER3

**Dilution**

WB~~1:1000

E~~N/A

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-PTGER3 / EP3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-PTGER3 / EP3 Antibody - Protein Information****Name** PTGER3**Function**

Receptor for prostaglandin E2 (PGE2) (PubMed:&lt;a href="http://www.uniprot.org/citations/7883006" target="\_blank"&gt;7883006&lt;/a&gt;, PubMed:&lt;a

[7981210](http://www.uniprot.org/citations/7981210), PubMed: [8117308](http://www.uniprot.org/citations/8117308), PubMed: [8135729](http://www.uniprot.org/citations/8135729), PubMed: [8307176](http://www.uniprot.org/citations/8307176)). The activity of this receptor can couple to both the inhibition of adenylate cyclase mediated by G(i) proteins, and to an elevation of intracellular calcium (PubMed: [7883006](http://www.uniprot.org/citations/7883006), PubMed: [7981210](http://www.uniprot.org/citations/7981210), PubMed: [8117308](http://www.uniprot.org/citations/8117308), PubMed: [8135729](http://www.uniprot.org/citations/8135729)). Required for normal development of fever in response to pyrinogens, including IL1B, prostaglandin E2 and bacterial lipopolysaccharide (LPS). Required for normal potentiation of platelet aggregation by prostaglandin E2, and thus plays a role in the regulation of blood coagulation. Required for increased HCO<sub>3</sub><sup>-</sup> secretion in the duodenum in response to mucosal acidification, and thereby contributes to the protection of the mucosa against acid- induced ulceration. Not required for normal kidney function, normal urine volume and osmolality (By similarity).

### Cellular Location

Cell membrane; Multi-pass membrane protein

### Tissue Location

Detected in kidney (PubMed:8117308, PubMed:8135729). Expressed in small intestine, heart, pancreas, gastric fundic mucosa, mammary artery and pulmonary vessels

## Goat Anti-PTGER3 / EP3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Goat Anti-PTGER3 / EP3 Antibody - Images



AF1880a (1 µg/ml) staining of Human Adipose lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### **Goat Anti-PTGER3 / EP3 Antibody - Background**

The protein encoded by this gene is a member of the G-protein coupled receptor family. This protein is one of four receptors identified for prostaglandin E2 (PGE2). This receptor may have many biological functions, which involve digestion, nervous system, kidney reabsorption, and uterine contraction activities. Studies of the mouse counterpart suggest that this receptor may also mediate adrenocorticotrophic hormone response as well as fever generation in response to exogenous and endogenous stimuli. Multiple transcript variants encoding different isoforms have been found for this gene.

### **Goat Anti-PTGER3 / EP3 Antibody - References**

A genetic association study of maternal and fetal candidate genes that predispose to preterm prelabor rupture of membranes (PROM). Romero R, et al. Am J Obstet Gynecol, 2010 Jul 29. PMID 20673868.

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Association of PTGER gene family polymorphisms with aspirin intolerant asthma in Korean asthmatics. Park BL, et al. BMB Rep, 2010 Jun. PMID 20587336.

Differential regulation of the aggressive phenotype of inflammatory breast cancer cells by prostanoid receptors EP3 and EP4. Robertson FM, et al. Cancer, 2010 Jun 1. PMID 20503412.

Identification of fetal and maternal single nucleotide polymorphisms in candidate genes that predispose to spontaneous preterm labor with intact membranes. Romero R, et al. Am J Obstet Gynecol, 2010 May. PMID 20452482.