

**Goat Anti-EP4 prostaglandin receptor Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1371a****Specification**

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**Goat Anti-EP4 prostaglandin receptor Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">P35408</a>
Other Accession	<a href="#">NP_000949</a> , <a href="#">5734</a>
Reactivity	Human
Predicted	Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	53119

**Goat Anti-EP4 prostaglandin receptor Antibody - Additional Information****Gene ID** 5734**Other Names**

Prostaglandin E2 receptor EP4 subtype, PGE receptor EP4 subtype, PGE2 receptor EP4 subtype, Prostanoid EP4 receptor, PTGER4, PTGER2

**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-EP4 prostaglandin receptor Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-EP4 prostaglandin receptor Antibody - Protein Information****Name** PTGER4**Synonyms** PTGER2

**Function**

Receptor for prostaglandin E2 (PGE2). The activity of this receptor is mediated by G(s) proteins that stimulate adenylate cyclase. Has a relaxing effect on smooth muscle. May play an important role in regulating renal hemodynamics, intestinal epithelial transport, adrenal aldosterone secretion, and uterine function.

**Cellular Location**

Cell membrane; Multi-pass membrane protein.

**Tissue Location**

High in intestine and in peripheral blood mononuclear cells; low in lung, kidney, thymus, uterus, vasculature and brain. Not found in liver, heart, retina or skeletal muscle

**Goat Anti-EP4 prostaglandin receptor 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-EP4 prostaglandin receptor Antibody - Images**

AF1371a (0.1 µg/ml) staining of Human Testes lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

**Goat Anti-EP4 prostaglandin receptor 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 can activate T-cell factor signaling. It has been shown to mediate PGE2 induced expression of early growth response 1 (EGR1), regulate the level and stability of cyclooxygenase-2 mRNA, and lead to the phosphorylation of glycogen synthase kinase-3. Knockout studies in mice suggest that this receptor may be involved in the neonatal adaptation of circulatory system, osteoporosis, as well as initiation of skin immune responses.

## **Goat Anti-EP4 prostaglandin receptor 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.

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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.