

# Goat Anti-EP4 prostaglandin receptor Antibody

Peptide-affinity purified goat antibody Catalog # AF1371a

## **Specification**

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

Application WB
Primary Accession P35408

Other Accession <u>NP\_000949</u>, <u>5734</u>

Reactivity
Predicted
Dog
Host
Clonality
Concentration
Usotype
Human
Dog
Goat
Coat
Polyclonal
O.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

### **Format**

0.5~mg lgG/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**

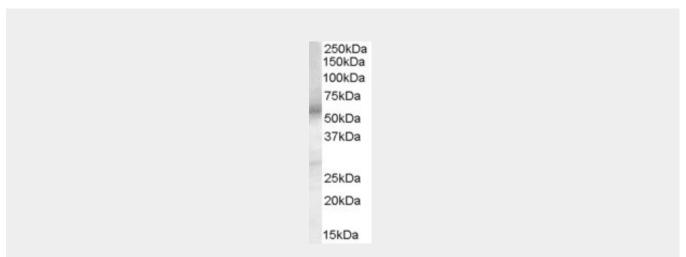
High in intestine and in peripheral blood mononuclear cells; low in lung, kidney, thymus, uterus, vasculature and brain. Not found in liver, heart, retina oe skeletal muscle

## 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 Cytomety
- Cell Culture

## Goat Anti-EP4 prostaglandin receptor Antibody - Images



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

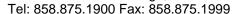
# Goat Anti-EP4 prostaglandin receptor Antibody - Background

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 Thiazolinedinedione-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.

Genome-wide searching of rare genetic variants in WTCCC data. Feng T, et al. Hum Genet, 2010 Sep. PMID 20549515.

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.