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Anti-PTGER4 Picoband Antibody

Catalog # ABO10231

Specification

Anti-PTGER4 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	P35408
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Prostaglandin E2 receptor EP4 subtype(PTGER4) detection. Tested with WB in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-PTGER4 Picoband 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

Calculated MW
53119 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Cell membrane; Multi-pass membrane protein.

Tissue Specificity
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.

Protein Name
Prostaglandin E2 receptor EP4 subtype

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human PTGER4 (311-345aa DLQAIRIASVNPILDPWIYILLRKTVLSKAIEKIK), identical to the related mouse and rat sequences.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-PTGER4 Picoband 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

Anti-PTGER4 Picoband 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

Anti-PTGER4 Picoband Antibody - Images

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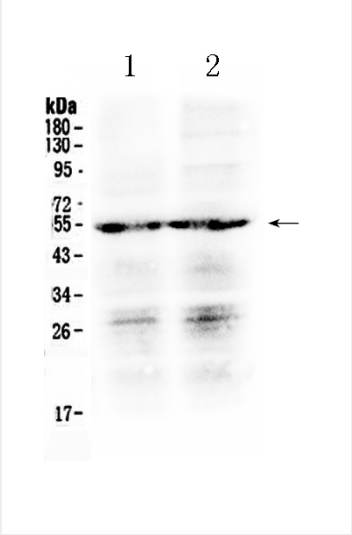

Figure 1. Western blot analysis of PTGER4 using anti- PTGER4 antibody (ABO10231). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: SW620 whole Cell lysates, Lane 2: MCF-7 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- PTGER4 antigen affinity purified polyclonal antibody (Catalog # ABO10231) at 0.5 Î¼g/mL overnight at 4Â°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PTGER4 at approximately 53KD. The expected band size for PTGER4 is at 53KD.

Anti-PTGER4 Picoband Antibody - Background

Prostaglandin E2 receptor 4 (EP4) is a prostaglandin receptor encoded by the PTGER4 gene in humans. 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.