

Anti-Prostaglandin E Receptor EP1 Antibody
Catalog # ABO10897**Specification**

Anti-Prostaglandin E Receptor EP1 Antibody - Product Information

Application	WB
Primary Accession	P34995
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Prostaglandin E2 receptor EP1 subtype(PTGER1) detection.
Tested with WB in Human.

Reconstitution

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

Anti-Prostaglandin E Receptor EP1 Antibody - Additional Information

Gene ID 5731

Other Names

Prostaglandin E2 receptor EP1 subtype, PGE receptor EP1 subtype, PGE2 receptor EP1 subtype, Prostanoid EP1 receptor, PTGER1

Calculated MW

41801 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Cell membrane; Multi-pass membrane protein.

Tissue Specificity

Abundant in kidney. Lower level expression in lung, skeletal muscle and spleen, lowest expression in testis and not detected in liver brain and heart.

Protein Name

Prostaglandin E2 receptor EP1 subtype(PGE receptor EP1 subtype/PGE2 receptor EP1 subtype)

Contents

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

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Prostaglandin E Receptor EP1(387-404aa AWEASSLRSSRHSGLSHF).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, 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.

Sequence Similarities

Belongs to the G-protein coupled receptor 1 family.

Anti-Prostaglandin E Receptor EP1 Antibody - Protein Information

Name PTGER1

Function

Receptor for prostaglandin E2 (PGE2). The activity of this receptor is mediated by G(q) proteins which activate a phosphatidylinositol-calcium second messenger system. May play a role as an important modulator of renal function. Implicated the smooth muscle contractile response to PGE2 in various tissues.

Cellular Location

Cell membrane; Multi-pass membrane protein.

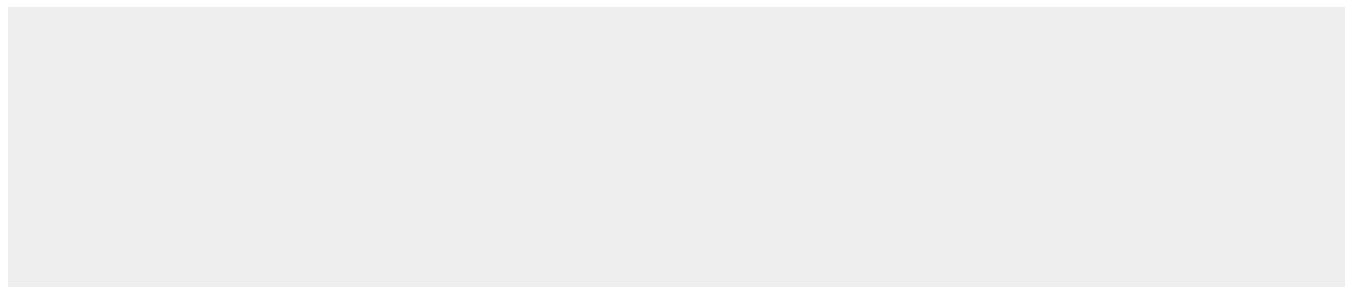
Tissue Location

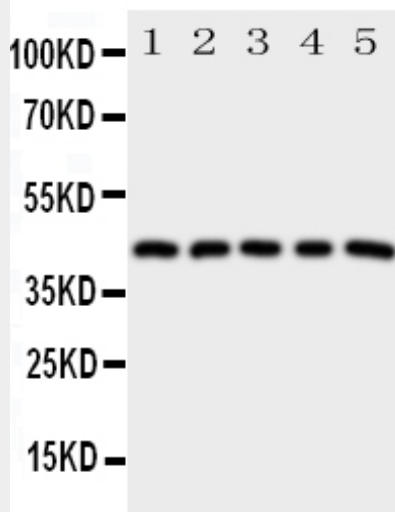
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Anti-Prostaglandin E Receptor EP1 Antibody - Protocols

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](#)

Anti-Prostaglandin E Receptor EP1 Antibody - Images



Anti-Prostaglandin E Receptor EP1 antibody, ABO10897, Western blotting All lanes: Anti Prostaglandin E Receptor EP1 (ABO10897) at 0.5ug/ml Lane 1: HELA Whole Cell Lysate at 40ug Lane 2: A549 Whole Cell Lysate at 40ug Lane 3: MCF-7 Whole Cell Lysate at 40ug Lane 4: MM231 Whole Cell Lysate at 40ug Lane 5: MM453 Whole Cell Lysate at 40ug Predicted bind size: 42KD Observed bind size: 42KD

Anti-Prostaglandin E Receptor EP1 Antibody - Background

PTGER1, Prostaglandin E Receptor 1, comprises 402 amino acids with a predicted molecular mass of 41, 858 and has the 7 predicted transmembrane-spanning domains common to all G protein-coupled receptors. The PTGER1 gene is mapped to chromosome 19p13.1. 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). Through a phosphatidylinositol-calcium second messenger system, G_q proteins mediate this receptor's activity. Knockout studies in mice suggested a role of this receptor in mediating algesia and in regulation of blood pressure. Studies in mice also suggested that this gene may mediate adrenocorticotrophic hormone response to bacterial endotoxin.