abcam

Product datasheet

Anti-Prostaglandin E Receptor EP2/PTGER2 antibody [EPR8030(B)] ab167171

Recombinant RabMAb

**** 2 Abreviews 15 References 7 Images

Overview

Product name Anti-Prostaglandin E Receptor EP2/PTGER2 antibody [EPR8030(B)]

DescriptionRabbit monoclonal [EPR8030(B)] to Prostaglandin E Receptor EP2/PTGER2

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), WB, ICC/IF

Unsuitable for: IHC-P

Species reactivity Reacts with: Mouse, Rat, Cow, Human

Immunogen Synthetic peptide corresponding to Human Prostaglandin E Receptor EP2/PTGER2 aa 300-400

(C terminal).

Database link: P43116

Positive control Human fetal lung, JAR and WI38 cell lysates. This antibody gave a positive result when used in the

following methanol fixed cell lines: SV40LT-SMC

General notesThis product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

Animal-free production
 For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

1

ClonalityMonoclonalClone numberEPR8030(B)

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab167171 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/80 - 1/500. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB	****(1)	1/1000 - 1/10000. Predicted molecular weight: 40 kDa.
ICC/IF		1/250 - 1/500.

Application notes Is unsuitable for IHC-P.

Target

Function Receptor for prostaglandin E2 (PGE2). The activity of this receptor is mediated by G(s) proteins

that stimulate adenylate cyclase. The subsequent raise in intracellular cAMP is responsible for the

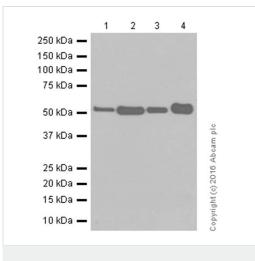
relaxing effect of this receptor on smooth muscle.

Tissue specificity Placenta and lung.

Sequence similarities Belongs to the G-protein coupled receptor 1 family.

Cellular localization Cell membrane.

Images



Western blot - Anti-Prostaglandin E Receptor EP2/PTGER2 antibody [EPR8030(B)] (ab167171)

All lanes : Anti-Prostaglandin E Receptor EP2/PTGER2 antibody [EPR8030(B)] (ab167171) at 1/1000 dilution

Lane 1: Mouse kidney tissue lysate

Lane 2: Mouse spleen tissue lysate

Lane 3: Rat spleen tissue lysate

Lane 4: MDBK (cow kidney) whole cell lysate

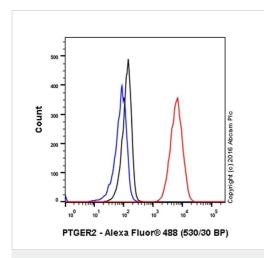
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 40 kDa

Blocking and diluting buffer: 5% NFDM/TBST



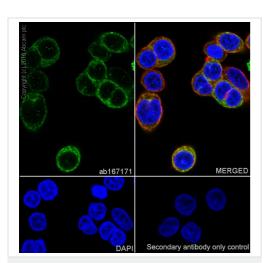
Flow Cytometry (Intracellular) - Anti-Prostaglandin E Receptor EP2/PTGER2 antibody [EPR8030(B)] (ab167171)

ab167171 staining Prostaglandin E Receptor EP2/PTGER2 in theWI-38 (Human Fetal Lung Fibroblast) cell lineby intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde and the sample was incubated with the primary antibody at a dilution of 1/80. A goat anti rabbit IgG (Alexa Fluor[®] 488) at a dilution of 1/2000was used as the secondary antibody.

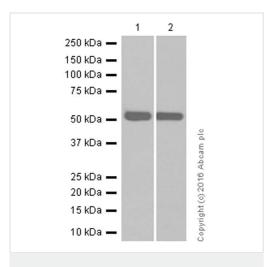
Isoytype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody

and secondary antibody (Blue)



Immunocytochemistry/ Immunofluorescence - Anti-Prostaglandin E Receptor EP2/PTGER2 antibody [EPR8030(B)] (ab167171)



Western blot - Anti-Prostaglandin E Receptor EP2/PTGER2 antibody [EPR8030(B)] (ab167171)

ab167171 staining Prostaglandin E Receptor EP2/PTGER2 in WI-38 (Human Fetal Lung Fibroblast) cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody at a dilution of 1/250. A goat anti rabbit IgG (Alexa Fluor® 488) (ab150077) was used as the secondary antibody at 1/1000. ab7291 and ab150120 were used as counterstains for primary antibody ab167171 and secondary antibody ab150077 respectively and DAPI was used as a nuclear counterstain.

Negative control 1: Rabbit primary antibody and anti-mouse secondary antibody (<u>ab150120</u>)

Negative control 2: Mouse primary antibody (<u>ab7291</u>) and antirabbit secondary antibody (<u>ab150077</u>)

All lanes : Anti-Prostaglandin E Receptor EP2/PTGER2 antibody [EPR8030(B)] (ab167171) at 1/1000 dilution

Lane 1: Mouse kidney tissue lysate

Lane 2: WI-38 (human lung) whole cell lysate

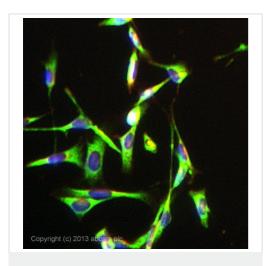
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

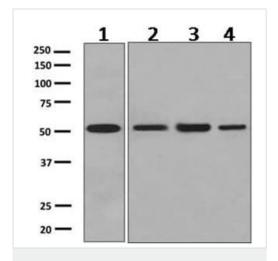
Predicted band size: 40 kDa

Blocking and diluting buffer: 5% NFDM/TBST



Immunocytochemistry/ Immunofluorescence - Anti-Prostaglandin E Receptor EP2/PTGER2 antibody [EPR8030(B)] (ab167171)

ab167171 stained SV40LT-SMC (rat) cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab167171 at 1/200 dilution overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- rabbit (ab96899) lgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 μ M.



Western blot - Anti-Prostaglandin E Receptor EP2/PTGER2 antibody [EPR8030(B)] (ab167171)

All lanes : Anti-Prostaglandin E Receptor EP2/PTGER2 antibody [EPR8030(B)] (ab167171) at 1/1000 dilution

Lane 1 : Human placenta lysates

Lane 2: Human fetal lung lysates

Lane 3 : JAR cell lysates

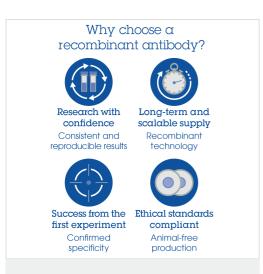
Lane 4 : WI38 cell lysates

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP labeled goat anti-rabbit at 1/2000 dilution

Predicted band size: 40 kDa



Anti-Prostaglandin E Receptor EP2/PTGER2 antibody [EPR8030(B)] (ab167171)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors