abcam

Product datasheet

# Anti-CD31 antibody [EPR17259] ab182981

重组 RabMAb

★★★★★ 19 Abreviews 140 References 6 图像

## 概述

| | |
|---|---|
| **产品名称** | Anti-CD31抗体[EPR17259] |
| **描述** | 兔单克隆抗体[EPR17259] to CD31 |
| **宿主** | Rabbit |
| **经测试应用** | **适用于:** IHC-P, mIHC |
| **种属反应性** | **与反应:** Mouse, Rat, Human |
| **免疫原** | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. |
| **阳性对照** | IHC-P: Human kidney and lung tissues; Mouse and rat lung tissues. mIHC: Human endometrium tissue. |
| **常规说明** | This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information **see here**.<br>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. |

## 性能

| | |
|---|---|
| **形式** | Liquid |
| **存放说明** | 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. |
| **存储溶液** | pH: 7.2<br>Preservative: 0.01% Sodium azide<br>Constituents: 0.05% BSA, 40% Glycerol, PBS |
| **纯度** | Protein A purified |
| **克隆** | 单克隆 |
| **克隆编号** | EPR17259 |
| **同种型** | IgG |

## 应用

**The Abpromise guarantee** **Abpromise™承诺保证使用ab182981于以下的经测试应用**

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

| 应用 | Ab评论 | 说明 |
|---|---|---|
| **IHC-P** | ★★★★★ (13) | 1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. In our hands we observed non-specific cytoplasmic staining on tubular cells in rat kidney.<br>The ideal fixation time will depend on the size of the tissue block and the type of tissue, but fixation between 18–24h is suitable for most samples. |
| **mIHC** | | 1/4000. |

## 靶标

**功能**

Induces susceptibility to atherosclerosis (By similarity). Cell adhesion molecule which is required for leukocyte transendothelial migration (TEM) under most inflammatory conditions. Tyr-690 plays a critical role in TEM and is required for efficient trafficking of PECAM1 to and from the lateral border recycling compartment (LBRC) and is also essential for the LBRC membrane to be targeted around migrating leukocytes. Prevents phagocyte ingestion of closely apposed viable cells by transmitting 'detachment' signals, and changes function on apoptosis, promoting tethering of dying cells to phagocytes (the encounter of a viable cell with a phagocyte via the homophilic interaction of PECAM1 on both cell surfaces leads to the viable cell's active repulsion from the phagocyte. During apoptosis, the inside-out signaling of PECAM1 is somehow disabled so that the apoptotic cell does not actively reject the phagocyte anymore. The lack of this repulsion signal together with the interaction of the eat-me signals and their respective receptors causes the attachment of the apoptotic cell to the phagocyte, thus triggering the process of engulfment). Isoform Delta15 is unable to protect against apoptosis. Modulates BDKRB2 activation. Regulates bradykinin- and hyperosmotic shock-induced ERK1/2 activation in human umbilical cord vein cells (HUVEC).

**组织特异性**

Expressed on platelets and leukocytes and is primarily concentrated at the borders between endothelial cells. Isoform Long predominates in all tissues examined. Isoform Delta12 is detected only in trachea. Isoform Delta14-15 is only detected in lung. Isoform Delta14 is detected in all tissues examined with the strongest expression in heart. Isoform Delta15 is expressed in brain, testis, ovary, cell surface of platelets, human umbilical vein endothelial cells (HUVECs), Jurkat T-cell leukemia, human erythroleukemia (HEL) and U937 histiocytic lymphoma cell lines (at protein level).

**序列相似性**

Contains 6 Ig-like C2-type (immunoglobulin-like) domains.

**结构域**

The Ig-like C2-type domains 2 and 3 contribute to formation of the complex with BDKRB2 and in regulation of its activity.

**翻译后修饰**

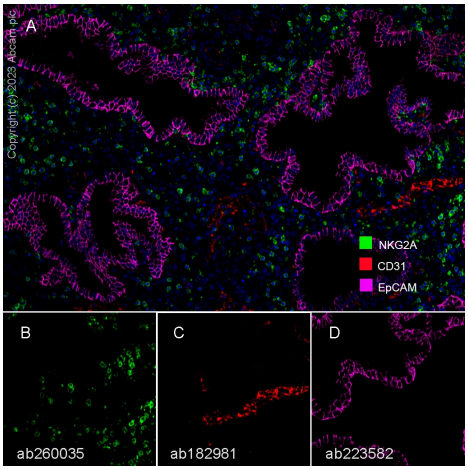
Phosphorylated on Ser and Tyr residues after cellular activation. In endothelial cells Fyn mediates mechanical-force (stretch or pull) induced tyrosine phosphorylation.

**细胞定位**

Membrane. Cell junction. Localizes to the lateral border recycling compartment (LBRC) and recycles from the LBRC to the junction in resting endothelial cells and Cell junction. Localizes to

the lateral border recycling compartment (LBRC) and recycles from the LBRC to the junction in resting endothelial cells.

## 图片




Multiplex immunohistochemistry - Anti-CD31 antibody [EPR17259] (ab182981)

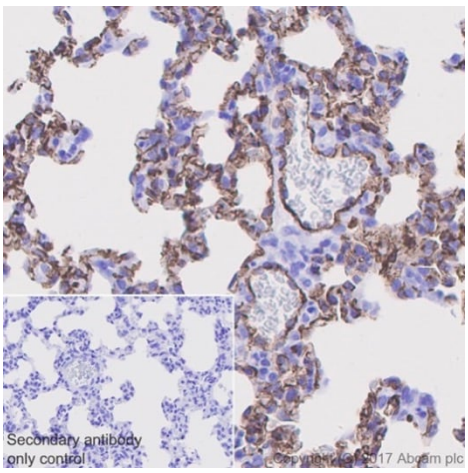
Fluorescence multiplex immunohistochemical analysis of the human endometrium (Formalin/PFA-fixed paraffin-embedded sections).

Panel A: merged staining of anti-EpCAM (**ab223582**, magenta; Opal™690), anti-NKG2A (**ab260035**, green; Opal™520) and anti-CD31 (ab182981, red; Opal™570) on human endometrium. Panel B: anti-NKG2A stained on NK cells. Panel C: anti-CD31 stained on endothelial cells. Panel D: anti-EpCAM stained on glandular cells. Opal Polymer HRP Ms + Rb was used as a secondary antibody.

The section was incubated in three rounds of staining: in the order of **ab223582** at 1/500 dilution (1.008 µg/ml), **ab260035** at 1/2000 dilution (0.262 µg/ml) and ab182981 at 1/4000 dilution (0.137 µg/ml) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain.

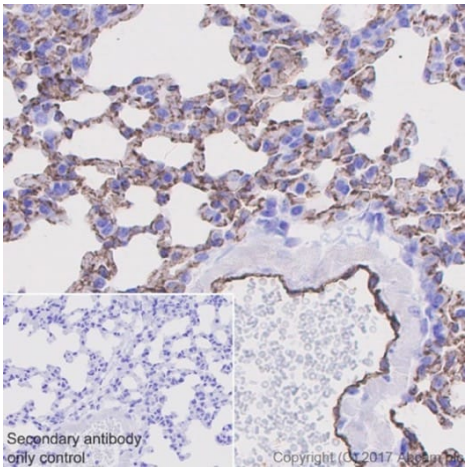



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [EPR17259] (ab182981)

Immunohistochemical analysis of paraffin-embedded rat lung tissue labeling CD31 with ab182981 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Membranous staining on endothelial cells in rat lung (PMID: 16234507) is observed. Counterstained with hematoxylin.

**Secondary antibody only control:** Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

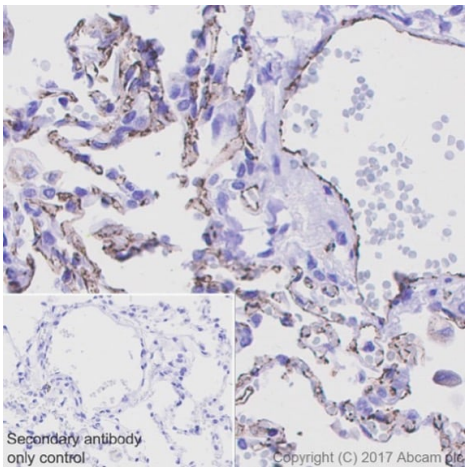



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [EPR17259] (ab182981)

Immunohistochemical analysis of paraffin-embedded mouse lung tissue labeling CD31 with ab182981 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Membranous staining on endothelial cells in mouse lung (PMID: 16234507) is observed. Counterstained with hematoxylin.

**Secondary antibody only control:** Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

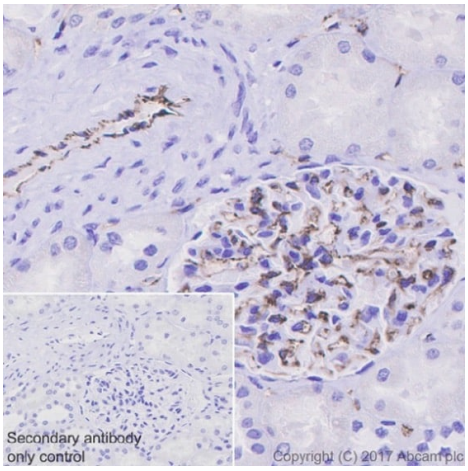



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [EPR17259] (ab182981)

Immunohistochemical analysis of paraffin-embedded human lung tissue labeling CD31 with ab182981 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Membranous staining on endothelial cells in human lung (PMID: 16234507) is observed. Counterstained with hematoxylin.

**Secondary antibody only control:** Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

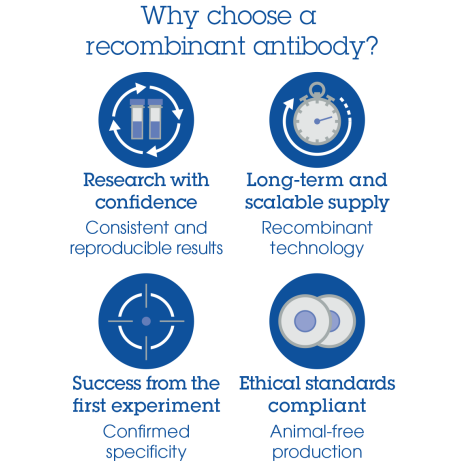



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [EPR17259] (ab182981)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling CD31 with ab182981 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Membranous staining on endothelial cells in human kidney (PMID: 16234507) is observed. Counterstained with hematoxylin.

**Secondary antibody only control:** Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.




Anti-CD31 antibody [EPR17259] (ab182981)

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