

### Anti-CD31 antibody [EP3095] ab134168

**重组** RabMAb

★★★★★ **7 Abreviews** **36 References** **9 图像**

#### 概述

产品名称	Anti-CD31抗体[EP3095]
描述	兔单克隆抗体[EP3095] to CD31
宿主	Rabbit
特异性	This antibody gave positive results in mouse and rat tissue staining via IHC-P, but we have had difficulties obtaining consistent positive results in WB with mouse and rat samples. Thus, at this time we unfortunately cannot guarantee this antibody to recognize mouse and rat CD31, and optimization may be necessary when working with these species.
经测试应用	<b>适用于:</b> Flow Cyt (Intra), IHC-P, WB <b>不适用于:</b> IP
种属反应性	<b>与反应:</b> Human
免疫原	Synthetic peptide within Human CD31 aa 700-800. The exact sequence is proprietary.
阳性对照	Human tonsil and uterus tissues; THP1 and Jurkat whole cell lysate ( <a href="#">ab7899</a> ).
常规说明	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
存储溶液	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
纯度	Protein A purified

克隆	单克隆
克隆编号	EP3095
同种型	IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab134168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
Flow Cyt (Intra)		1/100 - 1/1000. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IHC-P	★★★★★ (3)	1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. 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.  Positive Control: Hu tonsil tissue
WB	★★★★☆ (2)	1/1000 - 1/10000. Predicted molecular weight: 82 kDa. Treat samples with PNGase F or phosphatase to confirm the specificity of bands if necessary.  The observed band size of CD31 may not the same as predicted MWs in WB due to the different forms and modifications of CD31.  Hu Isoform 1-6: 79-83 kDa (predicted)

应用说明

Is unsuitable for IP.

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).
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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.

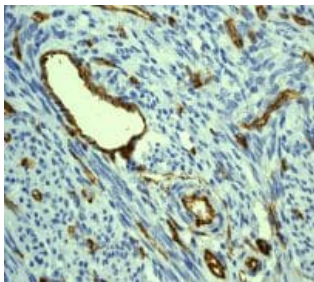
#### 翻译后修饰

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.

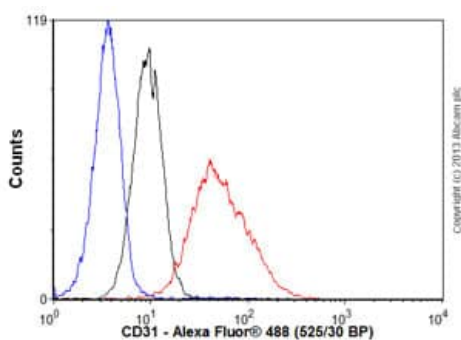
## 图片



Immunohistochemical analysis of paraffin-embedded Human uterus tissue, staining CD31 using ab134168 at a 1/250 dilution. Note membrane staining of endothelial cells.

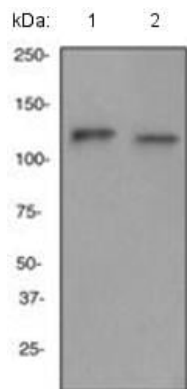
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [EP3095] (ab134168)



Flow Cytometry (Intracellular) - Anti-CD31 antibody [EP3095] (ab134168)

Overlay histogram showing Jurkat cells stained with ab134168 (red line). The cells were fixed with 80% methanol (5 min)/ and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab134168, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) ([ab150077](#)) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Western blot - Anti-CD31 antibody [EP3095]  
(ab134168)

**All lanes** : Anti-CD31 antibody [EP3095] (ab134168) at 1/1000 dilution

**Lane 1** : THP1 cell lysate

**Lane 2** : Jurkat cell lysate

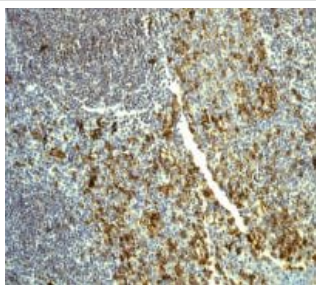
Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes** : Standard HRP labelled goat anti-rabbit at 1/2000 dilution

Developed using the ECL technique.

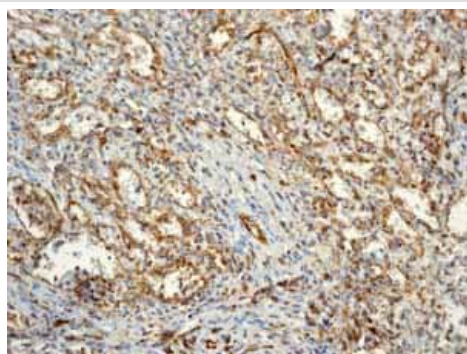
**Predicted band size:** 82 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [EP3095]  
(ab134168)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue, staining CD31 using ab134168 at a 1/250 dilution. Note membrane staining of endothelial cells.

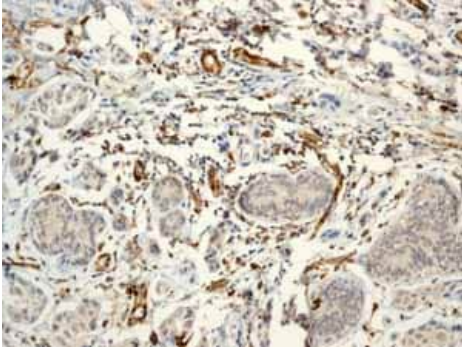
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [EP3095]  
(ab134168)

Immunohistochemical analysis of paraffin embedded normal Human spleen vessels tissue using ab134168 showing +ve staining.

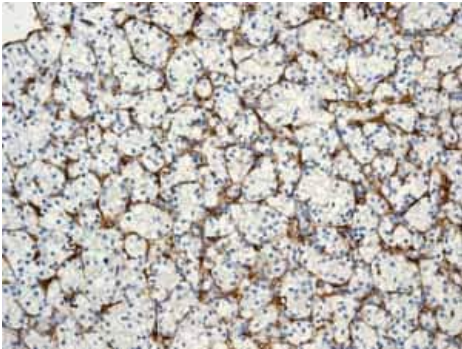
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [EP3095] (ab134168)

Immunohistochemical analysis of paraffin embedded Human Breast carcinoma vessels tissue using ab134168 showing +ve staining.

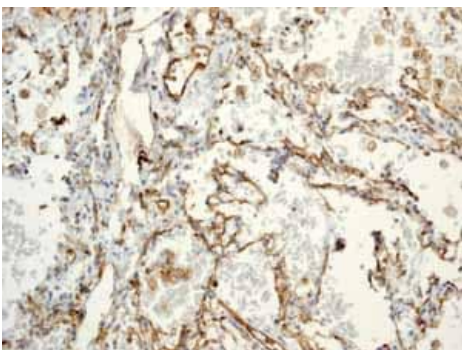
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [EP3095] (ab134168)

Immunohistochemical analysis of paraffin embedded Human Clear cell carcinoma of kidney tissue using ab134168 showing +ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [EP3095] (ab134168)

Immunohistochemical analysis of paraffin embedded normal Human lung tissue using ab134168 showing +ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-CD31 antibody [EP3095] (ab134168)

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