# abcam

# Product datasheet

# Alexa Fluor® 647 Anti-CD31 antibody [JC/70A] ab215912

2 References 2 图像

概述

产品名称 Alexa Fluor® 647荧光Anti-CD31抗体[JC/70A]

描述 Alexa Fluor® 647荧光小鼠单克隆抗体[JC/70A] to CD31

**宿主** Mouse

偶联物 Alexa Fluor® 647. Ex: 652nm, Em: 668nm

经测试应用 适用于: ICC, Flow Cyt (Intra)

种属反应性 与反应: Human

预测可用于: Cynomolgus monkey ▲

免疫原 Tissue, cells or virus corresponding to Human CD31. Membrane preparation of a spleen from a

patient with hairy cell leukaemia.

Database link: P16284

阳性对照 ICC: HUVEC cells. Flow Cyt (Intra): HUVEC and human PBMCs.

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The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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#### 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.

Avoid freeze / thaw cycle. Store In the Dark.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

纯**度** Immunogen affinity purified

 克隆
 单克隆

 克隆编号
 JC/70A

 同种型
 IgG1

 轻链类型
 kappa

#### 应用

# The Abpromise guarantee Abpromise™承诺保证使用ab215912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
ICC		1/100. This product gave a positive signal in HUVEC cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min).
		It is recommended to incubate cells with 0.1% Triton-X for 5 min to detect nuclear antigen. Use 0.3M glycine to quench autofluorescence caused by aldehydes.
Flow Cyt (Intra)		1/5000 - 1/12500.

#### 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 Tcell leukemia, human erythroleukemia (HEL) and U937 histiocytic lymphoma cell lines (at protein level).

序列相似性

Contains 6 lg-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.

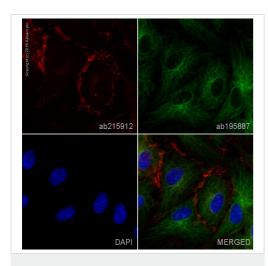
翻译后修饰

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

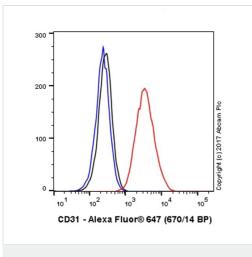


Immunocytochemistry - Alexa Fluor® 647 Anti-CD31 antibody [JC/70A] (ab215912)

ab215912 staining CD31 in HUVEC cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab215912 at 1/100 dilution (shown in red) and ab195887, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This product also gave a positive signal under the same testing conditions in HUVEC cells fixed with 4% formaldehyde (10 min).



Flow Cytometry (Intracellular) - Alexa Fluor® 647 Anti-CD31 antibody [JC/70A] (ab215912) Overlay histogram showing HUVEC cells stained with ab215912 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab215912, 1/5000 dilution) for 30 min at 22°C.

Isotype control antibody (black line) was Rabbit IgG (monoclonal) Alexa Fluor<sup>®</sup> 647 (<u>ab199093</u>) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 40 mW Red laser (640nm) and 670/14 bandpass filter.

This antibody gave a positive signal in HUVEC cells fixed with 4% formaldehyde (10 min)/permeabilized with 0.1% PBS-Triton X-100 for 15 min used under the same conditions.

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