abcam

Product datasheet

Anti-CD31 antibody [MEC 7.46] ab7388

重组

8 Abreviews 117 References 3 图像

概述

产品名称	Anti-CD31抗体[MEC 7.46]
描述	大鼠单克隆抗体[MEC 7.46] to CD31
宿主	Rat
特异性	The antibody reacts with the murine form of the Platelet-Endothelial Cell Adhesion Molecule. The reactivity of the antibody is restricted to the isoform of the molecule that is selectively expressed by endothelial cells. The antibody precipitates a 130 kDa molecule present on the membrane of endothelial cell presents on all mouse blood vessels both in normal and inflamed or tumor tissues. The antigen is predominantly present at the lateral borders of endothelial cells as described for human PECAM-1.
经测试应用	**适用于:** Flow Cyt, ICC/IF **不适用于:** IP or WB
种属反应性	**与反应:** Mouse
免疫原	Tissue, cells or virus. This information is proprietary to Abcam and/or its suppliers.
阳性对照	ICC: mouse bEnd.3 cell line; Flow Cyt: mouse bEnd.3 cell line
常规说明	This product has switched from a hybridoma to recombinant production method on 08th March 2021. This 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**.

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.
存储溶液	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 0.5% BSA, 40% Glycerol (glycerin, glycerine)

纯度	Protein A purified
克隆	单克隆
克隆编号	MEC 7.46
同种型	IgG1
轻链类型	kappa

应用

The Abpromise guarantee Abpromise™承诺保证使用ab7388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		1/1000.
ICC/IF	★★★☆☆ (1)	1/50.

应用说明 Is unsuitable for IP or WB.

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.

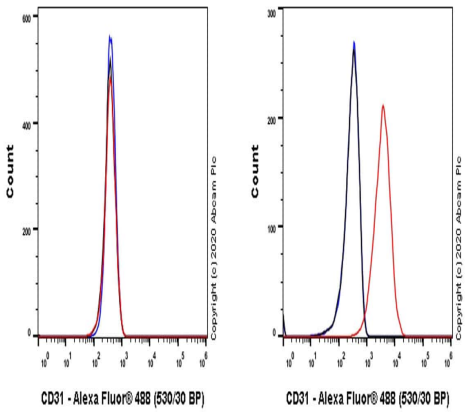
翻译后修饰 Phosphorylated on Ser and Tyr residues after cellular activation. In endothelial cells Fyn mediates

mechanical-force (stretch or pull) induced tyrosine phosphorylation.

细胞定位

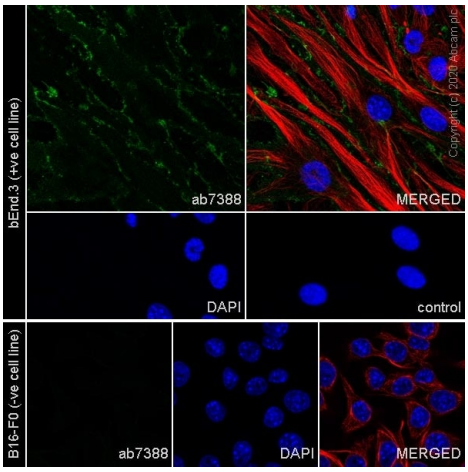
Membrane. Cell junction. Localizes to the lateral border recycling compartment (LBRC) and recycles from the LBRC to the junction in resting endothelial cells and Cell junction. Localizes to the lateral border recycling compartment (LBRC) and recycles from the LBRC to the junction in resting endothelial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

图片



Flow Cytometry - Anti-CD31 antibody [MEC 7.46] (ab7388)

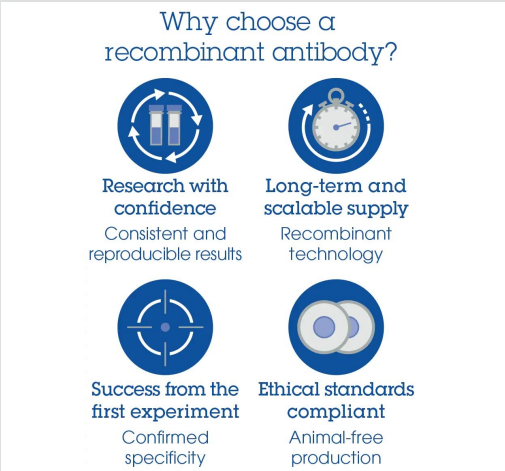
Flow cytometric analysis of / fixed / permeabilized B16-F0 (Mouse melanoma epithelial cell-like, Left) / bEnd.3 (Mouse brain endothelioma, Right) cells labelling CD31 with ab7388 at 1/1000 dilution (0.1µg) (Red) compared with a Rat monoclonal IgG (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat F(ab)2 Anti-Rat IgG Fc (Alexa Fluor® 488, **ab150161**) at 1/2000 dilution was used as the secondary antibody. Negative control: B16-F0.Gated on viable cells.



Immunocytochemistry/ Immunofluorescence - Anti-CD31 antibody [MEC 7.46] (ab7388)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized bEnd.3 cells labelling CD31 with ab7388 at 1/50 (19.32 µg/ml) dilution, followed by **ab150157** Goat Anti-Rat IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing membranous staining in bEnd.3 cell line. Negative control: B16-F0 (PMID: 8082649) **ab179513** Anti-beta Tubulin rabbit monoclonal antibody was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150157** Goat Anti-Rat IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



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