

Product datasheet

Anti-CD31 antibody [MEC 7.46] ab7388

★★★★☆ 6 Abreviews 51 References 画像数 3

製品の概要

製品名	Anti-CD31 antibody [MEC 7.46]
製品の詳細	Rat monoclonal [MEC 7.46] to CD31
特異性	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.
アプリケーション	適用あり: Flow Cyt, ICC/IF, IP, IHC-Fr 適用なし: IHC-P
種交差性	交差種: Mouse
免疫原	Mouse t.end.1 cells (polyoma middle T (PmT)-transformed EC)

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
バッファー	Preservative: 0.02% Sodium Azide Constituents: 0.1% BSA, PBS
精製度	IgG fraction
特記事項(精製)	0.2 µm filtered antibody solution.
ポリ/モノ	モノクローナル
クローン名	MEC 7.46
アイソタイプ	IgG1
軽鎖の種類	kappa

アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab7388** in the following tested applications.

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

アプリケーション	Abreviews	特記事項
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Flow Cyt Use at an assay dependent concentration.
No fixation or permeabilization needed. Epitope is sensitive to trypsin!
[ab18407](#) - Rat monoclonal IgG1, is suitable for use as an isotype control with this antibody.

ICC/IF ★★★★★ Use at an assay dependent concentration. Please see reviews for fixative recommendations. Certain users find acetone fixation necessary while others find 4% PFA necessary. In addition, found to work at 1/1000 dilution.

IP Use at an assay dependent concentration.

IHC-Fr ★★★★★ 1/10.
Acetone (-20°C) fixation for 10 minutes at room temperature is recommended.

追加情報 Is unsuitable for IHC-P.

ターゲット情報

機能 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).

組織特異性 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).

配列類似性 Contains 6 Ig-like C2-type (immunoglobulin-like) domains.

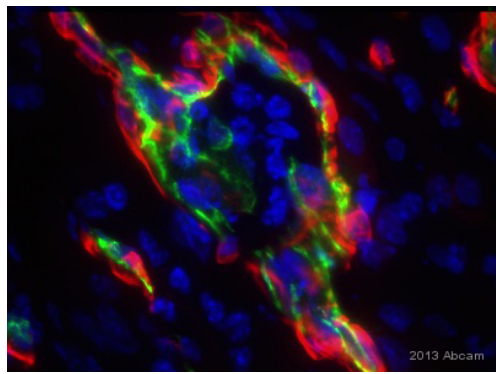
ドメイン The Ig-like C2-type domains 2 and 3 contribute to formation of the complex with BDKRB2 and in regulation of its activity.

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

細胞内局在 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.

画像



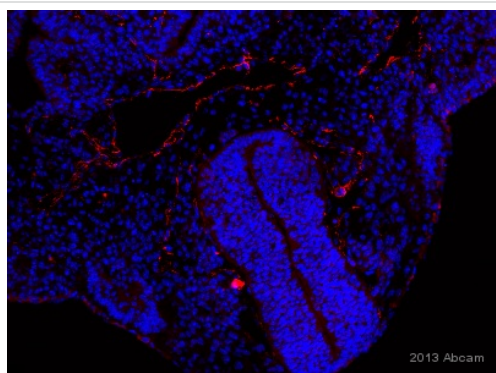
Immunohistochemistry (Frozen sections) - Anti-CD31 antibody [MEC 7.46] (ab7388)

This image is courtesy of an anonymous Abreview

Immunohistochemical analysis of frozen mouse skin tissue, staining CD31 with ab7388.

Tissue was fixed with acetone and blocked with 2% serum for 30 minutes at 20°C.

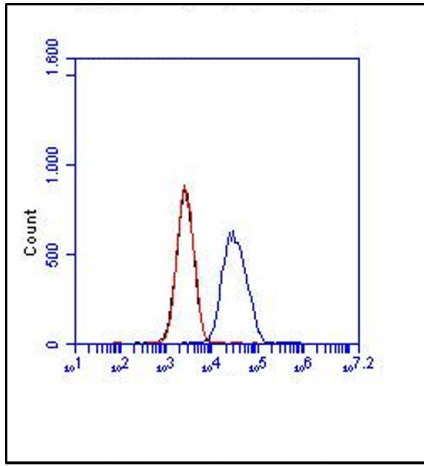
Samples were incubated with primary antibody (1/300 in 1% BSA) for 4 hours at 20°C. An Alexa Fluor® 488-conjugated goat anti-rat monoclonal IgG (1/500) was used as the secondary antibody.



Immunohistochemistry (Frozen sections) - Anti-CD31 antibody [MEC 7.46] (ab7388)

This image is courtesy of an anonymous abreview.

Immunohistochemistry (Frozen sections) analysis of mouse embryo transverse tissue section labeling CD31 with ab7388 at 1/1000 dilution. Tissue sections were fixed with paraformaldehyde and permeabilized with PBST (PBS / 0.5% v/v Triton X-100). Tissue was blocked for 30 minutes at 25°C. Samples were incubated with primary antibody (1/100 in 1% BSA + 5% donkey serum + PBST) for 12 hours at 4°C. A polyclonal goat anti-rat Alex Fluor® was used as the secondary antibody at 1/1000 dilution. This is a transverse section of E10.5 mouse embryo. CD31 expresses in endothelium cells which locates in the surface of dorsal aorta and small vessels.



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

Flow Cytometry analysis of bEND3 (mouse brain endothelial cell line) cells labeling CD31 with ab7388 at 10 µg/ml concentration. 10⁶ cells were used per sample. No fixation or permeabilization needed. A R-PE labelled goat anti-rat IgG (H+L) was used as the secondary antibody.

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