



Mouse Anti-CD31 antibody (BH0190)

BH0190

BH0190

Product Name:	CD31
Chinese Name:	小鼠抗CD31单克隆抗体
Alias:	platelet endothelial cell adhesion molecule precursor-1; PECAM-1; PECAM1; Adhesion molecule; CD31 antigen; CD31 EndoCAM; Endocam; FLJ34100; FLJ58394; GPIIA; Pecam 1; PECA1_HUMAN; PECAM 1 CD31 EndoCAM; PECA1; Pecam1; Platelet endothelial cell adhesion molecule; Platelet/endothelial cell adhesion molecule 1; Adhesion molecule; Platelet/endothelial cell adhesion molecule.
Organism Species:	Mouse
Clonality:	Monoclonal
克隆号:	6G2
React Species:	Human,
Applications:	IHC-P=1:100-500IHC-F=1:100-500ICC=1:100-500IF=1:100-500(Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	78kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CD31:
Lsotype:	IgG1
Purification:	affinity purified by Protein G
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed

Platelet endothelial cell adhesion molecule (PECAM-1) also known as cluster of differentiation 31 (CD31) is a protein that in humans is encoded by the PECAM1 gene found on chromosome 17. PECAM-1 plays a key role in removing aged neutrophils from the body. PECAM-1 is found on the surface of platelets, monocytes, neutrophils, and some types of T-cells, and makes up a large portion of endothelial cell intercellular junctions. The encoded protein is a member of the immunoglobulin superfamily and is likely involved in leukocyte transmigration, angiogenesis, and integrin activation.

Function:

Induces susceptibility to atherosclerosis. 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).

Subunit:

Interacts with PTPN11; Tyr-713 is critical for PTPN11 recruitment. Forms a complex with BDKRB2 and GNAQ. Interacts with BDKRB2 and GNAQ.

Subcellular Location:

Isoform Long: Membrane; Single-pass type I membrane protein. Cell junction.

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

Isoform Delta15: Cell junction. Note=Localizes to the lateral border recycling compartment (LBRC) and recycles from the LBRC to the junction in resting endothelial cells.

Tissue Specificity:

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).

Product Detail:

Post-translational modifications:

Phosphorylated on Ser and Tyr residues after cellular activation. Phosphorylated on tyrosine residues by FER and FES in response to FCER1 activation. In endothelial cells Fyn mediates mechanical-force (stretch or pull) induced tyrosine phosphorylation.

Similarity:

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

SWISS:

P16284

Gene ID:

5175

Database links:

[Entrez Gene: 5175](#)Human

[Entrez Gene: 18613](#)Mouse

[Omim: 173445](#)Human

[SwissProt: P16284](#)Human

[SwissProt: Q08481](#)Mouse

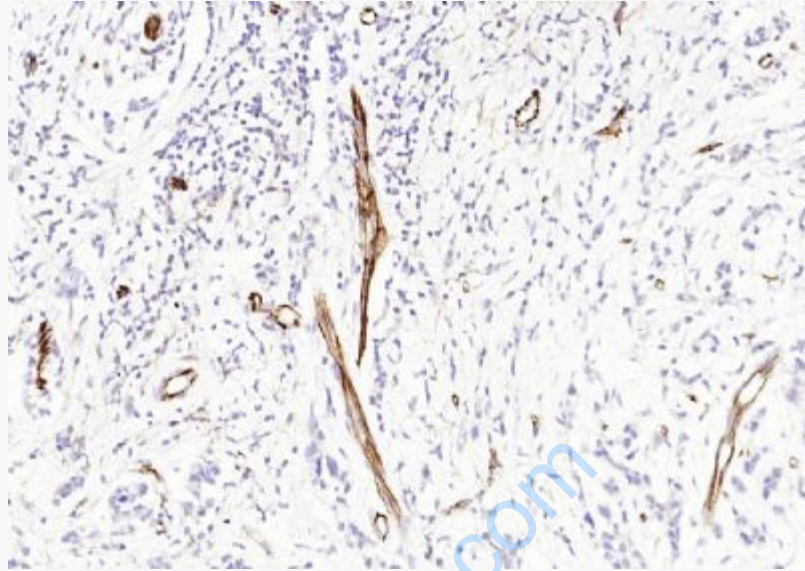
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[Unigene: 514412](#)Human

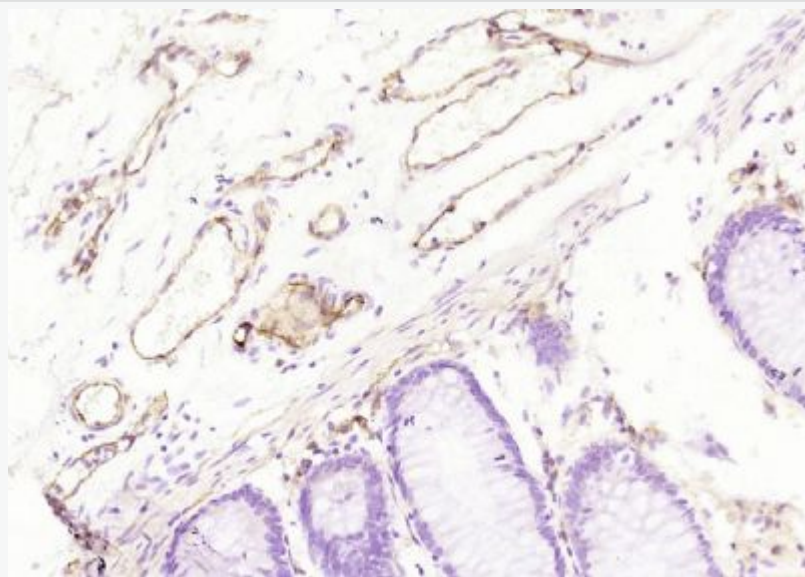
[Unigene: 343951](#)Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

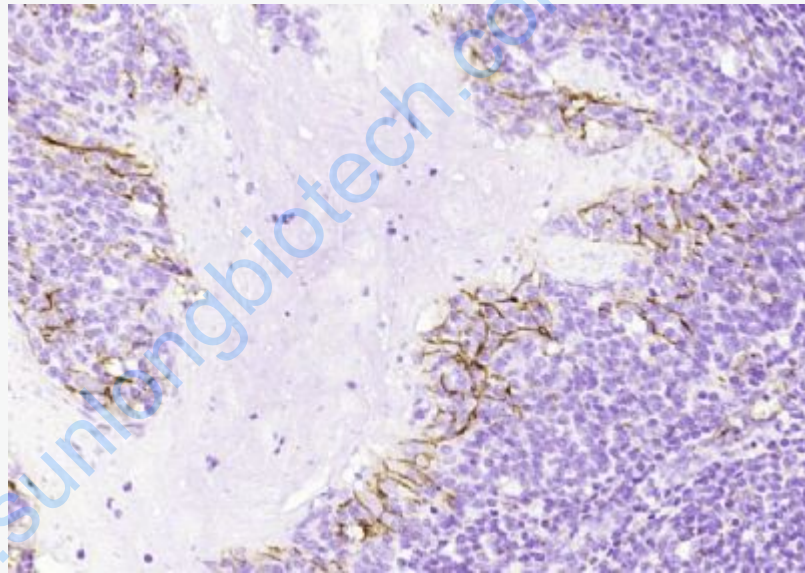


Paraformaldehyde-fixed, paraffin embedded (Human esophageal cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CD31) Monoclonal Antibody, Unconjugated (BH0190) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.



Picture:

Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CD31) Monoclonal Antibody, Unconjugated (BH0190) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human tonsil); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CD31) Monoclonal Antibody, Unconjugated (BH0190) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.