

Rabbit anti-Human CD31 Monoclonal Antibody | anti-CD31 antibody

Anti-CD31 Rabbit Monoclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA47062	Rabbit	Human	Western Blot, Immunohistochemistry, Immunoprecipitation, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

CD31; Monoclonal Antibody; Anti-CD31 Rabbit Monoclonal Antibody; Platelet endothelial cell adhesion molecule; PECAM-1; EndoCAM; GPIIA⁺; PECA1; PECAM1; anti-CD31 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Purity/Purification	Affinity-chromatography
Form/Format	Liquid
Sequence Length	727
Applicable Applications for anti-CD31 antibody	WB (Western Blot), IHC (Immunohistochemistry), IP (Immunoprecipitation), FCM/FACS (Flow Cytometry)
Immunogen	A synthesized peptide derived from human CD31
Subcellular Localization	Isoform Long: Cell membrane; Single-pass type I membrane protein. Cell membrane; Lipid-anchor. Cell junction. 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 U-937 histiocytic lymphoma cell lines (at protein level).
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



WB (Western Blot)

Western blot analysis of CD31 expression in THP-1 cell lysates (AAA47062). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PECAM1 monoclonal antibody overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PECAM1.



IHC (Immunohistochemistry)

Immunohistochemical analysis of paraffin-embedded human kidney, using CD31 Antibody(AAA47062). PECAM1 was detected in paraffin-embedded tissue section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PECAM1 Antibody (AAA47062) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-CD31 antibody	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).
Product Categories/Family for anti-CD31 antibody	Signal Transduction ; Cytoskeleton/ECM ; Cell Adhesion ; cell adhesion molecules ; endothelial ; Cardiovascular ; Angiogenesis ; Angiogenic Factors ; Immunology ; Cell Type Markers ; Kits/Lysates/Other ; ELISA Kits ; cd markers ELISA Kits ; atherosclerotic proteins el

NCBI AND UNIPROT INFORMATION

NCBI GI #	313760624
NCBI GeneID	5175
NCBI Accession #	NP_000433.4
NCBI GenBank Nucleotide #	NM_000442.4
UniProt Accession #	P16284; Q6LDA9; Q8TBH1; Q96RF5; Q96RF6; Q9NP65; Q9NPB7; Q9NPG9; Q9NQS9; Q9NQTO; A8K3S7; D3DU31
Molecular Weight	82536 MW
NCBI Official Full Name	platelet endothelial cell adhesion molecule
NCBI Official Synonym Full Names	platelet and endothelial cell adhesion molecule 1
NCBI Official Symbol	PECAM1
NCBI Official Synonym Symbols	CD31; PECA1; GPIIA ⁺ ; PECAM-1; endoCAM; CD31/EndoCAM
NCBI Protein Information	platelet endothelial cell adhesion molecule
UniProt Protein Name	Platelet endothelial cell adhesion molecule
UniProt Gene Name	PECAM1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/cd31-antibody-western-blot-immunohistochemistry-immunoprecipitation-flow-cytometry-elisa/47062>