



Rabbit Anti-CD31 antibody

SL0468R

Product Name:	CD31
Chinese Name:	血小板endothelial cells黏附分子-1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.
文献引用 PubMed :	<p>Specific References(11) SL0468R has been referenced in 11 publications.</p> <p>[IF=8.65]Chen, Xiang, et al. "A small interfering CD147-targeting RNA inhibited the proliferation, invasiveness, and metastatic activity of malignant melanoma." Cancer research 66.23 (2006): 11323-11330.Mouse. PubMed:17145878</p> <p>[IF=3.73]Zeng, Wei-qun, et al. "A New Method to Isolate and Culture Rat Kupffer Cells." PLOS ONE 8.8 (2013): e70832.Rat. PubMed:23967115</p> <p>[IF=2.56]Yuan, Qiao-ying, et al. "A targeted high-efficiency angiogenesis strategy as therapy for myocardial infarction." Life Sciences (2012).IHC-P; PubMed:22469972</p> <p>[IF=1.37]Zhang, Jun, et al. "Cardiac stem cells differentiate into sinus node-like cells." The Tohoku Journal of Experimental Medicine 222.2 (2010): 113-120.Dog. PubMed:20877167</p> <p>[IF=5.29]Guo, Yansu, et al. "A Single Injection of Recombinant Adeno-Associated Virus into the Lumbar Cistern Delivers Transgene Expression Throughout the Whole</p>

	<p>Spinal Cord." Molecular Neurobiology (2015): 1-14.IHC-F;Mouse. PubMed:26050084</p> <p>[IF=3.87]Ma, Yan, et al. "Intraocular expression of serum amyloid a and interleukin-6 in proliferative diabetic retinopathy." American journal of ophthalmology 152.4 (2011): 678-685.IHC-F;Mouse. PubMed:3.871</p> <p>[IF=5.47]Guo, Yansu, et al. "A single injection of recombinant adeno-associated virus into the lumbar cistern delivers transgene expression throughout the whole spinal cord." Molecular Neurobiology (2015): 1-14.IHC;Mouse. PubMed:26050084</p> <p>[IF=2.57]Vuletic, Ivan, et al. "Validation of Bevacizumab Therapy Effect on Colon Cancer Subtypes by Using Whole Body Imaging in Mice." Molecular Imaging and Biology: 1-10.IHC-F;Mouse. PubMed:28315202</p> <p>[IF=2.45]Yuan, Qiao-Ying, et al. "A visible, targeted high-efficiency gene delivery and transfection strategy." BMC biotechnology 11.1 (2011): 56.IHC-P;Dog. PubMed:21600027</p> <p>[IF=3.04]Korkmaz, H. Ibrahim, et al. "Neutrophil Extracellular Traps Coincide with a Pro-coagulant Status of Microcirculatory Endothelium in Burn Wounds." Wound Repair and Regeneration (2017).IHC-P;Pig. PubMed:28727215</p> <p>[IF=3.22]Long, Connor, et al. "Isolation and characterization of canine placenta-derived mesenchymal stromal cells for the treatment of neurological disorders in dogs." Cytometry Part A (2017).FCM;Dog. PubMed:28715613</p>
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000Flow-Cyt=1µg/Test 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 CD31:601-680/738
Lsotype:	IgG
Purification:	affinity purified by Protein A
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
Product Detail:	<p>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.</p> <p>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 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).</p> <p>Subunit: Interacts with PTPN11; Tyr-713 is critical for PTPN11 recruitment. Forms a complex with BDKRB2 and GNAQ. Interacts with BDKRB2 and GNAQ.</p> <p>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.</p>

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).

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

[Unigene: 376675](#)Human

[Unigene: 514412](#)Human

[Unigene: 343951](#)Mouse

Important Note:

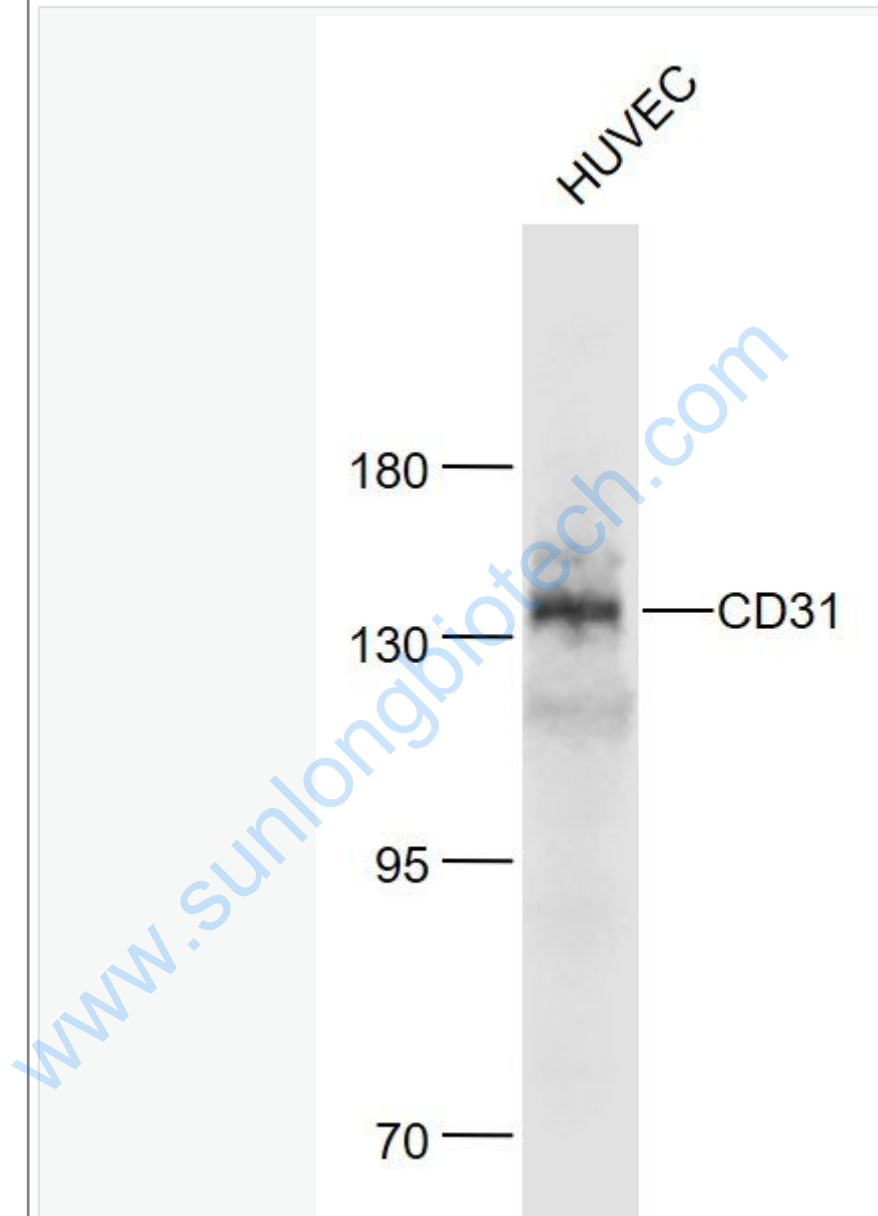
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

細胞粘附蛋白 (Cell Adhesion Protein)

血小板endothelial cells黏附分子-1 在血小板、endothelial

cells、单核细胞、嗜中性细胞及某些T细胞亚群上表达的质膜glycoprotein。属于免疫球蛋白超基因家族成员，在细胞外结构域中有6个C2亚类免疫球蛋白样保守性同原单位。在炎症应答中起作用。

Picture:



Sample:

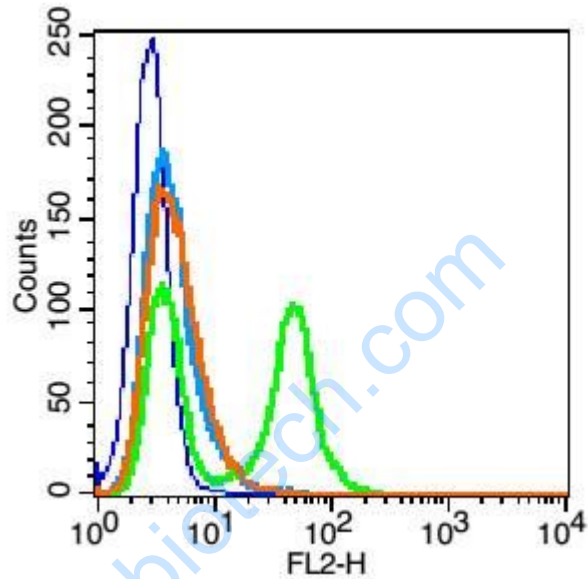
Huvec(Human) Cell Lysate at 30 ug

Primary: Anti-CD31 (SL0468R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 78 kD

Observed band size: 140 kD



Blank control: HUVEC cells(blue).

Primary Antibody:Rabbit Anti-CD31 antibody(SL0468R), Dilution: 1 μ g in 100 μ L
1X PBS containing 0.5% BSA;

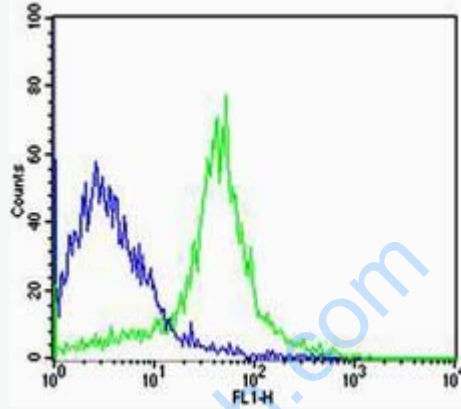
Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions);

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X
PBS containing 0.5% BSA.

Protocol

The cells were fixed with 2% paraformaldehyde (10 min) .Primary antibody (SL0468R) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the

blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.



Cell:R.spleen

Concentration:1:100

Host/Isotype:Rabbit/IgG

Flow cytometric analysis of Rabbit IgG isotype control (Cat#: bs-0468R) on R.spleen(green) compared with control in the absence of primary antibody (blue) followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG(H+L) secondary antibody .