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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.
Research Area	Tumour Cardiovascular Cell biology immunology Signal transduction Stem cells Cell adhesion molecule Cell Surface Molecule glycoprotein lymphocyte t-lymphocyte marrow cells
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human
Applications	IHC-P=1:200-1000,IHC-F=1:200-1000,IF=1:200-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	78kDa
Detection molecular weight	130 kDa
Cellular localization	The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human CD31: 601-680/738
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	Human1M TBS(pH7.4) with 1% BSA, Human3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw

cycles.

Attention

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

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Product Detail

The protein encoded by this gene 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 migration, angiogenesis, and integrin activation. [provided by RefSeq, May 2010]

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).

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

细胞粘附蛋白（Call Adhesion Protein）
血小板 endothelial cells 黏附分子-1 在血小板、endothelial cells、单核细

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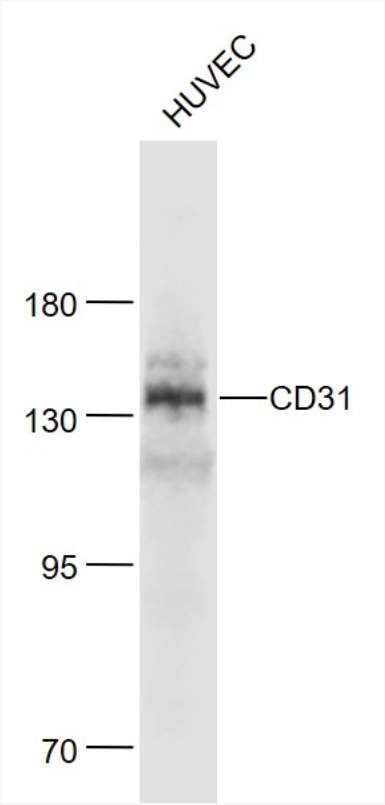
胞、嗜中性细胞及某些 T 细胞亚群上表达的质膜 glycoprotein。
属于免疫球蛋白超基因家族成员，在细胞外结构域中有 6 个 C2 亚类免疫球蛋白样保守性同原单位。在炎症应答中起作用。

Product 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

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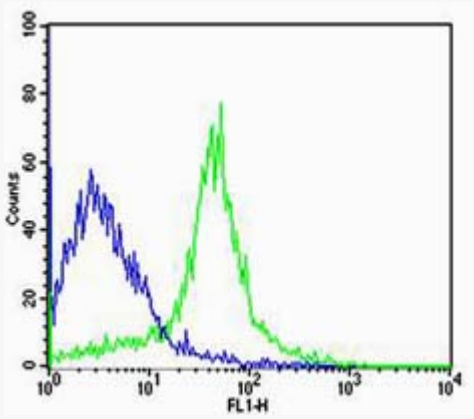

Cell:R.spleen

Concentration:1:100

Host/Isotype:Rabbit/IgG

Flow cytometric analysis of Rabbit IgG isotype control (Cat#: SL0468R) 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 .