

## 血小板内皮细胞黏附分子 1 抗体

产品货号： mlR20321

英文名称： CD31

中文名称： 血小板内皮细胞黏附分子 1 抗体

别名： platelet endothelial cell adhesion molecule precursor-1; PECAM-1; PECAM1; Adhesion molecule; CD31 antigen; CD31 EndoCAM; Endocam; FLJ34100; FLJ58394; GPIIA; Pecam 1; PECA1\_MOUSE; PECAM 1 CD31 EndoCAM; PECA1; Pecam1; Platelet endothelial cell adhesion molecule; Platelet/endothelial cell adhesion molecule 1; Adhesion molecule; Platelet/endothelial cell adhesion molecule.

研究领域： 肿瘤 心血管 细胞生物 免疫学 信号转导 干细胞 细胞表面分子 糖蛋白 细胞类型  
标志物 血管内皮细胞 内皮细胞

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Mouse,

产品应用： WB=1:500-2000 ELISA=1:500-1000

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分子量：78kDa

细胞定位：细胞膜

性状：Lyophilized or Liquid

浓度：1mg/ml

免疫原：KLH conjugated synthetic peptide derived from mouse CD31:31-130/727 <Extracellular>

亚型：IgG

纯化方法：affinity purified by Protein A

储存液：Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4

保存条件：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

**产品介绍 background:**

This protein is a cell adhesion molecule expressed on platelets and at endothelial cell intercellular junctions. Type I membrane protein. SIZE: 738 amino acids; 82536 Da. SUBCELLULAR LOCATION: Membrane; Single-pass type I membrane protein. TISSUE SPECIFICITY: Long isoform predominates all tissues examined, isoform Delta12 was detected only in trachea and isoform Delta14-15 only in lung, isoform Delta14 was detected in all tissues examined with the strongest expression in heart. PTM: Phosphorylated on Ser and Tyr residues after cellular activation. SIMILARITY: Contains 6 Ig-like C2-type (immunoglobulin-like) domains.

CD31, also known as platelet endothelial cell adhesion molecule 1 (PECAM1), is a type I integral membrane glycoprotein and a member of the immunoglobulin superfamily of cell surface receptors. It 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. CD31 is implicated in several functions, including transendothelial migration of leukocytes, angiogenesis, and integrin activation. Tyr-690 plays a critical role in leukocyte transendothelial migration (TEM) and is required for efficient trafficking of CD31 to and from the lateral border recycling compartment (LBRC) and is also essential for the LBRC membrane to be targeted around migrating leukocytes. CD31 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 CD31 on both cell surfaces leads to the viable cell's active repulsion from the phagocyte. During apoptosis, the inside-out signaling of CD31 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). CD31 has been used to measure angiogenesis in association with tumor recurrence. Other studies have also indicated that CD31 and CD34 can be used as markers for myeloid progenitor cells and recognize different subsets of myeloid leukemia infiltrates (granular sarcomas).

**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:**

Q08481

**Gene ID:**

18163

**Important Note:**

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

血小板内皮细胞黏附分子-1 ( Platelet/ endothelial cell adhesion molecule, PECAM-1)在血小板、内皮细胞、单核细胞、嗜中性细胞及某些 T 细胞亚群上表达的质膜糖蛋白，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。

产品图片

