

• Rabbit Anti-CD31/PECAM-1 Polyclonal Antibody

Primary Antibodies

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).

Source/Purification:

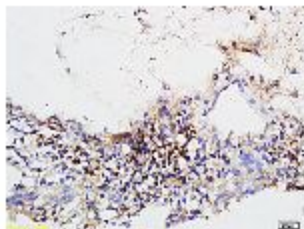
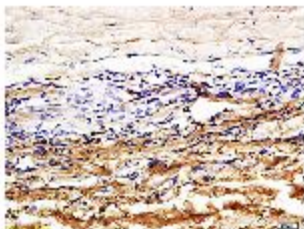
KLH conjugated synthetic peptide derived from human CD31 C-terminus. Was purified by Protein A and peptide affinity chromatography.

Storage: Prepared as lyophilized powder or liquid and shipped on ice. Store at -20°C for one year.

Reconstitution:

If the antibody is in liquid form, no reconstitution needed.

Reconstitution is only required for the lyophilized antibody. Please refer to the reconstitution instruction card in the package.



Size: 100ul or 100ug lyophilized

Concentration: 1ug/uL

Host: Rabbit

Reactivities:

Human, Mouse, Rat, Dog, Pig, Rabbit, Sheep, Bovine,

Application:

- WB(1:100-500)
 - ELISA(1:500-1000)
 - IP(1:20-100)
 - IHC-P(1:100-500)
 - IHC-F(1:100-500)
 - FACS(1:100-500)
 - IF(1:100-500)
 - Not yet tested in other applications.
- Optimal working dilutions must be determined by the end user.

Antibody Type: Polyclonal

Isotype: IgG

Molecular Weight: 82kDa

Preservatives:

10ug/uL BSA and 0.1% NaN3.

For research use only. CAUTION: Not for human or animal therapeutic or diagnostic use.