

Anti-CD31 Picoband Antibody

Catalog # ABO12951

Product Information

Application	WB, E
Primary Accession	Q08481
Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for CD31 detection. Tested with WB, Direct ELISA in Mouse.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	18613
Other Names	Platelet endothelial cell adhesion molecule, PECAM-1, CD31, Pecam1, Pecam, Pecam-1
Calculated MW	81263
Application Details	Western blot, 0.1-0.5 µg/ml Direct ELISA, 0.1-0.5 µg/ml
Subcellular Localization	Cell membrane.
Tissue Specificity	Isoform 1 and isoform 3 are expressed in lung and platelets.
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	E. coli-derived mouse CD31 recombinant protein (Position: R58-Q273).
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C; for one year. After r ° Constitution, at 4 °C; for one month. It ° Can also be aliquotted and stored frozen at -20 °C; for a longer time. Avoid repeated freezing and thawing.

Protein Information

Name Pecam1

Synonyms	Pecam, Pecam-1
Function	Cell adhesion molecule which is required for leukocyte transendothelial migration (TEM) under most inflammatory conditions (By similarity). Tyr-679 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 (By similarity). Trans-homophilic interaction may play a role in endothelial cell-cell adhesion via cell junctions (By similarity). Heterophilic interaction with CD177 plays a role in transendothelial migration of neutrophils (By similarity). Homophilic ligation of PECAM1 prevents macrophage- mediated phagocytosis of neighboring viable leukocytes by transmitting a detachment signal (By similarity). Promotes macrophage-mediated phagocytosis of apoptotic leukocytes by tethering them to the phagocytic cells; PECAM1-mediated detachment signal appears to be disabled in apoptotic leukocytes (By similarity). Modulates bradykinin receptor BDKRB2 activation (By similarity). Regulates bradykinin- and hyperosmotic shock-induced ERK1/2 activation in endothelial cells (By similarity). Induces susceptibility to atherosclerosis (PubMed: 19048083).
Cellular Location	Cell membrane {ECO:0000250 UniProtKB:P16284}; Single-pass type I membrane protein {ECO:0000250 UniProtKB:P16284} Membrane raft {ECO:0000250 UniProtKB:P16284}. Cell junction {ECO:0000250 UniProtKB:P16284}. Note=Localizes to the lateral border recycling compartment (LBRC) and recycles from the LBRC to the junction in resting endothelial cells. Cell surface expression on neutrophils is down-regulated upon fMLP or CXCL8/IL8-mediated stimulation {ECO:0000250 UniProtKB:P16284}
Tissue Location	[Isoform 1]: Expressed in lung and platelets (at protein level).

Background

CD31 also known as Platelet endothelial cell adhesion molecule (PECAM-1), is a protein that in human is encoded by the PECAM1 gene. Encoded protein is a member of the immunoglobulin superfamily and this gene is mapped to 17q23.3. CD31 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. It is demonstrated that CD31 expression on human PBSCs may positively affect both neutrophil and platelet engraftment. Meanwhile, CD31 is involved in leukocyte migration and angiogenesis, which are key components of venous thrombus resolution.

Images

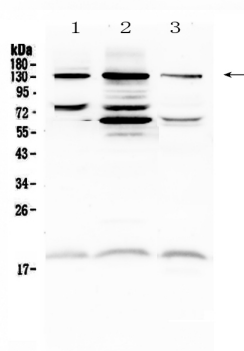


Figure 1. Western blot analysis of CD31 using anti-CD31 antibody (ABO12951).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.