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Anti-CD31 Picoband Antibody
Catalog # ABO12951

Specification

Anti-CD31 Picoband Antibody - 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.

Anti-CD31 Picoband Antibody - Additional Information

Gene ID 18613

Other Names
Platelet endothelial cell adhesion molecule, PECAM-1, CD31, Pecam1, Pecam, Pecam-1

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.

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

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.**

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Anti-CD31 Picoband Antibody - 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).

Anti-CD31 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CD31 Picoband Antibody - Images

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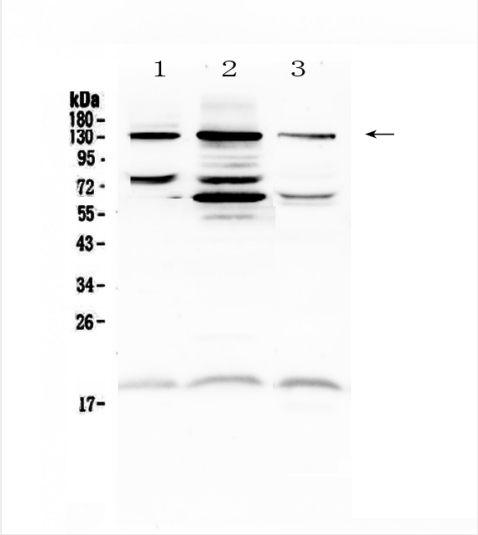

Figure 1. Western blot analysis of CD31 using anti-CD31 antibody (ABO12951).

Anti-CD31 Picoband Antibody - 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.