

Mouse CD31 Antibody (C-term) Blocking peptide Synthetic peptide Catalog # BP10928b

Specification

Mouse CD31 Antibody (C-term) Blocking peptide - Product Information

Primary Accession

Q08481

Mouse CD31 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 18613

Other Names

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse CD31 Antibody (C-term) Blocking peptide - 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).

Mouse CD31 Antibody (C-term) Blocking peptide - Protocols

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

Blocking Peptides

Mouse CD31 Antibody (C-term) Blocking peptide - Images

Mouse CD31 Antibody (C-term) Blocking peptide - Background

Cell adhesion molecule which is required for leukocyte transendothelial migration (TEM) under most inflammatory conditions. 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. 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). Modulates BDKRB2 activation (By similarity). Induces susceptibility to atherosclerosis.

Mouse CD31 Antibody (C-term) Blocking peptide - References

DeLisser, H., et al. Proc. Natl. Acad. Sci. U.S.A. 107(43):18616-18621(2010)Zhang, C., et al. Dev. Dyn. 239(10):2594-2602(2010)Enciso, J.M., et al. Dev. Dyn. 239(10):2570-2583(2010)Ni, A., et al. Dev. Dyn. 239(9):2354-2366(2010)Sessa, A., et al. Genes Dev. 24(16):1816-1826(2010)