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CD31 Rabbit pAb

Catalog # AP98942

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q08481
Other Accession	Q08481
Reactivity	Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	81263
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse CD31
Epitope Specificity	251-350/727
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.
SIMILARITY	Contains 6 Ig-like C2-type (immunoglobulin-like) domains.
SUBUNIT	Trans-homodimer (via Ig-like C2-type 1 and Ig-like C2-type 2 domains); trans-homodimerization is required for cell-cell interaction (PubMed:26702061, PubMed:27958302).Forms a complex with BDKRB2 and GNAQ (PubMed:18672896).Interacts with BDKRB2 and GNAQ (PubMed:18672896).Interacts with PTPN11; Tyr-713 is critical for PTPN11 recruitment (PubMed:18388311, PubMed:19342684).Interacts with FER (By similarity).Interacts (via Ig-like C2-type domain 6) with CD177; the interaction is Ca2+-dependent; the interaction is direct (PubMed:17580308).
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene 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. The encoded protein is a member of the immunoglobulin superfamily and is likely involved in leukocyte migration, angiogenesis, and integrin activation. [provided by RefSeq, May 2010]

Additional Information

Gene ID	18613
Other Names	CD31; CD31/EndoCAM; GPIIA'; PECA1; PECAM-1; endoCAM; Pecam; PECA1_HUMAN; PECAM1; PECA1_MOUSE; platelet and endothelial cell adhesion molecule 1; platelet/endothelial cell adhesion molecule 1; CD31 antigen

Dilution	IHC-P=1:200-500,IHC-F=1:200-500,IF=1:200-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

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).

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