CD31 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	CD31, Polyclonal Antibody
Full Product Name	CD31, CT (Pecam1, Pecam, Pecam-1, Platelet endothelial cell adhesion molecule, CD31) (MaxLight 490)
Product Gene Name	anti-CD31 antibody
Product Synonym Gene Name	Pecam1
Product Synonym Names	Pecam1; Pecam; Pecam-1; Platelet endothelial cell adhesion molecule; CD31
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Hamster, Mouse
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with MaxLight490.
Purity/Purification	Purified by Protein A Affinity Chromatography.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: MaxLight490 conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	80kDa; 76.2kDa
OMIM	173445
3D Structure	ModBase 3D Structure for P16284
Immunogen	Mouse CD31 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 511-540 amino acids from the C-terminal region of human Mouse CD31.
Conjugate	MaxLight490
Note	Preservative Free
Product Categories/Family for anti-CD31 antibody	Antibodies; CD Markers
Applications Tested/Suitable for anti-CD31 antibody	Western Blot (WB), FLISA
Application Notes for anti-CD31 antibody	WB: 1:100-500 FLISA: 1:1,000 Applications are based on unconjugated antibody.

Related Product Information for anti-CD31 antibody	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.
Product References and Citations for anti-CD31 antibody	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).
Other Notes	Small volumes of anti-CD31 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CD31 purchase	MBS6283066 is an antibody targeting CD31. Also known as CD31, CT (Pecam1, Pecam, Pecam-1, Platelet endothelial cell adhesion molecule, CD31) (MaxLight 490). Reactive in Hamster, Mouse. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CD31. It may not necessarily be applicable to this product.

NCBI GI #	74024907
NCBI GeneID	18613
NCBI Accession #	NP_032842.2
NCBI Related Accession #	NP_001027550.1; NP_113779.1
UniProt Primary Accession #	P16284
UniProt Secondary Accession #	Q08481
UniProt Related Accession #	Q08481
GenBank Nucleotide #	NM_008816.3
NCBI Official Full Name	platelet endothelial cell adhesion molecule isoform 1
NCBI Official Synonym Full Names	platelet/endothelial cell adhesion molecule 1
NCBI Official Symbol	Pecam1
NCBI Official Synonym Symbols	Cd31; Pecam; C85791; PECAM-1
UniProt Protein Name	Platelet endothelial cell adhesion molecule
UniProt Synonym Protein Names	EndoCAM; GPIIA'; PECA1
Protein Family	Platelet endothelial cell adhesion molecule
UniProt Gene Name	PECAM1
UniProt Synonym Gene Names	PECAM-1
UniProt Entry Name	PECA1_HUMAN
NCBI Protein Information	platelet endothelial cell adhesion molecule

UniProt Comments for CD31	PECAM-1: a cell adhesion molecule expressed on platelets and at endothelial cell intercellular junctions. Plays a role in modulation of integrin-mediated cell adhesion, transendothelial migration, angiogenesis, apoptosis, cell migration, negative regulation of immune cell signaling, autoimmunity, macrophage phagocytosis, IgE-mediated anaphylaxis and thrombosis. Undergoes alternative splicing, generating multiple isoforms in vascular beds of various tissues. Protein type: Cell adhesion; Membrane protein, integral Chromosomal Location of Human Ortholog: 17q23.3 Cellular Component: extracellular space; platelet alpha granule membrane; integral to membrane; plasma membrane; cell junction Molecular Function: protein binding Biological Process: platelet activation; extracellular matrix organization and biogenesis; platelet degranulation; diapedesis; cell recognition; blood coagulation; signal transduction; cell adhesion; leukocyte migration; phagocytosis
Research Articles on CD31	**1.** findings suggest that PECAM-1 enhances SDF-1-induced chemotaxis by augmenting and prolonging activation of the PI3K/Akt/mTORC1 pathway and Rap1 and that PECAM-1, at least partly, exerts its activity by inhibiting SDF-1-induced internalization of CXCR4
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