CD31 Antibody – Mouse Monoclonal

PRODUCT OVERVIEW

Product Name	CD31, Monoclonal Antibody
Full Product Name	CD31 (EndoCAM, PECA1, Platelet Endothelial Cell Adhesion Molecule 1, GPIIA', PECAM-1) (BSA & Azide Free) (MaxLight 550)
Product Gene Name	anti-CD31 antibody
Product Synonym Names	EndoCAM; PECA1; Platelet Endothelial Cell Adhesion Molecule 1; GPIIA'; PECAM-1
Clonality	Monoclonal
Isotype	IgG1,k
Clone Number	SPM122
Host	Mouse
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with MaxLight550.
Purity/Purification	Purified by Protein A/G Affinity Chromatography.
Specificity	Recognizes CD31. Species Crossreactivity: Human, Cynomolgus Monkey and Rabbit. Does not react with rat and procine.
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: MaxLight550 conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	82,536 Da
Chromosome Location	Chromosome: 17; NC_000017.10 (62396775..62404856, complement). Location: 17q23.3
OMIM	173445
3D Structure	ModBase 3D Structure for P16284
Immunogen	Membrane preparation of a spleen from a patient with hairy cell leukemia (JC/70A). Cellular Localization: Cell surface and cytoplasm of endothelial cells
Conjugate	MaxLight550
Positive Control	Tonsil, Angiosarcoma
Product Categories/Family for anti-CD31 antibody	Antibodies; CD Markers
Applications Tested/Suitable for anti-CD31 antibody	Flow Cytometry (FC/FACS), FLISA, Immunofluorescence (IF), Immunohistochemistry (IHC), Immunoprecipitation (IP), Western Blot (WB)
Application Notes for anti-CD31 antibody	IP: 0.5-1ug/500ug protein lysate FC/FACS: 0.5-1ug/million cells IHC: 0.5-1.0ug/ml for 30 minutes at RT IF: 0.5-1ug/ml WB: 0.5-1.0ug/ml Applications are based on unconjugated antibody.

Related Product Information for anti-CD31 antibody	MBS6215292 is an antibody targeting CD31. Also known as CD31 (EndoCAM, PECA1, Platelet Endothelial Cell Adhesion Molecule 1, GPIIA', PECAM-1) (BSA & Azide Free) (MaxLight 550). Reactive in Human. Host: Mouse.
Product References and Citations for anti-CD31 antibody	1. Gratzinger D et. al. Am J Clin Pathol 131:264-278 (2009).
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.

ADDITIONAL DETAILS

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

NCBI GI #	313760624
NCBI GeneID	5175
NCBI Accession #	NP_000433.4
UniProt Primary Accession #	P16284
UniProt Secondary Accession #	Q6LDA9; Q8TBH1; Q96RF5; Q96RF6; Q9NP65; Q9NPB7; Q9NPG9; Q9NQS9; Q9NQT0; Q9NQT1; Q9NQT2
UniProt Related Accession #	P16284
GenBank Nucleotide #	NM_000442.4
NCBI Official Full Name	platelet endothelial cell adhesion molecule
NCBI Official Synonym Full Names	platelet/endothelial cell adhesion molecule 1
NCBI Official Symbol	PECAM1
NCBI Official Synonym Symbols	CD31; PECA1; GPIIA'; PECAM-1; endoCAM; CD31/EndoCAM
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; CD31 antigen
NCBI Summary for CD31	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]

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.** The increased CD105/CD31 and VEGF/CD31 ratios in gingiva confirms an augmented proliferative fraction of the endothelium in gingiva with chronic periodontitis.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/monoclonal-human-antibody/cd31/6215292