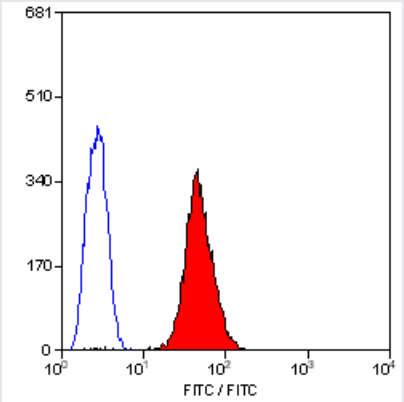
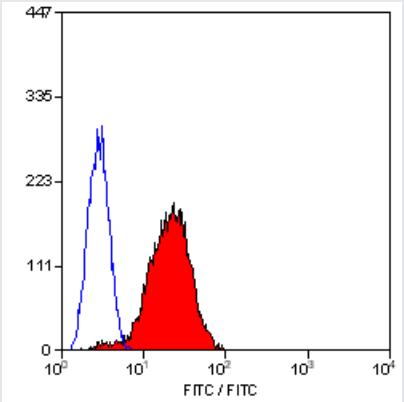
CD31 Antibody – Mouse Monoclonal

PRODUCT OVERVIEW

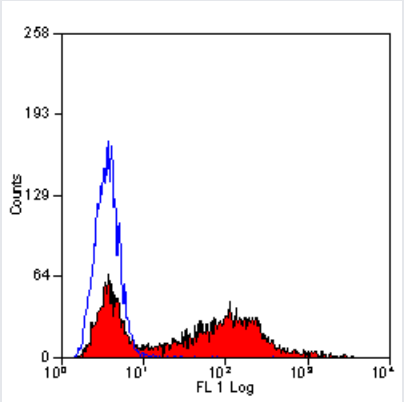
Product Name	CD31, Monoclonal Antibody
Full Product Name	MOUSE ANTI HUMAN CD31
Product Gene Name	anti-CD31 antibody
Clonality	Monoclonal
Isotype	IgG1
Clone Number	WM59
Host	Mouse
Form/Format	Purified Purified IgG - liquid
Concentration	IgG concentration 1.0mg/ml (lot specific)
Preparation and Storage	Store at 4 degree C or at -20 degree C if preferred. This product should be stored undiluted. Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use. Shelf Life: 18 months from date of despatch.
Molecular Weight	81,378 Da
OMIM	173445
3D Structure	ModBase 3D Structure for P16284
Perservative Stabilisers	0.09% Sodium Azide Preparation||Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Target Species	Human
Applications Tested/Suitable for anti-CD31 antibody	Flow cytometry (FC/FACS), Immunoprecipitation (IP)
Application Notes for anti-CD31 antibody	Flow Cytometry: Use 10ul of the suggested working dilution to label 106 cells in 100ul. **Flow Cytometry:** Minimum Dilution: 1/50; Maximum Dilution: 1/100
Related Product Information for anti-CD31 antibody	Mouse anti Human CD31 monoclonal antibody, clone WM59 recognizes the human CD31 antigen, a ~130kD single pass type I transmembrane glycoprotein bearing six C2 immunoglobulin domains. CD31 is expressed by all continuous endothelia including arteries, veins and non-sinusoidal capillaries, platelets,granulocytes and some lymphocytes. CD31 is not expressed by discontinuous endothelia such as hepatic sinusoids and splenic red pulp (Muller et al. 1989).CD31 is also known as PECAM-1. The binding epitope for mouse anti human CD31, clone WM59 has been mapped to the Ig-like domain 2 (Fawcett et al. 1995).
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	MBS215171 is an antibody targeting CD31. Also known as MOUSE ANTI HUMAN CD31. Host: Mouse.



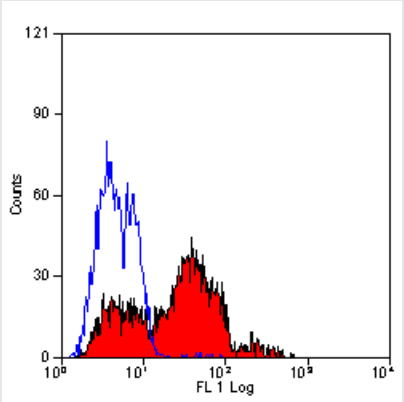
Testing Data of anti-CD31 antibody
Staining of human peripheral blood platelets with Mouse anti Human CD31:FITC (MBS210760)



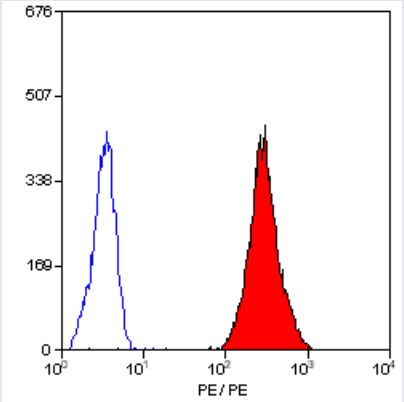
Testing Data of anti-CD31 antibody
Staining of human peripheral blood platelets with Mouse anti Human CD31:Biotin (MBS210356)



Testing Data of anti-CD31 antibody
Staining of human peripheral blood lymphocytes with Mouse anti Human CD31: Alexa Fluor 647 (MBS212289A647)



Testing Data of anti-CD31 antibody
Staining of human peripheral blood lymphocytes with Mouse anti Human CD31 (MBS212289)



Testing Data of anti-CD31 antibody
Staining of human peripheral blood platelets with Mouse anti Human CD31:RPE (MBS213658)

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; A8K3S7; D3DU31
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; CD_antigen: CD31
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; signal transduction; cell adhesion; blood coagulation; leukocyte migration; phagocytosis
Research Articles on CD31	**1.** The finding that the adhesive properties of PECAM-1 are regulatable suggests novel approaches for controlling endothelial cell migration and barrier function in a variety of vascular permeability disorders.
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-antibody/cd31/215171