

Mouse anti-Human CD31/PECAM-1 Monoclonal Antibody | anti-PECAM1 antibody

CD31/PECAM-1 (Endothelial Cell Marker)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA215133	Mouse	Human	Immunohistochemistry

PRODUCT SYNONYMS

CD31/PECAM-1; Monoclonal Antibody; CD31/PECAM-1 (Endothelial Cell Marker); EndoCAM; PECA1; Platelet Endothelial Cell Adhesion Molecule 1; GPIIA; anti-PECAM1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG
Clone Number	PECAM1/3530
Specificity	CD31 (PECAM-1) is a transmembrane glycoprotein member of the immunoglobulin supergene family of adhesion molecules. CD31 is expressed by stem cells of the hematopoietic system and is primarily used to identify and concentrate these cells for experimental studies as well as for bone marrow transplantation. Anti-CD31 has shown to be highly specific and sensitive for vascular endothelial cells. Staining of nonvascular tumors (excluding hematopoietic neoplasms) is rare. CD31 MAb reacts with normal, benign, and malignant endothelial cells which make up blood vessel lining. The level of CD31 expression can help to determine the degree of tumor angiogenesis, and a high level of CD31 expression may imply a rapidly growing tumor and potentially a predictor of tumor recurrence.
Purity/Purification	Purified Ab with BSA and Azide at 200ug/ml OR Purified Ab WITHOUT BSA and Azide at 1.0mg/ml
Form/Format	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Sequence Length	738
Applicable Applications for anti-PECAM1 antibody	IHC (Immunohistochemistry)
Positive Control	Jurkat cells. Tonsil or Angiosarcoma.
Immunogen	Recombinant fragment (around aa 625-738) of human CD31 protein (exact sequence is proprietary)
Cellular Localization	Cell Surface and cytoplasm of endothelial cells
Hu-chromosome Location	17q23.3
Preparation and Storage	Antibody with azide: store at 2 to 8 degree C. Antibody without azide: store at -20 to -80 degree C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

IMAGES



Application Data

Analysis of Protein Array containing more than 19,000 full-length human proteins using CD31 Mouse Monoclonal Antibody (PECAM1/3530) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



SDS-PAGE

SDS-PAGE Analysis Purified CD31 Mouse Monoclonal Antibody (PECAM1/3530). Confirmation of Integrity and Purity of Antibody.



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human tonsil stained with CD31 Mouse Monoclonal Antibody (PECAM1/3530).



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human skin stained with CD31 Mouse Monoclonal Antibody (PECAM1/3530).

NCBI AND UNIPROT INFORMATION

NCBI GI #	313760624
NCBI GeneID	5175
NCBI Accession #	NP_000433.4
NCBI GenBank Nucleotide #	NP_000433.4
UniProt Accession #	P16284
Molecular Weight	~100kDa (endothelium) and ~130kDa (platelets)
NCBI Official Full Name	platelet endothelial cell adhesion molecule
NCBI Official Synonym Full Names	platelet and endothelial cell adhesion molecule 1
NCBI Official Symbol	PECAM1
NCBI Official Synonym Symbols	CD31; PECA1; GPIIA ⁺ ; PECAM-1; endoCAM; CD31/EndoCAM
NCBI Protein Information	platelet endothelial cell adhesion molecule
UniProt Protein Name	Platelet endothelial cell adhesion molecule
UniProt Gene Name	PECAM1
UniProt Synonym Gene Names	PECAM-1
UniProt Entry Name	PECA1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.