

CD31 / PECAM-1 (Endothelial Cell Marker) Antibody

Mouse Monoclonal Antibody [Clone PECAM1/3533]

Catalog No	Format	Size
5175-MSM23-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
5175-MSM23-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
5175-MSM23-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

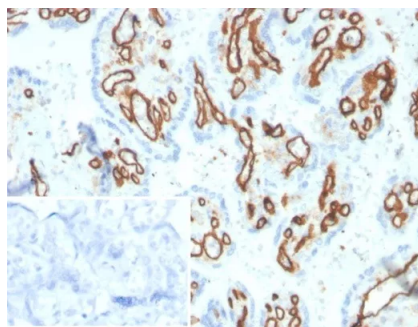
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

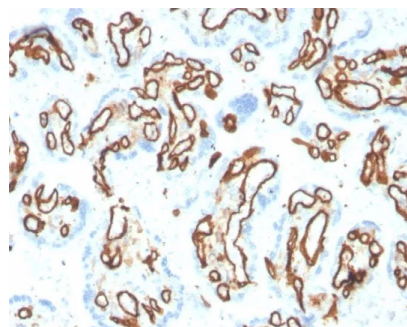
Clone	PECAM1/3533
Gene Name	PECAM-1
Immunogen	Recombinant fragment (around aa 625-738) of human CD31 protein (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b / Kappa
Mol. Weight of Antigen	~100kDa (endothelium) and ~130kDa (platelets) \bar{i} \bar{c} $\frac{1}{2}$
Cellular Localization	Cell surface and cytoplasm of endothelial cells
Species Reactivity	Human
Positive Control	Raji or Jurkat cells. Kidney, Heart, Tonsil or Angiosarcoma. THP-1

*Optimal dilution for a specific application should be determined.

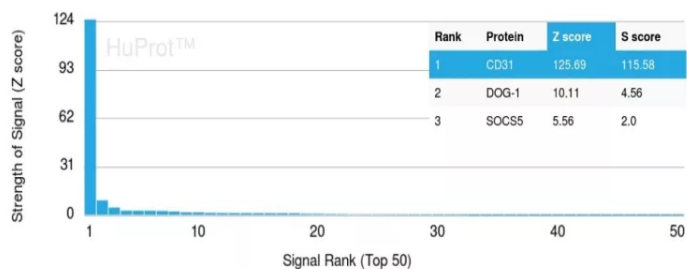
Product Images for CD31 / PECAM-1 (Endothelial Cell Marker) Antibody



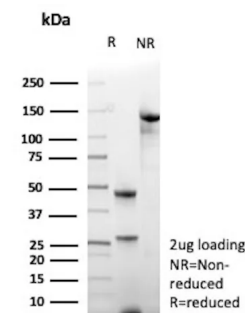
Formalin-fixed, paraffin-embedded human placenta stained with CD31 Mouse Monoclonal Antibody (PECAM1/3533). Inset: PBS instead of primary antibody; secondary only negative control.



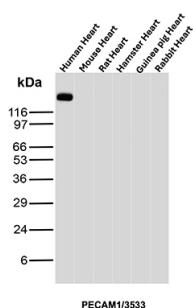
Formalin-fixed, paraffin-embedded human placenta stained with CD31 Mouse Monoclonal Antibody (PECAM1/3533). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



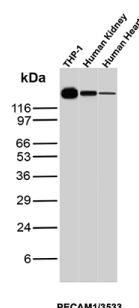
Analysis of Protein Array containing more than 19,000 full-length human proteins using CD31 Mouse Monoclonal Antibody (PECAM1/3533) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) 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 be 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



SDS-PAGE Analysis Purified CD31 Mouse Monoclonal Antibody (CD31/3533). Confirmation of Purity and Integrity of Antibody.



Western blot analysis of Human Heart, Mouse Heart, Rat Heart, Hamster Heart, Guinea pig Heart and Rabbit Heart tissue lysates using CD31 Mouse Monoclonal Antibody (PECAM1/3533).



Western Blot Analysis of THP-1, Human Kidney and Human Heart lysates using CD31 Mouse Monoclonal Antibody (PECAM1/3533).

Specificity & Comments

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.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

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.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Angiogenesis, Cardiovascular, Endothelial Cell Marker, Immunology