

## CD31 / PECAM-1 (Endothelial Cell Marker) Antibody

Mouse Monoclonal Antibody [Clone JC/70A]

Catalog No	Format	Size
5175-MSM4-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
5175-MSM4-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
5175-MSM4-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

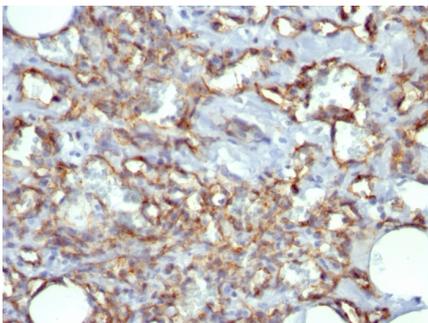
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

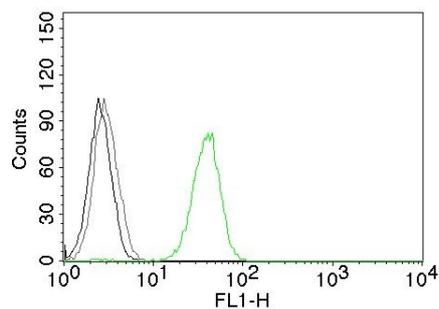
<b>Clone</b>	JC/70A
<b>Gene Name</b>	PECAM-1
<b>Immunogen</b>	Membrane preparation of a spleen from a patient with hairy cell leukemia
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG1 / Kappa
<b>Mol. Weight of Antigen</b>	~100kDa (endothelium) and ~130kDa (platelets)
<b>Cellular Localization</b>	Cell junction, Cell membrane, Membrane raft
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	Jurkat or THP-1 cells. Human angiosarcoma.

\*Optimal dilution for a specific application should be determined.

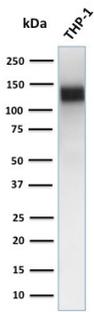
### Product Images for CD31 / PECAM-1 (Endothelial Cell Marker) Antibody



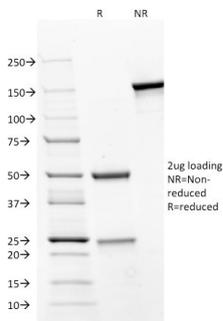
Formalin-fixed, paraffin-embedded human Angiosarcoma stained with CD31 Mouse Monoclonal Antibody (JC/70A). HIER: Tris/EDTA, pH9.0, 45min. 2°: HRP-polymer, 30min. DAB, 5min.



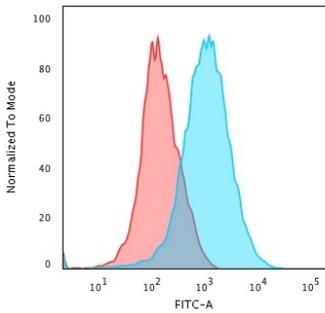
Flow Cytometry of human CD31 on Jurkat cells. Black: cells alone; Grey: Isotype Control; Green: AF488-labeled CD31 Mouse Monoclonal Antibody (JC/70A).



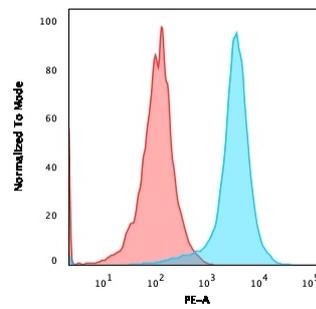
Western Blot Analysis of human THP-1 cell lysate using CD31 Mouse Monoclonal Antibody (JC/70A)



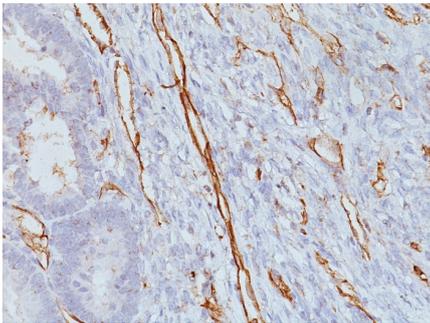
SDS-PAGE Analysis of Purified CD31 Mouse Monoclonal Antibody (JC/70A). Confirmation of Purity and Integrity of Antibody



Flow Cytometric Analysis of PFA-fixed Jurkat cells using CD31 Mouse Monoclonal Antibody (JC/70A) followed by goat anti-Mouse IgG-CF488 (blue); isotype control (red).



Flow cytometric analysis of Jurkat cells using PE-conjugated CD31 Mouse Monoclonal Antibody (JC/70A) (blue); isotype control (red).



Formalin-fixed, paraffin-embedded human colon carcinoma stained with CD31 Mouse Monoclonal Antibody (JC/70A). HIER: Tris/EDTA, pH9.0, 45min. 2°: HRP-polymer, 30min. DAB, 5min.

### 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