

## Product datasheet for **AM50225PU-S**

### CD31 (PECAM1) Mouse Monoclonal Antibody [Clone ID: C31.3 + JC/70A]

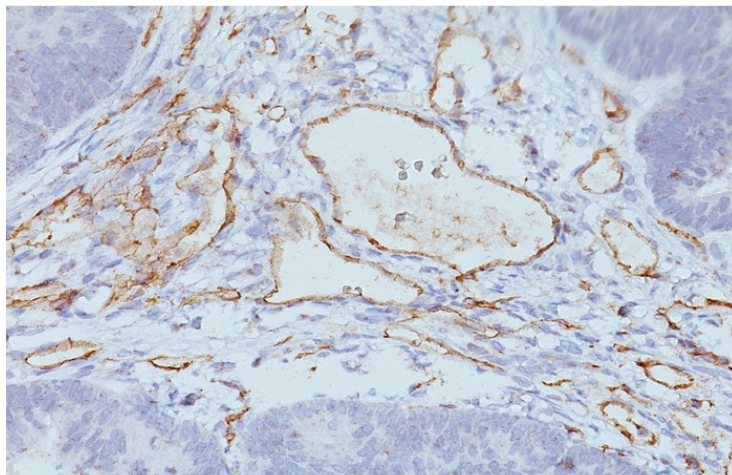
#### Product data:

Product Type:	Primary Antibodies
Clone Name:	C31.3 + JC/70A
Applications:	FC, IF, IHC, IP, WB
Recommended Dilution:	<b>Western blot:</b> 0.5-3 µg/ml. <b>Immunoprecipitation:</b> 0.5-1 µg/500 µg protein lysate. <b>Flow Cytometry:</b> 0.5-1 µg/10 <sup>6</sup> cells. <b>Immunofluorescence:</b> 0.5-1 µg/ml. <b>Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Sections:</b> 0.5-1 µg/ml for 30 minutes at RT. Staining of formalin-fixed tissues REQUIRES boiling tissue sections in 1mM EDTA, pH 8.0, for 10-20 min followed by cooling at RT for 20 min. <b>Positive Control:</b> Tonsil, Angiosarcoma.
Reactivity:	Human, Monkey, Rabbit
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human recombinant CD31 protein (C31.3) & Membrane preparation of a spleen from a patient with hairy cell leukemia (JC/70A).
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 Monoclonal Antibody 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. <b>Cellular Localization:</b> Cell surface and cytoplasm of endothelial cells.

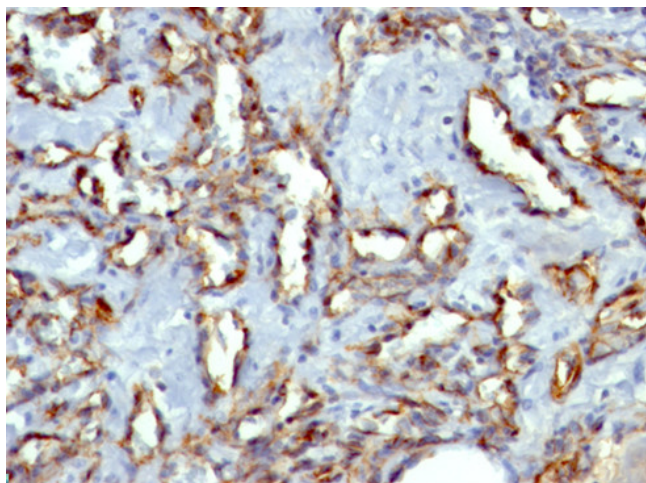


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<b>Formulation:</b>	10mM PBS State: Purified State: Liquid purified IgG fraction from Bioreactor Concentrate Stabilizer: 0.05% BSA Preservative: 0.05% Sodium Azide
<b>Concentration:</b>	lot specific
<b>Purification:</b>	Protein A/G Chromatography
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store undiluted at 2-8°C.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>Predicted Protein Size:</b>	~100 kDa (endothelium) and ~130 kDa (platelets)
<b>Gene Name:</b>	platelet and endothelial cell adhesion molecule 1
<b>Database Link:</b>	<a href="#">Entrez Gene 5175 Human P16284</a>
<b>Background:</b>	CD31 (PECAM-1, or platelet endothelial cell adhesion molecule-1) is a surface protein expressed by endothelial cells, monocytes, platelets, granulocytes, and lymphocyte subsets, and makes up a large portion of endothelial intercellular junctions. CD31 is a member of the immunoglobulin superfamily and is likely involved in leukocyte migration, angiogenesis, and integrin activation. Reports indicate that CD31 interacts with CD38 and is involved in cellular interactions resulting in wound healing and angiogenesis. Expression of CD31 on CD4+ T lymphocytes, helps to control T lymphocyte activation, because in the absence of CD31, T cells have a greater propensity to become activated, resulting in increased susceptibility to become apoptotic. This impact of CD31 loss becomes most pronounced during severe, inflammatory, and immunological stresses such as those caused by systemic Salmonella infection. This identifies a novel role for CD31 in regulating CD4 T homeostasis.
<b>Synonyms:</b>	PECAM-1, EndoCAM, GPIIA'

**Product images:**

Formalin-Paraffin Human Angiosarcoma stained with CD31 Antibody (Clone C31.7+JC/70A)



Formalin-Paraffin tonsil stained with CD31 Antibody (Clone C31.7+JC/70A)