



## CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody

Mouse Monoclonal Antibody [Clone CD34/7721]

Catalog No	Format	Size
947-MSM21-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
947-MSM21-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
947-MSM21-P1BX	Purified Ab WITHOUT BSA at 1.0mg/ml	100 ug

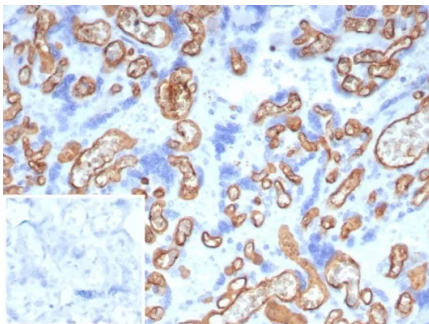
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

### Product Details

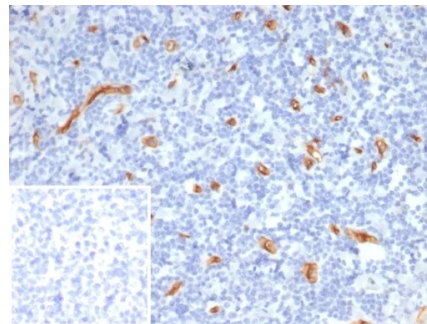
Clone	CD34/7721
Gene Name	CD34
Immunogen	Recombinant fragment (around aa100-300) of human HPCA1 protein (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG
Mol. Weight of Antigen	90-110kDa
Cellular Localization	Cell surface.
Species Reactivity	Human
Positive Control	Jurkat or KG-1 cells. Human tonsil or angiosarcoma.

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

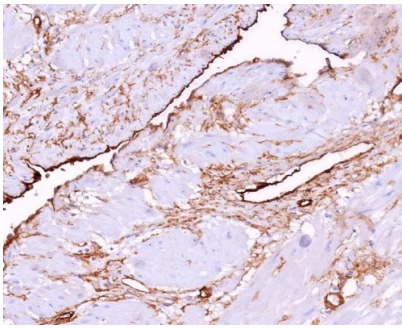
### Product Images for CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody



Formalin-fixed, paraffin-embedded human placenta stained with CD34 Mouse Monoclonal Antibody (CD34/7721) at 2ug/ml RT. Inset: PBS instead of primary antibody; secondary only negative control.



Formalin-fixed, paraffin-embedded human tonsil stained with CD34 Mouse Monoclonal Antibody (CD34/7721). Inset: PBS instead of primary antibody; secondary only negative control.



Formalin-fixed, paraffin-embedded human uterus stained with CD34 Mouse Monoclonal Antibody (CD34/7721). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

### Specificity & Comments

This MAb recognizes a single chain, transmembrane, heavily glycosylated protein of 90-120kDa, which is identified as CD34. On the basis of differential sensitivity to degradation by specific enzymes, epitopes of monoclonal antibodies to CD34 are classified into three main categories, class I, class II and class III. It is a class II antibody whose epitope is resistant to neuraminidase but sensitive to glycoprotease and chymopapain. CD34 expression is a hallmark for identifying pluripotent hematopoietic stem or progenitor cells. Its expression is gradually lost as lineage committed progenitors differentiate. CD34 is a marker of choice for staining blasts in acute myeloid leukemia. In addition, CD34 is expressed by soft tissue tumors, such as solitary fibrous tumor and gastrointestinal stromal tumor. Its expression is also found in vascular endothelium. It appears that proliferating endothelial cells express this molecule more than the non-proliferating endothelial cells. Anti-CD34 labels > 85% of angiosarcoma and Kaposi's sarcoma, but with a lower specificity.

### 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 at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Immunology, Endothelial Cell Marker, Hematopoietic Stem Cells, Mesenchymal Stem Cell Differentiation