

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

Mouse Monoclonal Antibody [Clone CD34/7721]

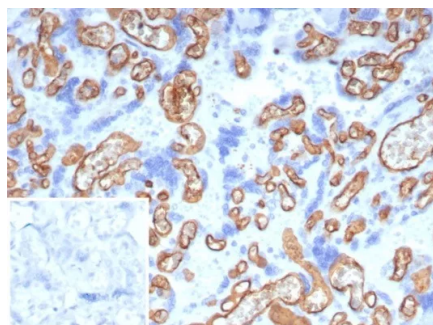
| Catalog No     | Format                                     | Size   |
|----------------|--|--------|
| 947-MSM21-P0   | Purified Ab with BSA and Azide at 200ug/ml | 20 ug  |
| 947-MSM21-P1   | Purified Ab with BSA and Azide at 200ug/ml | 100 ug |
| 947-MSM21-P1BX | Purified Ab WITHOUT BSA at 1.0mg/ml        | 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 |
| Western Blot (WB)          | 2-4ug/ml         |   |

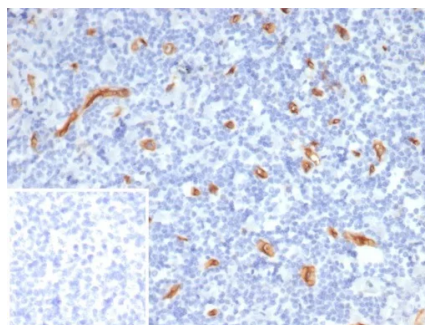
| Product Details        |  |
|------------------------|--|
| Clone                  | CD34/7721  |
| Gene Name              | CD34   |
| Immunogen              | Recombinant fragment (around aa100-300) of human HPCA1 protein (exact sequence is proprietary) |
| Host                   | Mouse  |
| Clonality              | Monoclonal   |
| Isotype / Light Chain  | IgG1 / Kappa   |
| Mol. Weight of Antigen | 90-110kDa  |
| Cellular Localization  | Cell surface.  |
| Species Reactivity     | Human  |
| Positive Control       | Jurkat or KG-1 cells. Human tonsil or angiosarcoma. Heart.                                     |

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

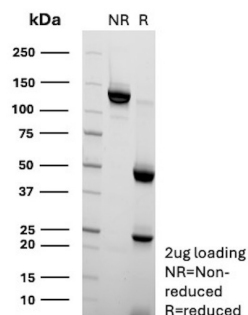
### Product Images for CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody



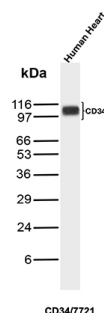
Formalin-fixed, paraffin-embedded human placenta stained with CD34 Mouse Monoclonal Antibody (CD34/7721) at 2ug/ml RT. Inset: PBS instead of primary antibody; secondary only negative control.



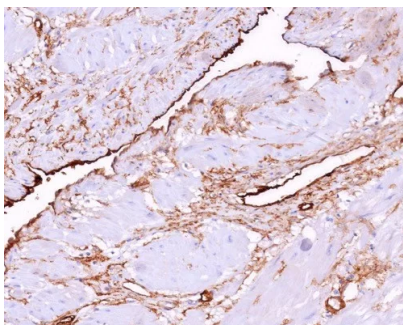
Formalin-fixed, paraffin-embedded human tonsil stained with CD34 Mouse Monoclonal Antibody (CD34/7721). Inset: PBS instead of primary antibody; secondary only negative control.



SDS-PAGE Analysis of Purified CD34 Mouse Monoclonal Antibody(CD34/7721). Confirmation of Purity and Integrity of Antibody



Western Blot Analysis of Human Heart tissue lysate using CD34 Mouse Monoclonal Antibody (CD34/7721).



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