

# CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - With BSA and Azide Mouse Monoclonal Antibody [Clone SPM123 ] Catalog # AH10875

#### **Specification**

### CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - With BSA and Azide - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality

Isotype Calculated MW IHC-P, IF, FC
P28906
947, 374990
Human, Rhesus, Cynomolgus
Mouse
Monoclonal

Mouse / IgG1, kappa 90-110kDa KDa

### CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - With BSA and Azide - Additional Information

#### Gene ID 947

#### **Other Names**

Hematopoietic progenitor cell antigen CD34, CD34, CD34

#### **Application Note**

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \> < span class
="dilution\_IF">IF~~1:50~200</span><br \> < span class = "dilution\_FC">FC~~1:10~50</span>

#### **Format**

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

Store at 2 to 8°C. Antibody is stable for 24 months.

#### **Precautions**

CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

### CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - With BSA and Azide - Protein Information

#### Name CD34

#### **Function**

Possible adhesion molecule with a role in early hematopoiesis by mediating the attachment of stem cells to the bone marrow extracellular matrix or directly to stromal cells. Could act as a scaffold for the attachment of lineage specific glycans, allowing stem cells to bind to lectins





expressed by stromal cells or other marrow components. Presents carbohydrate ligands to selectins.

#### **Cellular Location**

Membrane; Single-pass type I membrane protein.

#### **Tissue Location**

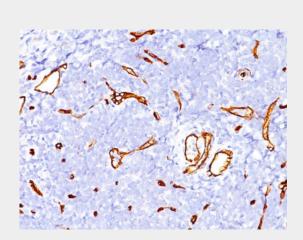
Selectively expressed on hematopoietic progenitor cells and the small vessel endothelium of a variety of tissues

### CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - With BSA and Azide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Tonsil stained with CD34 Monoclonal Antibody (SPM123)

## CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - With BSA and Azide - Background

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 intoĀthree 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.ĀCD34 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





Tel: 858.875.1900 Fax: 858.875.1999

gastrointestinal stromal tumor. Its expression is also found in vascular endothelium. Additionally, 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.

CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - With BSA and Azide -References

Ramani P; Bradley NI; Fletcher CD. QBEND/10, a new monoclonal antibody to endothelium: assessment of its diagnostic utility in paraffin sections. Histopathology, 1990, 17:237-42