

CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - With BSA and Azide Mouse Monoclonal Antibody [Clone HPCA1/1171 ] Catalog # AH12708

#### 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 WB, IHC, IF, FC <u>P28906</u> <u>947</u>, <u>374990</u> Human, Rat 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\_WB">WB~~1:1000</span><br \><span class ="dilution\_IHC">IHC~~1:100~500</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_FC">FC~~1:10~50</span>

**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**

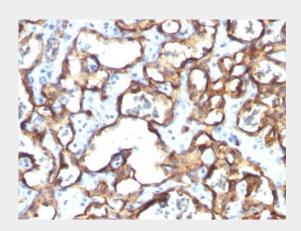
Selectively expressed on hematopoietic progenitor cells and the small vessel endothelium of a variety of tissues

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

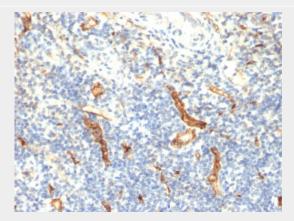
Provided below are standard protocols that you may find useful for product applications.

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

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



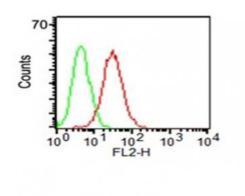
Formalin-fixed, paraffin-embedded human Angiosarcoma stained with CD34 Monoclonal Antibody (HPCA1/1171)



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



### (HPCA1/1171)



Flow Cytometry of KG-1 cells using CD34 Monoclonal Antibody (HPCA1/1171) (red) & isotype control (green).

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

This antibody recognizes a carbohydrate epitope on a single chain, transmembrane, heavily glycosylated protein of 90-120kDa, which is identified as CD34 (VI international workshop on human differentiation antigens). Its 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, it is expressed by soft tissue tumors, such as solitary fibrous tumor and gastrointestinal stromal tumor. CD34 expression is also found in vascular endothelium. Additionally, proliferating endothelial cells overexpress this molecule than the non-proliferating endothelial cells. Anti-CD34 labels > 85% of angiosarcoma and Kaposi s sarcoma, but shows low specificity.

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

Felshow DM et al. Blood 97:3768-3775 (2001). | Sato T et al. Blood 94:2548-2554 (1999). |