10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Mouse Monoclonal Antibody [Clone HPCA1/1171]
Catalog # AH12708

Product Information

Application	WB, IHC, IF, FC
Primary Accession	P28906
Other Accession	947, 374990
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	HPCA1/1171
Calculated MW	40716

Additional Information

Gene ID	947
Other Names	Hematopoietic progenitor cell antigen CD34, CD34, CD34
Application Note	WB~~1:1000 IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
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.

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

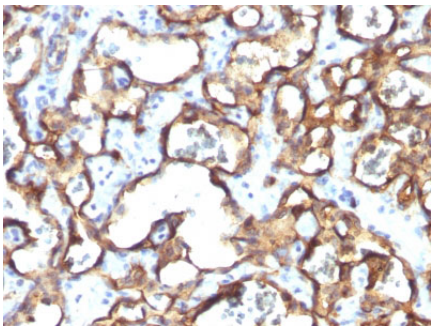
Background

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.

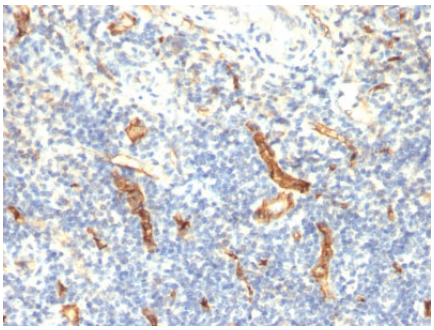
References

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

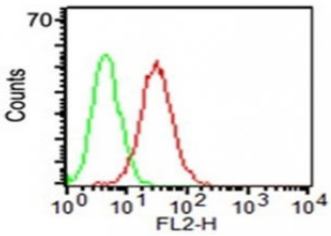
Images



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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.