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 QBEnd/10 + HPCA1/763] Catalog # AH12705

Product Information

Application IHC, IF, FC
Primary Accession P28906
Other Accession 947, 374990
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype Mouse / IgG's

Clone Names QBEnd/10 + HPCA1/763

Calculated MW 40716

Additional Information

Gene ID 947

Other Names Hematopoietic progenitor cell antigen CD34, CD34, CD34

Application Note 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

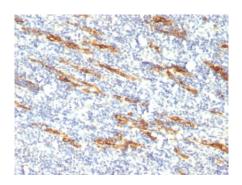
Background

This MAb recognizes a single chain, transmembrane, heavily glycosylated protein of 90-120kDa, which is identified as CD34. 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, CD34 is expressed by soft tissue tumors, such as solitary fibrous tumor and 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.

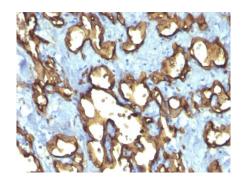
References

Felshow DM et al. Blood 97:3768-3775 (2001). | Ramani P; Bradley NJ; Fletcher CD. QBEND/10, a new monoclonal antibody to endothelium: assessment of its diagnostic utility in paraffin sections. Histopathology, 1990, 17:237-42. | Sato T et al. Blood 94:2548-2554 (1999). |

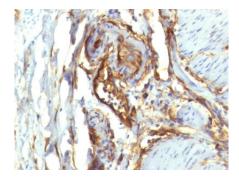
Images



Formalin-fixed, paraffin-embedded human Tonsil stained with CD34 Monoclonal Antibody (QBEnd/10 + HPCA1/763)

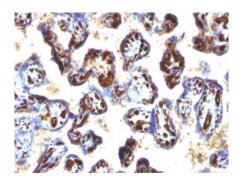


Formalin-fixed, paraffin-embedded human Angiosarcoma stained with CD34 Monoclonal Antibody (QBEnd/10 + HPCA1/763)



Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with CD34 Monoclonal Antibody (QBEnd/10 + HPCA1/763)

Formalin-fixed, paraffin-embedded human Placenta stained with CD34 Monoclonal Antibody (QBEnd/10 + HPCA1/763)



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