

CD34 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1099a

Specification

CD34 Antibody - Product Information

Application WB, IHC, IF, ICC

Primary Accession
Reactivity
Host
Clonality
Rotype
Reactivity
Human
Mouse
Monoclonal

Description

CD34 is a transmembrane glycoprotein with a molecular mass of approximately 110 kD that is selectively expressed on human hematopoietic progenitor cells, endothelial cells and some fibroblasts. It 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. CD34 is highly expressed on hematopoietic progenitors, as well as on endothelial cells. CD34 has been used to measure angiogenesis, which reportedly predicts tumor recurrence.

Immunogen

Purified recombinant fragment of CD34 expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

CD34 Antibody - Additional Information

Gene ID 947

Other Names

Hematopoietic progenitor cell antigen CD34, CD34, CD34

Dilution

WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 IF~~1/200 - 1/1000 ICC~~1:200~~1000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CD34 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CD34 Antibody - 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 Antibody - Protocols

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

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

CD34 Antibody - Images

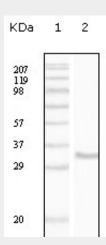


Figure 1: Western blot analysis using CD34 mouse mAb against truncated CD34 recombinant protein.



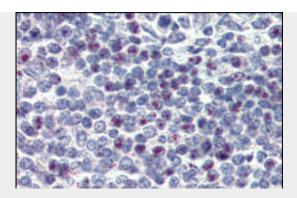


Figure 2: Immunohistochemical analysis of paraffin-embedded human spleen using CD34 mouse mAb with DAB staining.

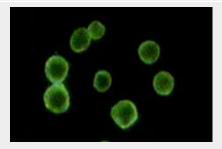


Figure 3: Immunofluorescence analysis of peripheral blood cells using CD34 mouse mAb.



Figure 2: Immunofluorescence staining of methanol-fixed Hela cells using ABL2 mouse mAb showing cytoplasm localization.

CD34 Antibody - References

1. Sho E., et al. Arterioscler Thromb Vasc Biol. 2004: 24: 1916-21. 2. Satterthwaite, A.B., et al. Genomics. 1992: 12:788-794.3. Krause, D.S., et al. 1994. Blood. 84: 691-701.