

CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - Conjugated to PE Purified Mouse Monoclonal Antibody Catalog # AH10219

Specification

CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - Conjugated to PE - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW FC <u>P28906</u> Human, Rat Mouse Monoclonal IgG1, kappa 90-110kDa KDa

CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - Conjugated to PE - Additional Information

Gene ID 947

Other Names Hematopoietic progenitor cell antigen CD34, CD34, CD34

Target/Specificity Blast cells of a chronic myeloid leukemia patient

Application Note FC~~1:10~50

Format 0.5 ml at 100ug/ml; Conjugated to PE

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

Precautions CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - Conjugated to PE is for research use only and not for use in diagnostic or therapeutic procedures.

CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - Conjugated to PE - 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 - Conjugated to PE -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 - Conjugated to PE -Images



Surface flow cytometric analysis of CD34 on KG-1 cells using CD34 Ab (ICO-115) (red) and isotype control Ab (green). PPI negative cell population was gated for analysis.

CD34 (Hematopoietic Stem Cell & Endothelial Marker) Antibody - Conjugated to PE -Background

This antibody 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, 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, it appears that 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 - Conjugated to PE - References

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