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

Purified Mouse Monoclonal Antibody
Catalog # AH10219

Product Information

Application	FC
Primary Accession	P28906
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1, kappa
Clone Names	ICO-115
Calculated MW	40716

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	Flow Cytometry 5ul (0.5ug) per test per one million cells.
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.

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

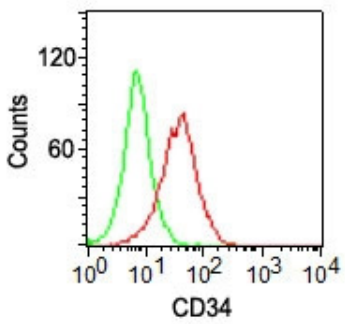
Background

This antibody recognizes a 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.

References

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

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.