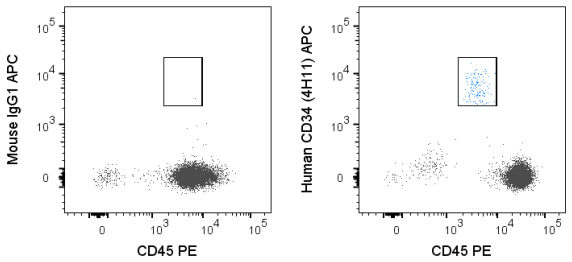
TECHNICAL DATA SHEET

APC Anti-Human CD34 (4H11)

Catalog Number: 20-0349

PRODUCT INFORMATION

Contents:	APC Anti-Human CD34 (4H11)
Isotype:	Mouse IgG1, k
Concentration:	5 uL (0.125 ug)/test
Clone:	4H11
Reactivity:	Human
Use By:	12 months from date of receipt
Storage Conditions:	2-8°C
Formulation:	10 mM NaH_2PO_4, 150 mM NaCl, 0.09% NaN_3, pH7.2



Human peripheral blood lymphocytes were stained with PE Anti-Human CD45 (50-0459) and 5 uL (0.125 ug) APC Anti-Human CD34 (20-0349) (right panel) or 0.125 ug APC Mouse IgG1 isotype control (left panel).

DESCRIPTION

The 4H11 monoclonal antibody reacts with human CD34, a single pass transmembrane protein with a molecular weight of 105-120 kDa. CD34 is heavily glycosylated with an N-terminal mucin domain. Although the function of CD34 is not defined, the intracellular domain of CD34 is a target for phosphorylation by activated protein kinase C, suggesting a possible role in signal transduction. CD34 is expressed on hematopoietic progenitor cells, some populations of mesenchymal stem cells, and vascular endothelium. Various epitopes of CD34 have been defined based on their differential sensitivity to enzymatic cleavage. By these criteria, the 4H11 antibody belongs to class III, indicating that it reacts with a protein epitope. Additionally, CD34 may also function as an adhesion molecule with a role in mediating attachment of stem cells to bone marrow extracellular matrix, stromal cells, or other bone marrow components.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been pre-titrated and quality-tested for flow cytometry using an appropriate cell type. The antibody has been diluted for use at 5 uL per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 uL. The number of cells within a sample should be determined empirically, but typically ranges between 1x10e5 to 1x10e8 cells.

REFERENCES

Loken MR, Shah VO, Hollander Z, Civin CI. 1988. Pathol Immunopathol Res. 1988. 7(5):357-570. Berenson RJ, Andrews RG, Bensinger WI, Kalamasz D, Knitter G, Buckner CD, Bernstein ID. 1988. J Clin Invest. Mar;81(3):951-955. Knapp W, Dorken B, Rieber EP, et al, ed. 1989. Leucocyte Typing IV. New York: Oxford University Press. Egeland T, Tjonnfjord G, Steen R, Gaudernack G, Thorsby E. 1993. Transplant Proc. 25(1):1261-1263.

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.