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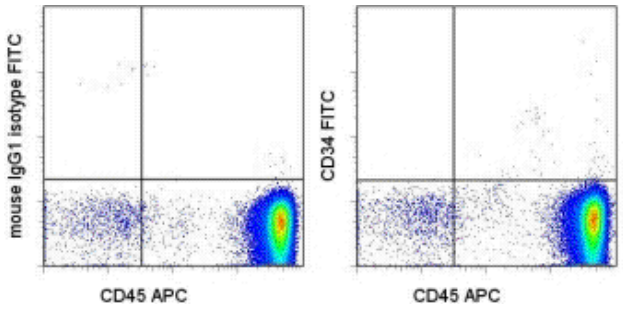
Anti-Human CD34 FITC

Catalog Number: 11-0349
Also Known As: Mucosialin, Class III epitope
RUO: For Research Use Only



Staining of normal human peripheral blood cells with Anti-Human CD45 APC (cat. 17-0459) and Mouse IgG1 K Isotype Control FITC (cat. 11-4714) (left) or Anti-Human CD34 FITC (right). Total viable cells were used for analysis.

Product Information

Contents: Anti-Human CD34 FITC
REF **Catalog Number:** 11-0349
Clone: 4H11
Concentration: 5 uL (0.5 ug)/test
Host/Isotype: Mouse IgG1, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material.
LOT **Batch Code:** Refer to Vial
Use By: Refer to Vial
Caution, contains Azide

Description

The 4H11 monoclonal antibody reacts with human CD34, also known as mucosialin. CD34 belongs to a protein family which also includes endoglycan and podocalyxin. Members of this family are single pass transmembrane proteins with a heavily glycosylated extracellular and N-terminal mucin domain. CD34 was first identified as an antigen expressed on hematopoietic progenitors, and has since been extensively used as a marker to isolate cells capable of hematopoietic cell engraftment. In spite of this, the function of CD34 remains unresolved. In addition to expression on hematopoietic progenitors, CD34 is expressed on some populations of mesenchymal stem cells, tumor cell lines, and by vascular endothelia in the adult. Epitopes of CD34 have been assigned to three classes (class I, II or III) based on their differential sensitivity to enzymatic cleavage by neuraminidase, chymopapain, or O-glycoprotease. According to this analysis, the 4H11 antibody belongs to class III, indicating that it reacts with a protein epitope.

Applications Reported

This 4H11 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 4H11 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.5 µg)/per test. A test is defined as the amount (µg)/test of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

References

Elknerová K, Lacinová Z, Soucek J, Marinov I, Stöckbauer P. Growth inhibitory effect of the antibody to hematopoietic stem cell antigen CD34 in leukemic cell lines. Neoplasma. 2007;54(4):311-20. (**4H11**, FA, FC, PubMed)

Sutherland DR, Watt SM, Dowden G, Karhi K, Baker MA, Greaves MF, Smart JE. Structural and partial amino acid sequence analysis of the human hemopoietic progenitor cell antigen CD34.Leukemia. 1988 Dec;2(12):793-803.

Baumheter S, Singer MS, Henzel W, Hemmerich S, Renz M, Rosen SD, Lasky LA. Binding of L-selectin to the vascular sialomucin CD34. Science. 1993 Oct 15;262(5132):436-8.

Related Products

11-0341 Anti-Mouse CD34 FITC (RAM34)
11-4714 Mouse IgG1 K Isotype Control FITC
17-0459 Anti-Human CD45 APC (HI30)

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