CD34 Monoclonal Antibody (4H11), PerCP-eFluor™ 710, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PerCP-eFluor™ 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	4H11
Conjugate	PerCP-eFluor™ 710
Excitation/Emission Max	482/708 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2016673

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	42 Publications

Product Specific Information

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 (0.125 µg) per test. A test is defined as the amount (µg) 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.

PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make

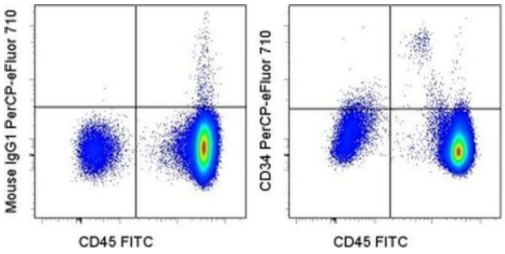
sure that your instrument is capable of detecting this fluorochrome.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD34 Monoclonal Antibody (4H11), PerCP-eFluor™ 710, eBioscience™



CD34 Antibody (46-0349-42) in Flow
Staining of normal human peripheral blood cells with Anti-Human CD45 FITC (Product # 11-0459-42) and Mouse IgG1 K Isotype Control PerCP-eFluor® 710 (Product # 46-4714-82) (left) or Anti-Human CD34 PerCP-eFluor® 710 (right). Cells in the lymphocyte gate were used for analysis.

View more figures on thermofisher.com

42 References

Flow Cytometry (42)

Experimental and therapeutic medicine

Human placental mesenchymal stem cells regulate inflammation via the NFB signaling pathway.

"Published figure using CD34 monoclonal antibody (Product # 46-0349-42) in Flow Cytometry"

Authors: Liu Y,Zhang X,Hu Y,Kang M,Wu Y,Wang Y,Deng C

Year
2022

Scientific reports

Angiogenic stem cell delivery platform to augment post-infarction neovasculature and reverse ventricular remodeling.

"Published figure using CD34 monoclonal antibody (Product # 46-0349-42) in Flow Cytometry"

Authors: Shin HS,Thakore A,Tada Y,Pedroza AJ,Ikeda G,Chen IY,Chan D,Jaatinen KJ,Yajima S,Pfrender EM, Kawamura M,Yang PC,Wu JC,Appel EA,Fischbein MP,Woo Y,Shudo Y

Year
2022

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