

CD34 Monoclonal Antibody (4H11), Alexa Fluor™ 700, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Alexa Fluor™ 700, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	4H11
Conjugate	Alexa Fluor™ 700
Excitation/Emission Max	696/719 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_2815232

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	47 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.

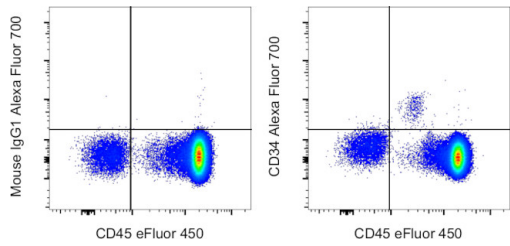
Applications Reported: This 4H11 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 4H11 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 µL (0.5 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 10⁵ to 10⁸ cells /test.

Alexa Fluor 700 emits at 723 nm and can be excited with the red laser (633-647 nm). Most instruments will require a 685 LP mirror and 710/20 band pass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 633-647 nm; Emission: 723 nm; Laser: Red Laser

Product Images For CD34 Monoclonal Antibody (4H11), Alexa Fluor™ 700, eBioscience™



CD34 Antibody (56-0349-42) in Flow
Normal human peripheral blood cells were stained with CD45 Monoclonal Antibody, eFluor 450 (Product # 48-0459-42) and Mouse IgG1 kappa Isotype Control, Alexa Fluor 700 (Product # 56-4714-80) (left) or CD34 Monoclonal Antibody, Alexa Fluor 700 (right). Total viable lymphocytes were used for analysis, as determined by 7-AAD (Product # 00-6993-50).

View more figures on thermofisher.com

48 References

Immunocytochemistry (1)

<p>Kidney research and clinical practice</p> <p>Modeling of endothelial cell dysfunction using human induced pluripotent stem cells derived from patients with end-stage renal disease.</p> <p>"Published figure using CD34 monoclonal antibody (Product # 56-0349-42) in Immunocytochemistry"</p> <p>Authors: Kim KW,Shin YJ,Kim BM,Cui S,Ko EJ,Lim SW,Yang CW,Chung BH</p>	<p>Year</p> <p>2021</p>
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Flow Cytometry (47)

<p>Experimental and therapeutic medicine</p> <p>Human placental mesenchymal stem cells regulate inflammation via the NFB signaling pathway.</p> <p>"Published figure using CD34 monoclonal antibody (Product # 56-0349-42) in Flow Cytometry"</p> <p>Authors: Liu Y,Zhang X,Hu Y,Kang M,Wu Y,Wang Y,Deng C</p>	<p>Year</p> <p>2022</p>
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<p>Scientific reports</p> <p>Angiogenic stem cell delivery platform to augment post-infarction neovasculature and reverse ventricular remodeling.</p> <p>"Published figure using CD34 monoclonal antibody (Product # 56-0349-42) in Flow Cytometry"</p> <p>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</p>	<p>Year</p> <p>2022</p>
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