

# CD34 Monoclonal Antibody (4H11), FITC, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Mouse, Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), FITC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	4H11
Conjugate	FITC
Excitation/Emission Max	498/517 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1518732

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	75 Publications
Miscellaneous PubMed (Misc)	-	2 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.

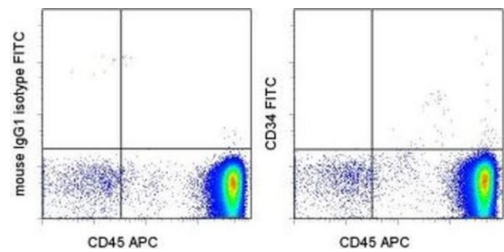
**Applications Reported:** This 4H11 antibody has been reported for use in flow cytometric analysis.

**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 (0.5 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 10<sup>5</sup> to 10<sup>8</sup> cells /test.

**Excitation:** 488 nm; **Emission:** 520 nm; **Laser:** Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD34 Monoclonal Antibody (4H11), FITC, eBioscience™



**CD34 Antibody (11-0349-42) in Flow**  
Staining of normal human peripheral blood cells with Anti-Human CD45 APC (Product # 17-0459-42) and Mouse IgG1 K Isotype Control FITC (Product # 11-4714-42) (left) or Anti-Human CD34 FITC (right). Total viable cells were used for analysis.

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Immunocytochemistry (2)

<p>Kidney research and clinical practice</p> <p><b>Modeling of endothelial cell dysfunction using human induced pluripotent stem cells derived from patients with end-stage renal disease.</b></p> <p>"Published figure using CD34 monoclonal antibody (Product # 11-0349-42) in Immunocytochemistry"</p> <p>Authors: Kim KW,Shin YJ,Kim BM,Cui S,Ko EJ,Lim SW,Yang CW,Chung BH</p>	<p>Year 2021</p>
<p>PloS one</p> <p><b>Microvesicles from Mesenchymal Stromal Cells Are Involved in HPC-Microenvironment Crosstalk in Myelodysplastic Patients.</b></p> <p>"Published figure using CD34 monoclonal antibody (Product # 11-0349-42) in Flow Cytometry"</p> <p>Authors: Muntión S,Ramos TL,Diez-Campelo M,Rosón B,Sánchez-Abarca LI,Misiewicz-Krzeminska I,Preciado S,Sarasquete ME,de Las Rivas J,González M,Sánchez-Guijo F,Del Cañizo MC</p>	<p>Year 2016</p> <p>Species Human</p>

Flow Cytometry (75)

<p>Pain</p> <p><b>CD304 + adipose tissue-derived mesenchymal stem cell abundance in autologous fat grafts highly correlates with improvement of localized pain syndromes.</b></p> <p>"Published figure using CD34 monoclonal antibody (Product # 11-0349-42) in Flow Cytometry"</p> <p>Authors: Rezzonico Jost T,Lozito A,Mangani D,Raimondi A,Klinger F,Morone D,Klinger M,Grassi F,Vinci V</p>	<p>Year 2024</p>
<p>Gland surgery</p> <p><b>Tumor-derived mesenchymal progenitor cell-related genes in the regulation of breast cancer proliferation.</b></p> <p>"Published figure using CD34 monoclonal antibody (Product # 11-0349-42) in Flow Cytometry"</p> <p>Authors: Chen Y,Zhu L,Wang Y,Hu J,Zhang H,Zhu J,Gong W,Liu X,Xiao F,Li X</p>	<p>Year 2024</p>

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More applications with references on thermofisher.cn

Misc (2)

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