

CD31 (PECAM-1) Monoclonal Antibody (WM-59 (WM59)), PerCP-eFluor™ 710, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human, Mouse
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	WM-59 (WM59)
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_1834397

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	29 Publications

Product Specific Information

Description: The WM59 monoclonal antibody reacts with human CD31, also known as platelet-endothelial cell adhesion molecule-1 (PECAM-1) and gpIIa. This 130-140 kDa surface protein is expressed by endothelial cells and at low levels on leukocytes and platelets. It has been reported that CD38 binds to CD31. Homotypic interaction of CD31 is important in adhesion, cell-cell and cell-matrix interaction, and signal transduction.

Applications Reported: This WM-59 (WM59) antibody has been reported for use in flow cytometric analysis.

Applications Tested: This WM-59 (WM59) 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 10⁵ to 10⁸ 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.

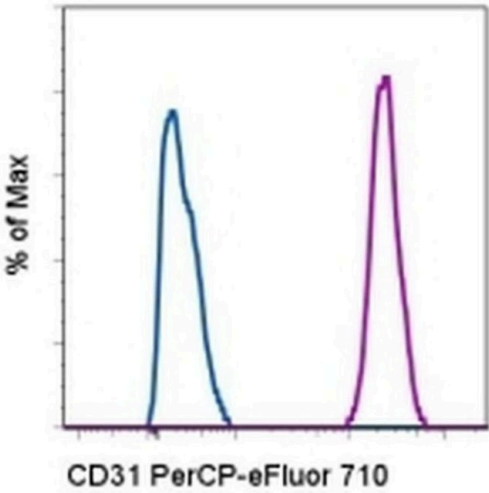
Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step

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 CD31 (PECAM-1) Monoclonal Antibody (WM-59 (WM59)), PerCP-eFluor™ 710, eBioscience™



CD31 (PECAM-1) Antibody (46-0319-42) in Flow
Staining of normal human peripheral blood cells with Mouse IgG1 K Isotype Control PerCP-eFluor® 710 (Product # 46-4714-82) (blue histogram) or Anti-Human CD31 (PECAM-1) PerCP-eFluor® 710 (purple histogram). Cells in the monocyte gate were used for analysis.

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Immunocytochemistry (1)

<p>F1000Research</p> <p>A three-dimensional model of the human blood-brain barrier to analyse the transport of nanoparticles and astrocyte/endothelial interactions.</p> <p>"46-0319 was used in Immunofluorescence to develop a 3D model of the human blood-brain barrier in vitro, which mimics the cellular architecture of the CNS, to analyse the delivery of nanoparticles to cells of the CNS."</p> <p>Authors: Sreekanthreddy P,Gromnicova R,Davies H,Phillips J,Romero IA,Male D</p>	<p>Year 2016</p> <p>Species Human</p>
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Flow Cytometry (29)

<p>Frontiers in immunology</p> <p>MiR-451a and let-7i-5p loaded extracellular vesicles attenuate heme-induced inflammation in hiPSC-derived endothelial cells.</p> <p>"Published figure using CD31 (PECAM-1) monoclonal antibody (Product # 46-0319-42) in Flow Cytometry"</p> <p>Authors: Thomas JJ,Harp KO,Bashi A,Hood JL,Botchway F,Wilson MD,Thompson WE,Stiles JK,Driss A</p>	<p>Year 2023</p>
<p>Scientific reports</p> <p>Angiogenic stem cell delivery platform to augment post-infarction neovasculature and reverse ventricular remodeling.</p> <p>"Published figure using CD31 (PECAM-1) monoclonal antibody (Product # 46-0319-42) 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 2022</p>

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