

# CD31 (PECAM-1) Monoclonal Antibody (390), PerCP-eFluor™ 710, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Fish, Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PerCP-eFluor™ 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	390
Conjugate	PerCP-eFluor™ 710
Excitation/Emission Max	482/708 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1834429

Applications	Tested Dilution	Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Flow Cytometry (Flow)	0.125 µg/test	80 Publications

## Product Specific Information

**Description:** The 390 monoclonal antibody reacts with mouse 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 all 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 390 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This 390 antibody has been tested by flow cytometric analysis of mouse spleen and bone marrow cells. This can be used at less than or equal to 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<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

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.

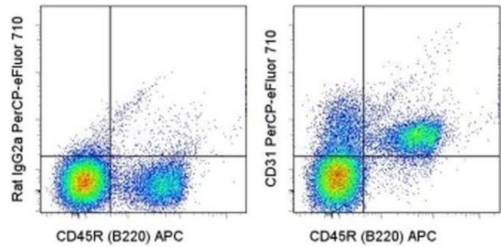
**Fixation:** Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step

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 (390), PerCP-eFluor™ 710, eBioscience™



**CD31 (PECAM-1) Antibody (46-0311-82) in Flow**  
Staining of BALB/c bone marrow cells with Anti-Human/Mouse CD45R (B220) APC (Product # 17-0452-82) and 0.06 µg of Rat IgG2a K Isotype Control PerCP-eFluor® 710 (Product # 46-4321-82) (left) or 0.06 µg of Anti-Mouse CD31 (PECAM-1) PerCP-eFluor® 710 (right). Cells in the small scatter population were used for analysis.

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81 References

Immunohistochemistry (Frozen) (1)

<p>The Journal of investigative dermatology</p> <p><b>Auf1/Hnnpd-deficient mice develop pruritic inflammatory skin disease.</b></p> <p>Authors: Sadri N,Schneider RJ</p>	<p>Year</p> <p>2009</p>
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Flow Cytometry (80)

<p>Nature communications</p> <p><b>The Wnt/TCF7L1 transcriptional repressor axis drives primitive endoderm formation by antagonizing naive and formative pluripotency.</b></p> <p>"Published figure using CD31 (PECAM-1) monoclonal antibody (Product # 46-0311-82) in Flow Cytometry"</p> <p>Authors: Athanasouli P,Balli M,De Jaime-Soguero A,Boel A,Papanikolaou S,van der Veer BK,Janiszewski A, Vanhessche T,Francis A,El Laithi Y,Nigro AL,Aulicino F,Koh KP,Pasque V,Cosma MP,Verfaillie C,Zwijssen A, Heindryckx B,Nikolaou C,Lluis F</p>	<p>Year</p> <p>2023</p>
<p>Nature communications</p> <p><b>Lamin A/C-dependent chromatin architecture safeguards naïve pluripotency to prevent aberrant cardiovascular cell fate and function.</b></p> <p>"Published figure using CD31 (PECAM-1) monoclonal antibody (Product # 46-0311-82) in Flow Cytometry"</p> <p>Authors: Wang Y,Elsherbiny A,Kessler L,Cordero J,Shi H,Serke H,Lityagina O,Trogisch FA,Mohammadi MM,El-Battrawy I,Backs J,Wieland T,Heineke J,Dobrev G</p>	<p>Year</p> <p>2022</p>

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