

APC/Cyanine7 anti-human CD31 Antibody

Catalog# / Size	303119 / 25 tests 303120 / 100 tests
Clone	WM59
Regulatory Status	RUO
Workshop	V P025
Other Names	PECAM-1, EndoCAM
Isotype	Mouse IgG1, κ
Description	CD31 is a 130-140 kD type I transmembrane glycoprotein also known as platelet endothelial cell adhesion molecule-1 (PECAM-1) or Endocam. It is expressed on monocytes, platelets, granulocytes, endothelial cells and lymphocyte subsets. CD31 has been reported to bind CD38 and be involved in wound healing, angiogenesis, and cellular migration in an inflammatory situation.

Product Details

Verified Reactivity	Human, Cynomolgus, Rhesus
Reported Reactivity	African Green, Baboon
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with APC/Cyanine7 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.
Excitation Laser	Red Laser (633 nm)
Application Notes	Clone WM59 has been reported to recognize the D2 extracellular portion of CD31. Additional reported applications (for the relevant formats) include: immunofluorescence microscopy ² , immunohistochemical staining of acetone-fixed frozen tissue sections ⁸ , blocking of platelet aggregation ³ , and spatial biology (IBEX) ^{11,12} . Clone WM59 is not recommended for immunohistochemical staining of formalin-fixed paraffin-embedded sections. The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 303143 & 303144). The purified WM59 antibody is useful as a capture antibody for a sandwich ELISA assay, when used in conjunction with biotin anti-human CD31 antibody (Cat. No. 536604) antibody as the detection antibody.
Additional Product Notes	BioLegend is in the process of converting the name APC/Cy7 to APC/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our APC/Cyanine7 products. Please contact Technical Service if you have any questions.
Application References	

**(PubMed link indicates
BioLegend citation)**

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10. Bushway ME, *et al.* 2014. *Biol Reprod.* 90(5): 110 (IF) [PubMed](#)
11. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci USA.* 117:33455-33465. (SB) [PubMed](#)
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Product Citations

1. Mendt M, *et al.* 2018. *JCI Insight.* 9:1523. [PubMed](#)
2. Wu J, *et al.* 2022. *Nat Commun.* 13:676. [PubMed](#)
3. Lin GL, *et al.* 2018. *Acta Neuropathol Commun.* 9:617. [PubMed](#)
4. Webster K, *et al.* 2013. *Hum Reprod.* 28:651. [PubMed](#)
5. Leimkühler NB, *et al.* 2020. *Cell Stem Cell.* 28:637. [PubMed](#)
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14. Phansalkar R, *et al.* 2021. *Elife.* 10: [PubMed](#)
15. Xu J *et al.* 2019. *Elife.* 8 pii: e48191. [PubMed](#)
16. Camunas-Soler J, *et al.* 2020. *Cell Metabolism.* 31(5):1017-1031. [PubMed](#)
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RRID

AB_10643590 (BioLegend Cat. No. 303119)
AB_10640734 (BioLegend Cat. No. 303120)

Antigen Details

Structure	Ig superfamily, type I transmembrane glycoprotein, 130-140 kD
Distribution	Monocytes, platelets, granulocytes, endothelial cells, lymphocyte subset
Function	Cell adhesion, signal transduction
Ligand/Receptor	CD38
Cell Type	Endothelial cells, Granulocytes, Lymphocytes, Monocytes, Neutrophils, Platelets
Biology Area	Angiogenesis, Cell Adhesion, Cell Biology, Immunology, Neuroinflammation, Neuroscience
Molecular Family	Adhesion Molecules, CD Molecules

Antigen References

1. DeLisser H, *et al.* 1994. *Immunol. Today* 15:490.
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3. Fawcett J, *et al.* 1995. *J. Cell Biol.* 128:1229.

Gene ID

[5175](#)

Related Protocols

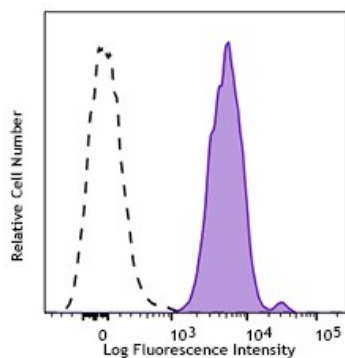
[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

FITC anti-human CD31, PE anti-human CD31, Purified anti-human CD31, Alexa Fluor® 488 anti-human CD31, Alexa Fluor® 647 anti-human CD31, Pacific Blue™ anti-human CD31, APC anti-human CD31, PE/Cyanine7 anti-human CD31, APC/Cyanine7 anti-human CD31, Brilliant Violet 605™ anti-human CD31, Brilliant Violet 421™ anti-human CD31, Purified anti-human CD31 (Maxpar® Ready), Alexa Fluor® 594 anti-human CD31, PE/Dazzle™ 594 anti-human CD31, PerCP/Cyanine5.5 anti-human CD31, Alexa

Fluor® 700 anti-human CD31, Brilliant Violet 711™ anti-human CD31, TotalSeq™-A0124 anti-human CD31, TotalSeq™-C0124 anti-human CD31, APC/Fire™ 750 anti-human CD31, Ultra-LEAF™ Purified anti-human CD31, TotalSeq™-B0124 anti-human CD31, Brilliant Violet 785™ anti-human CD31, PE/Cyanine5 anti-human CD31, TotalSeq™-D0124 anti-human CD31

Product Data



Human peripheral blood granulocytes were stained with CD31 (clone WM59) APC/Cyanine7 (filled histogram) or mouse IgG1, ? APC/Cyanine7 isotype control (open histogram)

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