SONY

Product Data Sheet

PE/Dazzle™ 594 anti-human CD31

Catalog # / Size: 2115650 / 100 tests
2115645 / 25 tests

Clone: WM59

Isotype: Mouse IgG1, κ

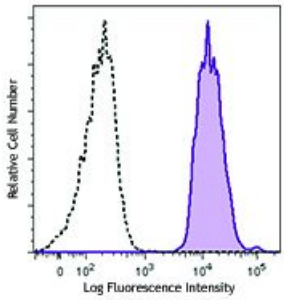
Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Workshop Number: V P025

Concentration: Lot-specific



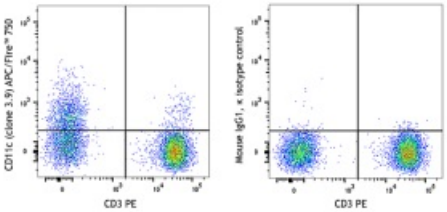
Human peripheral blood granulocytes were stained with CD31 (clone WM59) PE/Dazzle™ 594 (filled histogram) or mouse IgG1, κPE/Dazzle™ 594 isotype control (open histogram).

Applications:

Applications: Flow Cytometry

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 or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 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 microscopy2, immunohistochemical staining of acetone-fixed frozen tissue sections[8], and blocking of platelet aggregation3. Clone WM59 is not recommended for immunohistochemical staining of formalin-fixed paraffin-embedded sections. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 303108).

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products.
Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com

Application References:

1. Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V Oxford University Press. New York.
2. Muczynski KA, *et al.* 2003. *J. Am. Soc. Nephrol.* 14:1336. (IF)
3. Wu XW, *et al.* 1997. *Arterioscl. Throm. Vas.* 17:3154. (Block)
4. Nagano M, *et al.* 2007. *Blood* 110:151. (FC) PubMed
5. MacFadyen JR, *et al.* 2005. *FEBS Lett.* 579:2569. PubMed
6. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
7. Sestak K, *et al.* 2007. *Vet. Immunol. Immunopathol.* 119:21.
8. Wicki A, *et al.* 2012. *Clin. Cancer Res.* 18:454. (FC, IHC) PubMed
9. Oeztuerk-Winder F, *et al.* 2012. *EMBO J.* 31:3431. (FC) PubMed
10. Bushway ME, *et al*. 2014. *Biol Reprod*. 90(5): 110 (IF) PubMed

---

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.

Antigen References:

1. DeLisser H, *et al.* 1994. *Immunol. Today* 15:490.
2. Newman P, 1997. *J. Clin. Invest.* 99:3.
3. Fawcett J, *et al.* 1995. *J. Cell Biol.* 128:1229.

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products.