# **Product Data Sheet**

### PE/Dazzle™ 594 anti-human CD31

Catalog # / Size: 2115645 / 25 tests

2115650 / 100 tests

Clone:

Isotype: Mouse IgG1, κ

Reactivity: Human

**Preparation:** The antibody was purified by affinity

chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and

unconjugated antibody.

Phosphate-buffered solution, pH 7.2, Formulation:

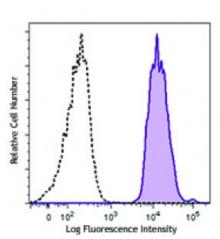
containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Workshop Number:

**Concentration:** 0.2

V P025



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

## **Applications:**

Flow Cytometry **Applications:** 

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 microL per million cells or 5 microL per 100 microL 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.

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### **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 acetonefixed frozen tissue sections<sup>8</sup>, and blocking of platelet aggregation3. Clone WM59 is not recommended for immunohistochemical staining of formalin-fixed paraffinembedded sections. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 303108).

#### **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

**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

1. DeLisser H, et al. 1994. Immunol. Today 15:490.

References: 2. Newman P, 1997. J. Clin. Invest. 99:3.

3. Fawcett J, et al. 1995. J. Cell Biol. 128:1229.