

## Pacific Blue™ anti-human CD31

**Catalog # / Size:** 303113 / 25 µg  
303114 / 100 µg

**Clone:** WM59

**Isotype:** Mouse IgG1, κ

**Workshop Number:** V P025

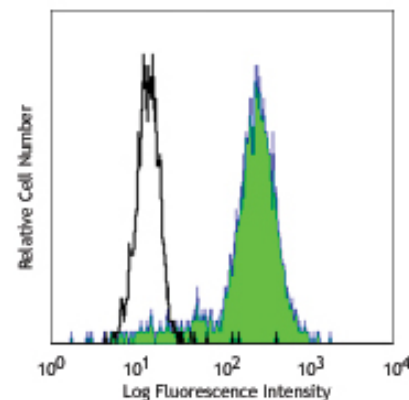
**Reactivity:** Human, **Cross-Reactivity:** African Green, Baboon, Cynomolgus, Rhesus

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood monocytes were stained with CD31 (clone WM59) Pacific Blue™ (filled histogram) or mouse IgG1, κ Pacific Blue™ isotype control (open histogram).

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤ 2.0 µg per 10<sup>6</sup> cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

\*\* Pacific Blue™ is a registered trademark of Molecular Probes, Inc. Pacific Blue™ dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunofluorescence microscopy<sup>2</sup>, immunohistochemical staining of acetone-fixed frozen tissue sections, and blocking of platelet aggregation<sup>3</sup>. 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).

**Application References:**

- Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V Oxford University Press. New York.
- Muczynski KA, *et al.* 2003. *J. Am. Soc. Nephrol.* 14:1336. (IF)
- Wu XW, *et al.* 1997. *Arterioscl. Throm. Vas.* 17:3154. (Block)
- Nagano M, *et al.* 2007. *Blood* 110:151. (FC) PubMed
- MacFadyen JR, *et al.* 2005. *FEBS Lett.* 579:2569. PubMed
- Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
- Sestak K, *et al.* 2007. *Vet. Immunol. Immunopathol.* 119:21.
- Wicki A, *et al.* 2012. *Clin Cancer Res.* 18:454. PubMed
- 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. Clone WM59 has been reported to recognize the D2 extracellular portion of CD31.

**Antigen References:**

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

### Related Products:

**Product**  
Pacific Blue™ Mouse IgG1, κ Isotype Ctrl  
Cell Staining Buffer

**Clone**  
MOPC-21

**Application**  
FC, ICFC  
FC, ICC, ICFC



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RBC Lysis Buffer (10X)  
Human TruStain FcX™ (Fc Receptor Blocking Solution)

FC, ICFC  
FC, ICC, ICFC



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