## SONY

## **Product Data Sheet**

## **Purified anti-human CD31**

**Catalog # / Size:** 2115505 / 25 μg

2115510 / 100 μg

Clone: WM59

**Isotype:** Mouse IgG1, κ

Reactivity: Human

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

chromatography.

Formulation: Phosphate-buffered solution, pH 7.2,

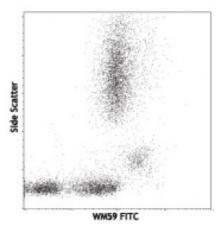
containing 0.09% sodium azide.

Workshop

V P025

**Number:** 

Concentration: 0.5



Human peripheral blood lymphocytes, monocytes and granulocytes stained with purified WM59, then detected with antimouse IgG FITC

## **Applications:**

**Applications:** Immunofluorescence

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 ≤1.0 microg per million cells in 100 microL volume. For immunofluorescence microscopy, a concentration range of 2.5-10 µg/ml is recommended. It is recommended that the reagent be titrated for optimal performance for

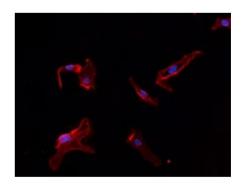
Application Notes:

Clone WM59 has been reported to recognize the D2 extracellular portion of

CD31.

each application.

Additional reported applications (for the relevant formats) include: immunofluorescence microscopy2, immunohistochemical staining of acetone-fixed frozen tissue sections<sup>8</sup>, 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).



HUVEC cells were fixed with 1% paraformaldehyde (PFA) and blocked with 5% fetal bovine serum for 30 minutes at room temperature. Then the cells were stained with 10 microg/ml of purified anti-CD31 (clone WM59) overnight, followed by 2.5 microg/ml DyLi

**Application** 1. Schlossman S, et al. Eds. 1995. Leucocyte Typing V Oxford University Press.

References: 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.