

# Anti-Mouse CD106 (VCAM-1) Functional Grade Purified

Catalog Number: 16-1061 Also Known As: VCAM1, vascular cell adhesion molecule-1 RUO: For Research Use Only

Product Information

Contents: Anti-Mouse CD106 (VCAM-1) Functional Grade Purified **REF** Catalog Number: 16-1061 Clone: 429 Concentration: 1 mg/ml Host/Isotype: Rat IgG2a, κ Handling Conditions: Use in sterile environment. Endotoxin Level: Less than 0.001 ng/ug antibody, as determined by the LAL assay. Formulation: aqueous buffer, no sodium azide Temperature Limitation: Store at 2-8°C. Batch Code: Refer to Vial Use By: Refer to Vial

## Description

The 429 monoclonal antibody reacts with mouse CD106 (Vascular Cell Adhesion Molecule-1, VCAM-1), a 110 kDa transmembrane glycoprotein expressed by myeloid lineage and bone marrow stromal cells. Endothelial cells constitutively express low levels of CD106 and upregulate it upon cytokine stimulation. CD106 binds to integrin  $\alpha_4\beta_1$  (VLA-4, CD49d/CD29) and Integrin a4b7 (LPAM-1) and these interactions in the bone marrow and thymus are important for early lymphocyte and myeloid development. Cytokine-mediated upregulation of CD106 on endothelial cells suggests a role for this antigen in the inflammatory response.

### **Applications Reported**

The 429 antibody has been reported for use in flow cytometric analysis. It has also been reported in blocking of CD106 in functional studies.

## **Applications Tested**

The 429 antibody has been tested by flow cytometric analysis of mouse bone marrow cell suspensions. This can be used at less than or equal to 0.25  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

Kinashi, T., Y. St. Pierre, et al. (1995). Expression of glycophosphatidylinositol-anchored and -non-anchored isoforms of vascular cell adhesion molecule 1 in murine stromal and endothelial cells. J Leukoc Biol 57(1): 168-73.

#### **Related Products**

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