

**Biotin anti-mouse CD106**

**Catalog # / Size:** 1128520 / 500 µg  
1128515 / 50 µg

**Clone:** 429 (MVCAM.A)

**Isotype:** Rat IgG2a, κ

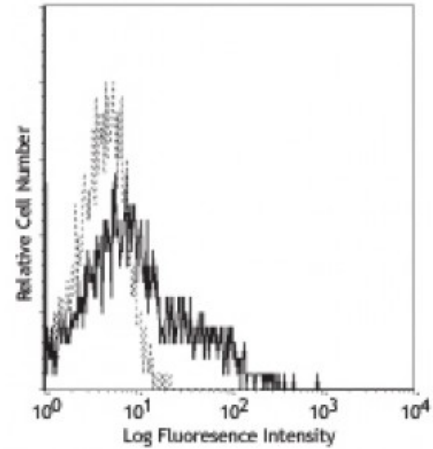
**Immunogen:** Mouse preadipose cell line PA6

**Reactivity:** Mouse

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

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

**Concentration:** 0.5



C57BL/6 bone marrow myeloid cells stained with 429 FITC

**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 ≤ 0.06 microg per 10<sup>6</sup> cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining<sup>2,3,5-7</sup> of acetone-fixed frozen sections, blocking<sup>4,5,8</sup> of ligand binding *in vitro* and *in vivo*, and immunoprecipitation<sup>1</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 105708).

**Application References:**

1. Kinashi T, *et al.* 1995. *J. Leukoc. Biol.* 57:168. (IP)
2. Koni PA, *et al.* 2001. *J. Exp. Med.* 193:741. (IHC)
3. Ishiyama N, *et al.* 1998. *Pathobiology* 66:274. (IHC)
4. Kinashi T, *et al.* 1994. *Blood Cells* 20:25. (Block)
5. Baron JL, *et al.* 1994. *J. Clin. Invest.* 93:1700. (Block IHC)
6. Buck CA, *et al.* 1996. *Cell Adhes. Commun.* 4:69. (IHC)
7. Hata H, *et al.* 2004. *J. Clin. Invest.* 114:582. (IHC)
8. Meunier MC, *et al.* 2005. *Nature Medicine* 11:1222. (Block) [PubMed](#)

**Description:** CD106 is a 110 kD glycosylphosphatidylinositol (GPI)-linked transmembrane protein, also known as VCAM-1 and INCAM-110. It is constitutively expressed on bone marrow stromal cells, myeloid progenitors, splenic dendritic cells, activated endothelial cells, as well as some lymphocytes. CD106 expression can be upregulated on endothelial cells by inflammatory cytokines. CD106 is involved in adhesion and acts as a counter-receptor for VLA-4 (α<sub>4</sub>/β<sub>1</sub> integrin) and LPAM-1 (α<sub>4</sub>/β<sub>7</sub> integrin). The 429 antibody has been reported to partially block VCAM-1-mediated binding.

**Antigen References:**

1. Barclay AN, *et al.* 1997. *The Leukocyte Antigen FactsBook* Academic Press.
2. Kinashi T, *et al.* 1995. *J. Leukoc. Biol.* 57:168.
3. Bevilacqua MP. 1993. *Annu. Rev. Immunol.* 11:767.

#### 4. Koni PA, e