

**FITC anti-mouse / rat CD29**

**Catalog # / Size:** 1111030 / 500 µg  
1111025 / 50 µg

**Clone:** HMβ1-1

**Isotype:** Hamster IgG

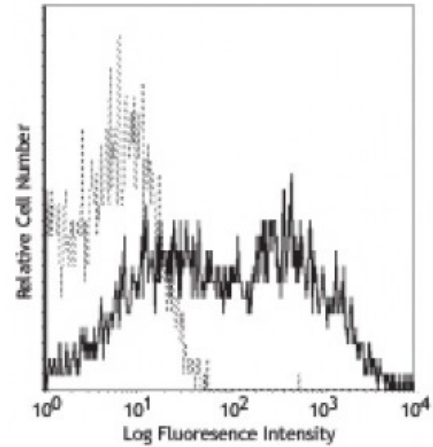
**Immunogen:** Purified mouse VLA-4 (α<sub>4</sub>β<sub>1</sub>, CD49d/CD29)

**Reactivity:** Mouse,Rat

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

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

**Concentration:** 0.5



Lou rat bone marrow cells stained with HMβ1-1 biotin, then detected with Sav-PE

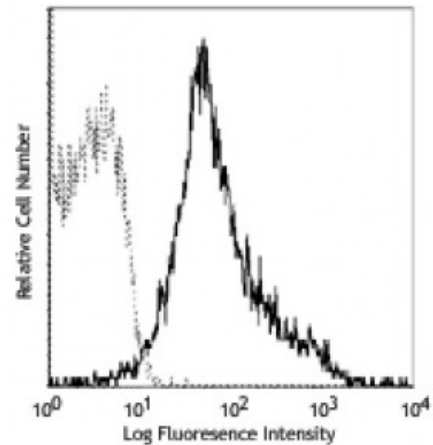
**Applications:**

**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 ≤ 1.0 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: immunoprecipitation<sup>1</sup>, immunohistochemistry<sup>4</sup> of acetone-fixed frozen sections, *in vitro* blocking of the adhesion of mouse tumor cell lines to extracellular matrix proteins and *in vitro* inhibition of T cell proliferative responses<sup>1</sup>, and *in vivo* inhibition of neutrophil migration<sup>2</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 102210).

- Application References:**
1. Noto K, *et al.* 1995. *Int. Immunol.* 7:835.
  2. Ridger VC, *et al.* 2001. *J. Immunol.* 166:3484.
  3. Jia W, *et al.* 2005. *Blood* 106:3854. [PubMed](#)
  4. Economopoulou M, *et al.* 2005. *Blood* 106:3831.
  5. Lawson BR, *et al.* 2007. *J. Immunol.* 178:5366.
  6. Eisenmann KM, *et al.* 2007. *J. Biol. Chem.* doi:10.1074/jbc.M703243200. [PubMed](#)
  7. Hayashi Y, *et al.* 2008. *Am J Physiol Gastrointest Liver Physiol.* 294:G778. [PubMed](#)
  8. Kim DT, *et al.* 2008. *Blood* 111:2929. [PubMed](#)



C57BL/6 mouse splenocytes stained with HMβ1-1 PE

9. Hayashi Y, *et al.* 2008. *J Pharmacol Exp Ther.* 326:523. [PubMed](#)
  10. Carlson TR, *et al.* 2008. *Development.* 135:2193. [PubMed](#)
  11. Sangaletti S, *et al.* 2008. *Cancer Res.* 68:9050. (Block) [PubMed](#)
  12. Takahashi M, *et al.* 2010. *Am J Physiol Heart Circ Physiol.* 298:415. [PubMed](#)
  13. Watzlawik J, *et al.* 2010. *Glia.* 58:1782. [PubMed](#)
  14. Rey-Barroso J, *et al.* 2013. *Cell Signal.* 25:848. [PubMed](#)
  15. Cai WY, *et al.* 2013. *J Cell Sci.* 126:2877. [PubMed](#)
  16. Contador-Troca M, *et al.* 2013. *Carcinogenesis.* 34:2683. [PubMed](#)
  17. Zou MR, *et al.* 2014. *J Biol Chem.* 289:17620. [PubMed](#)
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**Description:** CD29 is a 130 kD protein, also known as integrin  $\beta_1$ , VLA- $\beta$  chain, or GPIIa. It is a member of the integrin family, expressed broadly on leukocytes, endothelial cells, smooth muscle, and epithelial cells. In association with CD49a-f, CD29 forms the VLA-1 through VLA-6 complexes, respectively. It plays an important role in cell-cell or cell-matrix interaction. The HM $\beta$ 1-1 antibody reacts with both mouse and rat CD29. It is able to block cell adhesion and inhibit T cell proliferation.

**Antigen References:** 1. Noto K, *et al.* 1995. *Int. Immunol.* 7:835.