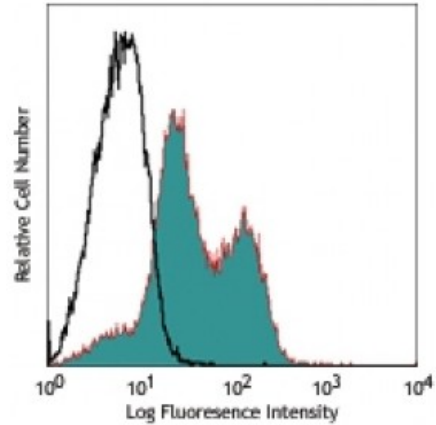


**Pacific Blue™ anti-mouse / rat CD29**

**Catalog # / Size:** 1111120 / 100 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 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



C57BL/6 mouse bone marrow cells stained with HMβ1-1 Pacific Blue™

**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.

\* 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.

**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](#)
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. Li G, *et al.* 2011. *J. Mol Cell Biol.* [PubMed](#).

**Description:** CD29 is a 130 kD protein, also known as integrin β<sub>1</sub>, VLA-β 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.
  2. Springer TA. 1990. *Nature* 346:425.