

PE anti-mouse / rat CD29

Catalog # / Size: 1111040 / 200 µg
1111035 / 50 µg

Clone: HMβ1-1

Isotype: Hamster IgG

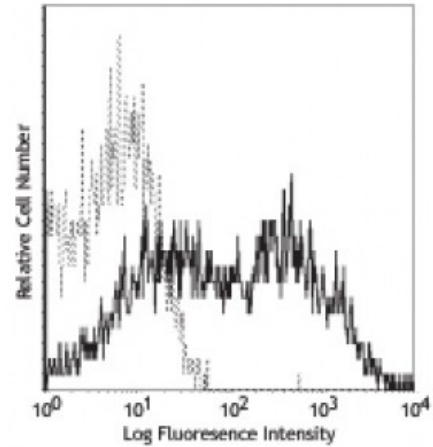
Immunogen: Purified mouse VLA-4 (α₄β₁, CD49d/CD29)

Reactivity: Mouse,Rat

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

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

Concentration: 0.2



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

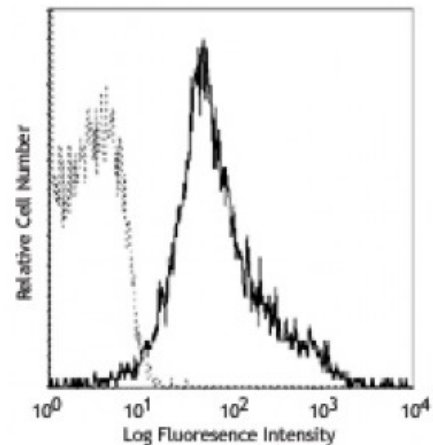
Applications:

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 ≤ 0.25 microg per 10⁶ 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: immunoprecipitation¹, immunohistochemistry⁴ 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 responses¹, and *in vivo* inhibition of neutrophil migration². 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](#)



C57BL/6 mouse splenocytes stained with HMβ1-1 PE

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. Zuba-Surma EK, *et al.* 2008. *J Mol Cell Cardiol.* 44:865. [PubMed](#)
 13. Zheng Z, *et al.* 2012. *Biochem Biophys Res Commun.* 428:309. [PubMed](#)
 14. Diaferia GR, *et al.* 2013. *Development.* 140:3360. [PubMed](#)
 15. Liang CZ, *et al.* 2013. *Acta Biomater.* 9:9423. [PubMed](#)
 16. Simonetti G, *et al.* 2013. *J Exp Med.* 210:2287. [PubMed](#)
 17. Weckbach LT, *et al.* 2014. *Blood.* 123:1887. [PubMed](#)
 18. Toda S, *et al.* 2014. *Blood.* 123:3963. [PubMed](#)
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Description: CD29 is a 130 kD protein, also known as integrin β_1 , 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 β 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.