SONY

Product Data Sheet

PerCP/Cy5.5 anti-mouse / rat CD29

Catalog # / Size: 1111140 / 100 µg
1111135 / 25 µg

Clone: HMβ1-1

Isotype: Hamster IgG

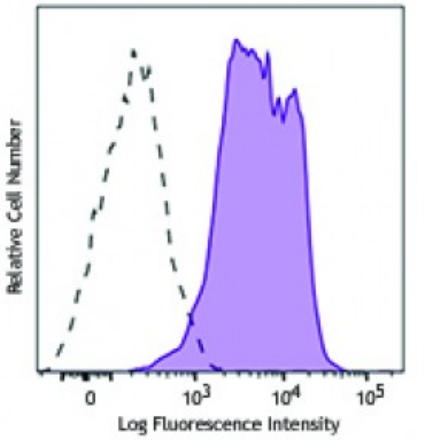
Immunogen: Purified mouse VLA-4 ($\alpha_4\beta_1$, CD49d/CD29)

Reactivity: Mouse,Rat

Preparation: The antibody was purified by affinity chromatography and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.

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

Concentration: 0.2



C57BL/6 mouse bone marrow cells were stained with CD29 (clone HMβ1-1) PerCP/Cy5.5 (filled histogram) or Armenian Hamster IgG PerCP/Cy5.5 isotype control (open histogram). Data shown was gated on the myeloid cell population.

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 million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

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
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

Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com

12. Baker CM, *et al.* 2012. *PNAS.* PubMed.
13. Hirokawa Y, *et al.* 2014. *Am J Physiol Gastrointerest Liver Physiol.* 306:547. PubMed

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 HMß1-1 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.