Product Data Sheet

APC anti-mouse / rat CD29

Catalog # / Size: $1111075 / 25 \mu g$

1111080 / 100 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

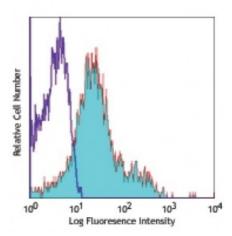
chromatography, and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and

unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2



C57BL/6 mouse splenocytes stained

with HMβ1-1 APC

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 10^6 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 $^{\text{TM}}$ 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. Parameswaran R, et al. 2009. Clin Immunol. 131:223. PubMed

13. Saenz FR, et al. 2014. PLoS One. 9:97666. PubMed

14. Toda S, et al. 2014. Blood. 123:3963. PubMed

15. Roarty K, et al. 2015. J Cell Sci. 208:351. 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 1. Noto K, *et al.* 1995. *Int. Immunol.* 7:835. **References:** 2. Springer TA. 1990. *Nature* 346:425.