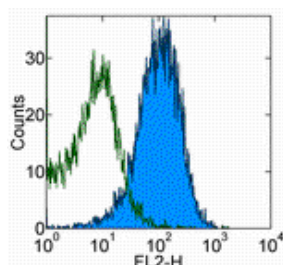


## Anti-Mouse/Rat CD29 (Integrin beta 1) Functional Grade Purified

**Catalog Number:** 16-0291

**Also Known As:** Fibronectin Receptor Beta

**RUO: For Research Use Only. Not for use in diagnostic procedures.**



Staining of C57Bl/6 thymocytes with 0.5 ug of Armenian Hamster IgG Isotype Control Purified (cat. 14-4888) (open histogram) or 0.5 ug of Anti-Mouse/Rat CD29 Purified (filled histogram) followed by Anti-Armenian Hamster IgG Biotin (cat. 13-4113) and Streptavidin PE (cat. 12-4317). Total viable cells were used for analysis.

### Product Information

**Contents:** Anti-Mouse/Rat CD29 (Integrin beta 1) Functional Grade Purified

**REF** **Catalog Number:** 16-0291

**Clone:** eBioHMB1-1 (HMB1-1)

**Concentration:** 1 mg/mL

**Host/Isotype:** Armenian Hamster IgG

**Handling Conditions:** Use in sterile environment.

**Endotoxin Level:** Less than 0.001 ng/ug antibody, as determined by the LAL assay.

**Formulation:** aqueous buffer, no sodium azide



**Temperature Limitation:** Store at 2-8°C.



**Batch Code:** Refer to Vial



**Use By:** Refer to Vial

### Description

The eBioHMB1-1 monoclonal antibody reacts with mouse and rat CD29 (integrin beta 1), a 110-120 kDa member of the beta integrin family expressed by leukocytes, endothelial, smooth muscle and epithelial cells. CD29 binds non-covalently with the alpha integrins CD49a-f to form the VLA-1 through VLA-6 complexes, as well as with CD51. These alpha-beta integrin heterodimers are capable of mediating a variety of cellular responses including adhesion, trafficking, proliferation and differentiation. All integrins which include CD29 bind to extracellular matrix proteins including collagen, laminin, fibronectin and vitronectin, whereas some CD29-containing integrins can also interact with cellular receptors such as VCAM-1 and MadCAM-1.

### Applications Reported

This eBioHMB1-1 (HMB1-1) antibody has been reported for use in flow cytometric analysis. The HMB1-1 monoclonal antibody has been reported to block VLA-dependent cellular functions, including the adhesion of mouse tumor cell lines to extracellular matrix proteins, and splenic T-cell proliferation induced by anti-CD3 monoclonal antibody.

### Applications Tested

This eBioHMB1-1 (HMB1-1) antibody has been tested by flow cytometric analysis of mouse spleen, thymus and bone marrow cell suspensions. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

Noto K, Kato K, Okumura K, Yagita H. Identification and functional characterization of mouse CD29 with a mAb. Int Immunol. 1995 May;7(5):835-42. (**HMBeta1-1**, mAb development, IP, FA, PubMed)

Ridger VC, Wagner BE, Wallace WA, Hellewell PG. Differential effects of CD18, CD29, and CD49 integrin subunit inhibition on neutrophil migration in pulmonary inflammation. J Immunol. 2001 Mar 1;166(5):3484-90. (**HMBeta1-1**, FA, PubMed)

### Related Products

12-4317 Streptavidin PE

13-4113 Anti-Armenian Hamster IgG Biotin (Polyclonal)

14-4888 Armenian Hamster IgG Isotype Control Purified (eBio299Arm)

16-4888 Armenian Hamster IgG Isotype Control Functional Grade Purified (eBio299Arm)

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