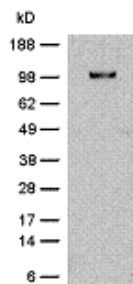


Anti-Mouse CD29 Purified

Catalog Number: 14-0292

Also Known As: Integrin Beta 1, ITGB1, Fibronectin Receptor Beta, VLA-Beta

RUO: For Research Use Only



Balb/c spleen cell lysate (3×10^5 cells/lane) was resolved by SDS-PAGE under non-reducing conditions, immunoblotted with 2 $\mu\text{g}/\text{mL}$ Anti-Mouse CD29 Purified and revealed with Anti-Rat IgG HRP.

Product Information

Contents: Anti-Mouse CD29 Purified


REF Catalog Number: 14-0292

Clone: KMI6

Concentration: 0.5 mg/ml


Host/Isotype: Rat IgG2a, κ

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 Temperature Limitation: Store at 2-8°C.

LOT Batch Code: Refer to Vial

 Use By: Refer to Vial

 Caution, contains Azide

Description

The KMI6 monoclonal antibody reacts with mouse CD29 (integrin $\beta 1$), a 120-130 kDa member of the β integrin family expressed by leukocytes, endothelial, smooth muscle and epithelial cells. CD29 binds non-covalently with the α integrins CD49a-f, to form the VLA-1 through VLA-6 complexes, respectively, and also with CD51. These $\alpha\beta$ integrin heterodimers are capable of mediating a variety of cellular responses including adhesion, trafficking, proliferation and differentiation. All of the integrins which include CD29 bind to extracellular matrix proteins including collagen, laminin, fibronectin and vitronectin, whereas some CD29-containing integrins also interact with cellular receptors including VCAM-1 and MadCAM-1. The KMI6 antibody has been shown to be an activating antibody for $\beta 1$ integrins, enhancing lymphocyte binding to fibronectin.

Applications Reported

This KMI6 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistology staining of frozen tissue sections. The KMI6 antibody has also been found useful for immunoblotting, recognizing a protein of approximately 120 kD under non-reducing conditions.

Applications Tested

This KMI6 antibody has been tested by flow cytometric analysis of mouse splenocytes and thymocytes. This can be used at less than or equal to 0.125 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 10^5 to 10^8 cells/test. The KMI6 antibody has also been tested by immunoblotting at 2 $\mu\text{g}/\text{mL}$. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Aoyama K, Oritani K, Yokota T, Ishikawa J, Nishiura T, Miyake K, Kanakura Y, Tomiyama Y, Kincade PW, Matsuzawa Y. Stromal cell CD9 regulates differentiation of hematopoietic stem/progenitor cells. *Blood*. 1999 Apr 15;93(8):2586-94. (KMI6, IP, WB, PubMed)

Wadsworth SA, Chang AC, Hong MJ, Halvorson MJ, Otto S, Coligan JE. Expression of a novel integrin $\beta 1$ chain epitope and anti- $\beta 1$ antibody-mediated enhancement of fibronectin binding are dependent on the stage of T cell differentiation. *J Immunol*. 1995 Mar 1;154(5):2125-33. (KMI6, FC, IP, FA, PubMed)

Jacobsen K, Miyake K, Kincade PW, Osmond DG. Highly restricted expression of a stromal cell determinant in mouse bone marrow in vivo. *J Exp Med*. 1992 Oct 1;176(4):927-35. (KMI6, IP, PubMed)

Related Products

11-4317 Streptavidin FITC

11-4811 Anti-Rat IgG FITC

12-4317 Streptavidin PE
13-4813 Anti-Rat IgG Biotin (Polyclonal)
14-0291 Anti-Mouse/Rat CD29 Purified (eBioHMb1-1 (HMb1-1))
14-4321 Rat IgG2a K Isotype Control Purified
17-4317 Streptavidin APC

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