

# CD29 (Integrin beta 1) Monoclonal Antibody (eBioHMb1-1 (HMb1-1)), eBioscience™

| Product Details    |                         |
|--------------------|-------------------------|
| Size               | 500 µg                  |
| Species Reactivity | Mouse, Rat              |
| Published Species  | Mouse, Human            |
| Host/Isotype       | Armenian hamster / IgG  |
| Class              | Monoclonal              |
| Type               | Antibody                |
| Clone              | eBioHMb1-1 (HMb1-1)     |
| Conjugate          | Unconjugated            |
| Form               | Liquid                  |
| Concentration      | 0.5 mg/mL               |
| Purification       | Affinity chromatography |
| Storage buffer     | PBS, pH 7.2             |
| Contains           | 0.09% sodium azide      |
| Storage conditions | 4° C                    |
| RRID               | AB_657729               |

| Applications                 | Tested Dilution | Publications    |
|------------------------------|-----------------|-----------------|
| Immunohistochemistry (IHC)   | -               | 2 Publications  |
| Immunocytochemistry (ICC/IF) | -               | 5 Publications  |
| Flow Cytometry (Flow)        | 1 µg/test       | 62 Publications |
| Immunoprecipitation (IP)     | Assay-Dependent | -               |
| Functional Assay (FN)        | Assay-Dependent | 1 Publication   |

## Product Specific Information

**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, and immunoprecipitation. (Please use Functional Grade purified eBioHMb1-1 (HMb1-1), cat. 16-0291, in functional assays.).

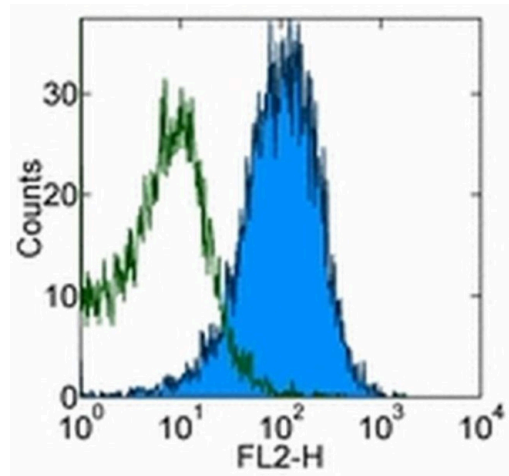
**Applications Tested:** This eBioHMb1-1 (HMb1-1) antibody has been tested by flow cytometric analysis of mouse spleen, thymus and bone marrow cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume 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.

**Purity:** Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

**Product Images For CD29 (Integrin beta 1) Monoclonal Antibody (eBioHMb1-1 (HMb1-1)), eBioscience™**



**CD29 (Integrin beta 1) Antibody (14-0291-85) in Flow**  
Staining of C57Bl/6 thymocytes with 0.5 µg of Armenian Hamster IgG Isotype Control Purified (Product # 14-4888-81) (open histogram) or 0.5 µg of Anti-Mouse /Rat CD29 Purified (filled histogram) followed by Anti-Armenian Hamster IgG Biotin (Product # 13-4113-85) and Streptavidin PE (Product # 12-4317-87). Total viable cells were used for analysis.

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## Immunohistochemistry (2)

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|--|---|
| <p><b>NPJ Regenerative medicine</b></p> <p><b>Differential activation of Ca<sup>2+</sup> influx channels modulate stem cell potency, their proliferation/viability and tissue regeneration.</b></p> <p>"Published figure using CD29 (Integrin beta 1) monoclonal antibody (Product # 14-0291-82) in Immunohistochemistry"</p> <p>Authors: Ahamad N,Sun Y,Nascimento Da Conceicao V,Xavier Paul Ezhilan CRD,Natarajan M,Singh BB</p>  | <p><b>Year</b><br/>2021</p>                                 |
| <p><b>Oncoimmunology</b></p> <p><b>Long-peptide vaccination with driver gene mutations in p53 and Kras induces cancer mutation-specific effector as well as regulatory T cell responses.</b></p> <p>"14-0291 was used in Immunohistochemistry-immunofluorescence to study the immunotherapeutic potential of a panel of long peptides comprising driver gene mutations in TP35 and KRAS frequently found in gastrointestinal tumours."</p> <p>Authors: Quandt J,Schlude C,Bartoschek M,Will R,Cid-Arregui A,Schölch S,Reissfelder C,Weitz J,Schneider M,Wiemann S,Momburg F,Beckhove P</p> | <p><b>Year</b><br/>2021</p> <p><b>Species</b><br/>Mouse</p> |

## Immunocytochemistry (5)

|  |                             |
|--|-----------------------------|
| <p><b>Frontiers in bioengineering and biotechnology</b></p> <p><b>Thermo-sensitive hydrogel combined with SHH expressed RMSCs for rat spinal cord regeneration.</b></p> <p>"Published figure using CD29 (Integrin beta 1) monoclonal antibody (Product # 14-0291-82) in Immunocytochemistry"</p> <p>Authors: Gu J,Gao B,Zafar H,Chu B,Feng X,Ni Y,Xu L,Bao R</p> | <p><b>Year</b><br/>2022</p> |
| <p><b>Molecular biology of the cell</b></p> <p><b>An IFT20 mechanotraficking axis is required for integrin recycling, focal adhesion dynamics, and polarized cell migration.</b></p> <p>"Published figure using CD29 (Integrin beta 1) monoclonal antibody (Product # 14-0291-82) in Immunocytochemistry"</p> <p>Authors: Su S,Begum S,Ezratty EJ</p>            | <p><b>Year</b><br/>2020</p> |

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## More applications with references on thermofisher.com

- Flow (62)
- FN (1)

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