

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

Product Details	
Size	500 µg
Species Reactivity	Mouse, Rat
Host/Isotype	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioHMb1-1 (HMb1-1)
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_657731

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	1 µg/test	18 Publications
Neutralization (Neu)	Assay-Dependent	-
Functional Assay (FN)	Assay-Dependent	-

## 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. 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 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>6</sup>.

10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

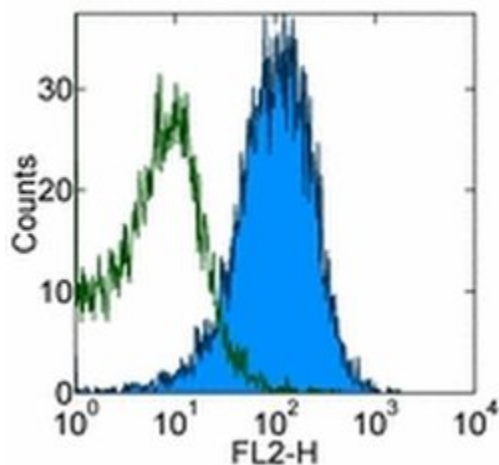
Filtration: 0.2 µm post-manufacturing filtered.

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

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

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

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



### CD29 (Integrin beta 1) Antibody (16-0291-85) in Flow

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

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## Immunocytochemistry (1)

Breast cancer research : BCR

### Integrin-Rac signalling for mammary epithelial stem cell self-renewal.

"Published figure using CD29 (Integrin beta 1) monoclonal antibody (Product # 16-0291-81) in Flow Cytometry"

Authors: Olabi S,Ucar A,Brennan K,Streuli CH

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2018

## Flow Cytometry (18)

Frontiers in immunology

### Central Nervous System Barriers Impact Distribution and Expression of iNOS and Arginase-1 in Infiltrating Macrophages During Neuroinflammation.

"Published figure using CD29 (Integrin beta 1) monoclonal antibody (Product # 16-0291-81) in Flow Cytometry"

Authors: Ivan DC,Walthert S,Locatelli G

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2021

International journal of molecular sciences

### Therapeutic Potential of Mesenchymal Stem Cells in a Pre-Clinical Model of Diabetic Kidney Disease and Obesity.

"Published figure using CD29 (Integrin beta 1) monoclonal antibody (Product # 16-0291-81) in Flow Cytometry"

Authors: Sávio-Silva C,Soinski-Sousa PE,Simplício-Filho A,Bastos RMC,Beyerstedt S,Rangel ÉB

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2021

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