

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

Product Details	
Size	100 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_657727

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	3 Publications
Flow Cytometry (Flow)	1 µg/test	37 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.).

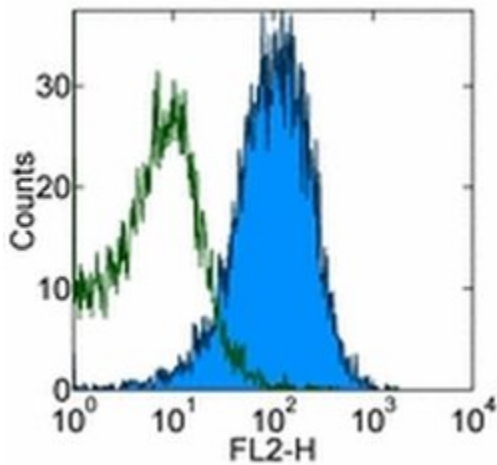
Applications Tested: This eBioHMb1-1 (HMb1-1) antibody has been tested by flow cytometric analysis of mouse spleen, thymus and bone marrow cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 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 (14-0291-82) 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.

[View more figures on thermofisher.com](http://thermofisher.com)

## 42 References

### Immunohistochemistry (1)

#### Oncoimmunology

#### Long-peptide vaccination with driver gene mutations in p53 and Kras induces cancer mutation-specific effector as well as regulatory T cell responses.

"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."

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

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2021

### Immunocytochemistry (3)

#### Breast cancer research : BCR

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

"Published figure using CD29 (Integrin beta 1) monoclonal antibody (Product # 14-0291-82) in Flow Cytometry"

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

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2018

#### Proceedings of the National Academy of Sciences of the United States of America

#### Casitas B-cell lymphoma (Cbl) proteins protect mammary epithelial cells from proteotoxicity of active c-Src accumulation.

"Published figure using CD29 (Integrin beta 1) monoclonal antibody (Product # 14-0291-82) in Immunofluorescence"

Authors: Mukhopadhyay C,Triplett A,Bargar T,Heckman C,Wagner KU,Naramura M

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2016

[View more ICC/IF references on thermofisher.com](#)

### Flow Cytometry (37)

#### 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 # 14-0291-82) in Flow Cytometry"

Authors: Ivan DC,Walthert S,Locatelli G

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2021

[View more Flow references on thermofisher.com](#)

### More applications with references on thermofisher.com

## FN (1)

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