

# 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)	-	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.).

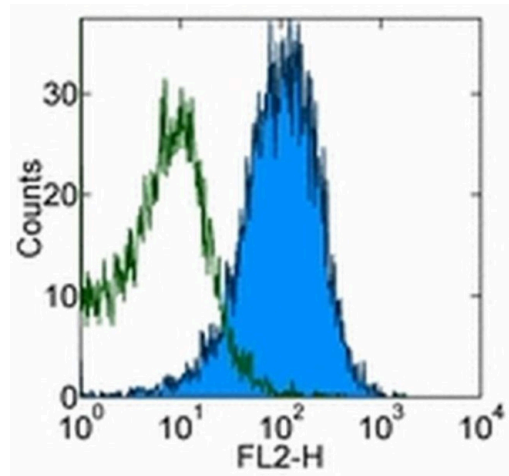
**Applications Tested:** This eBioHMb1-1 (HMb1-1) antibody has been tested by flow cytometric analysis of mouse spleen, thymus and bone marrow cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume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

## Immunohistochemistry (2)

NPJ Regenerative medicine

### Differential activation of $\text{Ca}^{2+}$ influx channels modulate stem cell potency, their proliferation/viability and tissue regeneration.

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

Authors: Ahamad N,Sun Y,Nascimento Da Conceicao V,Xavier Paul Ezhilan CRD,Natarajan M,Singh BB

Year  
2021

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

Year  
2021

Species  
Mouse

## Immunocytochemistry (5)

Frontiers in bioengineering and biotechnology

### Thermo-sensitive hydrogel combined with SHH expressed RMSCs for rat spinal cord regeneration.

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

Authors: Gu J,Gao B,Zafar H,Chu B,Feng X,Ni Y,Xu L,Bao R

Year  
2022

Molecular biology of the cell

### An IFT20 mechanotraficking axis is required for integrin recycling, focal adhesion dynamics, and polarized cell migration.

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

Authors: Su S,Begum S,Ezratty EJ

Year  
2020

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

## More applications with references on thermofisher.com

Flow (62)

FN (1)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.