

# CD29 (Integrin beta 1) Monoclonal Antibody (eBioHMb1-1 (HMb1-1)), PerCP-eFluor 710, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse, Rat
Published Species	Mouse, Human
Host/Isotype	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), PerCP-eFluor 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioHMb1-1 (HMb1-1)
Conjugate	PerCP-eFluor™ 710
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_10670099

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	34 Publications

## 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.

Applications Tested: This eBioHMb1-1 (HMb1-1) antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This can be used at less than or equal to 0.5 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.

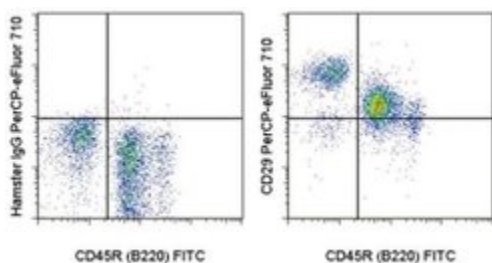
PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ L cell sample + 100  $\mu$ L IC Fixation Buffer) or 1-step Fix /Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2  $\mu$ m post-manufacturing filtered.

## Product Images For CD29 (Integrin beta 1) Monoclonal Antibody (eBioHMb1-1 (HMb1-1)), PerCP-eFluor 710, eBioscience™



### CD29 (Integrin beta 1) Antibody (46-0291-82) in Flow

Staining of C57Bl/6 bone marrow cells with Anti-Human/Mouse CD45R (B220) FITC (Product # 11-0452-82) and 0.25  $\mu$ g of Armenian Hamster IgG Isotype Control PerCP-eFluor® 710 (Product # 46-4888-82) (left) or 0.25  $\mu$ g of Anti-Mouse/Rat CD29 (Integrin beta 1) PerCP-eFluor® 710 (right). Cells in the small/lymphocyte scatter population were used for analysis.

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## 34 References

### Flow Cytometry (34)

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 # 46-0291-82) 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 # 46-0291-82) in Flow Cytometry"

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

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2021

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