

CD29 (Integrin beta 1) Monoclonal Antibody (eBioHMB1-1 (HMB1-1)), Super Bright™ 436, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse, Rat
Host/Isotype	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), Super Bright™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioHMB1-1 (HMB1-1)
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2784800

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	0.5 µg/test	28 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 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This eBioHMB1-1 antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This may 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

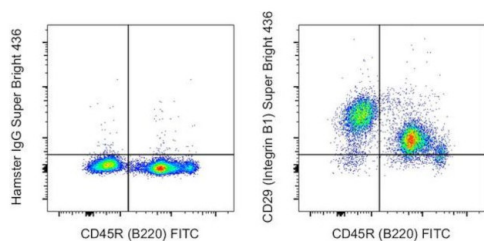
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

Excitation: 405 nm; Emission: 436 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD29 (Integrin beta 1) Monoclonal Antibody (eBioHMb1-1 (HMb1-1)), Super Bright™ 436, eBioscience™



CD29 (Integrin beta 1) Antibody (62-0291-82) in Flow

Swiss Webster mouse bone marrow cells were stained with CD45R (B220) Monoclonal Antibody, FITC (Product # 11-0452-82) and 0.25 µg of Armenian Hamster IgG Isotype Control, Super Bright 436 (Product # 62-4888-82) (left) or 0.25 µg of eBioHMB1-1 Monoclonal Antibody, Super Bright 436 (right). Cells in the small scatter population gate were used for analysis. Viability was determined by Fixable Viability Dye eFluor 780 (Product # 65-0865-18).

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

31 References

Immunohistochemistry (1)

NPJ Regenerative medicine

Differential activation of Ca²⁺ influx channels modulate stem cell potency, their proliferation/viability and tissue regeneration.

"Published figure using CD29 (Integrin beta 1) monoclonal antibody (Product # 62-0291-82) in Immunohistochemistry"

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

Year
2021

Immunocytochemistry (2)

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 # 62-0291-82) 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 # 62-0291-82) in Immunocytochemistry"

Authors: Su S, Begum S, Ezratty EJ

Year
2020

Flow Cytometry (28)

FEBS open bio

A comparative study of mouse bone marrow mesenchymal stem cells isolated using three easy-to-perform approaches.

"Published figure using CD29 (Integrin beta 1) monoclonal antibody (Product # 62-0291-82) in Flow Cytometry"

Authors: Lu Y, Han Y, Zhou L, Shi G, Bai L, Wang K, Qin C

Year
2022

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More applications with references on thermofisher.com

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