CD29 (Integrin beta 1) Monoclonal Antibody (eBioHMb1-1 (HMb1-1)), APC-eFluor™ 780, 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), APC-eFluor™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioHMb1-1 (HMb1-1)
Conjugate	APC-eFluor™ 780
Excitation/Emission Max	756/785 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_11218499

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	54 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, proliferaton 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 10^5 to 10^8 cells /test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

APC-eFluor 780 emits at 780 nm and is excited with the Red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochome.

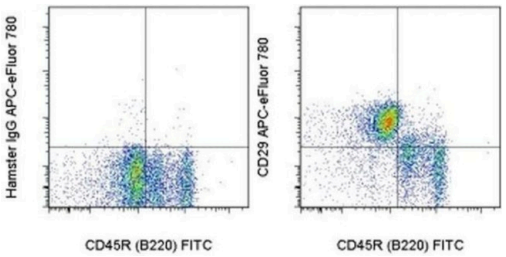
Light sensitivity: This tandem is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 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: 633-647 nm; Emission: 780 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD29 (Integrin beta 1) Monoclonal Antibody (eBioHMb1-1 (HMb1-1)), APC-eFluor™ 780, eBioscience™



CD29 (Integrin beta 1) Antibody (47-0291-82) in Flow
Staining of C57Bl/6 bone marrow cells with Anti-Human/Mouse CD45R (B220) FITC (Product # 11-0452-82) and 0.25 µg of Armenian Hamster IgG Isotype Control APC-eFluor® 780 (Product # 47-4888-80) (left) or 0.25 µg of Anti-Mouse /Rat CD29 (Integrin beta 1) APC-eFluor® 780 (right). Total viable cells were used for analysis.

View more figures on thermofisher.com

54 References

Flow Cytometry (54)

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 # 47-0291-82) in Flow Cytometry"
Authors: Lu Y,Han Y,Zhou L,Shi G,Bai L,Wang K,Qin C

Year
2022

Heliyon

Single-cell transcriptomics reveals variable trajectories of CSPCs in the progression of osteoarthritis.

"Published figure using CD29 (Integrin beta 1) monoclonal antibody (Product # 47-0291-82) in Flow Cytometry"
Authors: Qi L,Wang J,Chen X,Ding Y,Ling B,Wang W,Xu J,Xue Z

Year
2022

View more Flow references on thermofisher.com

More applications with references on thermofisher.com