

CD48 Monoclonal Antibody (HM48-1), APC, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), APC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	HM48-1
Conjugate	APC
Excitation/Emission Max	651/660 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_469408

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.125 µg/test	26 Publications

Product Specific Information

Description: The HM48-1 monoclonal antibody reacts with the mouse CD48 antigen; also known as BCM1, Blast-1 (human), and OX-45 (rat). CD48, a member of the SLAM family and Ig superfamily, is a 45 kDa GPI-linked glycoprotein expressed on the majority of hematopoietic cells. Recent publications have reported differential expression of members of the SLAM family including CD48, CD150, and CD244 among functionally distinct bone marrow hematopoietic progenitors providing a useful tool for prediction of the primitiveness of hematopoietic progenitors based on the expression of these SLAM family members. Hematopoietic stem cells (HSC) are highly purified as CD150(+)CD244(-)CD48(-) cells while non-self-renewing multipotent hematopoietic progenitors (MPP) are CD244(+)CD150(-)CD48(-) and the most restricted progenitors are CD48(+)CD244(+)CD150(-). CD48 plays a critical role in adhesion and T cell activation. In the mouse, the primary counter-receptors for CD48 are CD2 and CD244. HM48-1 is reported to modulate in vitro and in vivo CD48 functions including blocking the CD48/CD2 and CD48/CD244 interactions, inhibiting the proliferative response of mitogen-activated spleen cells, providing a costimulation signal for T cells activated in vitro through their TCR, and prolonging cardiac allograft survival in vivo.

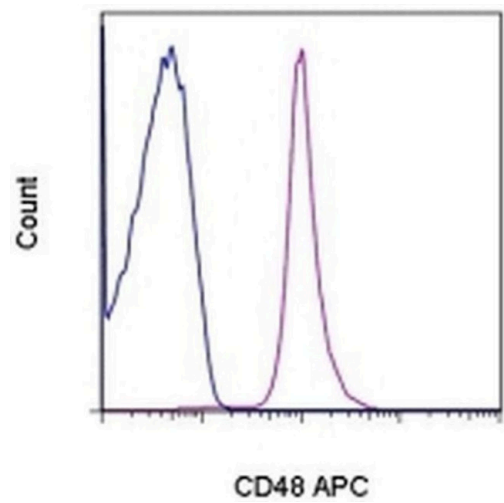
Applications Reported: This HM48-1 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This HM48-1 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.125 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.

Excitation: 633-647 nm; Emission: 660 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD48 Monoclonal Antibody (HM48-1), APC, eBioscience™



CD48 Antibody (17-0481-82) in Flow
Staining of C57BL/6 splenocytes with 0.03 µg of Armenian Hamster IgG Isotype Control APC (Product # 17-4888-82) (open histogram) or 0.03 µg of Anti-Mouse CD48 APC (filled histogram). Cells in the lymphocyte gate were used for analysis.

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26 References

Flow Cytometry (26)

Science advances	Year 2021
Conditionally pathogenic genetic variants of a hematopoietic disease-suppressing enhancer.	
"Published figure using CD48 monoclonal antibody (Product # 17-0481-82) in Flow Cytometry"	
Authors: Soukup AA,Matson DR,Liu P,Johnson KD,Bresnick EH	
Cell reports	Year 2021
TNF--induced alterations in stromal progenitors enhance leukemic stem cell growth via CXCR2 signaling.	Species Mouse
"17-0481-82 was used in Flow Cytometry to find that TNF--mediated alterations in CML BM stromal niches enhance support of LSC maintenance and growth via CXCL1-CXCR2 signaling and that CXCR2 inhibition effectively depletes CML LSCs."	
Authors: Agarwal P,Li H,Choi K,Hueneman K,He J,Welner RS,Starczynowski DT,Bhatia R	

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