

CD48 Monoclonal Antibody (HM48-1), eFluor 450, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Fish, Mouse, Human
Host/Isotope	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), eFluor 450, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	HM48-1
Conjugate	eFluor® 450
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_11151336

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.25 µg/test	7 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.

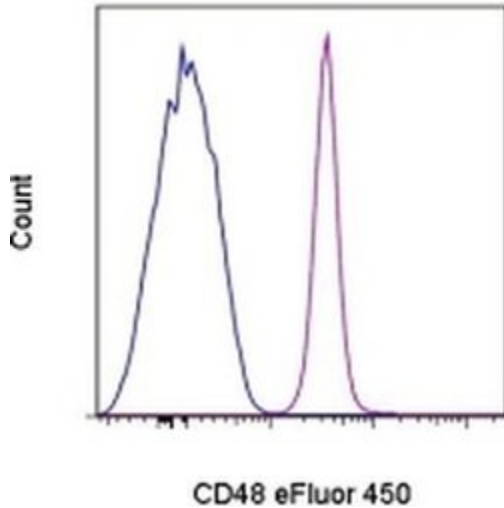
Applications Tested: This HM48-1 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined 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.

eFluor® 450 is an alternative to Pacific Blue®. eFluor® 450 emits at 445 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochoime.

Excitation: 405 nm; Emission: 445 nm; Laser: Violet Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD48 Monoclonal Antibody (HM48-1), eFluor 450, eBioscience™



CD48 Antibody (48-0481-82) in Flow

Staining of BALB/c splenocytes with 0.125 µg of Armenian Hamster IgG Isotype Control eFluor® 450 (Product # 48-4888-82) (blue histogram) or 0.125 µg of Anti-Mouse CD48 eFluor® 450 (purple histogram). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](#)

7 References

Flow Cytometry (7)

The Journal of clinical investigation

Single-nucleotide human disease mutation inactivates a blood-regenerative GATA2 enhancer.

"Published figure using CD48 monoclonal antibody (Product # 48-0481-82) in Flow Cytometry"

Authors: Soukup AA,Zheng Y,Mehta C,Wu J,Liu P,Cao M,Hofmann I,Zhou Y,Zhang J,Johnson KD,Choi K,Keles S, Bresnick EH

Species

Not Applicable

Dilution

Not Cited

Year

2019

Oncotarget

Recipient bone marrow assimilates the myeloid/lymphoid reconstitution of distinct fetal hematopoietic stem cells.

"Published figure using CD48 monoclonal antibody (Product # 48-0481-82) in Flow Cytometry"

Authors: Guo XL,Chu L,Ke F,Mu LL,Li Z,Cai JJ,Li HF,Hong DL

Species

Fish
Not Applicable

Dilution

Not Cited
Not Cited

Year

2017

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More applications with references on thermofisher.com

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