

PerCP/Cyanine5.5 anti-mouse CD48 Antibody

Catalog# / Size	103421 / 25 µg 103422 / 100 µg
Clone	HM48-1
Regulatory Status	RUO
Other Names	BCM1, SLAMF2, Blast-1
Isotype	Armenian Hamster IgG
Description	CD48 is a 45 kD GPI-anchored glycoprotein also known as BCM1, Blast-1 (human), and OX-45 (rat). It is a member of the Ig superfamily, expressed on T and B cells and monocytes/macrophages. It plays a role in adhesion and T cell recognition. The primary ligands for CD48 are CD2 and CD244.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Armenian Hamster
Immunogen	Mouse T lymphoma MBL-2
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with PerCP/Cyanine5.5 under optimal conditions.
Concentration	0.2 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is = 0.25 µg per 10 ⁶ cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. * PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
Excitation Laser	Blue Laser (488 nm)
Application Notes	The HM48-1 antibody is useful for blocking <i>in vitro</i> and <i>in vivo</i> CD48 mediated interactions. Additional reported applications (for the relevant formats) include: immunoprecipitation ¹ , costimulation of T cell proliferation ^{1,2} , blocking of CD48-CD2 interaction ¹ , and inhibition of CTL activity and graft rejection ^{1,2} . For <i>in vivo</i> studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. Nos. 103452-103456) with a lower endotoxin limit (Endotoxin < 0.01 EU/µg).
Additional Product Notes	BioLegend is in the process of converting the name PerCP/Cy5.5 to PerCP/Cyanine5.5. The dye molecule remains the same, so you should expect the same quality and performance from our PerCP/Cyanine5.5 products. Contact Technical Service if you have any questions.
Application References	1. Kato K, <i>et al.</i> 1992. <i>J. Exp. Med.</i> 176:1241. (IP, Costim, Block) 2. Qin L, <i>et al.</i> 1994. <i>J. Exp. Med.</i> 179:341. (Costim, Block)
(PubMed link indicates BioLegend citation)	
Product Citations	1. Viny AD, <i>et al.</i> 2019. <i>Cell Stem Cell.</i> 25:682. PubMed 2. Krzeptowski W, <i>et al.</i> 2021. <i>Antioxidants (Basel).</i> 10:00. PubMed

3. Chen S, *et al.* 2022. *Cancer Discov.* . [PubMed](#)
4. Szade K, *et al.* 2013. *PLoS One.* 8:63329. [PubMed](#)
5. Inoue D, *et al.* 2021. *Nat Genet.* 53:707. [PubMed](#)
6. Arai F, *et al.* 2020. *Cell Systems.* 11(6):640-652.e5. [PubMed](#)
7. Kunimoto H, *et al.* 2018. *Cancer Cell.* 33:44. [PubMed](#)
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9. Witkowski MT, *et al.* 2020. *Cancer Cell.* 37:867. [PubMed](#)
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11. Lee SC *et al.* 2018. *Cancer cell.* 34(2):225-241 . [PubMed](#)
12. Chen C, *et al.* 2020. *Cell Rep.* 2136:30. [PubMed](#)
13. Lefkopoulos S, *et al.* 2020. *Immunity.* 53(5):934-951.e9. [PubMed](#)
14. Yamashita M, *et al.* 2019. *Cell Stem Cell.* 25:357. [PubMed](#)

RRID AB_1575045 (BioLegend Cat. No. 103421)
 AB_2075051 (BioLegend Cat. No. 103422)

Antigen Details

Structure	Ig superfamily, 45 kD
Distribution	T cells and B cells, monocytes/macrophages
Function	Adhesion, T cell recognition
Ligand/Receptor	CD2, CD244
Cell Type	B cells, Macrophages, Monocytes, T cells
Biology Area	Immunology
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none"> 1. Barclay AN, <i>et al.</i> 1997. <i>The Leukocyte Antigen FactsBook</i> Academic Press. 2. Flament C, <i>et al.</i> 1996. <i>Hum. Immunol.</i> 46:82. 3. Van der Merwe PA, <i>et al.</i> 1995. <i>Curr. Biol.</i> 5:74. 4. Latchman Y, <i>et al.</i> 1998. <i>J. Immunol.</i> 161:5809.
Gene ID	12506

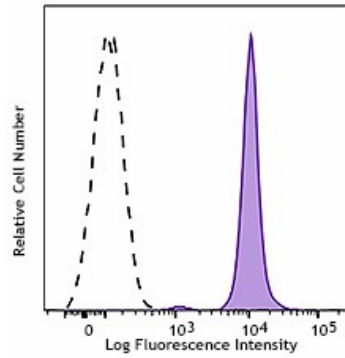
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

FITC anti-mouse CD48, PE anti-mouse CD48, Purified anti-mouse CD48, Biotin anti-mouse CD48, APC anti-mouse CD48, Alexa Fluor® 488 anti-mouse CD48, Alexa Fluor® 647 anti-mouse CD48, Pacific Blue™ anti-mouse CD48, PE/Cyanine5 anti-mouse CD48, PerCP/Cyanine5.5 anti-mouse CD48, PE/Cyanine7 anti-mouse CD48, Alexa Fluor® 700 anti-mouse CD48, Brilliant Violet 421™ anti-mouse CD48, APC/Cyanine7 anti-mouse CD48, Purified anti-mouse CD48 (Maxpar® Ready), Alexa Fluor® 594 anti-mouse CD48, Brilliant Violet 605™ anti-mouse CD48, Brilliant Violet 510™ anti-mouse CD48, Brilliant Violet 711™ anti-mouse CD48, PE/Dazzle™ 594 anti-mouse CD48, APC/Fire™ 750 anti-mouse CD48, TotalSeq™-A0429 anti-mouse CD48, Brilliant Violet 785™ anti-mouse CD48, Ultra-LEAF™ Purified anti-mouse CD48, TotalSeq™-B0429 anti-mouse CD48, TotalSeq™-C0429 anti-mouse CD48

Product Data



C57BL/6 mouse splenocytes were stained with CD48 (clone HM48-1) PerCP/Cyanine5.5 (filled histogram) or Armenian hamster IgG PerCP/Cyanine5.5 isotype control (open histogram).

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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587