

PE/Cyanine7 anti-mouse CD48 Antibody

Catalog# / Size	103423 / 25 µg 103424 / 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 PE/Cyanine7 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 ≤0.06 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 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 PE/Cy7 to PE/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine7 products. Please contact Technical Service if you have any questions.
Application References (PubMed link indicates BioLegend citation)	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)
Product Citations	1. Schönberger K, <i>et al.</i> 2022. <i>Cell Stem Cell.</i> 29:131. PubMed 2. Kim SP, <i>et al.</i> 2021. <i>Cell Reports.</i> 36(9):109626. PubMed 3. Carpenter RS, <i>et al.</i> 2020. <i>Nat Commun.</i> 3.029166667. PubMed

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6. Comazzetto S *et al.* 2018. *Cell stem cell*. 24(3):477-486 . [PubMed](#)
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15. Hidalgo San Jose L, *et al.* 2020. *Cell Rep*. 30:69. [PubMed](#)
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18. Li ZG, *et al.* 2020. *Chin Med J (Engl)*. 1943:133. [PubMed](#)
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RRID AB_2075050 (BioLegend Cat. No. 103423)
 AB_2075049 (BioLegend Cat. No. 103424)

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

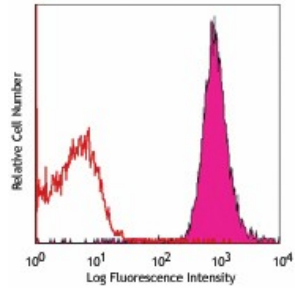
[Cell Surface Flow Cytometry Staining Protocol](#)

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 splenocytes stained with HM48-1 PE/Cyanine7



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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