

## PE/Cyanine5 anti-mouse CD48 Antibody

<b>Catalog# / Size</b>	103420 / 100 µg
<b>Clone</b>	HM48-1
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	BCM1, SLAMF2, Blast-1
<b>Isotype</b>	Armenian Hamster IgG
<b>Description</b>	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

<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Armenian Hamster
<b>Immunogen</b>	Mouse T lymphoma MBL-2
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with PE/Cyanine5 under optimal conditions.
<b>Concentration</b>	0.2 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per 10 <sup>6</sup> cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	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 <sup>1</sup> , costimulation of T cell proliferation <sup>1,2</sup> , blocking of CD48-CD2 interaction <sup>1</sup> , and inhibition of CTL activity and graft rejection <sup>1,2</sup> . 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).
<b>Additional Product Notes</b>	BioLegend is in the process of converting the name PE/Cy5 to PE/Cyanine5. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine5 products. Please contact <a href="#">Technical Service</a> if you have any questions.
<b>Application References</b>	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)
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	1. Yang C, <i>et al.</i> 2020. <i>J Control Release.</i> 326:324. <a href="#">PubMed</a> 2. Smith AM, <i>et al.</i> 2022. <i>iScience.</i> 25:104004. <a href="#">PubMed</a> 3. Glotzbach J, <i>et al.</i> 2011. <i>PLoS One.</i> 6:e21211. <a href="#">PubMed</a> 4. He X, <i>et al.</i> 2020. <i>Stem Cell Res.</i> 47:101869. <a href="#">PubMed</a>

RRID AB\_1089037 (BioLegend Cat. No. 103420)

## Antigen Details

<b>Structure</b>	Ig superfamily, 45 kD
<b>Distribution</b>	T cells and B cells, monocytes/macrophages
<b>Function</b>	Adhesion, T cell recognition
<b>Ligand/Receptor</b>	CD2, CD244
<b>Cell Type</b>	B cells, Macrophages, Monocytes, T cells
<b>Biology Area</b>	Immunology
<b>Molecular Family</b>	Adhesion Molecules, CD Molecules
<b>Antigen References</b>	1. Barclay AN, et al. 1997. The Leukocyte Antigen FactsBook Academic Press. 2. Flament C, et al. 1996. <i>Hum. Immunol.</i> 46:82. 3. Van der Merwe PA, et al. 1995. <i>Curr. Biol.</i> 5:74. 4. Latchman Y, et al. 1998. <i>J. Immunol.</i> 161:5809.
<b>Gene ID</b>	<a href="#">12506</a>

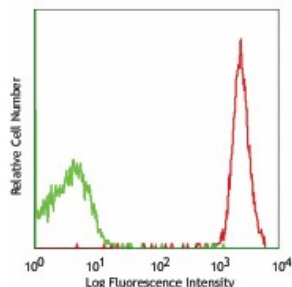
## Related Protocols

[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/Cyanine5

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