

PE anti-mouse CD48 Antibody

Catalog# / Size	103405 / 50 µg 103406 / 200 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 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.
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).
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. Lawson H, <i>et al.</i> 2021. <i>Stem Cell Reports.</i> 16:2784. PubMed 2. Wu N, <i>et al.</i> 2020. <i>Cell Rep.</i> 30:1129. PubMed 3. Paris J <i>et al.</i> 2019. <i>Cell Stem Cell.</i> 25(1):137-148 . PubMed 4. Castiello MC, <i>et al.</i> 2020. <i>J Allergy Clin Immunol.</i> . PubMed 5. Matsushita Y, <i>et al.</i> 2021. <i>J Bone Miner Res.</i> 36:1145. PubMed 6. Wong J, <i>et al.</i> 2015. <i>Elife.</i> 3: 07839. PubMed 7. McCabe A, <i>et al.</i> 2020. <i>STAR Protocols.</i> 33(7):2294-305. PubMed

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RRID AB_313020 (BioLegend Cat. No. 103405)
 AB_313021 (BioLegend Cat. No. 103406)

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. The Leukocyte Antigen FactsBook 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

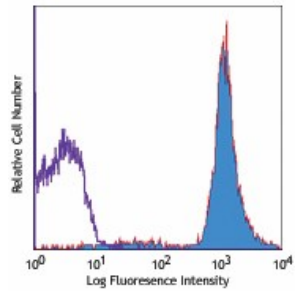
[Cell Surface Flow Cytometry Staining Protocol](#)

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 stained
with HM48-1 PE



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