

TotalSeq™-A0429 anti-mouse CD48 Antibody

Catalog# / Size	103447 / 10 µg
Clone	HM48-1
Regulatory Status	RUO
Other Names	BCM1, SLAMF2, Blast-1
Isotype	Armenian Hamster IgG
Barcode Sequence	AGAACCGCCGTAGTT
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 and 1 mM EDTA.
Preparation	The antibody was purified by chromatography and conjugated with TotalSeq™-A oligomer under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. Do not freeze.
Application	PG - Quality tested
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis and the oligomer sequence is confirmed by sequencing. TotalSeq™-A antibodies are compatible with 10x Genomics Single Cell Gene Expression Solutions.</p> <p>To maximize performance, it is strongly recommended that the reagent be titrated for each application, and that you centrifuge the antibody dilution before adding to the cells at 14,000xg at 2 - 8°C for 10 minutes. Carefully pipette out the liquid avoiding the bottom of the tube and add to the cell suspension. For Proteogenomics analysis, the suggested starting amount of this reagent for titration is ≤ 1.0 µg per million cells in 100 µL volume. Refer to the corresponding TotalSeq™ protocol for specific staining instructions.</p> <p>Buyer is solely responsible for determining whether Buyer has all intellectual property rights that are necessary for Buyer's intended uses of the BioLegend TotalSeq™ products. For example, for any technology platform Buyer uses with TotalSeq™, it is Buyer's sole responsibility to determine whether it has all necessary third party intellectual property rights to use that platform and TotalSeq™ with that platform.</p>
Application Notes	<p>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: immunoprecipitation¹, costimulation of T cell proliferation^{1,2}, blocking of CD48-CD2 interaction¹, 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).</p>
Additional Product Notes	<p>TotalSeq™ reagents are designed to profile protein levels at a single cell level following an optimized protocol similar to the CITE-seq workflow. A compatible single cell device (e.g. 10x Genomics Chromium System and Reagents) and sequencer (e.g. Illumina analyzers) are required. Please contact technical support for more information, or visit biolegend.com/totalseq.</p>

The barcode flanking sequences are CCTTGGCACCCGAGAATTCCA (PCR handle), and BAAA*A*A (capture sequence). B represents either C, G, or T, and * indicates a phosphorothioated bond, to prevent nuclease degradation.

View more applications data for this product in our [Scientific Poster Library](#).

Application References

(PubMed link indicates BioLegend citation)

1. Kato K, *et al.* 1992. *J. Exp. Med.* 176:1241. (IP, Costim, Block)
2. Qin L, *et al.* 1994. *J. Exp. Med.* 179:341. (Costim, Block)

RRID AB_2800558 (BioLegend Cat. No. 103447)

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

1. Barclay AN, *et al.* 1997. *The Leukocyte Antigen FactsBook* Academic Press.
2. Flament C, *et al.* 1996. *Hum. Immunol.* 46:82.
3. Van der Merwe PA, *et al.* 1995. *Curr. Biol.* 5:74.
4. Latchman Y, *et al.* 1998. *J. Immunol.* 161:5809.

Gene ID [12506](#)

Related Protocols

[TotalSeq™-A Antibodies and Cell Hashing with 10x Single Cell 3' Reagent Kit v3 3.1 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

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