

TotalSeq™-C0053 anti-human CD11c Antibody

Catalog# / Size	371521 / 10 µg
Clone	S-HCL-3
Regulatory Status	RUO
Other Names	Integrin αX subunit, CR4, p150, ITGAX
Isotype	Mouse IgG2b, κ
Barcode Sequence	TACGCCTATAACTTG
Description	CD11c is a 145-150 kD type I transmembrane glycoprotein also known as integrin α _x and CR4. CD11c non-covalently associates with integrin β ₂ (CD18) and is expressed on monocytes/macrophages, dendritic cells, granulocytes, NK cells, and subsets of T and B cells. CD11c has been reported to play a role in adhesion and CTL killing through its interactions with fibrinogen, CD54, and IC3b.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Spleen cells from patient diagnosed with hairy cell leukemia.
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™-C 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™-C antibodies are compatible with 10x Genomics Chromium Single Cell Immune Profiling Solution.</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	Additional reported applications (for the relevant formats) include: immunohistochemistry on frozen tissue sections ^{1,2,3,4} and immunoprecipitation ¹ .
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> <p>The barcode flanking sequences are CGGAGATGTGTATAAGAGACAGNNNNNNNNNN (PCR handle), and NNNNNNNNNCCCATATAAGA*A*A (capture sequence). N represents either randomly</p>

selected A, 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

1. Schwarting R, *et al.* 1985. *Blood* 65:974.
2. Knowles DM, *et al.* 1990. *Am. J. Pathol.* 136:29.
3. Vandenabeele S, *et al.* 2001. *Blood* 97:1733.
4. Shaw JL, *et al.* 2011. *J. Reprod. Immunol.* 89:84.

Product Citations

1. Bachireddy P, *et al.* 2021. *Cell Rep.* 37:109992. [PubMed](#)
2. Shangguan S, *et al.* 2021. *Elife.* 10:. [PubMed](#)
3. Sokal A, *et al.* 2021. *Cell.* 184(5):1201-1213.e14. [PubMed](#)

RRID AB_2801018 (BioLegend Cat. No. 371521)

Antigen Details

Structure	Integrin, type I transmembrane glycoprotein, associates with integrin β 2 (CD18), 145-150 kD.
Distribution	Myeloid, dendritic cells, NK cells, B cells and T cell subsets.
Function	Adhesion and CTL killing.
Interaction	Interacts with fibrinogen, CD54, and iC3b.
Ligand/Receptor	CD54, fibrinogen, iC3b, ICAM-1, ICAM-4
Cell Type	B cells, Dendritic cells, NK cells, T cells
Biology Area	Costimulatory Molecules, Immunology
Molecular Family	CD Molecules
Antigen References	<ol style="list-style-type: none">1. Petty HR, Todd RF 3rd. 1996. <i>Immunol. Today</i> 17:209.2. Springer T. 1994. <i>Cell</i> 76:301.3. Ihanus E, <i>et al.</i> 2007. <i>Blood</i> 109:802-10.
Gene ID	3687

Related Protocols

[TotalSeq™-B or -C with 10x Feature Barcoding Technology](#)

Other Formats

Purified anti-human CD11c, APC anti-human CD11c, PE anti-human CD11c, PE/Cyanine7 anti-human CD11c, Brilliant Violet 421™ anti-human CD11c, APC/Fire™ 750 anti-human CD11c, FITC anti-human CD11c, PerCP/Cyanine5.5 anti-human CD11c, Brilliant Violet 510™ anti-human CD11c, TotalSeq™-A0053 anti-human CD11c, TotalSeq™-C0053 anti-human CD11c, TotalSeq™-B0053 anti-human CD11c, Alexa Fluor® 647 anti-human CD11c Antibody, TotalSeq™-D0053 anti-human CD11c

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587