

## TotalSeq™-A0053 anti-human CD11c Antibody

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|--------------------------|---|
| <b>Catalog# / Size</b>   | 371519 / 10 µg  |
| <b>Clone</b>             | S-HCL-3   |
| <b>Regulatory Status</b> | RUO   |
| <b>Other Names</b>       | Integrin αX subunit, CR4, p150, ITGAX   |
| <b>Isotype</b>           | Mouse IgG2b, κ  |
| <b>Barcode Sequence</b>  | TACGCCTATAACTTG   |
| <b>Description</b>       | CD11c is a 145-150 kD type I transmembrane glycoprotein also known as integrin α <sub>x</sub> and CR4. CD11c non-covalently associates with integrin β <sub>2</sub> (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

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|---------------------------------|---|
| <b>Verified Reactivity</b>      | Human   |
| <b>Antibody Type</b>            | Monoclonal  |
| <b>Host Species</b>             | Mouse   |
| <b>Immunogen</b>                | Spleen cells from patient diagnosed with hairy cell leukemia.   |
| <b>Formulation</b>              | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 1 mM EDTA.   |
| <b>Preparation</b>              | The antibody was purified by chromatography and conjugated with TotalSeq™-A oligomer under optimal conditions.  |
| <b>Concentration</b>            | 0.5 mg/ml   |
| <b>Storage &amp; Handling</b>   | The antibody solution should be stored undiluted between 2°C and 8°C. <b>Do not freeze.</b>   |
| <b>Application</b>              | <a href="#">PG - Quality tested</a>   |
| <b>Recommended Usage</b>        | <p>Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> and the oligomer sequence is confirmed by sequencing. TotalSeq™-A antibodies are compatible with 10x Genomics Single Cell Gene Expression <a href="#">Solutions</a>.</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> |
| <b>Application Notes</b>        | Additional reported applications (for the relevant formats) include: immunohistochemistry on frozen tissue sections <sup>1,2,3,4</sup> and immunoprecipitation <sup>1</sup> .   |
| <b>Additional Product Notes</b> | <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. <a href="#">10x Genomics Chromium System and Reagents</a>) and sequencer (e.g. Illumina analyzers) are required. Please contact <a href="#">technical support</a> for more information, or visit <a href="http://biolegend.com/totalseq">biolegend.com/totalseq</a>.</p> <p>The barcode flanking sequences are CCTTGGCACCCGAGAATTCCA (PCR handle), and BAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA*A*A (capture sequence). B represents either C, G, or</p>  |

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. Vandenberghe S, *et al.* 2001. *Blood* 97:1733.
4. Shaw JL, *et al.* 2011. *J. Reprod. Immunol.* 89:84.

## Product Citations

1. Cook CP, *et al.* 2022. *Cell Rep Med.* 3:100715. [PubMed](#)
2. Stuart T, *et al.* 2019. *Cell.* 177:1888. [PubMed](#)
3. Parker R, *et al.* 2020. *bioRxiv.* . [PubMed](#)
4. Witkowski MT, *et al.* 2020. *Cancer Cell.* 37:867. [PubMed](#)
5. Swanson E, *et al.* 2021. *eLife.* 10:00. [PubMed](#)
6. Williams M, *et al.* 2022. *Cell.* 185:379. [PubMed](#)
7. Hao Y, *et al.* 2021. *Cell.* 184:3573. [PubMed](#)

## RRID

AB\_2749971 (BioLegend Cat. No. 371519)

## Antigen Details

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|                           |  |
|---------------------------|--|
| <b>Structure</b>          | Integrin, type I transmembrane glycoprotein, associates with integrin $\beta$ 2 (CD18), 145-150 kD.  |
| <b>Distribution</b>       | Myeloid, dendritic cells, NK cells, B cells and T cell subsets.  |
| <b>Function</b>           | Adhesion and CTL killing.  |
| <b>Interaction</b>        | Interacts with fibrinogen, CD54, and iC3b.   |
| <b>Ligand/Receptor</b>    | CD54, fibrinogen, iC3b, ICAM-1, ICAM-4   |
| <b>Cell Type</b>          | B cells, Dendritic cells, NK cells, T cells  |
| <b>Biology Area</b>       | Costimulatory Molecules, Immunology  |
| <b>Molecular Family</b>   | CD Molecules   |
| <b>Antigen References</b> | <ol style="list-style-type: none"><li>1. Petty HR, Todd RF 3rd. 1996. <i>Immunol. Today</i> 17:209.</li><li>2. Springer T. 1994. <i>Cell</i> 76:301.</li><li>3. Ihanus E, <i>et al.</i> 2007. <i>Blood</i> 109:802-10.</li></ol> |
| <b>Gene ID</b>            | <a href="#">3687</a>   |

## Related Protocols

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[TotalSeq™-A Antibodies and Cell Hashing with 10x Single Cell 3' Reagent Kit v3 3.1 Protocol](#)

## Other Formats

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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

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