

## Brilliant Violet 510™ anti-human CD11c Antibody

<b>Catalog# / Size</b>	371513 / 25 tests 371514 / 100 tests
<b>Clone</b>	S-HCL-3
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Integrin $\alpha$ X subunit, CR4, p150, ITGAX
<b>Isotype</b>	Mouse IgG2b, $\kappa$
<b>Description</b>	CD11c is a 145-150 kD type I transmembrane glycoprotein also known as integrin $\alpha$ X and CR4. CD11c non-covalently associates with integrin $\beta$ <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 BSA (origin USA).
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<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>	<p>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 5 <math>\mu</math>l per million cells in 100 <math>\mu</math>l staining volume or 5 <math>\mu</math>l per 100 <math>\mu</math>l of whole blood.</p> <p>Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 510™ is a trademark of Sirigen Group Ltd.</p> <p><a href="#">Learn more about Brilliant Violet™.</a></p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</p>
<b>Excitation Laser</b>	Violet Laser (405 nm)
<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>Application References</b>	1. Schwarting R, <i>et al.</i> 1985. <i>Blood</i> 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. Krummey SM, *et al.* 2020. *Cell Reports.* 30(5):1282-1291.e5.. [PubMed](#)

#### RRID

AB\_2650796 (BioLegend Cat. No. 371513)  
 AB\_2650797 (BioLegend Cat. No. 371514)

## 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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[Cell Surface Flow Cytometry Staining Protocol](#)

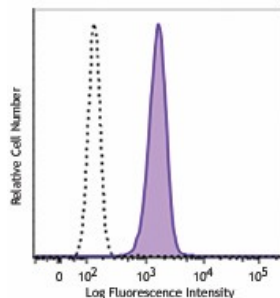
## Other Formats

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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

## Product Data

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Human peripheral blood granulocytes were stained with CD11c (clone S-HCL-3) Brilliant Violet 510™ (filled histogram) or mouse IgG2b,  $\kappa$  Brilliant Violet 510™ isotype control (open histogram).

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