

PerCP/Cyanine5.5 anti-human CD11c Antibody

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| Catalog# / Size | 301623 / 25 tests 301624 / 100 tests |
| Clone | 3.9 |
| Regulatory Status | RUO |
| Workshop | III NL707 |
| Other Names | Integrin α X subunit, CR4, p150, ITGAX |
| Isotype | Mouse IgG1, κ |
| 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

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| Reactivity | Human, African Green, Baboon, Chimpanzee, Cynomolgus, Rhesus, Squirrel Monkey |
| Antibody Type | Monoclonal |
| Host Species | Mouse |
| Formulation | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA) |
| Preparation | The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions. |
| Concentration | Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.) |
| 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 5 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood. * PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm. |
| Application Notes | Clone 3.9 preferentially binds the activated form of CD11c, is specific for the I domain of CD11c, and is able to partially block the binding of CD11c and ICAM-4. 3.9 binding is divalent cation dependent ¹² . While analyzing blood, it is best to use heparin as the anti-coagulant and not EDTA. Since the ability of clone 3.9 to bind to its target is divalent cation dependent, the usage of EDTA as an anti-coagulant may be detrimental to staining due to its chelating properties. Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections ⁴ , and functional assays ^{5,6} . The LEAF™ purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for functional assays (Cat. No. 301616). For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 301632) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/ μ g). |
| Additional Product Notes | BioLegend is in the process of converting the name PerCP/Cy5.5 to PerCP/Cyanine5.5. The dye molecule remains the same, so you should expect the same quality and performance from our PerCP/Cyanine5.5 products. Contact Technical Service if you have any questions. |
| Application References | <ol style="list-style-type: none"> Schlossman S, <i>et al.</i> Eds. 1995. Leucocyte Typing V. Oxford University Press. New York. Knapp W, <i>et al.</i> 1989. Leucocyte Typing IV Oxford University Press. New York. |

3. McMichael A, *et al.* Eds. 1987. Leucocyte Typing III Oxford University Press. New York.
4. Vainer B, *et al.* 2000. *Am. J. Surg. Pathol.* 24:1115. (IHC)
5. Ottonello L, *et al.* 1999. *Blood* 93:3505.
6. Metelitsa LS, *et al.* 2002. *Blood* 99:4166.
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8. Ihanus E, *et al.* 2007. *Blood* 109:802-810.
9. Gurer C, *et al.* 2008. *Blood* 112:1231. [PubMed](#)
10. Asai A, *et al.* 2009. *J. Lipid Res.* 50:95. [PubMed](#)
11. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
12. Sadhu C, *et al.* 2008. *J. Immunoass. Immunoch.* 29:42. (FC)

Product Citations

1. Keck S, *et al.* 2021. *Cellular and Molecular Gastroenterology and Hepatology.* 12(2):507-545. [PubMed](#)
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4. Blaszcak AM, *et al.* 2019. *J Diabetes Res.* 2019:8124563. [PubMed](#)
5. Perry JSA, *et al.* 2018. *Immunity.* 48:923. [PubMed](#)
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RRID

AB_10643589 (BioLegend Cat. No. 301623)
 AB_10640733 (BioLegend Cat. No. 301624)

Antigen Details

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| 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, CTL killing |
| Ligand/Receptor | CD54, fibrinogen, iC3b, ICAM-1, ICAM-4 |
| Cell Type | Dendritic cells, NK cells, B cells, T cells, Neutrophils, Tregs |
| Biology Area | Cell Adhesion, Cell Biology, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers, Costimulatory Molecules |
| Molecular Family | Adhesion Molecules, CD Molecules |
| Antigen References | <ol style="list-style-type: none"> 1. Petty H. 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> 109:802-810. |
| Gene ID | 3687 |

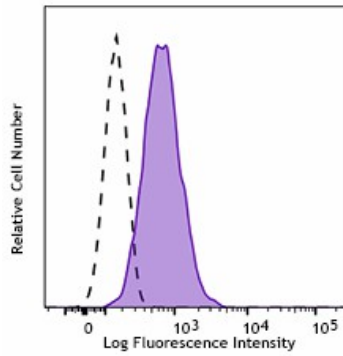
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

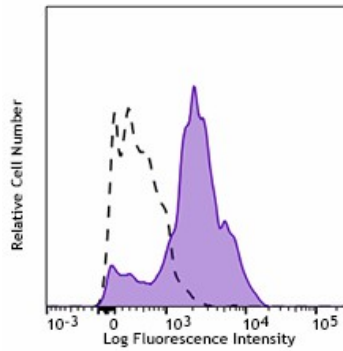
Other Formats

FITC anti-human CD11c, PE anti-human CD11c, Purified anti-human CD11c, PE/Cyanine7 anti-human CD11c, PE/Cyanine5 anti-human CD11c, Biotin anti-human CD11c, APC anti-human CD11c, Alexa Fluor® 488 anti-human CD11c, Alexa Fluor® 647 anti-human CD11c, Pacific Blue™ anti-human CD11c, PerCP/Cyanine5.5 anti-human CD11c, Brilliant Violet 421™ anti-human CD11c, Brilliant Violet 711™ anti-human CD11c, Ultra-LEAF™ Purified anti-human CD11c, Brilliant Violet 510™ anti-human CD11c, Brilliant Violet 605™ anti-human CD11c, Brilliant Violet 650™ anti-human CD11c, Purified anti-human CD11c (Maxpar® Ready), PE/Dazzle™ 594 anti-human CD11c, Brilliant Violet 785™ anti-human CD11c, Alexa Fluor® 700 anti-human CD11c, APC/Fire™ 750 anti-human CD11c

Product Data



Human peripheral blood granulocytes were stained with CD11c (clone 3.9) PerCP/Cyanine5.5 (filled histogram) or Mouse IgG1, κ PerCP/Cyanine5.5 isotype control (open histogram)



Human peripheral blood monocytes were stained with CD11c (clone 3.9) PerCP/Cyanine5.5 (filled histogram) or Mouse IgG1, κ PerCP/Cyanine5.5 isotype control (open histogram)

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