

PerCP/Cyanine5.5 anti-mouse CD11c Antibody

Catalog# / Size	117327 / 25 µg 117328 / 100 µg
Clone	N418
Regulatory Status	RUO
Other Names	αX integrin, integrin αX chain, CR4, p150, ITGAX
Isotype	Armenian Hamster IgG
Description	CD11c is a 150 kD glycoprotein also known as αX integrin, CR4, and p150. CD11c forms a αXβ2 heterodimer with β2 integrin (CD18). It is primarily expressed on dendritic cells, NK cells, a subset of intestinal intraepithelial lymphocytes (IEL), and some activated T cells. The αXβ2 integrin plays an important role in cell-cell contact by binding its ligands: iC3b, fibrinogen, and CD54.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Armenian Hamster
Immunogen	Mouse spleen dendritic cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with PerCP/Cyanine5.5 under optimal conditions.
Concentration	0.2 mg/ml
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 ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. * PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation ³ , immunohistochemical staining of acetone-fixed frozen sections ³ , immunofluorescence microscopy ^{5,9} (Alexa Fluor® 488 conjugated N418 was used for IHC in frozen sections ¹⁰), and spatial biology (IBEX) ^{22,23} .
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"> Granucci F, <i>et al.</i> 1997. <i>J. Immunol.</i> 159:1794. Stokes RW, <i>et al.</i> 1998. <i>J. Immunol.</i> 160:5514. Metlay JP, <i>et al.</i> 1990. <i>J. Exp. Med.</i> 171:1753. (IHC, IP) Ma XT, <i>et al.</i> 2006. <i>Cancer Research</i> 66:1169. Chin RK, <i>et al.</i> 2006. <i>J. Immunol.</i> 177:290. (IF) Cervantes-Barragan L, <i>et al.</i> 2007. <i>Blood</i> 109:1131. (FC) PubMed Turnquist HR, <i>et al.</i> 2007. <i>J. Immunol.</i> 178:7018. (FC) PubMed Benson MJ, <i>et al.</i> 2007. <i>J. Exp. Med.</i> doi:10.1084/jem.20070719. (FC) PubMed You Y, <i>et al.</i> 2009. <i>J. Immunol.</i> 182:7343. (IF) PubMed Roland CL, <i>et al.</i> 2009. <i>Mol. Cancer Res.</i> 8:1761. (IHC, FC) PubMed Wikstrom M, <i>et al.</i> 2006. <i>J. Immunol.</i> 177:913. PubMed
(PubMed link indicates BioLegend citation)	

12. Pericolini E, *et al.* 2008. *J. Leukocyte Biol.* 83:1286. [PubMed](#)
13. Randall LM, *et al.* 2008. *Infect. Immun.* 76:3312. [PubMed](#)
14. Fahlen-Yrild L, *et al.* 2009. *J. Immunol.* 183:5032. [PubMed](#)
15. Osterholzer JJ, *et al.* 2009. *J. Immunol.* 183:8044. [PubMed](#)
16. Bankoti J, *et al.* 2010. *Toxicol. Sci.* 115:422. (FC) [PubMed](#)
17. Eisenach PA, *et al.* 2010. *J Cell Sci.* 123:4182. [PubMed](#)
18. Leppin K, *et al.* 2014. *Invest. Ophthalmol. Vis. Sci.* 55:3603. [PubMed](#)
19. Sakai F, *et al.* 2014. *PLoS One.* 9:105370. [PubMed](#)
20. Gibbins JD, *et al.* 2014. *Blood.* 124:2953. [PubMed](#)
21. White CE, *et al.* 2015. *J Immunol.* 194:697. [PubMed](#)
22. Lu X, *et al.* 2015. *J Immunol.* 194:2011. [PubMed](#)
23. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci U S A.* 117:33455-65. (SB) [PubMed](#)
24. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

Product Citations

1. McNamara HA, *et al.* 2020. *Cell Host Microbe.* 572:28. [PubMed](#)
2. Frisbee AL, *et al.* 2019. *Nat Commun.* 10:2712. [PubMed](#)
3. Espinosa-Cueto P, *et al.* 2017. *PLoS One.* 10.1371/journal.pone.0182126. [PubMed](#)
4. Kitagawa S, *et al.* 2022. *NPJ Vaccines.* 7:115. [PubMed](#)
5. Li X, *et al.* 2022. *Nat Commun.* 13:2794. [PubMed](#)
6. Peters N, *et al.* 2012. *J Immunol.* 189:4832. [PubMed](#)
7. Zaslona Z, *et al.* 2014. *J Immunol.* 193:4245. [PubMed](#)
8. Bao H, *et al.* 2020. *Mol Med Rep.* 4.675. [PubMed](#)
9. Kobayashi T, *et al.* 2019. *Cell.* 176:982. [PubMed](#)
10. Hewitson JP, *et al.* 2020. *J Immunol.* 204:2949. [PubMed](#)
11. Bauer KM, *et al.* 2022. *JCI Insight.* 7:1. [PubMed](#)
12. Acharya N, *et al.* 2020. *Immunity.* 53(3):658-671.e6. [PubMed](#)
13. Roufaiel M, *et al.* 2016. *Nat Immunol.* 10.1038/ni.3564. [PubMed](#)
14. Zhao J, *et al.* 2019. *Nat Commun.* 10:899. [PubMed](#)
15. Tordesillas L, *et al.* 2018. *Nat Commun.* 9:5238. [PubMed](#)
16. Starkl P, *et al.* 2020. *Immunity.* 53(4):793-804.e9. [PubMed](#)
17. Okuniewska M, *et al.* 2021. *Cell Reports.* 36(2):109368. [PubMed](#)
18. Webster HC, *et al.* 2020. *J Immunol Methods.* 112702:477. [PubMed](#)
19. Mitsune A, *et al.* 2021. *Respir Res.* 22:232. [PubMed](#)
20. Rodriguez AB, *et al.* 2021. *Cell Reports.* 36(3):109422. [PubMed](#)
21. Blijswijk J, *et al.* 2015. *J Immunol.* 194:307. [PubMed](#)
22. Ma YV, *et al.* 2021. *MAbs.* 13:2003281. [PubMed](#)
23. Ma M, *et al.* 2021. *Front Immunol.* 12:718779. [PubMed](#)
24. Mooney J, *et al.* 2015. *Sci Rep.* 5: 14603. [PubMed](#)
25. Montel-Hagen A, *et al.* 2020. *Cell Rep.* 33:108320. [PubMed](#)
26. Speth JM, *et al.* 2019. *JCI Insight.* 4:e131340. [PubMed](#)
27. Bennion BG, *et al.* 2020. *Cell Reports.* 31(11):107771. [PubMed](#)
28. Poczobutt J, *et al.* 2016. *J Immunol.* 196: 891 - 901. [PubMed](#)
29. Ippolito G, *et al.* 2014. *Proc Natl Acad Sci U S A.* 111:998. [PubMed](#)
30. Liang Y, *et al.* 2014. *J Immunol.* 192:1277. [PubMed](#)
31. Hurrell BP, *et al.* 2019. *Cell Rep.* 29:4509. [PubMed](#)
32. Ma W, *et al.* 2017. *Sci Rep.* 10.1038/s41598-017-15661-6. [PubMed](#)
33. Mao FY, *et al.* 2021. *Cell Mol Gastroenterol Hepatol.* 12:395. [PubMed](#)
34. Alikhanyan K, *et al.* 2021. *Cancers (Basel).* 13:1. [PubMed](#)
35. Lu X, *et al.* 2020. *Sci Transl Med.* 12:1. [PubMed](#)
36. Pardy RD, *et al.* 2021. *Nat Commun.* 12:4051. [PubMed](#)
37. Tacconi C, *et al.* 2021. *Cell Reports.* 35(2):108993. [PubMed](#)
38. Ringel AE, *et al.* 2020. *Cell.* 183(7):1848-1866.e26. [PubMed](#)
39. Horiguchi H, *et al.* 2019. *Genes Dev.* 33:1641. [PubMed](#)
40. Guo L, *et al.* 2021. *Vaccines (Basel).* 9:1. [PubMed](#)
41. Uddin MJ, *et al.* 2022. *Mucosal Immunol.* 15:165. [PubMed](#)
42. Roberts LM, *et al.* 2021. *iScience.* 24:103025. [PubMed](#)
43. LaFleur MW, *et al.* 2019. *Nat Commun.* 10:1668. [PubMed](#)
44. Alikhanyan K, *et al.* 2020. *Immun Inflamm Dis.* 8:181. [PubMed](#)
45. Chatterjee D, *et al.* 2021. *Cell Reports.* 35(2):108996. [PubMed](#)
46. Ni J, *et al.* 2020. *Immunity.* 52(6):1075-1087.e8. [PubMed](#)
47. Lee L, *et al.* 2016. *PLoS One.* 11:e0167693. [PubMed](#)
48. Poczobutt J, *et al.* 2016. *J Immunol.* 196: 2847 - 2859. [PubMed](#)
49. Steiger S, *et al.* 2015. *J Immunol.* 195: 5495 - 5502. [PubMed](#)
50. Vergadi E, *et al.* 2014. *J Immunol.* 192:394. [PubMed](#)
51. Luo J *et al.* 2018. *Immunity.* 49(1):107-119. [PubMed](#)
52. Feng J, *et al.* 2017. *Nat Commun.* 10.1038/s41467-017-01056-8. [PubMed](#)
53. Bastow CR, *et al.* 2021. *Proc Natl Acad Sci U S A.* 118:1. [PubMed](#)
54. Anderson AE, *et al.* 2022. *NPJ Regen Med.* 7:6. [PubMed](#)
55. Monaghan KL, *et al.* 2020. *J Vis Exp.* 1. [PubMed](#)
56. Ma X, *et al.* 2020. *Immunity.* 53:1315. [PubMed](#)
57. Ahn D, *et al.* 2021. *Cell Reports.* 35(9):109196. [PubMed](#)
58. Zaslona Z, *et al.* 2017. *Am J Physiol Lung Cell Mol Physiol.* 312:L855. [PubMed](#)
59. Bartolacci C, *et al.* 2018. *Cancer Immunol Res.* 1.281944444. [PubMed](#)
60. Gomez S, *et al.* 2022. *J Immunother Cancer.* 10:1. [PubMed](#)
61. Peters N, *et al.* 2009. *PLoS One.* 5:e1000484. [PubMed](#)
62. Matsumura T, *et al.* 2022. *Nat Commun.* 13:7064. [PubMed](#)
63. Matsuda T, *et al.* 2022. *iScience.* 25:105324. [PubMed](#)
64. Sakamoto K, *et al.* 2021. *Immunity.* 54:2321. [PubMed](#)

65. Hofmann J, *et al.* 2021. *Front Immunol.* 11:599495. [PubMed](#)
66. Kitur K, *et al.* 2015. *PLoS Pathog.* 11:1004820. [PubMed](#)
67. Xu J, *et al.* 2020. *Immunity.* 53(2):371-383.e5. [PubMed](#)
68. Isvoranu G, *et al.* 2019. *Oncol Lett.* 17:4197. [PubMed](#)
69. Dallari S, *et al.* 2021. *Cell Host Microbe.* 29(6):1014-1029.e8. [PubMed](#)
70. Bagati A, *et al.* 2020. *Cancer Cell.* 39(1):54-67.e9. [PubMed](#)
71. Huo M, *et al.* 2017. *FASEB J.* 10.1096/fj.201601030R. [PubMed](#)
72. Clemente-Casares X, *et al.* 2017. *Immunity.* 47:974. [PubMed](#)
73. Leary N, *et al.* 2022. *J Extracell Vesicles.* 11:e12197. [PubMed](#)
74. Blaszczak AM, *et al.* 2020. *Immunometabolism.* 2:00. [PubMed](#)
75. Gaya M *et al.* 2018. *Cell.* 172(3):517-533. [PubMed](#)
76. Kong XF, *et al.* 2018. *Nat Immunol.* 19:973. [PubMed](#)
77. Katzmarski N, *et al.* 2021. *Nat Immunol.* 22:1382. [PubMed](#)
78. Ren S, *et al.* 2022. *Int J Biol Sci.* 18:166. [PubMed](#)
79. Dhayade S, *et al.* 2020. *Nutrients.* 12:. [PubMed](#)
80. Hackstein CP, *et al.* 2022. *Nat Commun.* 13:7472. [PubMed](#)
81. Bonavita E, *et al.* 2020. *Immunity.* 1215:53. [PubMed](#)
82. Martins R, *et al.* 2016. *Nat Immunol.* 17:1361-1372. [PubMed](#)
83. Sakamoto K, *et al.* 2022. *STAR Protoc.* 3:101052. [PubMed](#)
84. Dourcy M, *et al.* 2020. *Mucosal Immunol.* 13:799. [PubMed](#)
85. Spiljar M, *et al.* 2021. *Cell Metab.* 33:2231. [PubMed](#)
86. Ichinose M, *et al.* 2021. *Sci Rep.* 7200:11. [PubMed](#)
87. Spanier J, *et al.* 2016. *Nat Commun.* 7:11804. [PubMed](#)
88. Deniset JF *et al.* 2019. *Immunity.* 51(1):131-140. [PubMed](#)
89. Li CY, *et al.* 2022. *Int J Mol Sci.* 23:. [PubMed](#)
90. Samuelson DR, *et al.* 2021. *Commun Biol.* 4:997. [PubMed](#)

RRID AB_2129642 (BioLegend Cat. No. 117327)
 AB_2129641 (BioLegend Cat. No. 117328)

Antigen Details

Structure	Integrin α -chain, associates with integrin β_2 (CD18), 150 kD
Distribution	Dendritic cells, NK cells, intestinal intraepithelial lymphocytes (IEL), some activated T cells
Function	Cellular adhesion
Ligand/Receptor	iC3b, fibrinogen
Cell Type	Dendritic cells, Epithelial cells, NK cells, T cells, Tregs
Biology Area	Cell Adhesion, Cell Biology, Costimulatory Molecules, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none"> 1. Barclay A, <i>et al.</i> 1997. <i>The Leukocyte Antigen Facts Book</i> Academic Press. 2. Springer TA. 1994. <i>Cell</i> 76:301. 3. Lopez-Rodriguez C, <i>et al.</i> 1996. <i>J. Immunol.</i> 156:3780.
Gene ID	16411

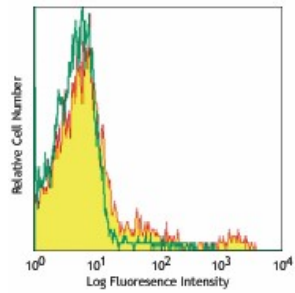
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-mouse CD11c, Biotin anti-mouse CD11c, FITC anti-mouse CD11c, PE anti-mouse CD11c, Purified anti-mouse CD11c, Alexa Fluor® 488 anti-mouse CD11c, Alexa Fluor® 647 anti-mouse CD11c, PE/Cyanine5 anti-mouse CD11c, PE/Cyanine7 anti-mouse CD11c, Brilliant Violet 605™ anti-mouse CD11c, Alexa Fluor® 700 anti-mouse CD11c, Pacific Blue™ anti-mouse CD11c, APC/Cyanine7 anti-mouse CD11c, PerCP/Cyanine5.5 anti-mouse CD11c, PerCP anti-mouse CD11c, Brilliant Violet 421™ anti-mouse CD11c, Brilliant Violet 570™ anti-mouse CD11c, Brilliant Violet 785™ anti-mouse CD11c, Brilliant Violet 510™ anti-mouse CD11c, Brilliant Violet 650™ anti-mouse CD11c, Purified anti-mouse CD11c (Maxpar® Ready), Alexa Fluor® 594 anti-mouse CD11c, PE/Dazzle™ 594 anti-mouse CD11c, Brilliant Violet 711™ anti-mouse CD11c, APC/Fire™ 750 anti-mouse CD11c, TotalSeq™-A0106 anti-mouse CD11c, Brilliant Violet 750™ anti-mouse CD11c, TotalSeq™-B0106 anti-mouse CD11c, TotalSeq™-C0106 anti-mouse CD11c, KIRAVIA Blue 520™ anti-mouse CD11c, Spark Blue™ 550 anti-mouse CD11c, Spark NIR™ 685 anti-mouse CD11c,

Product Data



C57BL/6 mouse splenocytes stained
with N418 PerCP/Cyanine5.5

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.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587