

PE anti-mouse CD11c Antibody

Catalog# / Size	117307 / 50 µg 117308 / 200 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 PE under optimal conditions.
Concentration	0.2 mg/ml
Storage & Handling	The CD11c 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 ≤ 0.25 µg per 10 ⁶ cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for other applications.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 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} .
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 Pericolini E, <i>et al.</i> 2008. <i>J. Leukocyte Biol.</i> 83:1286. PubMed Randall LM, <i>et al.</i> 2008. <i>Infect. Immun.</i> 76:3312. PubMed
(PubMed link indicates BioLegend citation)	

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. Lee T, *et al.* 2014. *Mol Biol Cell.* 25:583. [PubMed](#)
2. Koyama M, *et al.* 2015. *J Exp Med.* 212: 1303 - 1321. [PubMed](#)
3. Hou X, *et al.* 2020. *Cell Reports.* 28(1):172-189.e7.. [PubMed](#)
4. Lin C *et al.* 2019. *Immunity.* 50(1):137-151 . [PubMed](#)
5. Xiong Y, *et al.* 2020. *J Nanobiotechnology.* 18:66. [PubMed](#)
6. Zhao Z, *et al.* 2021. *Nat Commun.* 12:4355. [PubMed](#)
7. Grigsby SM, *et al.* 2021. *Cancers (Basel).* 13:. [PubMed](#)
8. Garo LP, *et al.* 2021. *Nat Commun.* 12:2419. [PubMed](#)
9. Liang J, *et al.* 2021. *Cancer Manag Res.* 13:6977. [PubMed](#)
10. Du J, *et al.* 2020. *Developmental Cell.* 55(6):737-753.e7. [PubMed](#)
11. Naito Y, *et al.* 2019. *American Journal of Physiology-Renal Physiology.* 318(1):F238-F247. [PubMed](#)
12. Jackson A, *et al.* 2014. *J Leukoc Biol.* 92:609. [PubMed](#)
13. Tseng K, *et al.* 2009. *J Immunol.* 182:4590. [PubMed](#)
14. Schloss MJ, *et al.* 2022. *Nat Immunol.* 23:605. [PubMed](#)
15. Lee S, *et al.* 2021. *JCI Insight.* 6:. [PubMed](#)
16. Fan L, *et al.* 2021. *Cancers (Basel).* 13:. [PubMed](#)
17. Zhang R, *et al.* 2021. *Cell Mol Immunol.* 18:1222. [PubMed](#)
18. Kang S, *et al.* 2009. *Gastroenterology.* 137:1391. [PubMed](#)
19. Clark K, *et al.* 2015. *J Autoimmun.* Available online 21 August 2015. [PubMed](#)
20. Blecher-Gonen R, *et al.* 2019. *Cell Syst.* 8:109. [PubMed](#)
21. Baptista AP *et al.* 2019. *Immunity.* 50(5):1188-1201 . [PubMed](#)
22. Lee H, *et al.* 2020. *Cell Metabolism.* 31(4):822-836. [PubMed](#)
23. Kunimura K, *et al.* 2020. *Cell Reports.* 29(9):2823-2834.e7.. [PubMed](#)
24. Zhang J, *et al.* 2021. *MedComm (Beijing).* 2:256. [PubMed](#)
25. Cheong SS, *et al.* 2020. *Front Cell Dev Biol.* 8:577201. [PubMed](#)
26. Wu R, *et al.* 2019. *J Cell Mol Med.* 24:1684. [PubMed](#)
27. Schmidleithner L *et al.* 2019. *Immunity.* 50(5):1232-1248 . [PubMed](#)
28. Shu T, *et al.* 2022. *Eur Respir J.* Online ahead of print. [PubMed](#)
29. Hu K, *et al.* 2015. *PLoS One.* 10: 0137123. [PubMed](#)
30. Toivonen R, *et al.* 2016. *J Immunol.* 196: 4750 - 4759. [PubMed](#)
31. Shemer A, *et al.* 2020. *Immunity.* 53(5):1033-1049.e7. [PubMed](#)
32. Li Q *et al.* 2018. *Immunity.* 48(2):258-270 . [PubMed](#)
33. Nakagawa S *et al.* 2017. *Cell host & microbe.* 22(5):667-677 . [PubMed](#)
34. Tsuchiya N, *et al.* 2020. *Cell Reports.* 29(1):162-175.e9.. [PubMed](#)
35. Lees JG, *et al.* 2020. *PLoS One.* 15:e0238164. [PubMed](#)
36. Xiong A, *et al.* 2022. *EBioMedicine.* 83:104239. [PubMed](#)
37. Li X, *et al.* 2015. *J Immunol.* 195: 2710-2721. [PubMed](#)
38. Privratsky JR, *et al.* 2018. *Am J Physiol Renal Physiol.* 315:F682. [PubMed](#)
39. Akram KM, *et al.* 2019. *Nat Commun.* 10:1178. [PubMed](#)
40. Tran L, *et al.* 2017. *Cancer Immunol Res.* 5:1141. [PubMed](#)
41. Wang C, *et al.* 2017. *J Immunol.* 10.4049/jimmunol.1700671. [PubMed](#)
42. Syed A, *et al.* 2015. *Infect Immun.* 83: 3428-3437. [PubMed](#)
43. Ma Y, *et al.* 2015. *J Immunol.* 195: 3769 - 3780. [PubMed](#)
44. Chi Z, *et al.* 2020. *Molecular Cell.* 80(1):43-58.e7. [PubMed](#)
45. Fujita K, *et al.* 2019. *Proc Natl Acad Sci U S A.* 116:14714. [PubMed](#)
46. Zhang D, *et al.* 2020. *Signal Transduct Target Ther.* 5:24. [PubMed](#)
47. Ramos CV, *et al.* 2020. *Cell Reports.* 32(3):107910. [PubMed](#)
48. Dane EL, *et al.* 2022. *Nat Mater.* 21:710. [PubMed](#)
49. Carozza JA, *et al.* 2020. *Nat Cancer.* 184:1. [PubMed](#)
50. Aegerter H, *et al.* 2020. *Nat Immunol.* 0.975694444. [PubMed](#)
51. Fulham MA, *et al.* 2019. *Am J Physiol Cell Physiol.* 317:C687. [PubMed](#)
52. Benechet AP, *et al.* 2019. *Nature.* 574:200. [PubMed](#)
53. Feng T, *et al.* 2022. *Nat Commun.* 13:5208. [PubMed](#)
54. Zhang L, *et al.* 2021. *J Immunother Cancer.* 9:. [PubMed](#)
55. Li Z, *et al.* 2022. *J Exp Clin Cancer Res.* 41:74. [PubMed](#)
56. Wu L, *et al.* 2022. *Theranostics.* 12:842. [PubMed](#)
57. Jiao Y, *et al.* 2021. *Crit Care.* 25:356. [PubMed](#)
58. Jeong SH, *et al.* 2021. *Nat Commun.* 12:4405. [PubMed](#)
59. Ray A, *et al.* 2015. *PLoS One.* 10: 0137314. [PubMed](#)
60. Galvani E, *et al.* 2020. *Nat Commun.* 11:853. [PubMed](#)
61. Garcia LR, *et al.* 2021. *Nat Commun.* 12:3364. [PubMed](#)
62. Park SG, *et al.* 2021. *J Vet Sci.* 22:e16. [PubMed](#)
63. Wang J, *et al.* 2021. *Nat Commun.* 12:6198. [PubMed](#)
64. Friedman DJ, *et al.* 2021. *Cancer Immunol Res.* 9:952. [PubMed](#)
65. Glaros V, *et al.* 2021. *Immunity.* 54:2005. [PubMed](#)

66. Guo Y, *et al.* 2022. Nat Commun. 13:6534. [PubMed](#)
67. Toubal A, *et al.* 2020. Nat Commun. 3755:11. [PubMed](#)
68. Barsoumian HB, *et al.* 2020. J Immunother Cancer. 8:00. [PubMed](#)
69. Osaka M, *et al.* 2016. Sci Rep. 6:21391. [PubMed](#)
70. Frodermann V, *et al.* 2019. Nat Med. 25:1761. [PubMed](#)
71. Garo LP, *et al.* 2019. Cell Rep. 28:3353. [PubMed](#)
72. Miteva K, *et al.* 2018. Sci Rep. 8:2820. [PubMed](#)
73. Ding Y, *et al.* 2022. Cell Death Dis. 13:996. [PubMed](#)
74. Yong L, *et al.* 2022. Nat Commun. 13:4255. [PubMed](#)
75. Pilonis KA, *et al.* 2020. Cancer Immunol Res. 8:1054. [PubMed](#)
76. Reinfeld BI, *et al.* 2021. Nature. 593:282. [PubMed](#)
77. Olson M, *et al.* 2014. J Immunol. 193:5420. [PubMed](#)
78. Zeng W, *et al.* 2021. STAR Protocols. 2(1):100361. [PubMed](#)
79. De Simone G, *et al.* 2021. Immunity. .: [PubMed](#)
80. Lim CX, *et al.* 2020. Cell Rep. 3793:30. [PubMed](#)
81. Van Winkle JA *et al.* 2018. Cell host & microbe. 24(5):665-676 . [PubMed](#)
82. LaFleur MW, *et al.* 2019. Nat Commun. 10:1668. [PubMed](#)
83. Yang H, *et al.* 2019. J Neuroinflammation. 16:169. [PubMed](#)
84. Liu S, *et al.* 2020. Cell Host & Microbe. 26(6):779-794.e8.. [PubMed](#)
85. Vorselen D, *et al.* 2021. Elife. 10.: [PubMed](#)
86. Dey S, *et al.* 2020. J Immunother Cancer. 8.: [PubMed](#)
87. Koikawa K, *et al.* 2021. Cell. 184(18):4753-4771.e27. [PubMed](#)
88. Hanihara-Tatsuzawa F, *et al.* 2014. J Biol Chem. 389:30925. [PubMed](#)
89. Choi EW, *et al.* 2020. Sci Rep. 10:12001. [PubMed](#)
90. López MJ, *et al.* 2018. Invest Ophthalmol Vis Sci. 59:5671. [PubMed](#)
91. Cohen M *et al.* 2018. Cell. 175(4):1031-1044 . [PubMed](#)
92. Maulloo CD, *et al.* 2021. Front Immunol. 12:714842. [PubMed](#)
93. Benhamron S, *et al.* 2012. PLoS One. 7:e35602. [PubMed](#)
94. Hsu Y, *et al.* 2017. Biochem Biophys Res Commun.. 10.1016/j.bbrc.2017.10.067. [PubMed](#)
95. Yang BH, *et al.* 2020. Cell Reports. 27(12):3629-3645.e6.. [PubMed](#)
96. Lebel MÈ, *et al.* 2020. Nat Commun. 3.051388889. [PubMed](#)
97. Hu Y, *et al.* 2021. Cell Death Dis. 12:743. [PubMed](#)
98. Li D, *et al.* 2022. Emerg Microbes Infect. 11:2248. [PubMed](#)
99. Nahrendorf W, *et al.* 2021. eLife. 10:00. [PubMed](#)
100. Bi CS, *et al.* 2020. Cell Prolif. 53:e12827. [PubMed](#)
101. Rosenbaum SR, *et al.* 2020. Cell Rep. 30:510. [PubMed](#)
102. Yuan X, *et al.* 2017. Elife. 6:e29540. [PubMed](#)
103. Wang Y, *et al.* 2021. Nat Commun. 12:4964. [PubMed](#)
104. Takahashi F, *et al.* 2022. iScience. 25:104278. [PubMed](#)
105. Wang W, *et al.* 2021. J Am Heart Assoc. 10:e019142. [PubMed](#)
106. Al-Barwani F, *et al.* 2014. PLoS One. 9:104523. [PubMed](#)
107. Holzki J, *et al.* 2015. J Virol. 89: 9886 - 9895. [PubMed](#)
108. Gamradt P, *et al.* 2016. PLoS Pathog. 12:e1006032. [PubMed](#)
109. Younes AI, *et al.* 2021. Transl Oncol. 14:100983. [PubMed](#)
110. Nechama M, *et al.* 2018. Nat Commun. 9:1603. [PubMed](#)
111. Xia Y, *et al.* 2018. Cell. 175:1059. [PubMed](#)
112. Oliveira AC *et al.* 2017. eLife. 6 pii: e30883. [PubMed](#)
113. Alexander Mildner *et al.* 2017. Immunity. 46(5):849-862 . [PubMed](#)
114. Lu X, *et al.* 2019. Circ Res. 125:1055. [PubMed](#)
115. Zheng B, *et al.* 2021. Bioact Mater. 6:3879. [PubMed](#)
116. Zhang MS, *et al.* 2022. Nat Commun. 13:954. [PubMed](#)
117. Tuong ZK, *et al.* 2021. Cell Rep. 37:110132. [PubMed](#)
118. Kataru RP, *et al.* 2022. Front Aging. 3:864860. [PubMed](#)
119. Chen C, *et al.* 2020. Cell Rep. 2136:30. [PubMed](#)
120. Damgaard RB *et al.* 2016. Cell. 166(5):1215-1230 . [PubMed](#)
121. Yuan C, *et al.* 2015. Biochem Biophys Res Commun. 464: 249-255. [PubMed](#)
122. Clemente-Casares X, *et al.* 2017. Immunity. 47:974. [PubMed](#)
123. Godwin MS, *et al.* 2021. Am J Physiol Lung Cell Mol Physiol. 320:L393. [PubMed](#)
124. Gu H, *et al.* 2021. Elife. 10.: [PubMed](#)
125. Fujimura N, *et al.* 2016. Sci Rep. 5:11664. [PubMed](#)
126. Manifold-Wheeler B, *et al.* 2016. J Immunol. 196: 328 - 335. [PubMed](#)
127. Zhou H, *et al.* 2016. J Immunol. 197: 288 - 295. [PubMed](#)
128. Zhang D, *et al.* 2020. Signal Transduct Target Ther. 5:24. [PubMed](#)
129. Lai JH, *et al.* 2021. iScience. 24(6):102498. [PubMed](#)
130. Bussey KA, *et al.* 2019. J Virol. 93. [PubMed](#)
131. Kataru RP, *et al.* 2019. Cancer Immunol Res. 7:1345. [PubMed](#)
132. Melgert B, *et al.* 2010. Am J Respir Cell Mol Biol. 42:595. [PubMed](#)
133. Park C, *et al.* 2012. J Leukoc Biol. 91:739. [PubMed](#)
134. Parodi B, *et al.* 2021. Front Immunol. 12:655212. [PubMed](#)
135. Siolas D, *et al.* 2021. Cell Reports. 36(8):109578. [PubMed](#)
136. Iwai H, *et al.* 2015. Tuberculosis (Edinb). 95:246. [PubMed](#)
137. Sharma M, *et al.* 2019. Immunometabolism. 1. [PubMed](#)
138. Zukauskas A, *et al.* 2018. mSphere. 3:e00303. [PubMed](#)
139. Tomita T, *et al.* 2021. Nat Commun. 12:3655. [PubMed](#)
140. Heyde A, *et al.* 2021. Cell. 184(5):1348-1361.e22. [PubMed](#)
141. Wu L, *et al.* 2020. Cancer Immunol Res. 710:8. [PubMed](#)
142. Tian T, *et al.* 2020. Cancer Immunol Res. 660:8. [PubMed](#)
143. Mangal JL, *et al.* 2020. J Mater Chem B. 8:5195. [PubMed](#)
144. Li A, *et al.* 2018. Cancer Lett. 431:54. [PubMed](#)
145. Mino T, *et al.* 2019. Nucleic Acids Res. 47:8838. [PubMed](#)

146. Lai NY, *et al.* 2020. *Cell*. 180:33:00. [PubMed](#)
 147. Jones GS, *et al.* 2020. *mSphere*. 5:. [PubMed](#)
 148. Spiljar M, *et al.* 2021. *Cell Metab*. 33:2231. [PubMed](#)
 149. Chow AK, *et al.* 2021. *Cellular and Molecular Gastroenterology and Hepatology*. :. [PubMed](#)
 150. Chng S, *et al.* 2016. *Sci Rep*. 6: 23820. [PubMed](#)
 151. Huang J, *et al.* 2013. *J Immunol Methods*. 387:254. [PubMed](#)
 152. Vecchiola A, *et al.* 2020. *Front Endocrinol (Lausanne)*. 11:223. [PubMed](#)
 153. Giles DA, *et al.* 2018. *J Clin Invest*. 128:5322. [PubMed](#)
 154. Yamamoto R, *et al.* 2019. *J Immunol*. 203:167. [PubMed](#)
 155. Omenetti S, *et al.* 2019. *Immunity*. 51:77. [PubMed](#)
 156. Chen S, *et al.* 2018. *Nat Commun*. 9:5298. [PubMed](#)
 157. Syed I *et al.* 2018. *Cell metabolism*. 27(2):419-427 . [PubMed](#)
 158. Li CY, *et al.* 2022. *Int J Mol Sci*. 23:. [PubMed](#)
 159. Li C, *et al.* 2022. *Front Cell Dev Biol*. 10:913824. [PubMed](#)
 160. Zhong J, *et al.* 2021. *Commun Biol*. 4:865. [PubMed](#)

RRID AB_313776 (BioLegend Cat. No. 117307)
 AB_313777 (BioLegend Cat. No. 117308)

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	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

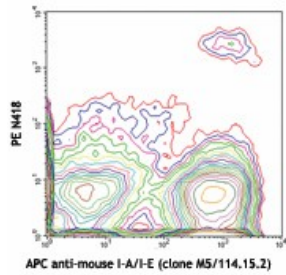
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

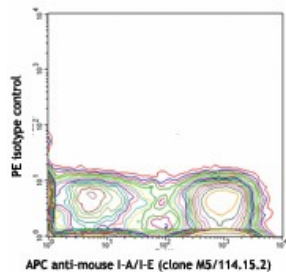
Other Formats

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, Spark UV™ 387 anti-mouse CD11c, Spark Red™ 718 anti-mouse CD11c

Product Data



C57BL/6 mouse splenocytes stained with APC anti-mouse I-A/I-E (clone M5/114.15.2) and PE N418 (top) or PE Armenian hamster IgG isotype control (bottom)



C57BL/6 mouse splenocytes stained with APC anti-mouse I-A/I-E (clone M5/114.15.2) and PE N418 (top) or PE Armenian hamster IgG isotype control (bottom)

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