

APC anti-mouse CD8a Antibody

Catalog# / Size	100711 / 25 µg 100712 / 100 µg
Clone	53-6.7
Regulatory Status	RUO
Other Names	T8, Lyt2, Ly-2
Isotype	Rat IgG2a, κ
Description	CD8, also known as Lyt-2, Ly-2, or T8, consists of disulfide-linked α and β chains that form the α(CD8a)/β(CD8b) heterodimer and α/α homodimer. CD8a is a 34 kD protein that belongs to the immunoglobulin family. The CD8 α/β heterodimer is expressed on the surface of most thymocytes and a subset of mature TCR α/β T cells. CD8 expression on mature T cells is non-overlapping with CD4. The CD8 α/α homodimer is expressed on a subset of γ/δ TCR-bearing T cells, NK cells, intestinal intraepithelial lymphocytes, and lymphoid dendritic cells. CD8 is an antigen co-receptor on T cells that interacts with MHC class I on antigen-presenting cells or epithelial cells. CD8 promotes T cell activation through its association with the TCR complex and protein tyrosine kinase lck.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Mouse thymus or spleen
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions.
Concentration	0.2 mg/ml
Storage & Handling	The CD8a 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 each application.
Excitation Laser	Red Laser (633 nm)
Application Notes	Clone 53-6.7 antibody competes with clone 5H10-1 antibody for binding to thymocytes ³ . The 53-6.7 antibody has been reported to block antigen presentation via MHC class I and inhibit T cell responses to IL-2. This antibody has also been used for depletion of CD8a ⁺ cells. Additional reported applications (for the relevant formats) include: immunoprecipitation ^{1,3} , <i>in vivo</i> and <i>in vitro</i> cell depletion ^{2,10,15} , inhibition of CD8 T cell proliferation ³ , blocking of cytotoxicity ^{3,4} , immunohistochemical staining ^{5,6} of acetone-fixed frozen sections and zinc-fixed paraffin-embedded sections, and spatial biology (IBEX) ^{29,30} . Clone 53-6.7 is not recommended for immunohistochemistry of formalin-fixed paraffin sections. The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays or <i>in vivo</i> studies (Cat No. 100746).
Application References	<ol style="list-style-type: none"> 1. Ledbetter JA, <i>et al.</i> 1979. <i>Immunol. Rev.</i> 47:63. (IHC, IP) 2. Hathcock KS. 1991. <i>Current Protocols in Immunology</i>. 3.4.1. (Deplete) 3. Takahashi K, <i>et al.</i> 1992. <i>P. Natl. Acad. Sci. USA</i> 89:5557. (Block, IP) 4. Ledbetter JA, <i>et al.</i> 1981. <i>J. Exp. Med.</i> 153:1503. (Block)
(PubMed link indicates BioLegend citation)	

5. Hata H, *et al.* 2004. *J. Clin. Invest.* 114:582. (IHC)
6. Fan WY, *et al.* 2001. *Exp. Biol. Med.* 226:1045. (IHC)
7. Shih FF, *et al.* 2006. *J. Immunol.* 176:3438. (FC)
8. Kamimura D, *et al.* 2006. *J. Immunol.* 177:306.
9. Bouwer HGA, *et al.* 2006. *P. Natl. Acad. Sci. USA* 103:5102. (FC, Deplete)
10. Kao C, *et al.* 2005. *Int. Immunol.* 17:1607. [PubMed](#)
11. Ko SY, *et al.* 2005. *J. Immunol.* 175:3309. (FC) [PubMed](#)
12. Rasmussen JW, *et al.* 2006. *Infect. Immun.* 74:6590. [PubMed](#)
13. Lee CH, *et al.* 2009. *Clin. Cancer Res.* [PubMed](#)
14. Geiben-Lynn R, *et al.* 2008. *Blood* 112:4585. (Deplete) [PubMed](#)
15. Kingeter LM, *et al.* 2008. *J. Immunol.* 181:6244. [PubMed](#)
16. Guo Y, *et al.* 2008. *Blood* 112:480. [PubMed](#)
17. Andrews DM, *et al.* 2008. *J. Virol.* 82:4931. [PubMed](#)
18. Britschqui MR, *et al.* 2008. *J. Immunol.* 181:7681. [PubMed](#)
19. Kenna TJ, *et al.* 2008. *Blood* 111:2091. [PubMed](#)
20. Jordan JM, *et al.* 2008. *Infect. Immun.* 76:3717. [PubMed](#)
21. Todd DJ, *et al.* 2009. *J. Exp. Med.* 206:2151. [PubMed](#)
22. Bankoti J, *et al.* 2010. *Toxicol. Sci.* 115:422. (FC) [PubMed](#)
23. Medyouf H, *et al.* 2010. *Blood* 115:1175. [PubMed](#)
24. Riedl P, *et al.* 2009. *J. Immunol.* 183:370. [PubMed](#)
25. Apte SH, *et al.* 2010. *J. Immunol.* 185:998. [PubMed](#)
26. Bankoti J, *et al.* 2010. *Toxicol. Sci.* 115:422. (FC) [PubMed](#)
27. del Rio ML, *et al.* 2011. *Transpl. Int.* 24:501. (FC) [PubMed](#)
28. Cui L, *et al.* 2015. *J Control Release.* 206:220. [PubMed](#)
29. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci U S A.* 117:33455-65. (SB) [PubMed](#)
30. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

Product Citations

1. Choi JG, *et al.* 2020. *Front Immunol.* 11:598556. [PubMed](#)
2. Chang YS, *et al.* 2020. *Int J Mol Sci.* 21:00. [PubMed](#)
3. Liu Y, *et al.* 2021. *Cell Metabolism.* 33(6):1221-1233.e11. [PubMed](#)
4. Glasner A, *et al.* 2017. *Sci Rep.* 10.1038/s41598-017-12998-w. [PubMed](#)
5. Logan K Smith *et al.* 2018. *Immunity.* 48(2):299-312. [PubMed](#)
6. Schuster M, *et al.* 2017. *J Immunol.* 199:920. [PubMed](#)
7. Li X *et al.* 2019. *Immunity.* 50(3):576-590. [PubMed](#)
8. O'Malley G, *et al.* 2018. *Cancer Immunol Res.* 1.240277778. [PubMed](#)
9. Jiang W, *et al.* 2017. *Sci Rep.* 7:6501. [PubMed](#)
10. Xu X, *et al.* 2020. *Chin Med.* 15:33. [PubMed](#)
11. Stone VM, *et al.* 2022. *iScience.* 25:105070. [PubMed](#)
12. Zelenka T, *et al.* 2022. *Nat Commun.* 13:6954. [PubMed](#)
13. Renrick AN, *et al.* 2021. *Front Immunol.* 607044:12. [PubMed](#)
14. Paris J *et al.* 2019. *Cell Stem Cell.* 25(1):137-148. [PubMed](#)
15. Espinosa-Cueto P, *et al.* 2017. *PLoS One.* 10.1371/journal.pone.0182126. [PubMed](#)
16. Bian L, *et al.* 2022. *Front Immunol.* 13:938598. [PubMed](#)
17. Di Martile M, *et al.* 2020. *J Immunother Cancer.* 8:. [PubMed](#)
18. Li X, *et al.* 2022. *Nat Commun.* 13:2794. [PubMed](#)
19. Zhao X, *et al.* 2022. *Front Mol Biosci.* 9:786864. [PubMed](#)
20. Jiang Q, *et al.* 2022. *Theranostics.* 12:59. [PubMed](#)
21. Kim D, *et al.* 2021. *Nanomicro Lett.* 13:31. [PubMed](#)
22. Ma Z, *et al.* 2016. *Clin Cancer Res.* 22: 2969 - 2980. [PubMed](#)
23. Iwasaki Y, *et al.* 2016. *PLoS One.* 11: 0158282. [PubMed](#)
24. Leach SM, *et al.* 2020. *Cell Rep.* 33:108337. [PubMed](#)
25. Uzhachenko RV, *et al.* 2021. *Cell Reports.* 35(1):108944. [PubMed](#)
26. Christian LS, *et al.* 2021. *Cell Reports.* 35(6):109118. [PubMed](#)
27. Dong L, *et al.* 2021. *Cancer Cell.* [PubMed](#)
28. Castiello MC, *et al.* 2020. *J Allergy Clin Immunol.* [PubMed](#)
29. Wang D, *et al.* 2018. *Immunity.* 48:659. [PubMed](#)
30. Misumi I *et al.* 2019. *Cell Rep.* 27(5):1387-1396. [PubMed](#)
31. Song C, *et al.* 2019. *Nat Commun.* 10:3745. [PubMed](#)
32. Takeda Y, *et al.* 2018. *Innate Immun.* 24:323. [PubMed](#)
33. Gupta SS, *et al.* 2019. *Cell Rep.* 29:1862. [PubMed](#)
34. Riley JS, *et al.* 2020. *Blood Adv.* 4:1102. [PubMed](#)
35. Rodriguez-Garcia A, *et al.* 2021. *Nat Commun.* 12:877. [PubMed](#)
36. Pan Y, *et al.* 2021. *Front Cell Neurosci.* 15:664312. [PubMed](#)
37. Hewitson JP, *et al.* 2020. *J Immunol.* 204:2949. [PubMed](#)
38. Xu ZH, *et al.* 2021. *Mediators Inflamm.* 2021:8856326. [PubMed](#)
39. Jiang W, *et al.* 2021. *Oncol Lett.* 22:625. [PubMed](#)
40. Chen L, *et al.* 2022. *Mol Ther Oncolytics.* 24:522. [PubMed](#)
41. Li ZX, *et al.* 2022. *Arch Virol.* [PubMed](#)
42. Ghosh S, *et al.* 2022. *APL Bioeng.* 6:036105. [PubMed](#)
43. Bauer KM, *et al.* 2022. *JCI Insight.* 7:. [PubMed](#)
44. Fu Y, *et al.* 2020. *Mol Ther.* 1214:28. [PubMed](#)
45. Hirano KI, *et al.* 2021. *eLife.* 0.4166666666666667. [PubMed](#)
46. Delacher M, *et al.* 2021. *Immunity.* 54(4):702-720.e17. [PubMed](#)
47. Zheng H, *et al.* 2021. *Frontiers in Cell and Developmental Biology.* 9:641527. [PubMed](#)
48. Blumenthal D, *et al.* 2020. *eLife.* 9:e55995. [PubMed](#)
49. Chakrabarti J, *et al.* 2018. *Oncotarget.* 9:37439. [PubMed](#)
50. Yuzhu Hou *et al.* 2018. *Immunity.* 49(3):490-503. [PubMed](#)
51. Oyarce C, *et al.* 2018. *Front Immunol.* 8:1794. [PubMed](#)

52. Mayer RL, *et al.* 2022. Nat Commun. 13:6075. [PubMed](#)
53. Mirshahi F, *et al.* 2022. Cell Rep. 38:110454. [PubMed](#)
54. del Rio ML, *et al.* 2021. Transl Res. Online ahead of print.. [PubMed](#)
55. Zhao J, *et al.* 2022. J Nanobiotechnology. 20:62. [PubMed](#)
56. Felker A, Croy B 2016. J Leukoc Biol. 100: 645 - 655. [PubMed](#)
57. Wagner V, *et al.* 2016. Sci Transl Med. 8: 366ra164. [PubMed](#)
58. He C, *et al.* 2020. Clin Transl Med. 10:e39. [PubMed](#)
59. Pan H, *et al.* 2020. Mol Psychiatry. . [PubMed](#)
60. Chen S *et al.* 2018. Cell reports. 25(7):1729-1740 . [PubMed](#)
61. Hayatsu N *et al.* 2017. Immunity. 47(2):268-283 . [PubMed](#)
62. Misumi I *et al.* 2019. Cell Rep. 27(2):514-524 . [PubMed](#)
63. Zhang F, *et al.* 2019. Nat Commun. 10:3974. [PubMed](#)
64. Lee JH, *et al.* 2018. Transgenic Res. 27:241. [PubMed](#)
65. Demircioglu F, *et al.* 2020. Nat Commun. 11:1290. [PubMed](#)
66. Bommireddy R, *et al.* 2020. Vaccines (Basel). 8:. [PubMed](#)
67. Yin Y, *et al.* 2021. ACS Nano. 15:14347. [PubMed](#)
68. Xu F, *et al.* 2022. Cell Death Discov. 8:142. [PubMed](#)
69. Zhan CS, *et al.* 2020. FASEB J. 14006:34. [PubMed](#)
70. Mitchell JE, *et al.* 2021. Cell Reports. 35(2):108966. [PubMed](#)
71. Han C, *et al.* 2021. Cell Reports. 34(6):108706. [PubMed](#)
72. Lebratti T, *et al.* 2021. eLife. 10:00. [PubMed](#)
73. Eriksson E, *et al.* 2016. Gene Ther. 10.1038/gt.2016.80. [PubMed](#)
74. Shade K, *et al.* 2015. J Exp Med. 212:457. [PubMed](#)
75. Zhang C, *et al.* 2020. Cell Metabolism. 31(1):148-161.e5.. [PubMed](#)
76. Lu Y, *et al.* 2020. Cell. 180(6):1081-1097. [PubMed](#)
77. Uchimura T *et al.* 2018. Immunity. 49(6):1049-1061 . [PubMed](#)
78. Li Y, *et al.* 2019. Oncol Rep. 41:2679. [PubMed](#)
79. Tran L, *et al.* 2017. Cancer Immunol Res. 5:1141. [PubMed](#)
80. Guo H, *et al.* 2022. PLoS Pathog. 18:e1010857. [PubMed](#)
81. Frey N, *et al.* 2022. Nat Commun. 13:1804. [PubMed](#)
82. Zhang J, *et al.* 2022. Front Immunol. 13:931740. [PubMed](#)
83. Bhattacharya P, *et al.* 2022. PLoS Negl Trop Dis. 16:e0010224. [PubMed](#)
84. Zhan Y, *et al.* 2021. JCI Insight. 6:. [PubMed](#)
85. Yin Q, *et al.* 2015. PLoS One. 10: 0137808. [PubMed](#)
86. Vieyra-Garcia P, *et al.* 2016. Clin Cancer Res. 22: 3328 - 3339. [PubMed](#)
87. Matsumura K, *et al.* 2016. J Immunol. 197: 3233 - 3244. [PubMed](#)
88. Paiva RA, *et al.* 2021. Cell Reports. 35(2):108967. [PubMed](#)
89. Solanki A, *et al.* 2018. Development. 145. [PubMed](#)
90. Koliaraki V *et al.* 2019. Cell reports. 26(3):536-545 . [PubMed](#)
91. Zhang F, *et al.* 2019. Immunity. 50:738. [PubMed](#)
92. Riffelmacher T *et al.* 2017. Immunity. 47(3):466-480 . [PubMed](#)
93. Caronni N, *et al.* 2018. Cancer Res. 78:1685. [PubMed](#)
94. Wang L, *et al.* 2021. Cancer Immunol Res. 9:348. [PubMed](#)
95. Si L, *et al.* 2022. Nat Biotechnol. 40:1370. [PubMed](#)
96. Ebina-Shibuya R, *et al.* 2021. Elife. 10:. [PubMed](#)
97. Huang Y, *et al.* 2020. FASEB J. 34:1768. [PubMed](#)
98. Aegerter H, *et al.* 2020. Nat Immunol. 0.975694444. [PubMed](#)
99. Poczobutt J, *et al.* 2016. J Immunol. 196: 891 - 901. [PubMed](#)
100. Brummer G, *et al.* 2020. Oncogene. 39:2275. [PubMed](#)
101. Maluski M, *et al.* 2019. J Clin Invest. 129:5108. [PubMed](#)
102. Soldevilla MM, *et al.* 2019. Mol Ther. 27:1878. [PubMed](#)
103. Liu D *et al.* 2019. Immunity. 51(1):64-76 . [PubMed](#)
104. Luo Y *et al.* 2019. Cell reports. 26(7):1869-1879 . [PubMed](#)
105. Miska J *et al.* 2019. Cell reports. 27(1):226-237 . [PubMed](#)
106. Liu J, *et al.* 2019. J Exp Med. 216:656. [PubMed](#)
107. Funk KE, *et al.* 2019. J Neuroinflammation. 16:22. [PubMed](#)
108. Cong J *et al.* 2018. Cell metabolism. 28(2):243-255 . [PubMed](#)
109. Divan A, *et al.* 2018. PLoS One. 13:e0196893. [PubMed](#)
110. He X, *et al.* 2021. Small. 17:e2007165. [PubMed](#)
111. Pervaiz N, *et al.* 2021. Pigment Cell Melanoma Res. 34:918. [PubMed](#)
112. Katsinas N, *et al.* 2022. J Clin Med. 11:. [PubMed](#)
113. He X, *et al.* 2021. Adv Sci (Weinh). 8:e2103023. [PubMed](#)
114. Jeong SH, *et al.* 2021. Nat Commun. 12:4405. [PubMed](#)
115. Chen Q, *et al.* 2016. Nat Commun. 7:13193. [PubMed](#)
116. Hoefflin R, *et al.* 2020. Nat Commun. 3.313194444. [PubMed](#)
117. Espinosa JR, *et al.* 2018. Front Immunol. 9:1371. [PubMed](#)
118. Lee JS *et al.* 2018. Cell. 174(6):1559-1570 . [PubMed](#)
119. Schadt L, *et al.* 2020. Cell Reports. 29(5):1236-1248.e7.. [PubMed](#)
120. Zheng Z, *et al.* 2020. Cell Death Dis. 0.684722222. [PubMed](#)
121. Xu H, *et al.* 2020. Immunity. 51(4):696-708.e9.. [PubMed](#)
122. Alikhanyan K, *et al.* 2021. Cancers (Basel). 13:. [PubMed](#)
123. Tartey S, *et al.* 2021. Cancer Research. 81(9):2358-2372. [PubMed](#)
124. Elahi S, *et al.* 2020. Stem Cell Res. 43:101710. [PubMed](#)
125. Bayik D, *et al.* 2020. Cancer Discov. 1.256944444. [PubMed](#)
126. Yi X, *et al.* 2020. Sci Adv. 6:eaba3546. [PubMed](#)
127. Vidy A, *et al.* 2016. PLoS One. 11:e0165361. [PubMed](#)
128. Mirando AC, *et al.* 2020. Oncoimmunology. 9:1760685. [PubMed](#)
129. Horiguchi H, *et al.* 2019. Genes Dev. 33:1641. [PubMed](#)
130. Bai C, *et al.* 2020. Mol Ther Oncolytics. 17:9. [PubMed](#)
131. Leal AS, *et al.* 2019. Sci Rep. 5.286111111. [PubMed](#)

132. Al-Zaher AA, *et al.* 2018. Mol Ther Oncolytics. 0.376388889. [PubMed](#)
133. Li W, *et al.* 2019. Nat Commun. 10:3349. [PubMed](#)
134. Budida R, *et al.* 2017. Eur J Immunol. 47:1819. [PubMed](#)
135. Reismann D, *et al.* 2017. Nat Commun. 10.1038/s41467-017-01538-9. [PubMed](#)
136. Ishidome T *et al.* 2017. EBioMedicine. 22:89-99 . [PubMed](#)
137. Zhao X, *et al.* 2022. Nat Protoc. 17:2240. [PubMed](#)
138. He X, *et al.* 2022. Cancer Immunol Res. 10:314. [PubMed](#)
139. Liu T, *et al.* 2022. Front Immunol. 13:901349. [PubMed](#)
140. Goldfarb Y, *et al.* 2021. J Exp Med. 218:. [PubMed](#)
141. Ye P, *et al.* 2022. Front Cardiovasc Med. 8:810477. [PubMed](#)
142. Chen G, *et al.* 2021. Sci Adv. 7:eabg5686. [PubMed](#)
143. Gibbins J, *et al.* 2014. Blood. 124:2953. [PubMed](#)
144. Ku C, *et al.* 2015. Genes Dev. 29: 1930-1941. [PubMed](#)
145. Cook KD, *et al.* 2015. Immunity. 43:703-714. [PubMed](#)
146. Latasa C, *et al.* 2016. PLoS One. 11: 0161216. [PubMed](#)
147. Holokai L, *et al.* 2020. Cancers (Basel). 12:00. [PubMed](#)
148. Wanner-Seleznik GM, *et al.* 2020. Immunohorizons. 0.644444444. [PubMed](#)
149. Zeng W, *et al.* 2021. STAR Protocols. 2(1):100361. [PubMed](#)
150. Vaena S, *et al.* 2021. Cell Reports. 35(5):109076. [PubMed](#)
151. Ren W, *et al.* 2018. Mucosal Immunol. 12:531. [PubMed](#)
152. Hu J, *et al.* 2019. Mol Ther Nucleic Acids. 16:650. [PubMed](#)
153. Matsuo K, *et al.* 2018. J Immunol. 200:800. [PubMed](#)
154. Takaku S, *et al.* 2020. Integr Cancer Ther. 19:1534735419900798. [PubMed](#)
155. Alikhanyan K, *et al.* 2020. Immun Inflamm Dis. 8:181. [PubMed](#)
156. Medyouf H, *et al.* 2010. Blood. 115:1175. [PubMed](#)
157. Oka Y, *et al.* 2020. Sci Adv. 6:. [PubMed](#)
158. Haas MS, *et al.* 2020. Mol Cancer Res. 19:717. [PubMed](#)
159. Jiang Y, *et al.* 2020. Adv Mater. 32:e2001808. [PubMed](#)
160. Shannon JP, *et al.* 2021. STAR Protoc. 2:100790. [PubMed](#)
161. Li H, *et al.* 2021. Nat Commun. 12:7149. [PubMed](#)
162. Dey S, *et al.* 2020. J Immunother Cancer. 8:. [PubMed](#)
163. Wu H, *et al.* 2021. Cell Death Discov. 7:225. [PubMed](#)
164. Shen M, *et al.* 2022. Nat Cancer. 3:60. [PubMed](#)
165. Zhang Q, *et al.* 2022. Nat Commun. 13:2406. [PubMed](#)
166. Germundson DL, *et al.* 2022. Front Allergy. 3:870513. [PubMed](#)
167. Li YN, *et al.* 2022. Nat Commun. 13:4074. [PubMed](#)
168. Shannon JP, *et al.* 2021. Immunity. 54(2):276-290.e5. [PubMed](#)
169. Oguri Y, *et al.* 2020. Cell. 182(3):563-577.e20. [PubMed](#)
170. Guo H, *et al.* 2014. J Leukoc Biol. 96:419. [PubMed](#)
171. Lin W, *et al.* 2019. EBioMedicine. 49:133. [PubMed](#)
172. Chen Z, *et al.* 2019. J Exp Med. 216:152. [PubMed](#)
173. Nam GH, *et al.* 2018. Nat Commun. 9:2165. [PubMed](#)
174. Chatterjee S *et al.* 2017. Cell metabolism. 27(1):85-100 . [PubMed](#)
175. Yang Z, *et al.* 2021. Onco Targets Ther. 14:4239. [PubMed](#)
176. Otvos B, *et al.* 2021. Clin Cancer Res. 27:2038. [PubMed](#)
177. Ding P, *et al.* 2022. Bone Res. 10:42. [PubMed](#)
178. Li Y, *et al.* 2021. Cell Death Dis. 12:1001. [PubMed](#)
179. Bates PD, *et al.* 2021. Front Immunol. 12:668307. [PubMed](#)
180. Sun S, *et al.* 2013. J Immunol. 190:6209. [PubMed](#)
181. Wang H, *et al.* 2020. Nat Mater. 1.655555556. [PubMed](#)
182. Nanou A, *et al.* 2021. Cell Reports. 35(8):109168. [PubMed](#)
183. Lin YH, *et al.* 2018. Cancer Immunol Res. 0.25. [PubMed](#)
184. Morelli AE, *et al.* 2020. Cell Rep. 30:3448. [PubMed](#)
185. Zhang NN, *et al.* 2020. Cell. 182(5):1271-1283. [PubMed](#)
186. Mohamed E, *et al.* 2020. Immunity. 52(4):668-682.e7.. [PubMed](#)
187. Hu Y, *et al.* 2021. Cell Death Dis. 12:743. [PubMed](#)
188. Schreiber K, *et al.* 2020. Cancer Immunol Res. 8:192. [PubMed](#)
189. Feng Y, *et al.* 2022. J Nanobiotechnology. 20:193. [PubMed](#)
190. Chen R, *et al.* 2021. Cell Reports. 34(7):108751. [PubMed](#)
191. Alexandre YO, *et al.* 2020. Cell Reports. 33(13):108567. [PubMed](#)
192. Nahrendorf W, *et al.* 2021. eLife. 10:00. [PubMed](#)
193. Gong N, *et al.* 2020. Nat Nanotechnol. 1.35625. [PubMed](#)
194. Wu L, *et al.* 2020. Cell Rep. 33:108327. [PubMed](#)
195. Swanson P, *et al.* 2016. PLoS Pathog. 12:e1006022. [PubMed](#)
196. Teo T, *et al.* 2015. J Virol. 89: 7955-7969. [PubMed](#)
197. Sasaki Y, *et al.* 2015. PLoS One. 10: 0131176. [PubMed](#)
198. Spangenberg E, *et al.* 2019. Nat Commun. 10:3758. [PubMed](#)
199. Wang Y, *et al.* 2021. Nat Commun. 12:4964. [PubMed](#)
200. Takahashi F, *et al.* 2022. iScience. 25:104278. [PubMed](#)
201. Qi J, *et al.* 2021. Nat Commun. 12:4755. [PubMed](#)
202. Robertson TF, *et al.* 2021. J Cell Biol. 220:. [PubMed](#)
203. Nasarre P, *et al.* 2021. Cancers (Basel). 13: . [PubMed](#)
204. Li X, *et al.* 2021. Cell Death Dis. 12:314. [PubMed](#)
205. Frazer GL, *et al.* 2021. J Cell Biol. 220:. [PubMed](#)
206. Do-Thi VA, *et al.* 2021. Cancers (Basel). 13:. [PubMed](#)
207. Wang J, *et al.* 2022. Clin Transl Med. 12:e718. [PubMed](#)
208. Kataru RP, *et al.* 2022. Front Aging. 3:864860. [PubMed](#)
209. Zhao X, *et al.* 2022. iScience. 25:104690. [PubMed](#)
210. Huber MK, *et al.* 2021. J Vis Exp. .: [PubMed](#)
211. Chen H, *et al.* 2022. Front Pharmacol. 13:827520. [PubMed](#)

212. Dallari S, *et al.* 2021. *Cell Host Microbe*. 29(6):1014-1029.e8. [PubMed](#)
213. Ulaganathan VK, *et al.* 2020. *Sci Rep*. 10:8453. [PubMed](#)
214. Li X, *et al.* 2017. *Front Immunol*. 8:1186. [PubMed](#)
215. Schuster M, *et al.* 2019. *Front Immunol*. 10:1583. [PubMed](#)
216. Ma Q, *et al.* 2022. *Vaccines (Basel)*. 10: . [PubMed](#)
217. Fonderflick L, *et al.* 2022. *Cells*. 11: . [PubMed](#)
218. Rao L, *et al.* 2020. *Nat Commun*. 11:4909. [PubMed](#)
219. Murata T, *et al.* 2020. *Sci Rep*. 10:13560. [PubMed](#)
220. He X, *et al.* 2021. *J Immunother Cancer*. 9: . [PubMed](#)
221. Zheng Z, *et al.* 2021. *Nat Commun*. 12:6202. [PubMed](#)
222. Kiss M, *et al.* 2020. *Cancer Immunol Res*. 9:309. [PubMed](#)
223. Tassi I, *et al.* 2014. *J Immunol*. 193:4303. [PubMed](#)
224. Kramer K, *et al.* 2017. *Mol Ther*. 25(1):62-70. [PubMed](#)
225. Zheng DW, *et al.* 2020. *Nat Commun*. 3.865972222. [PubMed](#)
226. Yin X, *et al.* 2020. *Cell Rep*. 33:108278. [PubMed](#)
227. Lu C, *et al.* 2020. *Cancer Cell*. 39(1):96-108.e6. [PubMed](#)
228. Gaya M *et al.* 2018. *Cell*. 172(3):517-533 . [PubMed](#)
229. Zhang J, *et al.* 2018. *Oncoimmunology*. 7:e1461301. [PubMed](#)
230. Yoshida H, *et al.* 2019. *Cell*. 176:897. [PubMed](#)
231. Chao Y, *et al.* 2020. *Sci Adv*. 6:eaaz4204. [PubMed](#)
232. Kataru RP, *et al.* 2019. *Cancer Immunol Res*. 7:1345. [PubMed](#)
233. Fang W, *et al.* 2021. *J Exp Clin Cancer Res*. 40:4. [PubMed](#)
234. Zheng Z, *et al.* 2021. *Biomed Res Int*. 2021:5535578. [PubMed](#)
235. Jiang Y, *et al.* 2021. *Nat Commun*. 12:742. [PubMed](#)
236. Zhang Z, *et al.* 2020. *Nature*. 579:415. [PubMed](#)
237. Harrison DK, *et al.* 2021. *Transplantation*. 105:540. [PubMed](#)
238. Ukidve A, *et al.* 2020. *Proc Natl Acad Sci U S A*. 117:17727. [PubMed](#)
239. Pelly V, *et al.* 2016. *Mucosal Immunol*. 10.1038/mi.2016.4. [PubMed](#)
240. Chen S, *et al.* 2015. *Cancer Res* . 7: 519-531. [PubMed](#)
241. Chakraborty P, *et al.* 2020. *Cell Reports*. 28(7):1879-1893.e7.. [PubMed](#)
242. Han P, *et al.* 2020. *Sci Adv*. 6:eaaz1580. [PubMed](#)
243. Nakamura K, *et al.* 2018. *Cancer Cell*. 33:634. [PubMed](#)
244. Tippimanchai DD, *et al.* 2018. *Oncoimmunology*. 7:e1438105. [PubMed](#)
245. Liu YW, *et al.* 2022. *JCI Insight*. 7: . [PubMed](#)
246. Sun Y, *et al.* 2022. *iScience*. 25:104846. [PubMed](#)
247. Chen B, *et al.* 2021. *Cell*. 184:6262. [PubMed](#)
248. Smith LK, *et al.* 2021. *Elife*. 10: . [PubMed](#)
249. Nagatake T, *et al.* 2021. *Int Immunol*. 33:171. [PubMed](#)
250. Tang-Huau TL, *et al.* 2021. *Viruses*. 13: . [PubMed](#)
251. Tian T, *et al.* 2020. *Cancer Immunol Res*. 660:8. [PubMed](#)
252. Konishi Y, *et al.* 2018. *iScience*. 10:98. [PubMed](#)
253. Wang J, *et al.* 2020. *J Hematol Oncol*. 0.610416667. [PubMed](#)
254. Cong L, *et al.* 2021. *Breast Cancer Res*. 23:51. [PubMed](#)
255. Dourcy M, *et al.* 2020. *Mucosal Immunol*. 13:799. [PubMed](#)
256. Zhou P, *et al.* 2022. *Mol Ther Oncolytics*. 25:236. [PubMed](#)
257. Zheng Y, *et al.* 2022. *Transl Res*. :. [PubMed](#)
258. Funk KE, *et al.* 2021. *Aging Cell*. 20:e13412. [PubMed](#)
259. Galeano Nio JL, *et al.* 2020. *eLife*. 9:00. [PubMed](#)
260. Liu WL, *et al.* 2019. *Nat Commun*. 10:3199. [PubMed](#)
261. Johnson JL *et al.* 2018. *Immunity*. 48(2):243-257 . [PubMed](#)
262. Zhang Y, *et al.* 2022. *J Immunother Cancer*. 10: . [PubMed](#)
263. Bessell CA, *et al.* 2020. *JCI Insight*. 5: . [PubMed](#)
264. Li C, *et al.* 2022. *Front Cell Dev Biol*. 10:913824. [PubMed](#)
265. Tseng SH, *et al.* 2021. *J Biomed Sci*. 28:63. [PubMed](#)
266. Li X, *et al.* 2021. *Front Immunol*. 12:779560. [PubMed](#)

RRID AB_312750 (BioLegend Cat. No. 100711)
 AB_312751 (BioLegend Cat. No. 100712)

Antigen Details

Structure	Ig superfamily, CD8α chain, 34 kD
Distribution	Most thymocytes, T cell subset, some NK cells, lymphoid dendritic cells
Function	Co-receptor for TCR
Ligand/Receptor	MHC class I molecule
Antigen References	<ol style="list-style-type: none"> 1. Barclay A, <i>et al.</i> 1997. <i>The Leukocyte Antigen FactsBook</i> Academic Press. 2. Zamoyska R. 1994. <i>Immunity</i> 1:243. 3. Ellmeier W, <i>et al.</i> 1999. <i>Annu. Rev. Immunol.</i> 17:523.
Gene ID	12525

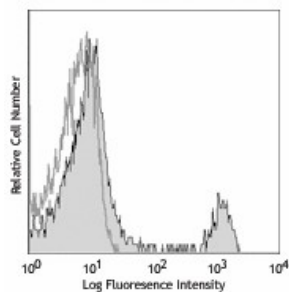
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-mouse CD8a, Biotin anti-mouse CD8a, FITC anti-mouse CD8a, PE anti-mouse CD8a, PE/Cyanine5 anti-mouse CD8a, Purified anti-mouse CD8a, PE/Cyanine7 anti-mouse CD8a, APC/Cyanine7 anti-mouse CD8a, Alexa Fluor® 488 anti-mouse CD8a, Alexa Fluor® 647 anti-mouse CD8a, Pacific Blue™ anti-mouse CD8a, Alexa Fluor® 700 anti-mouse CD8a, PerCP/Cyanine5.5 anti-mouse CD8a, PerCP anti-mouse CD8a, Brilliant Violet 421™ anti-mouse CD8a, Brilliant Violet 570™ anti-mouse CD8a, Brilliant Violet 650™ anti-mouse CD8a, Brilliant Violet 605™ anti-mouse CD8a, Ultra-LEAF™ Purified anti-mouse CD8a, Brilliant Violet 711™ anti-mouse CD8a, Brilliant Violet 785™ anti-mouse CD8a, Brilliant Violet 510™ anti-mouse CD8a, Purified anti-mouse CD8a (Maxpar® Ready), Alexa Fluor® 594 anti-mouse CD8a, PE/Dazzle™ 594 anti-mouse CD8a, APC/Fire™ 750 anti-mouse CD8a, GolnVivo™ Purified anti-mouse CD8a, TotalSeq™-A0002 anti-mouse CD8a, Spark Blue™ 550 anti-mouse CD8a, Spark NIR™ 685 anti-mouse CD8a, TotalSeq™-C0002 anti-mouse CD8a, TotalSeq™-B0002 anti-mouse CD8a, Spark YG™ 570 anti-mouse CD8a, PE/Fire™ 640 anti-mouse CD8a, PE/Fire™ 700 anti-mouse CD8a, Spark Blue™ 574 anti-mouse CD8a Antibody, Spark Violet™ 423 anti-mouse CD8a Antibody, Spark UV™ 387 anti-mouse CD8a

Product Data



C57BL/6 mouse splenocytes were stained with CD8 (clone 53-6.7) APC (filled histogram) or rat IgG2a, κ APC isotype control (open histogram).

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