

FITC anti-mouse Ly-6C Antibody

Catalog# / Size	128005 / 50 µg 128006 / 500 µg
Clone	HK1.4
Regulatory Status	RUO
Other Names	Lymphocyte antigen 6 complex, locus C
Isotype	Rat IgG2c, κ
Description	Most hematopoietic cells express one or more members of Ly-6 family. The expression of Ly-6 varies with development stage and activation. Ly-6C is a 14-17 kD GPI-linked surface protein expressed on mouse monocyte/macrophage cells, endothelial cells, neutrophils, and some T cell subsets. Ly-6C is reported to be an indicator of memory CD8 ⁺ T cells.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	L3 cloned CTL cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions.
Concentration	0.5 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 ≤ 0.25 µg per 10 ⁶ cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm)
Application Notes	Clone HK1.4 does not block the binding of clone RB6-8C5 ⁸ . Additional reported applications (for relevant formats of this clone) include: <i>in vitro</i> activation of T cells ¹⁻³ and immunohistochemistry of frozen sections ⁴ .

Application References

(PubMed link indicates BioLegend citation)

1. Jutila MA, *et al.* 1988. *Eur. J. Immunol.* 18:1819. (Activ)
2. Herold KC, *et al.* 1990. *Diabetes* 39:815. (Activ)
3. Havran WL, *et al.* 1988. *J. Immunol.* 140:1034 (Activ)
4. Flanagan K, *et al.* 2008. *J. Immunol.* 180:3874. (IHC)
5. Makaroff LE, *et al.* 2009. *P. Natl. Acad. Sci. USA* 106:4799. (FC)
6. Zuber J, *et al.* 2009. *Genes Dev.* 23:877. (FC) [PubMed](#)
7. Ribechini E, *et al.* 2009. *Eur. J. Immunol.* 39:3538.
8. Ma C, *et al.* 2012. *J. Leukoc. Biol.* 92:1199.
9. Watson NB, *et al.* 2015. *J Immunol.* 194:2796. [PubMed](#)

Product Citations

1. DeSouza-Vieira T, *et al.* 2020. *Cell Rep.* 33:108317. [PubMed](#)
2. Liu Y, *et al.* 2021. *Cell Metabolism.* 33(6):1221-1233.e11. [PubMed](#)
3. Zaman R, *et al.* 2021. *Immunity.* .: [PubMed](#)
4. Combes F, *et al.* 2018. *Neoplasia.* 20:848. [PubMed](#)

5. de la Rosa X, *et al.* 2018. *Am J Pathol.* 188:950. [PubMed](#)
6. Ying W, *et al.* 2019. *Cell Metab.* 29:457. [PubMed](#)
7. Duan Y, *et al.* 2019. *Circ Res.* 125:969. [PubMed](#)
8. Liang J, *et al.* 2021. *Cancer Manag Res.* 13:6977. [PubMed](#)
9. Bouchareychas L, *et al.* 2021. *iScience.* 24(8):102847. [PubMed](#)
10. Jackson A, *et al.* 2014. *J Leukoc Biol.* 92:609. [PubMed](#)
11. Jones NM, *et al.* 2019. *BMC Cancer.* 1.127777778. [PubMed](#)
12. John S, *et al.* 2020. *Sci Rep.* 10:11377. [PubMed](#)
13. Frisbee AL, *et al.* 2019. *Nat Commun.* 10:2712. [PubMed](#)
14. Hastings AK, *et al.* 2019. *iScience.* 13:339. [PubMed](#)
15. Schloss MJ, *et al.* 2022. *Nat Immunol.* 23:605. [PubMed](#)
16. Keeter WC, *et al.* 2022. *Eur Heart J Open.* 2:oeac028. [PubMed](#)
17. Fan L, *et al.* 2021. *Cancers (Basel).* 13:. [PubMed](#)
18. Rødahl I, *et al.* 2021. *STAR Protoc.* 2:100842. [PubMed](#)
19. You Y, *et al.* 2016. *Sci Rep.* 6:20630. [PubMed](#)
20. Dong L, *et al.* 2021. *Cancer Cell.* . [PubMed](#)
21. Zhang Z, *et al.* 2020. *J Immunol.* 204:3400. [PubMed](#)
22. Kim TJ, *et al.* 2019. *Nat Commun.* 10:3258. [PubMed](#)
23. Saleh MM, *et al.* 2019. *Cell Host Microbe.* 25:756. [PubMed](#)
24. Rao E, *et al.* 2021. *Sci Immunol.* 6:. [PubMed](#)
25. Shani O, *et al.* 2020. *Cancer Res.* 80:5317. [PubMed](#)
26. Buzas K, *et al.* 2011. *Cytokine.* 55:429. [PubMed](#)
27. Rybalko V, *et al.* 2015. *PLoS One.* 10: 0145550. [PubMed](#)
28. Ohtsuki T, *et al.* 2016. *J Virol.* 90: 300 - 307. [PubMed](#)
29. Iwata H, *et al.* 2016. *Nat Commun.* 7:12849. [PubMed](#)
30. Uroda T, *et al.* 2020. *Nat Protoc.* 15:2107. [PubMed](#)
31. Misumi I *et al.* 2019. *Cell Rep.* 27(2):514-524 . [PubMed](#)
32. McAlpine CS, *et al.* 2019. *Nature.* 566:383. [PubMed](#)
33. Go DM, *et al.* 2021. *Cell Mol Gastroenterol Hepatol.* 12:715. [PubMed](#)
34. Chen JS, *et al.* 2022. *Sci Immunol.* 7:eabl5652. [PubMed](#)
35. Dolgova EV, *et al.* 2022. *Int J Mol Sci.* 23:. [PubMed](#)
36. Paprckova D, *et al.* 2022. *Front Immunol.* 13:1009198. [PubMed](#)
37. Yu AI, *et al.* 2020. *Cell Rep.* 107471:31. [PubMed](#)
38. Moreau GB, *et al.* 2020. *Am J Trop Med Hyg.* 103:1215. [PubMed](#)
39. Ellis G, *et al.* 2015. *EMBO Rep.* 16: 1203-1218. [PubMed](#)
40. Mirakaj V, *et al.* 2014. *J Exp Med.* 211:1037. [PubMed](#)
41. Park Y, *et al.* 2013. *Cancer Res.* 73:5669. [PubMed](#)
42. Schlegel M, *et al.* 2018. *J Clin Invest.* 128:4711. [PubMed](#)
43. Al-Sharea A, *et al.* 2017. *Cell Cycle.* 10.1016/j.atherosclerosis.2017.08.010. [PubMed](#)
44. Bhattacharya P, *et al.* 2022. *PLoS Negl Trop Dis.* 16:e0010224. [PubMed](#)
45. Zhang Z, *et al.* 2021. *Oncimmunology.* 10:1912472. [PubMed](#)
46. Shin SH, *et al.* 2022. *Front Cell Neurosci.* 16:844480. [PubMed](#)
47. Eichin D, *et al.* 2015. *PLoS One.* 10: 0134721. [PubMed](#)
48. Xiao P, *et al.* 2019. *J Exp Med.* 216:337. [PubMed](#)
49. Fatkhullina AR *et al.* 2018. *Immunity.* 49(5):943-957 . [PubMed](#)
50. McAlpine CS, *et al.* 2021. *Nature.* 595:701. [PubMed](#)
51. Naler LB, *et al.* 2022. *Commun Biol.* 5:102. [PubMed](#)
52. Lehmann M, *et al.* 2016. *J Leukoc Biol.* 99: 1057 - 1064. [PubMed](#)
53. Körner A, *et al.* 2019. *Nat Commun.* 10:633. [PubMed](#)
54. Hulsmans M *et al.* 2017. *Cell.* 169(3):510-522 . [PubMed](#)
55. Grune J, *et al.* 2022. *Nat Cardiovasc Res.* 1:649. [PubMed](#)
56. Han D, *et al.* 2021. *J Immunol Res.* 6688053:2021. [PubMed](#)
57. Volberding PJ, *et al.* 2021. *Cell Reports.* 35(8):109160. [PubMed](#)
58. Cao Y, *et al.* 2015. *J Biol Chem.* 290: 23050-23063. [PubMed](#)
59. Körner A, *et al.* 2019. *Proc Natl Acad Sci U S A.* 116:20623. [PubMed](#)
60. Kulkarni U, *et al.* 2019. *Mucosal Immunol.* 12:545. [PubMed](#)
61. Suresh MV, *et al.* 2019. *JCI Insight.* 4:e133103. [PubMed](#)
62. Liu T, *et al.* 2022. *Front Immunol.* 13:901349. [PubMed](#)
63. Yong L, *et al.* 2022. *Nat Commun.* 13:4255. [PubMed](#)
64. He Y, *et al.* 2021. *Front Immunol.* 12:641206. [PubMed](#)
65. Uddin MJ, *et al.* 2022. *Mucosal Immunol.* 15:165. [PubMed](#)
66. Reinfeld BI, *et al.* 2021. *Nature.* 593:282. [PubMed](#)
67. Xu Y, *et al.* 2016. *Arthritis Rheum.* 67: 225-237. [PubMed](#)
68. Ma H, Wan S, Xia C 2016. *J Leukoc Biol.* 99: 1121 - 1129. [PubMed](#)
69. Guldner IH, *et al.* 2020. *Cell.* 183(5):1234-1248.e25. [PubMed](#)
70. Trefzer A, *et al.* 2021. *Cell Reports.* 34(6):108748. [PubMed](#)
71. Körner A, *et al.* 2017. *Cell Death Differ.* 10.1038/cdd.2017.177. [PubMed](#)
72. He J, *et al.* 2019. *J Clin Invest.* 130. [PubMed](#)
73. Li Y, *et al.* 2020. *Cell Reports.* 27(10):2809-2816.e3.. [PubMed](#)
74. Monteran L, *et al.* 2022. *Nat Commun.* 13:5797. [PubMed](#)
75. Li C, *et al.* 2021. *Cell Metabolism.* 33(8):1610-1623.e5. [PubMed](#)
76. Ballesteros I, *et al.* 2020. *Cell.* 183(5):1282-1297.e18. [PubMed](#)
77. Ni J, *et al.* 2020. *Immunity.* 52(6):1075-1087.e8. [PubMed](#)
78. Tan X, *et al.* 2015. *Sci Rep.* 5: 15702. [PubMed](#)
79. Smith CA, *et al.* 2019. *JCI Insight.* 4. [PubMed](#)
80. Yu X, *et al.* 2019. *Nat Commun.* 10:574. [PubMed](#)
81. Cohen M *et al.* 2018. *Cell.* 175(4):1031-1044 . [PubMed](#)
82. Puigdelloses M, *et al.* 2021. *J Immunother Cancer.* 9:. [PubMed](#)
83. Poczobutt JM, *et al.* 2021. *Am J Respir Cell Mol Biol.* 64:629. [PubMed](#)
84. Garcia-Bonilla L, *et al.* 2014. *J Immunol.* 193:2531. [PubMed](#)

85. Lee S, *et al.* 2011. J Immunol. 186:6972. [PubMed](#)
86. Li D, *et al.* 2022. Emerg Microbes Infect. 11:2248. [PubMed](#)
87. Gomez S, *et al.* 2022. J Immunother Cancer. 10:. [PubMed](#)
88. Derada Troletti C, *et al.* 2021. Cell Reports. 35(9):109201. [PubMed](#)
89. Hou PP, *et al.* 2020. Molecular Cell. 78(6):1192-1206.e10. [PubMed](#)
90. Xu G, *et al.* 2020. Cell Rep. 32:108170. [PubMed](#)
91. Moore J, *et al.* 2015. Am J Physiol Heart Circ Physiol. 309: 906-917. [PubMed](#)
92. León-Cabrera S, *et al.* 2014. Int J Biol Sci. 9 948 . [PubMed](#)
93. Alvarez-Breckenridge C, *et al.* 2012. J Virol. 86:4566. [PubMed](#)
94. Hightower RM, *et al.* 2019. Mol Ther. 28:189. [PubMed](#)
95. Zhao T, *et al.* 2022. JCI Insight. 7:. [PubMed](#)
96. Murdock BJ, *et al.* 2021. JCI Insight. 6:. [PubMed](#)
97. Liu Y, *et al.* 2015. BioMed Res Int. 2015 563425. [PubMed](#)
98. Kwak T, *et al.* 2020. Cell Reports. 33(13):108571. [PubMed](#)
99. Alexander Mildner *et al.* 2017. Immunity. 46(5):849-862 . [PubMed](#)
100. Chiang N, *et al.* 2019. J Clin Invest. 129:5294. [PubMed](#)
101. Wong NR, *et al.* 2021. Immunity. 54:2072. [PubMed](#)
102. Yang YS, *et al.* 2022. Nat Commun. 13:6175. [PubMed](#)
103. Baumann D, *et al.* 2020. Nat Commun. 1.969444444. [PubMed](#)
104. Ji L *et al.* 2019. Immunity. 51(2):272-284 . [PubMed](#)
105. Clemente-Casares X, *et al.* 2017. Immunity. 47:974. [PubMed](#)
106. Hobbs BE, *et al.* 2021. Pathogens. 10:. [PubMed](#)
107. Montes de Oca M, *et al.* 2016. PLoS Pathog. 12: 1005398. [PubMed](#)
108. Knuplez E, *et al.* 2021. British Journal of Pharmacology. 178(5):1234-1248. [PubMed](#)
109. Roediger B *et al.* 2018. Cell. 175(2):530-543 . [PubMed](#)
110. Meng Michelle Xu *et al.* 2017. Immunity. 47(2):363-373 . [PubMed](#)
111. Caballero S, *et al.* 2017. Invest Ophthalmol Vis Sci. 58:5164. [PubMed](#)
112. Donlan AN, *et al.* 2021. JCI Insight. 6: . [PubMed](#)
113. Tyagi A, *et al.* 2021. Nat Commun. 12:474. [PubMed](#)
114. Tang S, *et al.* 2022. Virol J. 19:32. [PubMed](#)
115. Rahtes A, *et al.* 2020. Front Immunol. 1.484722222. [PubMed](#)
116. Aryal B, *et al.* 2016. Nat Commun. 7:12313. [PubMed](#)
117. Ngkelo A, *et al.* 2016. J Exp Med. 213: 1353 - 1374. [PubMed](#)
118. Garcia-Bonilla L, *et al.* 2015. J Neurosci. 35: 14783 - 14793. [PubMed](#)
119. Ramanan D, *et al.* 2020. Cell. 181(6):1276-1290. [PubMed](#)
120. Nguyen HX *et al.* 2017. J Neurosci. 37(38):9269-9287 . [PubMed](#)
121. Asahara M, *et al.* 2022. PLoS One. 17:e0276135. [PubMed](#)
122. Dye BR, *et al.* 2020. Biomaterials. 234:119757. [PubMed](#)
123. Lei Y, *et al.* 2021. Sci Adv. 7:. [PubMed](#)
124. Guan D, *et al.* 2021. Cell Death Dis. 12:431. [PubMed](#)
125. Tummala G, *et al.* 2021. Invest Ophthalmol Vis Sci. 62:41. [PubMed](#)
126. Chetty A, *et al.* 2021. Cell Host Microbe. 29:579. [PubMed](#)
127. Chavkin NW, *et al.* 2021. J Am Heart Assoc. 10:e019904. [PubMed](#)
128. Hegde V, *et al.* 2015. J Immunol. 194:5211. [PubMed](#)
129. Aguado B, *et al.* 2015. Sci Rep. 5: 17566. [PubMed](#)
130. Tran S, *et al.* 2020. Immunity. 53(3):627-640.e5. [PubMed](#)
131. Hilt ZT, *et al.* 2019. JCI Insight. 4:5. [PubMed](#)
132. Akhand SS, *et al.* 2020. Cancer Immunol Res. 8:1542. [PubMed](#)
133. Jones GS, *et al.* 2020. mSphere. 5:. [PubMed](#)
134. Galeano Nio JL, *et al.* 2020. eLife. 9:00. [PubMed](#)
135. Reinke S, *et al.* 2020. Cell Reports. 30(8):2501-2511. [PubMed](#)
136. Ershaid N, *et al.* 2019. Nat Commun. 10:4375. [PubMed](#)
137. Abe H, *et al.* 2019. Nat Commun. 10:2824. [PubMed](#)
138. Song X, *et al.* 2022. Transl Oncol. 15:101306. [PubMed](#)
139. Yang F, *et al.* 2021. Nat Commun. 12:3424. [PubMed](#)

RRID

AB_1186134 (BioLegend Cat. No. 128005)
 AB_1186135 (BioLegend Cat. No. 128006)

Antigen Details

Structure	14-17 kD protein (134 amino acids), member of the Ly-6 family of GPI linked protein. Ly6 family members share structure homology throughout a distinctive cystein rich protein domain that incorporates O-linked carbohydrates.
Distribution	Ly-6C is expressed primarily on bone marrow myeloid populations, monocytes/macrophages, neutrophils, endothelial cells, and some T cell subsets. Ly-6C is also a marker of memory CD8 ⁺ T cells.
Cell Type	Endothelial cells, Macrophages, Monocytes, Neutrophils, T cells
Biology Area	Immunology
Molecular Family	CD Molecules
Antigen References	1. Jutila MA, <i>et al.</i> 1988. <i>Eur. J. Immunol.</i> 18:1819.

2. Cerwenka A, et al. 1998. *J. Immunol.* 161:97.

Gene ID [17067](#)

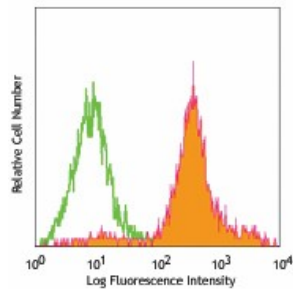
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Pacific Blue™ anti-mouse Ly-6C, APC anti-mouse Ly-6C, Purified anti-mouse Ly-6C, Biotin anti-mouse Ly-6C, FITC anti-mouse Ly-6C, Alexa Fluor® 647 anti-mouse Ly-6C, PE anti-mouse Ly-6C, PerCP/Cyanine5.5 anti-mouse Ly-6C, PE/Cyanine7 anti-mouse Ly-6C, Alexa Fluor® 488 anti-mouse Ly-6C, Alexa Fluor® 700 anti-mouse Ly-6C, APC/Cyanine7 anti-mouse Ly-6C, PerCP anti-mouse Ly-6C, Brilliant Violet 570™ anti-mouse Ly-6C, Brilliant Violet 421™ anti-mouse Ly-6C, Brilliant Violet 510™ anti-mouse Ly-6C, Brilliant Violet 605™ anti-mouse Ly-6C, Brilliant Violet 711™ anti-mouse Ly-6C, Purified anti-mouse Ly-6C (Maxpar® Ready), Brilliant Violet 785™ anti-mouse Ly-6C, PE/Dazzle™ 594 anti-mouse Ly-6C, APC/Fire™ 750 anti-mouse Ly-6C, TotalSeq™-A0013 anti-mouse Ly-6C, Brilliant Violet 650™ anti-mouse Ly-6C, TotalSeq™-C0013 anti-mouse Ly-6C, TotalSeq™-B0013 anti-mouse Ly-6C, APC/Fire™ 810 anti-mouse Ly-6C Antibody

Product Data



C57BL/6 bone marrow cells stained with HK1.4 FITC (gated on myeloid cell population)

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