

APC anti-mouse Ly-6C Antibody

Catalog# / Size	128015 / 25 µg 128016 / 100 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 APC 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 ≤ 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 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. Tebartz C, *et al.* 2015. *J Immunol.* 194:1100. [PubMed](#)
2. D'Alessandro G, *et al.* 2020. *Eur J Immunol.* 50:705. [PubMed](#)
3. MohanKumar K, *et al.* 2019. *Nat Commun.* 10:3494. [PubMed](#)
4. Guo H, *et al.* 2020. *Curr Protoc Immunol.* 131:e107. [PubMed](#)

5. Aggen DH, *et al.* 2020. Clin Cancer Res. . [PubMed](#)
6. Kim JS, *et al.* 2020. Immunity. 54(1):176-190.e7. [PubMed](#)
7. Nocera D, *et al.* 2016. J Immunol. 196: 2860 - 2869. [PubMed](#)
8. Rosenheinrich M, *et al.* 2015. PLoS One. 10: 0136290. [PubMed](#)
9. Borggrewe M, *et al.* 2018. Glia. 66:2645. [PubMed](#)
10. Iwamoto H *et al.* 2018. Cell metabolism. 28(1):104-117 . [PubMed](#)
11. Tan L, *et al.* 2022. Biochem Biophys Rep. 32:101351. [PubMed](#)
12. Li X, *et al.* 2022. Nat Commun. 13:2794. [PubMed](#)
13. Price P, *et al.* 2014. J Virol. 88:10840. [PubMed](#)
14. Zaslona Z, *et al.* 2014. J Immunol. 193:4245. [PubMed](#)
15. Su N, Xiong Y 2016. Sci Rep. 6:22658. [PubMed](#)
16. Kurelac I, *et al.* 2019. Nat Commun. 10:903. [PubMed](#)
17. Jahan S, *et al.* 2022. J Biol Chem. :102386. [PubMed](#)
18. Pingili AK, *et al.* 2021. Cell Reports. 35(12):109285. [PubMed](#)
19. Earnest JT, *et al.* 2021. Cell Reports. 35(1):108962. [PubMed](#)
20. Liang W, *et al.* 2020. Nat Commun. 4.563888889. [PubMed](#)
21. Biffi G, *et al.* 2018. Cancer Discov. 2:282. [PubMed](#)
22. Shu T, *et al.* 2022. Eur Respir J. Online ahead of print. [PubMed](#)
23. Cheng G, *et al.* 2021. iScience. 24:102673. [PubMed](#)
24. Getts D, *et al.* 2014. Sci Transl Med. 15:219. [PubMed](#)
25. Martin R, *et al.* 2014. J Leukoc Biol. 96:151. [PubMed](#)
26. Pan H, *et al.* 2020. Mol Psychiatry. . [PubMed](#)
27. Godbersen-Palmer C, *et al.* 2020. J Immunol. 204:2973. [PubMed](#)
28. Lubkin A *et al.* 2019. Cell host & microbe. 25(3):463-470 . [PubMed](#)
29. Dave K *et al.* 2017. eLife. 6 pii: e23382. [PubMed](#)
30. Murphy M, *et al.* 2017. Eur J Immunol. 47:880. [PubMed](#)
31. Zhang X, *et al.* 2022. J Neuroinflammation. 19:111. [PubMed](#)
32. Ye M, *et al.* 2022. Nat Nanotechnol. 17:880. [PubMed](#)
33. Magod P, *et al.* 2021. Cell Reports. 36(5):109480. [PubMed](#)
34. Ray A, *et al.* 2014. J Immunol. 192:5109. [PubMed](#)
35. Kienzl M, *et al.* 2020. Oncoimmunology. 9:1776059. [PubMed](#)
36. Werneburg S, *et al.* 2020. Immunity. 52(1):167-182.e7. [PubMed](#)
37. Anderson MC, *et al.* 2018. Cell Chem Biol. 25:483. [PubMed](#)
38. Pan W *et al.* 2017. Immunity. 47(2):284-297 . [PubMed](#)
39. Mastandrea I, *et al.* 2022. STAR Protoc. 3:101106. [PubMed](#)
40. Parlet CP, *et al.* 2019. Cell Rep. 27:187. [PubMed](#)
41. Green DP, *et al.* 2019. Neuron. 101:412. [PubMed](#)
42. Zhang S, *et al.* 2019. Cell Metab. 29:443. [PubMed](#)
43. Zhang J, *et al.* 2022. iScience. 25:104963. [PubMed](#)
44. Ohgomori T, *et al.* 2020. Neuropharmacology. 176:108227. [PubMed](#)
45. Tanaka T, *et al.* 2015. J Immunol. 194:2004. [PubMed](#)
46. McLaughlin PA *et al.* 2019. PLoS Pathog. 15(7):e1007847 . [PubMed](#)
47. Ye Z, *et al.* 2019. Mediators Inflamm. 2019:8709583. [PubMed](#)
48. Chakraborty S, *et al.* 2022. Sci Transl Med. . [PubMed](#)
49. Li Y, *et al.* 2021. Brain Behav Immun. 91:267. [PubMed](#)
50. Korangath P, *et al.* 2020. Bio Protoc. 10:e3822. [PubMed](#)
51. Ajina R, *et al.* 2021. Cancer Immunol Res. 9:386. [PubMed](#)
52. Derecka M, *et al.* 2020. Nat Immunol. 261:21. [PubMed](#)
53. Codina A, *et al.* 2019. Cell Syst. 8:136. [PubMed](#)
54. Mao FY, *et al.* 2021. Cell Mol Gastroenterol Hepatol. 12:395. [PubMed](#)
55. Morales-Mantilla DE, *et al.* 2022. Elife. 11: . [PubMed](#)
56. Radjabova V, *et al.* 2015. J Immunol. 195: 3149 - 3159. [PubMed](#)
57. Christ A, *et al.* 2018. Cell. 172:162. [PubMed](#)
58. Hepler C *et al.* 2018. eLife. 7 pii: e39636. [PubMed](#)
59. Heng Y, *et al.* 2021. J Neuroinflammation. 18:57. [PubMed](#)
60. Holokai L, *et al.* 2020. Cancers (Basel). 12:00. [PubMed](#)
61. Guldner IH, *et al.* 2020. Cell. 183(5):1234-1248.e25. [PubMed](#)
62. Shao M, *et al.* 2021. Cell Stem Cell. 28(4):685-701.e7. [PubMed](#)
63. Deczkowska A, *et al.* 2017. Nat Commun. 8:717. [PubMed](#)
64. Liang J, *et al.* 2020. Sci Adv. 6:eabc3646. [PubMed](#)
65. Kuhn JA, *et al.* 2021. Elife. 10: . [PubMed](#)
66. Liu H, *et al.* 2022. Front Pharmacol. 13:949316. [PubMed](#)
67. Joffin N, *et al.* 2021. Cell Stem Cell. 28(4):702-717.e8. [PubMed](#)
68. Ritzel RM, *et al.* 2021. Glia. 69:746. [PubMed](#)
69. Sauter K, *et al.* 2014. J Leukoc Biol. 96:265. [PubMed](#)
70. Pundir P, *et al.* 2020. Cell Host & Microbe. 26(1):114-122. [PubMed](#)
71. Liu X, *et al.* 2021. Int J Nanomedicine. 16:5675. [PubMed](#)
72. Kolodziejczyk AA, *et al.* 2020. Nat Med. 26:1899. [PubMed](#)
73. Daneshmandi S, *et al.* 2021. Elife. 10: . [PubMed](#)
74. Melo-Silva CR, *et al.* 2021. PLOS Pathogens. 17(5):e1009593. [PubMed](#)
75. Yu W, *et al.* 2022. Nat Commun. 13:3544. [PubMed](#)
76. Ryan NM, *et al.* 2022. Front Immunol. 13:932742. [PubMed](#)
77. Shan B, *et al.* 2020. Nat Metab. 1332:2. [PubMed](#)
78. Matsumura T, *et al.* 2022. Nat Commun. 13:7064. [PubMed](#)
79. Bordas M, *et al.* 2020. Int J Mol Sci. 21:00. [PubMed](#)
80. Varikuti S, *et al.* 2020. Br J Cancer. 122:1005. [PubMed](#)
81. Karki R, *et al.* 2020. bioRxiv. . [PubMed](#)
82. Clemente C, *et al.* 2018. Nat Commun. 9:910. [PubMed](#)
83. Wang T *et al.* 2018. Immunity. 49(3):504-514 . [PubMed](#)
84. Ohgomori T *et al.* 2019. J Comp Neurol. 528(1):14-31 . [PubMed](#)

85. Alexander Mildner *et al.* 2017. *Immunity*. 46(5):849-862 . [PubMed](#)
86. Wong NR, *et al.* 2021. *Immunity*. 54:2072. [PubMed](#)
87. Karki R, *et al.* 2021. *Cell*. 184:149. [PubMed](#)
88. Huo M, *et al.* 2017. *FASEB J*. 10.1096/fj.201601030R. [PubMed](#)
89. Mukovozov I, *et al.* 2015. *J Immunol*. 195: 3334 - 3344. [PubMed](#)
90. Li N, *et al.* 2022. *Nat Commun*. 13:7281. [PubMed](#)
91. Liu R, *et al.* 2020. *Eur J Vasc Endovasc Surg*. 60:254. [PubMed](#)
92. Steele NG, *et al.* 2021. *Clin Cancer Res*. 27:2023. [PubMed](#)
93. Di Pilato M, *et al.* 2021. *Cell*. 184(17):4512-4530.e22. [PubMed](#)
94. Ding L *et al.* 2018. *Cell reports*. 25(11):2972-2980 . [PubMed](#)
95. Schaffenaar FH, *et al.* 2019. *Sci Rep*. 9:17391. [PubMed](#)
96. Molgora M, *et al.* 2020. *Cell*. 182:886. [PubMed](#)
97. Chen L, *et al.* 2021. *Theranostics*. 11:6668. [PubMed](#)
98. Li Y, *et al.* 2022. *Theranostics*. 12:5364. [PubMed](#)
99. Kitamoto S, *et al.* 2020. *Cell*. 182(2):447-462.e14. [PubMed](#)
100. Kratochvill F, *et al.* 2015. *Cancer Res*. 75: 3054-3064. [PubMed](#)
101. Pisano F, *et al.* 2014. *PLoS One*. 9:103541. [PubMed](#)
102. Li Y, *et al.* 2020. *Theranostics*. 10:11376. [PubMed](#)
103. Hsia HC, *et al.* 2017. *J Leukoc Biol*. 101:1053. [PubMed](#)
104. Collins C, *et al.* 2014. *Proc Natl Acad Sci U S A*. 111:9899. [PubMed](#)
105. Tran S, *et al.* 2020. *Immunity*. 53(3):627-640.e5. [PubMed](#)
106. Hamdan F, *et al.* 2021. *Journal for ImmunoTherapy of Cancer*. 9(8):. [PubMed](#)
107. Tian T, *et al.* 2020. *Cancer Immunol Res*. 660:8. [PubMed](#)
108. Ghosh S, *et al.* 2019. *Commun Biol*. 0.325. [PubMed](#)
109. Shin SH, *et al.* 2022. *Clin Exp Otorhinolaryngol*. . [PubMed](#)
110. Rivera CA, *et al.* 2022. *Immunity*. 55:129. [PubMed](#)
111. Zhang X, *et al.* 2020. *Glia*. . [PubMed](#)
112. Kim I *et al.* 2015. *Brain and behavior*. 5(12):e00403 . [PubMed](#)
113. Qu J, *et al.* 2021. *Int J Biol Sci*. 17:2756. [PubMed](#)

RRID AB_1732087 (BioLegend Cat. No. 128015)
 AB_1732076 (BioLegend Cat. No. 128016)

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, <i>et al.</i> 1998. <i>J. Immunol</i> . 161:97.
Gene ID	17067

Related Protocols

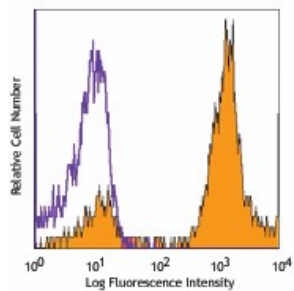
[Cell Surface Flow Cytometry Staining Protocol](#)

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 APC



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