

Brilliant Violet 711™ anti-mouse Ly-6C Antibody

Catalog# / Size	128037 / 50 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 and BSA (origin USA).
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 711™ 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	<p>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 ≤0.5 µg per million 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.</p> <p>Brilliant Violet 711™ excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 711™ is a trademark of Sirigen Group Ltd.</p> <p>Learn more about Brilliant Violet™.</p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</p>
Excitation Laser	Violet Laser (405 nm)
Application Notes	<p>Clone HK1.4 does not block the binding of clone RB6-8C5⁸.</p> <p>Additional reported applications (for relevant formats of this clone) include: <i>in vitro</i> activation of T cells¹⁻³ and immunohistochemistry of frozen sections⁴.</p>
Application References	1. Jutila MA, <i>et al.</i> 1988. <i>Eur. J. Immunol.</i> 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. Komuczki J, *et al.* 2019. *Immunity.* 50:1289. [PubMed](#)
2. Argüello RJ, *et al.* 2020. *Cell Metab.* 32:1063. [PubMed](#)
3. Friebel E, *et al.* 2020. *Cell.* 181(7):1626-1642.e20. [PubMed](#)
4. Hagan N, *et al.* 2020. *Cell Death Dis.* 1.086111111. [PubMed](#)
5. Barry KC, *et al.* 2018. *Nat Med.* 24:1178. [PubMed](#)
6. Hu W, *et al.* 2021. *Nat Immunol.* 22:1163. [PubMed](#)
7. Chattopadhyay A, *et al.* 2018. *Sci Rep.* 8:9032. [PubMed](#)
8. Evren E, *et al.* 2020. *Immunity.* 54(2):259-275.e7. [PubMed](#)
9. Zhu B, *et al.* 2021. *Immunity.* 54(6):1200-1218.e9. [PubMed](#)
10. Ostendorf BN, *et al.* 2020. *Nat Med.* 26:1048. [PubMed](#)
11. Bhattacharjee A, *et al.* 2019. *Commun Biol.* 2:450. [PubMed](#)
12. Jenkins RW, *et al.* 2018. *Cancer Discov.* 8:196. [PubMed](#)
13. Bhattacharjee A, *et al.* 2021. *Mol Neurodegener.* 16:19. [PubMed](#)
14. Jassinskaja M, *et al.* 2021. *Cell Reports.* 34(12):108894. [PubMed](#)
15. Dikiy S, *et al.* 2021. *Immunity.* 54(5):931-946.e11. [PubMed](#)
16. Liang Z, *et al.* 2020. *Pain.* 161:2089. [PubMed](#)
17. Ruhland MK, *et al.* 2020. *Cancer Cell.* 37(6):786-799.e5. [PubMed](#)
18. Kelsey E Sivick *et al.* 2018. *Cell reports.* 25(11):3074-3085. [PubMed](#)
19. Mrdjen D *et al.* 2018. *Immunity.* 48(2):380-395. [PubMed](#)
20. Goldman E, *et al.* 2021. *Cells.* 10:. [PubMed](#)
21. Koivisto CS, *et al.* 2020. *Neoplasia.* 1.252777778. [PubMed](#)
22. Salvioni A *et al.* 2019. *Cell Rep.* 27(11):3254-3268. [PubMed](#)
23. Guo P, *et al.* 2021. *J Immunol.* 207:408. [PubMed](#)
24. Brown CC, *et al.* 2020. *Cell.* 179(4):846-863.e24.. [PubMed](#)
25. Tavazoie MF, *et al.* 2018. *Cell.* 172:825. [PubMed](#)
26. Campbell C *et al.* 2018. *Immunity.* 48(6):1245-1257. [PubMed](#)
27. Kennedy EM, *et al.* 2022. *Nat Commun.* 13:5907. [PubMed](#)
28. Brandi P, *et al.* 2022. *Cell Rep.* 38:110184. [PubMed](#)
29. Van Winkle JA *et al.* 2018. *Cell host & microbe.* 24(5):665-676. [PubMed](#)
30. Krueger A, *et al.* 2022. *Front Microbiol.* 12:789042. [PubMed](#)
31. Kar S, Colino J, Snapper C 2016. *J Immunol.* 196: 4204 - 4213. [PubMed](#)
32. Tummers B, *et al.* 2020. *Immunity.* 52(6):994-1006.e8. [PubMed](#)
33. Beura LK, *et al.* 2018. *Immunity.* 48:327. [PubMed](#)
34. Chitu V, *et al.* 2020. *Cell Reports.* 30(9):3004-3019. [PubMed](#)
35. Xueyang Yu *et al.* 2017. *Immunity.* 47(5):903-912. [PubMed](#)
36. Sakamoto K, *et al.* 2021. *Immunity.* 54:2321. [PubMed](#)
37. Abdelfattah N, *et al.* 2022. *Nat Commun.* 13:767. [PubMed](#)
38. Pizzurro GA, *et al.* 2021. *Cancers (Basel).* 13:. [PubMed](#)
39. Montalban-Arques A, *et al.* 2021. *Cell Host Microbe.* .: [PubMed](#)
40. Hering L, *et al.* 2020. *Front Immunol.* 1.747222222. [PubMed](#)
41. Mujal AM, *et al.* 2022. *Cancer Immunol Res.* 10:403. [PubMed](#)
42. Zhang L, *et al.* 2020. *Cell.* 442:181. [PubMed](#)
43. Sakamoto K, *et al.* 2022. *STAR Protoc.* 3:101052. [PubMed](#)
44. Maller O, *et al.* 2020. *Nat Mater.* 20:548. [PubMed](#)
45. O'Boyle C, *et al.* 2020. *Int J Stroke.* 0.746527778. [PubMed](#)
46. Spiljar M, *et al.* 2021. *Cell Metab.* 33:2231. [PubMed](#)
47. Ichinose M, *et al.* 2021. *Sci Rep.* 7200:11. [PubMed](#)
48. Pastor Arroyo EM, *et al.* 2022. *Clin Sci (Lond).* 136:557. [PubMed](#)

RRID

AB_2562630 (BioLegend Cat. No. 128037)

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, et al. 1988. *Eur. J. Immunol.* 18:1819.
2. Cerwenka A, et al. 1998. *J. Immunol.* 161:97.

Gene ID

[17067](#)

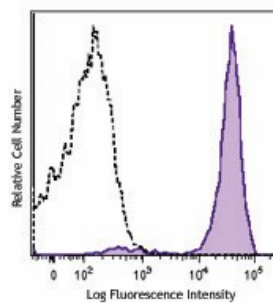
Related Protocols

[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 mouse bone marrow cells were stained with Ly-6C (clone HK1.4) Brilliant Violet 711™ (filled histogram). Open histogram represents non-stained cells. Data shown was gated on the myeloid 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