

Brilliant Violet 510™ anti-mouse Ly-6G Antibody

Catalog# / Size	127633 / 50 µg
Clone	1A8
Regulatory Status	RUO
Other Names	Lymphocyte antigen 6 complex, locus G
Isotype	Rat IgG2a, κ
Description	Lymphocyte antigen 6 complex, locus G (Ly-6G), a 21-25 kD GPI-anchored protein, is expressed on the majority of myeloid cells in bone marrow and peripheral granulocytes.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Ly-6G transfected EL-4J cell line.
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 510™ 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 ≤0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 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 510™ is a trademark of Sirigen Group Ltd.

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Excitation Laser	Violet Laser (405 nm)
Application Notes	While 1A8 recognizes only Ly-6G, clone RB6-8C5 recognizes both Ly-6G and Ly-6C. Clone RB6-8C5 binds with high affinity to mouse Ly-6G molecules and to a lower extent to Ly-6C ¹⁵ . Clone RB6-8C5 impairs the binding of anti-mouse Ly-6G clone 1A8 ¹⁵ . However, clone RB6-8C5 is able to stain in the presence of anti-mouse Ly-6C clone HK1.4 ¹⁶ .

Additional reported applications (for the relevant formats) include: immunohistochemistry⁹ of frozen sections¹⁰ and paraffin-embedded sections¹¹, depletion^{4, 12-14}, and spatial biology (IBEX)^{20,21}. The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for *in vivo* studies or highly sensitive assays (Cat. No. 127632, 127649, 127650,

127661 and 127662).

Application References

(PubMed link indicates
BioLegend citation)

1. Fleming TJ, *et al.* 1993. *J. Immunol.* 151:2399. (FC)
2. Daley JM, *et al.* 2008. *J. Leukocyte Biol.* 83:1. (FC)
3. Dietlin TA, *et al.* 2007. *J. Leukocyte Biol.* 81:1205. (FC)
4. Daley J, *et al.* 2007. *J. Leukocyte Biol.* doi:10.1189. (Deplete) [PubMed](#)
5. Tadagavadi RK, *et al.* 2010. *J. Immunol.* 185:4904. [PubMed](#)
6. Sumagin R, *et al.* 2010. *J. Immunol.* 185:7057. [PubMed](#)
7. Guiducci C, *et al.* 2010. *J. Exp Med.* 207:2931. [PubMed](#)
8. Fujita M, *et al.* 2011. *Cancer Res.* 71:2664. [PubMed](#)
9. Van Leeuwen, *et al.* 2008. *Arterioscler. Thromb. Vasc. Biol.* 28:84. (IHC)
10. Kowanetz M, *et al.* 2010. *P. Natl. Acad. Sci. USA* 107:21248. [supplementary data] (IHC)
11. Esbona K, *et al.* 2016. *Breast Cancer Res.* 18:35. (IHC)
12. Wojtasiak M, *et al.* 2010. *J. Gen. Virol.* 91:2158. (FC, Deplete)
13. Jaeger BN, *et al.* 2012. *J. Exp. Med.* 209:565. (Deplete)
14. Wozniak KL, *et al.* 2012. *BMC Immunol.* 13:65 (FC, Deplete)
15. Ribechini E, *et al.* 2009. *Eur. J. Immunol.* 39:3538.
16. Ng LG, *et al.* 2011. *J Invest. Dermatol.* 131:2058. [PubMed](#)
17. Ma C, *et al.* 2012. *J. Leukoc. Biol.* 92:1199.
18. McCartney-Francis, N, *et al.* 2014. *J Leukoc. Biol.* 96:917. [PubMed](#)
19. Her Z, *et al.* 2014. *EMBO Mol. Med.* 7:24. [PubMed](#)
20. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci U S A.* 117:33455-65. (SB) [PubMed](#)
21. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

Product Citations

1. Postat J *et al.* 2018. *Immunity.* 49(4):654-665 . [PubMed](#)
2. Devalaraja S, *et al.* 2020. *Cell.* 1098:180. [PubMed](#)
3. Barberio AE, *et al.* 2020. *ACS Nano.* 14:11238. [PubMed](#)
4. Bertocchi A, *et al.* 2021. *Cancer Cell.* 39(5):708-724.e11. [PubMed](#)
5. Jenkins RW, *et al.* 2018. *Cancer Discov.* 8:196. [PubMed](#)
6. Devalaraja S, *et al.* 2020. *STAR Protoc.* 1:100188. [PubMed](#)
7. Eisele AS, *et al.* 2022. *Elife.* 11:. [PubMed](#)
8. Amor C, *et al.* 2020. *Nature.* 583:127. [PubMed](#)
9. Ratitong B, *et al.* 2021. *Cell Reports.* 35(7):109139. [PubMed](#)
10. Cassidy BR, *et al.* 2020. *J Neuroinflammation.* 17:259. [PubMed](#)
11. Fennell LM, *et al.* 2020. *EMBO J.* 39:e103303. [PubMed](#)
12. Lu X, *et al.* 2020. *Sci Transl Med.* 12:. [PubMed](#)
13. Friedman DJ, *et al.* 2021. *Cancer Immunol Res.* 9:952. [PubMed](#)
14. Guérin MV, *et al.* 2019. *Nat Commun.* 10:4131. [PubMed](#)
15. Salvioni A *et al.* 2019. *Cell Rep.* 27(11):3254-3268 . [PubMed](#)
16. Ding Y, *et al.* 2022. *Cell Death Dis.* 13:996. [PubMed](#)
17. Kamp M, *et al.* 2016. *PLoS One.* 11: 0163750. [PubMed](#)
18. Mirando AC, *et al.* 2020. *Oncoimmunology.* 9:1760685. [PubMed](#)
19. Uribealgo I, *et al.* 2019. *EMBO Mol Med.* 11:e9266. [PubMed](#)
20. Martínez-López M *et al.* 2019. *Immunity.* 50(2):446-461 . [PubMed](#)
21. Monaghan KL, *et al.* 2020. *J Vis Exp.* . [PubMed](#)
22. Coronel MM, *et al.* 2020. *Sci Adv.* 6:eaba5573. [PubMed](#)
23. Landon J Edgar *et al.* 2018. *Cell chemical biology.* 26(1):131-136 . [PubMed](#)
24. Alam Z, *et al.* 2020. *Cell Rep.* 107825:31. [PubMed](#)
25. Sung PS, *et al.* 2022. *JCI Insight.* . [PubMed](#)
26. Hering L, *et al.* 2020. *Front Immunol.* 1.747222222. [PubMed](#)
27. Nicolas-Boluda A, *et al.* 2021. *eLife.* 10:00. [PubMed](#)
28. Lee HN, *et al.* 2022. *JCI Insight.* 7:. [PubMed](#)
29. Teijeira á, *et al.* 2020. *Immunity.* 52(5):856-871. [PubMed](#)
30. Jones GS, *et al.* 2020. *mSphere.* 5:. [PubMed](#)
31. Kilgore AM, *et al.* 2020. *J Immunol.* 204:510. [PubMed](#)
32. Goldberg MF *et al.* 2018. *Immunity.* 49(6):1090-1102 . [PubMed](#)

RRID

AB_2562937 (BioLegend Cat. No. 127633)

Antigen Details

Structure	A 21-35 kD GPI-anchored membrane protein
Distribution	Expressed on the majority of myeloid cells in bone marrow and peripheral granulocytes. The monoclonal antibody RB6-8C5 recognizes both Ly-6G and Ly-6C.
Cell Type	Granulocytes, Macrophages, Monocytes
Biology Area	Immunology, Innate Immunity
Antigen References	Fleming TJ, <i>et al.</i> 1993. <i>J. Immunol.</i> 151:2399.
Gene ID	546644

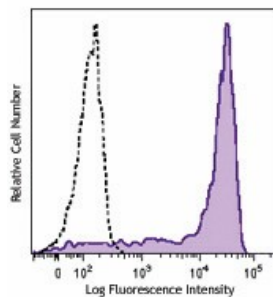
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Alexa Fluor® 594 anti-mouse Ly-6G, Purified anti-mouse Ly-6G, Biotin anti-mouse Ly-6G, FITC anti-mouse Ly-6G, PE anti-mouse Ly-6G, Alexa Fluor® 647 anti-mouse Ly-6G, Pacific Blue™ anti-mouse Ly-6G, APC anti-mouse Ly-6G, PerCP/Cyanine5.5 anti-mouse Ly-6G, PE/Cyanine7 anti-mouse Ly-6G, Alexa Fluor® 700 anti-mouse Ly-6G, APC/Cyanine7 anti-mouse Ly-6G, Alexa Fluor® 488 anti-mouse Ly-6G, Brilliant Violet 421™ anti-mouse Ly-6G, Brilliant Violet 570™ anti-mouse Ly-6G, Ultra-LEAF™ Purified anti-mouse Ly-6G, Brilliant Violet 510™ anti-mouse Ly-6G, Purified anti-mouse Ly-6G (Maxpar® Ready), Brilliant Violet 650™ anti-mouse Ly-6G, Brilliant Violet 711™ anti-mouse Ly-6G, Brilliant Violet 605™ anti-mouse Ly-6G, Brilliant Violet 785™ anti-mouse Ly-6G, PE/Dazzle™ 594 anti-mouse Ly-6G, APC/Fire™ 750 anti-mouse Ly-6G, PerCP anti-mouse Ly-6G, TotalSeq™-A0015 anti-mouse Ly-6G, TotalSeq™-C0015 anti-mouse Ly-6G, TotalSeq™-B0015 anti-mouse Ly-6G, Spark Blue™ 550 anti-mouse Ly-6G, Spark NIR™ 685 anti-mouse Ly-6G, Spark YG™ 593 anti-mouse Ly-6G, APC/Fire™ 810 anti-mouse Ly-6G Antibody, PE/Cyanine5 anti-mouse Ly-6G, PE/Fire™ 810 anti-mouse Ly-6G Antibody, Spark UV™ 387 anti-mouse Ly-6G, PE/Fire™ 640 anti-mouse Ly-6G

Product Data



C57BL/6 mouse bone marrow cells were stained with Ly-6G (clone 1A8) Brilliant Violet 510™ (filled histogram) or rat IgG2a, κ Brilliant Violet 510™ isotype control (open histogram). Data shown was gated on myeloid cell population.

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