

## Purified anti-mouse Ly-6G Antibody

<b>Catalog# / Size</b>	127601 / 50 µg 127602 / 500 µg
<b>Clone</b>	1A8
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Lymphocyte antigen 6 complex, locus G
<b>Isotype</b>	Rat IgG2a, κ
<b>Description</b>	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

<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	Ly-6G transfected EL-4J cell line.
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C.
<b>Application</b>	<a href="#">FC - Quality tested</a> <a href="#">IHC-F - Verified</a> <a href="#">IHC - Reported in the literature, not verified in house</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per 10 <sup>6</sup> cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application Notes</b>	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 <sup>15</sup> . Clone RB6-8C5 impairs the binding of anti-mouse Ly-6G clone 1A8 <sup>15</sup> . However, clone RB6-8C5 is able to stain in the presence of anti-mouse Ly-6C clone HK1.4 <sup>16</sup> .  Additional reported applications (for the relevant formats) include: immunohistochemistry <sup>9</sup> of frozen sections <sup>10</sup> and paraffin-embedded sections <sup>11</sup> , depletion <sup>4, 12-14</sup> , and spatial biology (IBEX) <sup>20,21</sup> . The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for <i>in vivo</i> studies or highly sensitive assays (Cat. No. 127632, 127649, 127650, 127661 and 127662).

### Application References

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. Davies M, *et al.* 2017. *PLoS Pathogens.* 13(6):e1006435. [PubMed](#)
2. Watanabe K, *et al.* 2017. *PLoS Pathog.* 10.1371/journal.ppat.1006513. [PubMed](#)
3. Danobeitia J, *et al.* 2017. *PLoS One.* 10.1371/journal.pone.0183701. [PubMed](#)
4. Nakamizo S, *et al.* 2017. *Sci Rep.* 10.1038/s41598-017-14292-1. [PubMed](#)
5. Bonnart C, *et al.* 2017. *Parasite Immunol.* 10.1111/pim.12489. [PubMed](#)
6. Maybin JA, *et al.* 2018. *Nat Commun.* 9:295. [PubMed](#)
7. Meers GK, *et al.* 2018. *PLoS One.* 13:e0190846. [PubMed](#)
8. Shevchenko MA, *et al.* 2018. *J Immunol Res.* 8:53. [PubMed](#)
9. Qu S, *et al.* 2018. *Int J Cancer.* 8:6685. [PubMed](#)
10. Vallelian F, *et al.* 2018. *Pharmacol Res Perspect.* 15:5422. [PubMed](#)
11. An Y *et al.* 2018. *Cell reports.* 25(3):702-714. [PubMed](#)
12. Mrdjen D *et al.* 2018. *Immunity.* 48(2):380-395. [PubMed](#)
13. Vasamsetti SB, *et al.* 2018. *Immunity.* 49:93. [PubMed](#)
14. Snell LM, *et al.* 2018. *Immunity.* 49:678. [PubMed](#)
15. Wang B *et al.* 2018. *Cell stem cell.* 22(2):206-220. [PubMed](#)
16. Bence Daniel *et al.* 2018. *Immunity.* 49(4):615-626. [PubMed](#)
17. Scutts SR, *et al.* 2018. *Cell Rep.* 25:1953. [PubMed](#)
18. Otxoa-de-Amezaga A, *et al.* 2019. *Acta Neuropathol.* 137:321. [PubMed](#)
19. Simon N, *et al.* 2019. *JCI Insight.* 4:. [PubMed](#)
20. Perdomo J, *et al.* 2019. *Nat Commun.* 10:1322. [PubMed](#)
21. Zhao Z, *et al.* 2019. *J Immunol Res.* 2019:9561350. [PubMed](#)
22. Laura C Burzynski *et al.* 2019. *Immunity.* 50(4):1033-1042. [PubMed](#)
23. Vu LT, *et al.* 2019. *J Extracell Vesicles.* 8:1599680. [PubMed](#)
24. Boeckel SRV, *et al.* 2019. *Sci Rep.* 9:7356. [PubMed](#)
25. Merz SF, *et al.* 2019. *Nat Commun.* 10:2312. [PubMed](#)
26. Bianchi-Frias D, *et al.* 2019. *Mol Cancer Res.* 17:321. [PubMed](#)
27. Lin L, *et al.* 2018. *J Invest Dermatol.* 138:1032. [PubMed](#)
28. Juttukonda LJ, *et al.* 2017. *Cell Host Microbe.* 22:531. [PubMed](#)
29. Chudnovskiy A *et al.* 2016. *Cell.* 167(2):444-456. [PubMed](#)
30. Mottahedin A, *et al.* 2017. *J Leukoc Biol.* 101:297. [PubMed](#)
31. Stacey MA, *et al.* 2017. *J Clin Invest.* 127:1463. [PubMed](#)
32. Ajona D, *et al.* 2017. *Cancer Discov.* 0.773611111. [PubMed](#)
33. Akiel M, *et al.* 2017. *Cancer Res.* 77:4014. [PubMed](#)
34. Fino KK, *et al.* 2017. *Sci Rep.* 5.334722222. [PubMed](#)
35. Goel S, *et al.* 2017. *Nature.* 548:471. [PubMed](#)
36. Nolin JD, *et al.* 2017. *JCI Insight.* 2:e94929. [PubMed](#)
37. Verma M, *et al.* 2018. *Brain Behav Immun.* 69:223. [PubMed](#)
38. Regan-Komito D, *et al.* 2017. *Front Immunol.* 1.459027778. [PubMed](#)
39. Schmid AS, *et al.* 2018. *Rheumatology (Oxford).* 57:748. [PubMed](#)
40. Hoves S, *et al.* 2018. *J Exp Med.* 215:859. [PubMed](#)
41. Burrello C, *et al.* 2018. *Front Med (Lausanne).* 5:21. [PubMed](#)
42. Shen S, *et al.* 2018. *Front Immunol.* 1.06875. [PubMed](#)
43. Kikuchi K, *et al.* 2018. *J Immunol.* 201:635. [PubMed](#)
44. Gu H, *et al.* 2018. *Aging (Albany NY).* 1.525694444. [PubMed](#)
45. Luo J, *et al.* 2019. *Clin Cancer Res.* 25:808. [PubMed](#)
46. McLeod RL, *et al.* 2018. *Oncotarget.* 9:34459. [PubMed](#)
47. Bhatt K, *et al.* 2018. *mSphere.* 3:e00352. [PubMed](#)
48. Zhang M, *et al.* 2018. *Front Immunol.* 2.285416667. [PubMed](#)
49. Düsedau HP, *et al.* 2019. *Glia.* 67:193. [PubMed](#)
50. Ford J, *et al.* 2019. *Front Immunol.* 2.502083333. [PubMed](#)
51. Kapellos TS, *et al.* 2019. *FASEB J.* 33:6154. [PubMed](#)
52. Otxoa-de-Amezaga A, *et al.* 2019. *Stroke.* 50:1548. [PubMed](#)
53. Leist SR, *et al.* 2019. *PLoS One.* 14:e0220126. [PubMed](#)
54. Carper MB, *et al.* 2019. *Cell Rep.* 29:1660. [PubMed](#)
55. Wang Y, *et al.* 2019. *Cell.* 179:1144. [PubMed](#)
56. Abboud G, *et al.* 2018. *Front Immunol.* 9:1973. [PubMed](#)
57. Borges TJ, *et al.* 2018. *Nat Commun.* 9:3482. [PubMed](#)
58. Roussey JA, *et al.* 2017. *J Immunol.* 199:3535. [PubMed](#)
59. Davies CL, *et al.* 2019. *Front Immunol.* 10:1048. [PubMed](#)
60. Mazor R, *et al.* 2018. *Proc Natl Acad Sci U S A.* 115:E733. [PubMed](#)
61. Yang SH, *et al.* 2017. *Front Immunol.* 8:1192. [PubMed](#)
62. Tsubaki T, *et al.* 2018. *Oncotarget.* 9:11209. [PubMed](#)
63. Silvestre-Roig C, *et al.* 2019. *Nature.* 569:236. [PubMed](#)
64. Seelige R, *et al.* 2018. *Sci Rep.* 8:13670. [PubMed](#)
65. Paharik AE, *et al.* 2017. *Cell Host Microbe.* 22:746. [PubMed](#)
66. Mensurado S, *et al.* 2018. *PLoS Biol.* 16:e2004990. [PubMed](#)
67. Kim D, *et al.* 2019. *Immune Netw.* 19:e32. [PubMed](#)
68. Deng M, *et al.* 2019. *J Exp Med.* 216:2838. [PubMed](#)
69. Kapellos TS, *et al.* 2017. *Mediators Inflamm.* 2017:4315412. [PubMed](#)

70. Peterson LW, *et al.* 2017. J Exp Med. 214:3171. [PubMed](#)
71. McArthur S, *et al.* 2020. J Clin Invest. 130:1156. [PubMed](#)
72. Jung H, *et al.* 2019. Autophagy. 15:1990. [PubMed](#)
73. Rehm SRT, *et al.* 2019. Sci Rep. 9:9925. [PubMed](#)
74. Yao W, *et al.* 2019. Nature. 568:410. [PubMed](#)
75. Prows DR, *et al.* 2020. American Journal of Physiology-Heart and Circulatory Physiology. 317(2):H405-H414.. [PubMed](#)
76. Chen M, *et al.* 2019. Cell Stem Cell. 25:501. [PubMed](#)
77. Choudhury SR, *et al.* 2020. Cell. 178(5):1205-1221.e17.. [PubMed](#)
78. Kang SH, *et al.* 2018. Oncoimmunology. 8:e1515057. [PubMed](#)
79. Pfirschke C, *et al.* 2020. Cell Rep. 32:108164. [PubMed](#)
80. Arnold IC, *et al.* 2018. J Exp Med. 215:2055. [PubMed](#)
81. Guiducci E, *et al.* 2018. Front Immunol. 1.467361111. [PubMed](#)
82. Guiducci C, *et al.* 2010. J Exp Med. 207:2931. [PubMed](#)
83. Sumagin R, *et al.* 2010. J Immunol. 185:7057. [PubMed](#)
84. Reeves R 2010. J Immunol. 185:4904. [PubMed](#)
85. Fujita M, *et al.* 2011. Cancer Res. 71:2664. [PubMed](#)
86. Cain D, *et al.* 2011. PLoS One. 6:e19957. [PubMed](#)
87. Raccosta L, *et al.* 2013. J Exp Med. 210:1711. [PubMed](#)
88. Andrade E, *et al.* 2013. J Immunol. 191:4759. [PubMed](#)
89. Ng L, *et al.* 2011. J Invest Dermatol. 131:2058. [PubMed](#)
90. McCartney-Francis N, *et al.* 2014. J Leukoc Biol. 96:917. [PubMed](#)
91. Her Z, *et al.* 2015. EMBO Mol Med. 7:24. [PubMed](#)
92. Ilyas G, *et al.* 2015. J Hepatol. Available online 29 August 2015. [PubMed](#)
93. Yago T, *et al.* 2015. J Exp Med. 212: 1267 - 1281. [PubMed](#)
94. Sacramento L, *et al.* 2015. Infect Immun . 83: 4604 - 4616. [PubMed](#)
95. Stempel H, *et al.* 2016. J Biol Chem. 291: 9762-9775. [PubMed](#)
96. Metz H, *et al.* 2016. Proc Natl Acad Sci U S A. 113: 8795 - 8800. [PubMed](#)
97. Lalazar G, *et al.* 2016. Am J Physiol Gastrointest Liver Physiol. 311: G377 - G386. [PubMed](#)
98. Bennewitz MF, *et al.* 2020. Blood Adv. 0.351388889. [PubMed](#)
99. Hernández-Santana YE, *et al.* 2020. Life Sci Alliance. 3:00. [PubMed](#)
100. Goh W, *et al.* 2020. Cell Rep. 33:108285. [PubMed](#)
101. Tilburg J, *et al.* 2020. J Thromb Haemost. 1.940277778. [PubMed](#)
102. Karhadkar TR, *et al.* 2021. PLoS One. 16:e0245924. [PubMed](#)
103. Louwe MC, *et al.* 2020. JACC Basic Transl Sci. 1.048611111. [PubMed](#)
104. Xu W, *et al.* 2021. Immunity. 54(3):526-541.e7. [PubMed](#)
105. Okubo K, *et al.* 2021. Cell Reports. 35(7):109142. [PubMed](#)

**RRID** AB\_1089179 (BioLegend Cat. No. 127601)  
 AB\_1089180 (BioLegend Cat. No. 127602)

## Antigen Details

---

<b>Structure</b>	A 21-35 kD GPI-anchored membrane protein
<b>Distribution</b>	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.
<b>Cell Type</b>	Granulocytes, Macrophages, Monocytes
<b>Biology Area</b>	Immunology, Innate Immunity
<b>Antigen References</b>	Fleming TJ, <i>et al.</i> 1993. <i>J. Immunol.</i> 151:2399.
<b>Gene ID</b>	<a href="#">546644</a>

## Related Protocols

---

[Cell Surface Flow Cytometry Staining Protocol](#)

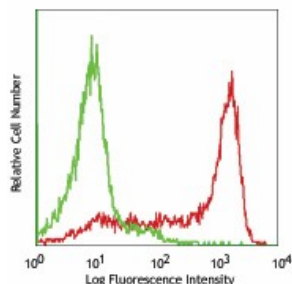
## Other Formats

---

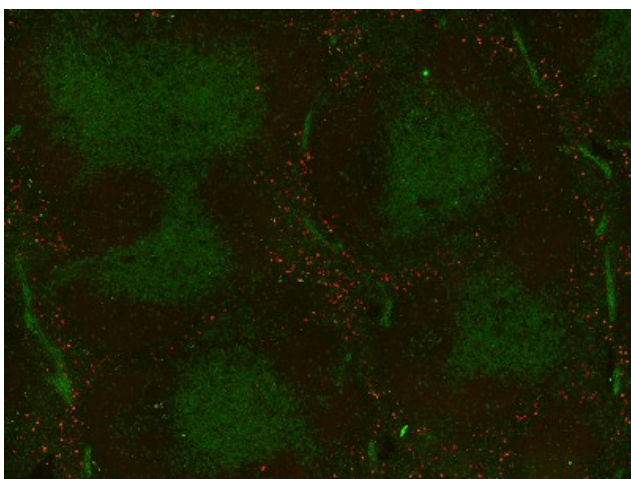
Alexa Fluor® 594 anti-mouse Ly-6G, Purified anti-mouse Ly-6G, Biotin anti-mouse Ly-6G, FITC anti-mouse Ly-6G, PE anti-mouse Ly-6G, Alexa Fluor® 647 anti-mouse Ly-6G, Pacific Blue™ anti-mouse Ly-6G, APC anti-mouse Ly-6G, PerCP/Cyanine5.5 anti-mouse Ly-6G, PE/Cyanine7 anti-mouse Ly-6G, Alexa Fluor® 700 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, 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

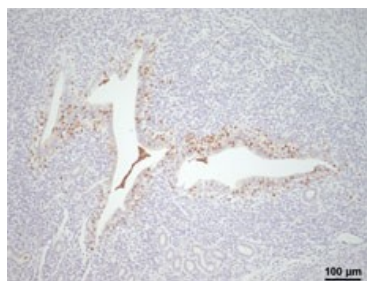
## Product Data



C57BL/6 bone marrow cells stained with 1A8 purified, followed by anti-rat IgG PE (myeloid cells were gated for analysis)



Fresh, frozen mouse spleen was stained with purified Ly6G clone 1A8 conjugated and detected with a Cy5 CODEX™ oligonucleotide duplex (red). Samples were counterstained with TCR FITC (green). Data generated at Akoya Biosciences, Inc. using the CODEX™ technology.



Mouse uterine tissue fixed in 10% formalin, paraffin embedded, and sliced to 4 μm. After deparaffination and antigen retrieval, sample was stained using an automatic slide stainer. The anti-mouse Ly6G primary antibody was applied at 1:500 dilution in blocking buffer for 1 hr at RT and DAB was used for visualization.

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](http://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](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587