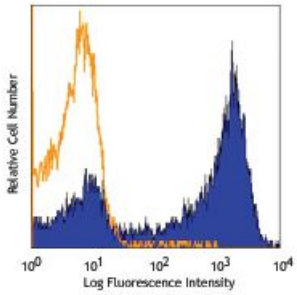
SONY

Product Data Sheet

Alexa Fluor® 647 anti-mouse Ly-6G

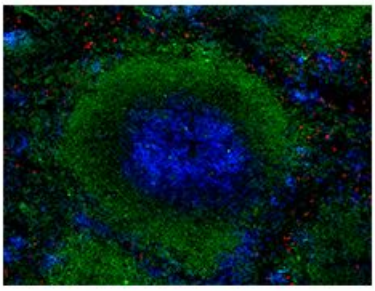
Catalog # / Size:	1238045 / 25 µg 1238050 / 100 µg
Clone:	1A8
Isotype:	Rat IgG2a, κ
Immunogen:	Ly-6G transfected EL-4J cell line.
Reactivity:	Mouse
Preparation:	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Workshop Number:	750 under optimal conditions.
Concentration:	0.5



C57BL/6 mouse bone marrow cells stained with 1A8 Alexa Fluor® 647

Applications:

Applications:	Flow Cytometry, Immunohistochemistry
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. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.



C57BL/6 mouse frozen spleen section was fixed with 4% paraformaldehyde (PFA) for ten minutes at room temperature and blocked with 5% FBS plus 5% rat/mouse serum for 30 minutes at room temperature. Then the section was stained with 5 µg/mL anti-mouse Ly-6G (clone 1A8) Alexa Fluor® 647 (red), anti-mouse/human CD45R/B220 (clone RA3-6B2) Brilliant Violet 510™ (green) and CD8a (clone 53-6.7) Brilliant Violet 421™ (blue) overnight at 4°C. The image was captured with a 10X objective.

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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: immunohistochemistry[9] of frozen sections[10] and paraffin-embedded sections[11], and depletion[4, 12-14]. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 127620). For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 127632) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).

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

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.

Antigen References: Fleming TJ, *et al.* 1993. *J. Immunol.* 151:2399.

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