

## Anti-Mouse Ly-6G Antibody, Clone 1A8, FITC



Scientists Helping Scientists™ | [WWW.STEMCELL.COM](http://WWW.STEMCELL.COM)

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

[INFO@STEMCELL.COM](mailto:INFO@STEMCELL.COM) • [TECHSUPPORT@STEMCELL.COM](mailto:TECHSUPPORT@STEMCELL.COM)

FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

## Antibodies

Rat monoclonal IgG2a antibody  
against mouse Ly-6G, FITC-conjugated

Catalog #60031FI  
#60031FI.1

500 µg 0.5 mg/mL  
50 µg 0.5 mg/mL

## Product Description

The 1A8 antibody reacts with Ly-6G, a 21 - 25 kDa GPI-anchored protein, which together with the structurally related Ly-6C protein comprises the granulocyte receptor-1 antigen (Gr-1). Gr-1 is expressed on monocytes, neutrophils and subsets of macrophages, plasmacytoid dendritic cells and T cells. Monocytes in the bone marrow transiently express Gr-1 during development and the expression level is strongly correlated with granulocyte differentiation and maturation. In the periphery, Gr-1 is found predominantly on neutrophils and is a useful marker for these cells. The 1A8 antibody binds specifically to Ly-6G, whereas another commonly used antibody, clone RB6-8C5, binds to both Ly-6G and Ly-6C. It has been reported that the 1A8 antibody detects Ly-6G-expressing granulocytes in peripheral blood, whereas the RB6-8C5 antibody also binds to Ly-6C-expressing lymphocytes, monocytes and dendritic cells.

Target Antigen Name:	Ly-6G
Alternative Names:	Gr-1, GR1, Ly6G
Gene ID:	546644
Species Reactivity:	Mouse
Host Species:	Rat (LEW)
Clonality:	Monoclonal
Clone:	1A8
Isotype:	IgG2a, kappa
Immunogen:	Mouse Ly-6G transfected EL-4J cell line
Conjugate:	FITC

## Applications

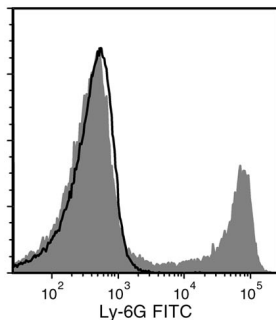
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse Neutrophil Enrichment Kit (Catalog #19762).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

## Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact <a href="mailto:techsupport@stemcell.com">techsupport@stemcell.com</a> .
Directions for Use:	For flow cytometry the suggested use of this antibody is ≤ 0.25 µg per 1 × 10 <sup>6</sup> cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application.

## Data



Flow cytometry analysis of C57BL/6 mouse bone marrow cells labeled with Anti-Mouse Ly-6G Antibody, Clone 1A8, FITC (filled histogram) or a rat IgG2a, kappa FITC isotype control antibody (solid line histogram).

## Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at [www.stemcell.com/antibodies](http://www.stemcell.com/antibodies) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

1. Rose S et al. (2012) A novel Ly6C/Ly6G-based strategy to analyze the mouse splenic myeloid compartment. *Cytometry A* 81(4): 343–50. (FC)
2. Fujita M et al. (2011) COX-2 blockade suppresses gliomagenesis by inhibiting myeloid-derived suppressor cells. *Cancer Res* 71(7): 2664–74.
3. Guiducci C et al. (2010) Autoimmune skin inflammation is dependent on plasmacytoid dendritic cell activation by nucleic acids via TLR7 and TLR9. *J Exp Med* 207(13): 2931–42.
4. Tadagavadi RK & Reeves WB. (2010) Endogenous IL-10 attenuates cisplatin nephrotoxicity: role of dendritic cells. *J Immunol* 185(8): 4904–11.
5. Daley JM et al. (2008) Use of Ly6G-specific monoclonal antibody to deplete neutrophils in mice. *J Leukoc Biol* 83(1): 64–70.
6. van Leeuwen M et al. (2008) Accumulation of myeloperoxidase-positive neutrophils in atherosclerotic lesions in LDLR<sup>-/-</sup> mice. *Arterioscler Thromb Vasc Biol* 28(1): 84–9. (IHC)
7. Dietlin TA et al. (2007) Mycobacteria-induced Gr-1+ subsets from distinct myeloid lineages have opposite effects on T cell expansion. *J Leukoc Biol* 81(5): 1205–12. (FC)
8. Fleming TJ & Malek TR. (1994) Multiple glycosylphosphatidylinositol-anchored Ly-6 molecules and transmembrane Ly-6E mediate inhibition of IL-2 production. *J Immunol* 153(5): 1955–62. (FA)
9. Fleming TJ et al. (1993) Selective expression of Ly-6G on myeloid lineage cells in mouse bone marrow. RB6-8C5 mAb to granulocyte-differentiation antigen (Gr-1) detects members of the Ly-6 family. *J Immunol* 151(5): 2399–408. (IP)
10. Hestdal K et al. (1991) Characterization and regulation of RB6-8C5 antigen expression on murine bone marrow cells. *J Immunol* 147(1): 22–8.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2016 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists and EasySep are trademarks of STEMCELL Technologies Inc. All other trademarks are the property of their respective holders. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.