

## Anti-Mouse Gr-1 Antibody, Clone RB6-8C5, Biotin



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 IgG2b antibody  
against mouse Gr-1 (Ly-6G/Ly-6C),  
biotin-conjugated

Catalog #60028BT  
#60028BT.1

100 µg 0.5 mg/mL  
25 µg 0.5 mg/mL

## Product Description

The RB6-8C5 antibody reacts with the structurally related murine Ly-6G (21 - 25 kDa) and Ly-6C (14 - 16 kDa) GPI-anchored proteins, which together comprise the granulocyte receptor-1 antigen (Gr-1). Gr-1 is expressed on monocytes, neutrophils, 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. Whereas the RB6-8C5 binds to both Ly-6G and Ly-6C, another commonly used anti-Gr-1 antibody, clone 1A8, binds specifically to Ly-6G. 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:	Gr-1 (Ly-6G/Ly-6C)
Alternative Names:	Gr 1, Gr1, Ly 6G, Ly6G, Ly-6G/Ly-6C
Gene ID:	17067/546644
Species Reactivity:	Mouse
Host Species:	Rat
Clonality:	Monoclonal
Clone:	RB6-8C5
Isotype:	IgG2b, kappa
Immunogen:	Normal mouse bone marrow
Conjugate:	Biotin

## Applications

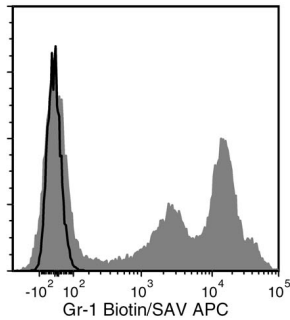
Verified:	CellSep, FC
Reported:	FC, IHC, IP, WB
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse Neutrophil Enrichment Kit (Catalog #19762).

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 saline containing < 0.1% (w/v) sodium azide and < 0.1% (w/v) bovine serum albumin. May contain protein stabilizer.
Purification:	The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. 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 ≤ 0.5 µg per 1 × 10 <sup>6</sup> cells in 100 µL volume in combination with fluorescently conjugated avidin or streptavidin. 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 Gr-1 Antibody, Clone RB6-8C5, Biotin, followed by streptavidin (SAV) APC (filled histogram), or a biotinylated rat IgG2b, kappa isotype control antibody, followed by SAV APC (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. Sasmono RT et al. (2007) Mouse neutrophilic granulocytes express mRNA encoding the macrophage colony-stimulating factor receptor (CSF-1R) as well as many other macrophage-specific transcripts and can transdifferentiate into macrophages in vitro in response to CSF-1. *J Leukoc Biol* 82(1): 111–23.
3. Fan J et al. (2006) Hemorrhagic shock-activated neutrophils augment TLR4 signaling-induced TLR2 upregulation in alveolar macrophages: role in hemorrhage-primed lung inflammation. *Am J Physiol Lung Cell Mol Physiol* 290(4): L738–46. (Depletion)
4. Brown CR et al. (2003) Susceptibility to experimental Lyme arthritis correlates with KC and monocyte chemoattractant protein-1 production in joints and requires neutrophil recruitment via CXCR2. *J Immunol* 171(2): 893–901. (IHC)
5. Conlan JW & North RJ. (1994) Neutrophils are essential for early anti-Listeria defense in the liver, but not in the spleen or peritoneal cavity, as revealed by a granulocyte-depleting monoclonal antibody. *J Exp Med* 179(1): 259–68. (Depletion, WB)
6. 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)
7. Stoppacciaro A et al. (1993) Regression of an established tumor genetically modified to release granulocyte colony-stimulating factor requires granulocyte-T cell cooperation and T cell-produced interferon gamma. *J Exp Med* 178(1): 151–61. (Depletion, IHC)
8. Jutila MA et al. (1988) Ly-6C is a monocyte/macrophage and endothelial cell differentiation antigen regulated by interferon-gamma. *Eur J Immunol* 18(11): 1819–26. (WB)

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. Alexa Fluor® is a registered trademark of Life Technologies Corporation. This product is licensed for internal research use only and its sale is expressly conditioned on the buyer not using it for manufacturing, performing a service, or medical test, or otherwise generating revenue. For use other than research, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or [outlicensing@lifetech.com](mailto:outlicensing@lifetech.com). 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.