Anti-Mouse Gr-1 Antibody, Clone RB6-8C5, Alexa Fluor®

**Antibodies** 

Rat monoclonal IgG2b antibody against mouse Gr-1 (Ly-6G/Ly-6C), Alexa Fluor® 488-conjugated

Catalog #60028AD #60028AD.1

0.5 mg/mL 100 µg 0.5 mg/mL 25 µg



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## **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: Alexa Fluor® 488

# Applications

Verified: FC Reported: FC, IHC

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 Alexa Fluor® 488 under optimal

conditions. The solution is free of unconjugated Alexa Fluor® 488.

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 techsupport@stemcell.com.

For flow cytometry the suggested use of this antibody is ≤ 0.25 µg per 1 x 10^6 cells in 100 µL volume. It is Directions for Use:

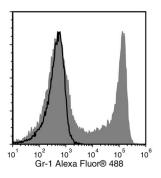
recommended that the antibody be titrated for optimal performance for each application.

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## **Antibodies**



## Data



Flow cytometry analysis of C57BL/6 mouse bone marrow cells labeled with Anti-Mouse Gr-1 Antibody, Clone RB6-8C5, Alexa Fluor® 488 (filled histogram) or a rat IgG2b, kappa Alexa Fluor® 488 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 or contact us at techsupport@stemcell.com.

### References

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- 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)
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- 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)

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