Anti-Mouse Gr-1 Antibody, Clone RB6-8C5, PerCP-Cy5.5

Antibodies

Rat monoclonal IgG2b antibody against mouse Gr-1 (Ly-6G/Ly-6C), PerCP-Cy5.5-conjugated

Catalog #60028PS

25 μg 0.2 mg/mL



Scientists Helping Scientists™ | www.stemcell.com

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713 INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

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: PerCP-Cy5.5 (Peridinin chlorophyll protein complex-Cyanine5.5)

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 saline, pH 7.2, containing 0.09% sodium azide and 0.1% gelatin

Purification: The antibody was purified by affinity chromatography and conjugated with PerCP-Cy5.5 under optimal conditions.

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, contact techsupport@stemcell.com.

Directions for Use: For flow cytometry, the suggested use of this antibody is ≤ 0.06 µg per 1 x 10⁶ cells in 100 µL. It is

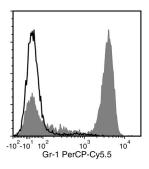
recommended that the antibody be titrated for optimal performance for each application.

Anti-Mouse Gr-1 Antibody, Clone RB6-8C5, PerCP-Cy5.5

Antibodies



Data



Flow cytometry analysis of C57BL/6 mouse splenocytes (gated on granulocytes) labeled with Anti-Mouse Gr-1 Antibody, Clone RB6-8C5, PerCP-Cy5.5 (filled histogram) or a rat IgG2b, kappa isotype control antibody, PerCP-Cy5.5 (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, visit www.stemcell.com/antibodies or contact us at 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)

PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2022 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.