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

Rat monoclonal IgG2a antibody against mouse Ly-6G, unconjugated

Catalog #60031 500 μg 0.5 mg/mL

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: Unconjugated

Applications
Verified: FC
Reported: FA, FC, IP, 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; WB: Western blotting

Properties
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification: The antibody was purified by affinity chromatography.
Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please request a lot-specific Certificate of Analysis from techsupport@stemcell.com.
Directions for Use: For flow cytometry the suggested use of this antibody is ≤ 0.25 μg per 1 x 10e6 cells in 100 μL volume. It is recommended that the antibody be titrated for optimal performance for each application.
Antibodies

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

Data

(A) Flow cytometry analysis of C57BL/6 mouse bone marrow cells labeled with Anti-Mouse Ly-6G Antibody, Clone 1A8, followed by anti-rat IgG, PE (black line histogram) or a rat IgG2a, kappa isotype control antibody followed by anti-rat IgG, PE (grey line histogram). Myeloid cells were gated for analysis.

(B) Immunohistochemical analysis of formalin-fixed, paraffin-embedded mouse uterine tissue labeled with Anti-Mouse Ly-6G Antibody, Clone 1A8, followed by anti-mouse, HRP. DAB substrate was used for visualization.

References

2. Fleming TJ, et al. 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, 1993 (IP)

Related Products

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>CATALOG #</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-Mouse Ly-6G Antibody, Clone 1A8</td>
<td>60031</td>
<td>500 μg</td>
</tr>
<tr>
<td>Anti-Mouse Ly-6G Antibody, Clone 1A8, PE</td>
<td>60031PE</td>
<td>200 μg</td>
</tr>
<tr>
<td>Anti-Mouse Ly-6G Antibody, Clone 1A8, PE.1</td>
<td>60031PE.1</td>
<td>50 μg</td>
</tr>
<tr>
<td>Anti-Mouse Ly-6G Antibody, Clone 1A8, FITC</td>
<td>60031FI.1</td>
<td>50 μg</td>
</tr>
<tr>
<td>Anti-Mouse Ly-6G Antibody, Clone 1A8, FITC</td>
<td>60031FI</td>
<td>500 μg</td>
</tr>
</tbody>
</table>

Copyright © 2013 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.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485 MEDICAL DEVICE STANDARDS.