

## Ly-6G (M-66): sc-98754

### BACKGROUND

Ly-6G (Lymphocyte antigen 6G) belongs to the Ly-6 family of glycosyl-phosphatidylinositol (GPI)-linked proteins. Ly-6 family members share amino acid homology throughout a distinctive cysteine rich protein domain that incorporates O-linked carbohydrates. Murine Ly-6 molecules have unique patterns of tissue expression during hematopoiesis from multipotential stem cells to lineage committed precursor cells, and on specific leukocyte subpopulations in the peripheral lymphoid tissues. Ly-6G contains one UPAR/Ly6 domain and is expressed almost exclusively on neutrophils localizing to the cell membrane. Ly-6G together with Ly-6C make up the Gr-1 antigen. The Gr-1 antigen is expressed on monocytes, neutrophils and a subset of macrophages, plasmacytoid dendritic cells and T cells. Cells expressing Gr-1 may play a role in the suppression of antitumor and T cell responses. Ly-6G is commonly used as a surface marker for neutrophils.

### REFERENCES

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3. Nagendra, S. and Schlueter, A.J. 2004. Absence of cross-reactivity between murine Ly-6C and Ly-6G. *Cytometry A* 58: 195-200.
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6. Nelson, A.L., Roche, A.M., Gould, J.M., Chim, K., Ratner, A.J. and Weiser, J.N. 2006. Capsule enhances pneumococcal colonization by limiting mucus-mediated clearance. *Infect. Immun.* 75: 83-90.

### CHROMOSOMAL LOCATION

Genetic locus: Ly6g (mouse) mapping to 15 D3.

### SOURCE

Ly-6G (M-66) is a rabbit polyclonal antibody raised against amino acids 53-118 mapping within an internal region of Ly-6G of mouse origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### APPLICATIONS

Ly-6G (M-66) is recommended for detection of Ly-6G of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Ly-6G siRNA (m): sc-106187, Ly-6G shRNA Plasmid (m): sc-106187-SH and Ly-6G shRNA (m) Lentiviral Particles: sc-106187-V.

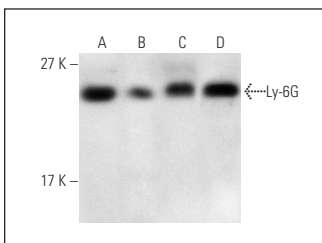
Molecular Weight of Ly-6G: 16 kDa.

Positive Controls: CTLL-2 cell lysate: sc-2242, RAW 264.7 whole cell lysate: sc-2211 or LADMAC whole cell lysate: sc-364189.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### DATA



Ly-6G (M-66): sc-98754. Western blot analysis of Ly-6G expression in LADMAC (A), RAW 264.7 (B), CTLL-2 (C) and NIH/3T3 (D) whole cell lysates.

### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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Try **Ly-6G (RB6-8C5): sc-53515**, our highly recommended monoclonal alternative to Ly-6G (M-66).