### Anti-Mouse CD16/CD32 Antibody, Clone 2.4G2

## **Antibodies**

Rat monoclonal IgG2b antibody against mouse CD16/CD32,

unconjugated

Catalog #60161 1 mg 2 mg/mL #60161.1 500 µg 2 mg/mL

#60161.2 100 µg 2 mg/mL



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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 2.4G2 antibody reacts with a shared epitope of Fc-gamma receptors CD16 (FcRIII) and CD32 (FcRII) in the mouse. CD16 and CD32 are low affinity receptors for the Fc portion of IgG, with CD32 having a higher affinity for IgG aggregates and immune complexes. CD16 and CD32 are expressed on B cells, monocytes, macrophages, NK cells, neutrophils, granulocytes, mast cells, and dendritic cells. The binding of immunoglobulins to Fc receptors is involved in multiple immunological functions, including phagocytosis, cytotoxocity, and the modulation of immune responses. The 2.4G2 antibody blocks the interaction between IgG and CD16 or CD32, and therefore is used as a pre-treatment to minimize non-specific binding of antibodies to FcR-bearing cells in applications such as flow cytometry, cell sorting, and immunofluorescence.

Target Antigen Name: CD16/CD32

Alternative Names: FCGR2, FCGR3, FC Receptor, IGFR2, IGFR3, Ly-17

Gene ID: 14130/14131

Species Reactivity: Mouse

Host Species: Rat (Sprague-Dawley)

Clonality: Monoclonal Clone: 2.4G2

Isotype: IgG2b, kappa

Immunogen: Mouse BALB/c macrophage J774 cell line

Conjugate: Unconjugated

# **Applications**

Verified: FC

Reported: FA (Blocking), FC, IF, IP

Special Applications: This formulation of the 2.4G2 antibody contains low endotoxin and no azide and may be used for in vivo

studies in mice.

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence activated cell sorting; 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. Endotoxin level is ≤ 0.01 EU/µg as determined by the Limulus amebocyte

lysate (LAL) test.

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 contact

techsupport@stemcell.com.

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

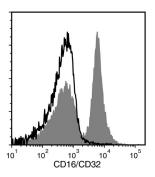
recommended that the antibody be titrated for optimal performance for each application.

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### Data



Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD16/CD32 Antibody, Clone 2.4G2, followed by a mouse anti-rat IgG2b antibody, FITC (filled histogram), or Rat IgG2b, kappa Isotype Control Antibody, Clone RTK4530 (Catalog #60077), followed by a mouse anti-rat IgG2b antibody, FITC (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

- 1. Mukai K et al. (2016) S100A8 production in CXCR2-expressing CD11b+Gr-1high cells aggravates hepatitis in mice fed a high-fat and high-cholesterol diet. J Immunol 196: 395–406. (FA/Blocking)
- 2. Metzger DW et al. (2015) Limited efficacy of antibacterial vaccination against secondary serotype 3 pneumococcal pneumonia following influenza infection. J Infect Dis 212(3): 445–52. (FA/Blocking, FC)
- 3. Arnold JN et al. (2014) Tumoral immune suppression by macrophages expressing fibroblast activation protein-α and heme oxygenase-1. Cancer Immunol Res 2(2): 121–6. (FA/Blocking)
- 4. Shimazu T et al. (2012) CD86 is expressed on murine hematopoietic stem cells and denotes lymphopoietic potential. Blood 119(21): 4889–97. (FC)
- 5. Stephen TL et al. (2012) Subcellular distribution of Lck during CD4 T-cell maturation in the thymic medulla regulates the T-cell activation threshold. Proc Natl Acad Sci USA 109(19): 7415–20. (IF)
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- 7. Berretta F et al. (2011) IL-2 contributes to maintaining a balance between CD4+Foxp3+ regulatory T cells and effector CD4+ T cells required for immune control of blood-stage malaria infection. J Immunol 186(8): 4862–71. (FC)
- 8. Stoeker L et al. (2011) Assessment of Lactobacillus gasseri as a candidate oral vaccine vector. Clin Vaccine Immunol 18(11): 1834-44. (FC)
- 9. Coudert JD et al. (2008) Sustained NKG2D engagement induces cross-tolerance of multiple distinct NK cell activation pathways. Blood 111(7): 3571–8. (IP)
- 10. Benhamou M et al. (1990) Molecular heterogeneity of murine mast cell Fc gamma receptors. J Immunol 144(8): 3071-7. (IP)

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