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

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, cytotoxicity, 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.

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 10^6 cells in 100 μL volume. It is recommended that the antibody be titrated for optimal performance for each application.
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

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)