Antibodies

Rat monoclonal IgG2b antibody against mouse CD16/CD32, FITC-conjugated

Catalog #60161FI
#60161FI.1

100 μg 0.5 mg/mL
25 μg 0.5 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:
FITC

Applications

Verified:
FC

Reported:
FC

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 FITC under optimal conditions. The solution is free of unconjugated FITC.

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