

## Anti-Mouse CD16 / CD32 FITC

Catalog Number :08212-50

RUO: For Research Use Only. Not for use in diagnostic procedures.

### Product Information

**Clone:** 2.4G2

**Format/Conjugate:** FITC

**Concentration:** 0.5 mg/mL

**Reactivity:** Mouse

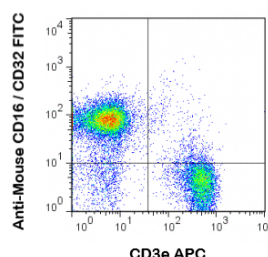
**Laser:** Blue (488nm)

**Peak Emission:** 520nm

**Peak Excitation:** 494nm

**Filter:** 530/30

**Brightness (1=dim,5=brightest):** 3



C57Bl/6 splenocytes were stained with FITC 2.4G2 and APC 145-2C11.

**Isotype:** Rat IgG2b

**Formulation:** Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.

**Storage:** Product should be kept at 2-8°C and protected from prolonged exposure to light.

**Applications:** FC

### Description

The 2.4G2 monoclonal antibody specifically reacts with an epitope on the extracellular domain of the mouse CD16 (Fc  $\gamma$  III) and CD 32 (Fc  $\gamma$  II). CD16 and CD32 are low affinity receptors for the IgG Fc domain and are expressed by B lymphocytes, NK cells, kupffer cells, mast cells, monocytes, macrophages, granulocytes, immature thymocytes, neutrophils, and some activated mature T cells.

The 2.4G2 antibody blocks the binding of immunoglobulins to CD16 and CD32, and possibly to Fc  $\gamma$  I receptor.

### Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

### Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. For flow cytometric staining, the suggested use of this reagent is ≤0.25 ug per million cells in 100  $\mu$ l volume. It is recommended that the reagent be titrated for optimal performance for each application.

### References

1. Araujo-Jorge, T. A. N. I. A., Rivera, M. T., el Bouhdidi, A. Y. A. C. H. I., Daëron, M. A. R. C., Carlier, Y. (1993). An Fc gamma RII-, Fc gamma RIII-specific monoclonal antibody (2.4 G2) decreases acute Trypanosoma cruzi infection in mice.; Infection and immunity.;61(11), 4925-4928.

2. Jensen, W. A., Marschner, S., Ott, V. L., Cambier, J. C. (2001). FcgammaRIIB-mediated inhibition of T-cell receptor signal transduction involves the phosphorylation of SH2-containing inositol 5-phosphatase (SHIP), dephosphorylation of the linker of activated T-cells (LAT) and inhibition of calcium

mobilization.;Biochemical Society Transactions;;29(Pt 6), 840-846.

3. Vremec, D., Zorbas, M., Scollay, R., Saunders, D. J., Ardavin, C. F., Wu, L., Shortman, K. (1992). The surface phenotype of dendritic cells purified from mouse thymus and spleen: investigation of the CD8 expression by a subpopulation of dendritic cells.;The Journal of experimental medicine;;176(1), 47-58.