

**AM08040LE-N****Monoclonal Antibody to CD16/CD32 - Low Endotoxin****Alternate names:**

CD16a, FCG3, FCGR3A, Fc gamma receptor IIB, Fc-gamma RIII, Fc-gamma RIII-alpha, Fc-gamma RIIIa, Fc-gamma-RIIB, FcR mouse Seroblock, FcRII, FcRIII, FcRIIIa, Fcgr2, IGFR3, IgG Fc receptor II beta, IgG Fc receptor III-2, Low affinity immunoglobulin gamma Fc region receptor II/III, Ly-17, Lymphocyte antigen 17

**Quantity:**

0.5 mg

**Concentration:**

0.5 mg/ml

**Background:**

The lymphocyte Fc-gamma Receptors recognize the Fc portion of IgG, presented either as immune complexes or as free antibody. The different classes of receptors are distinct because of varying size, tissue distribution and affinity for IgGs. The Fc type II receptor is expressed on a wide variety of cells including B cells, hematopoietic cells, monocyte/macrophages, neutrophils, platelets, Langerhans cells, eosinophils, basophils, trophoblasts, and endothelial cells of the placenta. (Ref.1,2)

The Fc-gamma type III receptors are higher affinity than the type II and are expressed on macrophages, NK cells and neutrophils. Both types of receptors can be expressed on the same cell and in varying ratios. (Ref.1) The receptors are constitutively expressed, although cytokines and lymphokines can modulate their expression. (Ref.4) Besides identifying Fc-gammaR+ cells, monoclonal antibodies to the Fc-gamma III receptor have been used to block Fc receptor binding of IgG, Fc-mediated signal transduction and effector functions, clearance of immune complexes and to attenuate infection by organisms dependent on Fc-gamma R for parasitic invasion. (Ref.4-6)

**Host / Isotype:**

Rat / IgG2a

**Recommended Isotype Controls:**

SM26LE

**Clone:**

93

**Format:****State:** Liquid purified Ig fraction.**Buffer System:** PBS containing no preservatives.**Applications:****Flow Cytometry.** (Ref.4,7,8)**Functional Assay:** Blocking of Fc-gamma Receptors.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

This antibody is specific to Murine CD16/32 (CD16/FcgII and CD32/FcgIII receptors). It recognizes a conformational epitope formed by Fc-gamma III and Fc-gamma III Receptors.

**Species:** Mouse.

Other species not tested.

**Storage:**

Store the antibody undiluted (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

**General Readings:**

1. Unkeless, J. C., et al. 1995. *Semin. Immunol.* 7:37.
2. Warmerdam, P.A., et al. 1992. *Immunobiol.* 185:175.
3. Huizinga, T. W., et al. 1989. *J. Immunol.* 142:2365.
4. Ho, A. S-Y., et al. 1995. *Mol. and Cell. Biol.* 15:5043.
5. John Kearney, personal communication.
6. Kurlander, R.J., D. M. Ellison and J. Hall. 1984. *J. Immunol.* 133:855.
7. Araujo-Jorge, T., et al. 1993. *Infection and Immunity* 61:4925.
8. Titus, J. A., et al. 1984. *J. Immunol.* 133:556.