

## FCGR3A

### Mouse Anti-Human CD16 (Clone CLB-FcR-gran/1, 5D2) FITC mAb

**Catalog No.** M1604 **Quantity:** 100 Tests

**Alternate Names:** Fc gamma RIII-alpha, FcRIIIa, CD16a, FcR-10

**Description:** The mouse monoclonal antibody recognizes human CD16, a receptor for the Fc portion of IgG. CD16 is involved in the removal of antigen-antibody complexes from the circulation, as well as other other antibody-dependent responses. The Fc receptor encoded by this gene (FCGR3A) is expressed on natural killer (NK) cells as an integral membrane glycoprotein anchored through a transmembrane peptide. It is highly similar to another nearby gene (FCGR3B) located on chromosome 1, which is expressed as CD16 on polymorphonuclear neutrophils (PMN).

The monoclonal antibody is directed against the CD16 antigen (the Fc gamma Receptor III), which is expressed on neutrophil granulocytes, monocytes (weak), macrophages (weak) and NK cells (molecular mass 45 – 72 kDa). It is absent in patients with PNH. The mobility of the CD16 antigen is dependent on the NA1/NA2 allotype of the neutrophil donor. The antibody inhibits binding of human IgG to the Fc  $\gamma$  Receptor III.

**Gene ID:** 2214

**UniProt ID:** P08637

**Concentration:** 100 tests/mL (10  $\mu$ L/test)

**Conjugate:** FITC (The molecular F/P ratio is between 5 and 10.)

**Specificity:** Human CD16

**Isotype:** IgG2a

**Immunogen:** Human Granulocytes

**Clone:** CLB-Fc-gran/1, 5D2 (submitted to CD16 in the Fifth International Workshop on Human Leukocyte Differentiation Antigens)

**Source:** Culture supernatant or ascites.

**Formulation:** The reagent is supplied in 1 mL of 20 mM TRIS, 150 mM NaCl, pH 8.0, containing 1% BSA and 0.1% sodium azide.

**Purification:** Column chromatography (ion exchange and/or affinity chromatography).

**Applications:** Flow Cytometry, Immunofluorescence Microscopy



**Application Notes:**

For enumeration of NK cell numbers in peripheral blood and lymphoid tissue. To prevent interference with red cells, treat whole blood with lysing agent or purify mononuclear cells by density medium.

Recommended use: 10  $\mu$ L antibody per  $4 \times 10^5$  purified mononuclear cells in 0.04 mL.  
10  $\mu$ L antibody per 100  $\mu$ L whole blood (+ EDTA).

The use of a negative control is recommended to determine background fluorescence produced due to Fc binding capacities by mononuclear cells.

The optimal concentration should be determined by the user for each specific application.

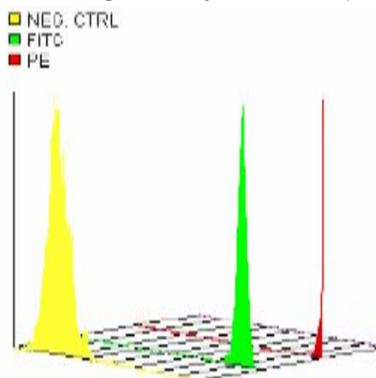
**Storage & Stability:**

Store in the dark at 2-8 °C for up to 1 year. **DO NOT FREEZE**

**Statement:**

PPE is recommended when working with products containing sodium azide.

Fluorescence profile, scatter gates set on the granulocyte fraction (R1)



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