

Anti-Human CD16 (GRM1)



FITC



16F-100T



100 test



RUO

1. PRODUCT DESCRIPTION

- **Clone:** GRM1;
- **Isotype:** IgG2a, kappa;
- **Tested application:** flow cytometry;
- **Immunogen:** The anti-CD16 monoclonal antibody derives from human polymorphonuclear leukocytes;
- **Species reactivity:** Human;
- **Storage instruction:** store in the dark at 2-8 °C;
- **Storage buffer:** aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN₃);
- **Recommended usage:** Mouse Anti-Human CD16 monoclonal antibody FITC-conjugated, clone GRM1, is recommended for use in flow cytometry for identification of Fc gamma RIII antigen (FcγRIII) present on NK cells, neutrophils and macrophages in peripheral blood and bone marrow. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for 10⁶ cells;
- **Presentation:** liquid;
- **Source:** Supernatant proceeding from an in vitro cell culture of a cell hybridoma;
- **Purification:** Affinity chromatography;
- **Other names:** FcRIII, Fc-gamma receptor III, CD16, FCG3, FCGR3, IGFR4;
- **Gene ID:** 2214;
- **Molecular weight:** Ig superfamily, transmembrane form (50-65 kDa) or GPI-linked form (48 kDa).

2. ANTIGEN DETAILS

Large description: The CD16 molecule has been described as the low affinity Fc receptor (FcRIII) for complexed IgG which may exist either as a transmembranous form (FcRIIIa) which is expressed on NK cells, and macrophages or as glycosylphosphatidylinositol (GPI)-anchored form (FcRIIIb) expressed on neutrophils. The GPI-anchored CD16B exists as two allelic forms termed NA1 (CD16BNA1) and NA2 (CD16BNA2).⁽⁴⁾

Clone GRM1 recognizes an epitope on the distal domain. It binds strongly with neutrophils of NA2 homozygotes and reacts weakly with neutrophils of NA1 homozygotes, while on neutrophils of NA1/NA2 heterozygotes it reacts with intermediate intensity(I). The mobility of the CD16-antigen is dependent on the NA1/NA2 allotype of the neutrophil donor⁽²⁾.

Clone GRM1 recognizes NA2-FcγRIIIb and FcγRIIIa, whereas clone 3G8 is an Anti-pan FcγRIII⁽³⁾.

3. WARRANTY

Warranted only to conform to the quantity and contents stated on the label or in the product labelling at the time of delivery to the customer. Immunostep disclaims hereby other warranties.

Immunostep's sole liability is limited to either the replacement of the products or refund of the purchase price.

4. ADDITIONAL INFORMATION

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5. REFERENCES

1. Claudio Ortolani. Flow Cyometry of Hematological. John Wiley & Sons, 15 ago. 2011.
2. Ruiz-Cabello F, Lopez Nevot MA, Garrido A, Garrido F. A study of GRM1 monoclonal antibody that reacts with natural killer cells and granulocytes. Nat Immun Cell Growth Regul1987; 6(2):99-108.
3. Tamm A, Schmidt RE. The binding epitopes of human CD16 (Fc gamma RIII) monoclonal antibodies. Implications for ligand binding. J Immunol1996 Aug 15;157(4):1576-81.
4. Harry R. Koene, Marion Kleijer, Dirk Roos, Masja de Haas and Albert E. G. Kr Von dem Borne. FcγRIIIb Gene Duplication: Evidence for Presence and Expression of Three Distinct FcγRIIIb Genes in NA(1+2+)SH(+) Individuals.

6. EXPLANATION OF SYMBOLS



Fluorochrome



Product reference



Content for <n> analysis



Regulatory Status



Research Use Only



Manufacturer

7. MANUFACTURED BY: IMMUNOSTEP S.L.



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