

PE anti-human CD16 Antibody

Catalog# / Size	310013 / 25 tests 310014 / 100 tests
Clone	W18182B
Regulatory Status	RUO
Other Names	FcγRIII, IGFR3, FCG3, FCGR3, FCGRIII, Fc gamma receptor, Fc gamma receptor 3
Isotype	Rat IgG1, κ
Description	CD16 is known as low affinity IgG receptor III (FcγRIII). It is expressed as two distinct forms (CD16a and CD16b). CD16a (FcγRIIIA) is a 50-65 kD polypeptide-anchored transmembrane protein. It is expressed on the surface of NK cells, activated monocytes, macrophages, a subset of T cells and placental trophoblasts in humans. CD16b (FcγRIIIB) is a 48 kD glycosylphosphatidylinositol (GPI)-anchored protein. Its extracellular domain is over 95% homologous to that of CD16a, and it is expressed specifically on neutrophils. CD16 binds aggregated IgG or IgG-antigen complex which functions in NK cell activation, phagocytosis, and antibody-dependent cell-mediated cytotoxicity (ADCC).

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Recombinant human CD16 protein
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool).
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Clone W18182B can completely block the binding of clone B73.1 on target cells. Clone W18182B does not affect the binding of clones 3G8 or W18182A on target cells. Clone W18182B is able to activate NK cells and induce degranulation.

Antigen Details

Structure	Ig superfamily, transmembrane form (50-65 kD) or GPI-linked form (48 kD)
Distribution	Expressed on natural killer cells, activated monocytes, macrophages, neutrophils and a subset of T cells
Function	Low affinity IgG Fc receptor
Ligand/Receptor	IgG Fc (Fcγ)
Cell Type	Granulocytes, Neutrophils, NK cells
Biology Area	Adaptive Immunity, Immunology, Innate Immunity
Molecular Family	CD Molecules, Fc Receptors
Antigen References	- Schubert J, <i>et al.</i> 1989. In Leucocyte Typing IV (Knapp W, ed) Oxford University Press Oxford pp 711. - Ravetch JV and Bolland S. 2001. <i>Annu Rev Immunol.</i> 19:275.

Gene ID [2214](#)
[2215](#)

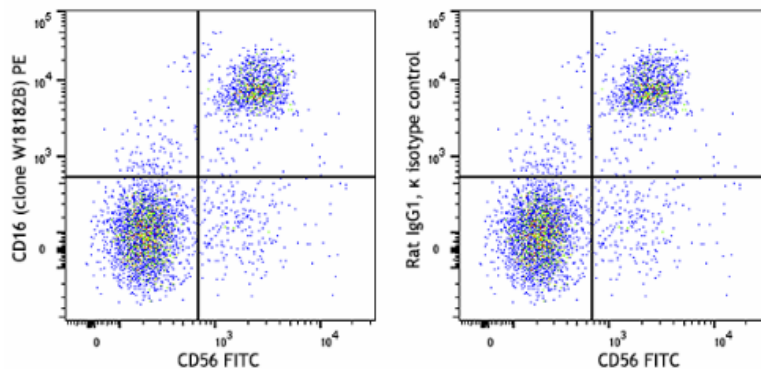
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD16, Ultra-LEAF™ Purified anti-human CD16, PE anti-human CD16 Antibody

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD56 (clone HCD56) FITC and anti-human CD16 (clone W18182B) PE (left) or rat IgG1, κ PE isotype control (right).

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