

PE anti-human CD16 Recombinant Antibody

Catalog# / Size	360739 / 25 tests 360740 / 100 tests
Clone	B73.1.Rec
Regulatory Status	RUO
Other Names	FcγRIII, IGFR3, FCG3, FCGR3, FCGRIII, Fc gamma receptor, Fc gamma receptor 3, CD16a
Isotype	Mouse 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, 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	Recombinant
Host Species	Mouse
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)
RRID	AB_3683382 (BioLegend Cat. No. 360739) AB_3683382 (BioLegend Cat. No. 360740)

Antigen Details

Structure	Ig superfamily, transmembrane form (50-65 kD) or GPI-linked form (48 kD)
Distribution	NK cells, activated monocytes, macrophages, neutrophils and a subset of T cells
Function	Low affinity IgG Fc receptor, phagocytosis, ADCC
Interaction	CD16 binds aggregated IgG or IgG-antigen complex which functions in NK cell activation,

phagocytosis, and antibody-dependent cell-mediated cytotoxicity (ADCC)

Ligand/Receptor	IgG Fc receptor III (FcγRIII)
Cell Type	Macrophages, Monocytes, Neutrophils, NK cells, T cells
Biology Area	Immunology, Innate Immunity
Molecular Family	CD Molecules, Fc Receptors

Antigen References

1. Rataj F, *et al.* 2019. *Br J Cancer*. 120:79-87.
2. Kaufmann M, *et al.* 2021. *Med*. 2:296-312.
3. Sigal N, *et al.* 2022. *Methods Mol Biol*. 2543:113-128.
4. Cheung P, *et al.* 2018. *Cell*. 173:1385.
5. Prodjinotho UF, *et al.* 2017. *PLoS Negl Trop Dis*. 11:e0005777.
6. Roussel M, *et al.* 2021. *Cell Reports Medicine*. 2:100291.
7. Waugh KA, *et al.* 2020. *Cell Reports*. 29:1893-1908.e4.

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

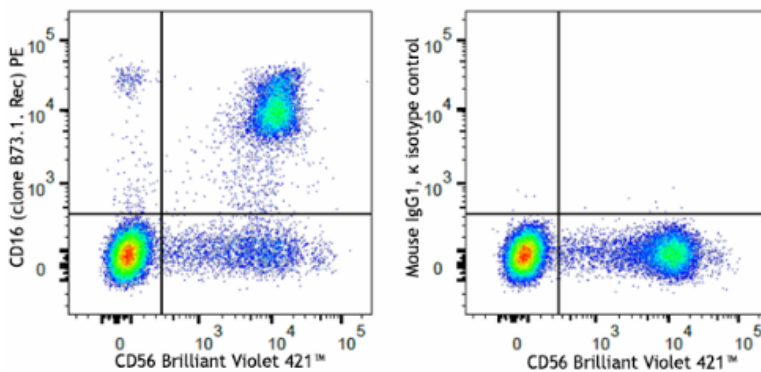
Related Protocols

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

Other Formats

Purified anti-human CD16 Recombinant Antibody, PE anti-human CD16 Recombinant Antibody

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD56 (clone HCD56) Brilliant Violet 421™ and anti-human CD16 recombinant (clone B73.1. Rec) PE antibody (left), or mouse IgG1, κ PE isotype control (right).

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