

## PE anti-human CD16 Antibody

<b>Catalog# / Size</b>	390905 / 25 tests 390906 / 100 tests
<b>Clone</b>	W18182A
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	FcγRIII, IGFR3, FCG3, FCGR3, FCGRIII, Fc gamma receptor, Fc gamma receptor 3
<b>Isotype</b>	Rat IgG2a, κ
<b>Description</b>	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

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	Recombinant human CD16 protein
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our <a href="#">Certificate of Analysis</a> online tool.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . 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.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	Clone W18182A does not block the binding of clones 3G8, B73.1, and W18182B on target cells.
<b>RRID</b>	AB_3662289 (BioLegend Cat. No. 390905) AB_3662289 (BioLegend Cat. No. 390906)

### Antigen Details

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<b>Structure</b>	Ig superfamily, transmembrane form (50-65 kD) or GPI-linked form (48 kD)
<b>Distribution</b>	Expressed on natural killer cells, activated monocytes, macrophages, neutrophils and a subset of

T cells

<b>Function</b>	Low affinity IgG Fc receptor
<b>Ligand/Receptor</b>	IgG Fc (Fc $\gamma$ )
<b>Cell Type</b>	Granulocytes, Neutrophils, NK cells
<b>Biology Area</b>	Adaptive Immunity, Immunology, Innate Immunity
<b>Molecular Family</b>	CD Molecules, Fc Receptors

**Antigen References**

- Schubert J, *et al.* 1989. *Oxford University Press*. pp 711.
- Ravetch JV and Bolland S. 2001. *Annu Rev Immunol.* 19:275-90.

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

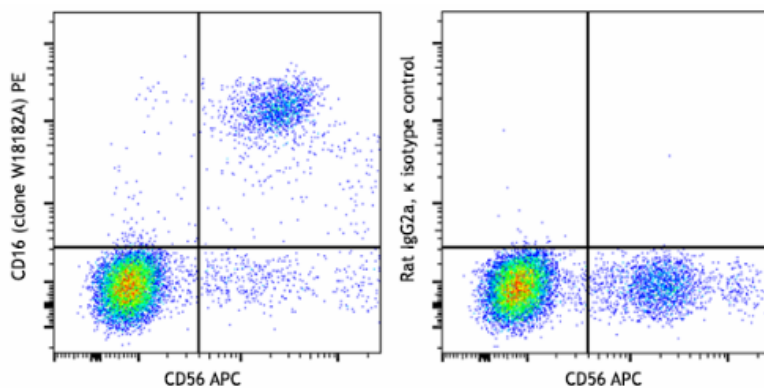
## Related Protocols

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

## Other Formats

Purified anti-human CD16, PE anti-human CD16

## Product Data



Human peripheral blood lymphocytes were stained with anti-human CD56 (clone QA17A16) APC and anti-human CD16 (clone W18182A) PE (left) or rat IgG2a,  $\kappa$  PE isotype control (right).

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