

APC anti-human CD16 Antibody

Catalog# / Size	C-0018-41 /25Tests
	C-0018-42 /100Tests
Clone	KEL-CD16-001
Regulatory Status	RUO
Other Names	FcγRIII, IGFR3, FCG3, FCGR3, FCGRIII, Fc gamma receptor, Fc gamma receptor 3, CD16a
Isotype	human 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	Mouse
Immunogen	NK cell-enriched fraction from human peripheral blood.
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 APC 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.
Excitation Laser	Red Laser (633 nm)
Application Notes	The epitope recognized by clone KEL-CD16-001 is in the first membrane distal Ig-like domain of the CD16 molecule Donor variability has been observed for clone KEL-CD16-001 staining ¹ , especially on granulocytes.

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
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
Gene ID	2214 2215

Product Data:

