Datasheet for ABIN7013998

anti-CD16 antibody (PE-DyLight 594)

3 Images

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Overview

Quantity:	100 tests
Target:	CD16
Reactivity:	Human, Non-Human Primate
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD16 antibody is conjugated to PE-DyLight 594
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	Human neutrophils
Clone:	3G8
Isotype:	IgG1 kappa
Specificity:	The mouse monoclonal antibody 3G8 recognizes an extracellular epitope of CD16, a low affinity receptor for aggregated IgG (FcgammaRIII antigen). CD16 exists in two different isoforms: CD16a (FcgammaRIIIA, 50-65 kDa, expressed on NK-cells, monocytes and macrophages) and CD16b (FcgammaRIIIB, 48 kDa, mainly expressed on neutrophils). Regarding CD16-158V/F polymorphism, the antibody 3G8 detects both 158V and 158F allotype on natural NK cells.
Purification:	Purified antibody is conjugated with activated tandem dye of R-phycoerythrin-DyLight®594 (PE-DyLight®594) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

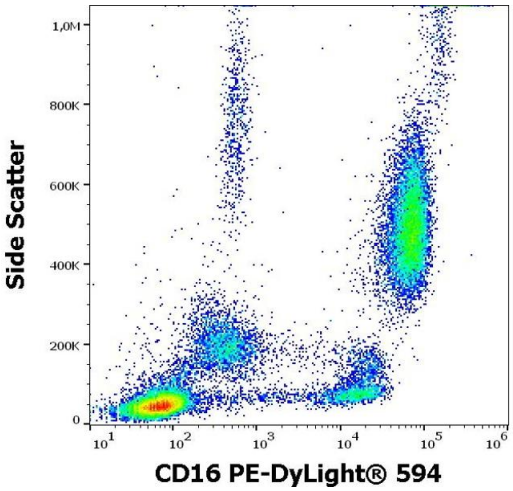
Target:	CD16
Alternative Name:	CD16 (CD16 Products)
Background:	CD16 (FcgammaRIII) is a 50-65 kDa glycoprotein serving as a low affinity IgG receptor. Human FcgammaRIII is expressed in two forms –, FcgammaRIII-A and -B. FcgammaRIII-A is a transmembrane protein of monocytes, macrophages, NK cells and a subset of T cells. It is associated with FcepsilonRI-gamma subunit and is responsible for antibody-dependent NK cell cytotoxicity. Mast cell FcgammaRIII-A is associated, moreover, with FcepsilonRI-beta subunit. Besides IgG, FcgammaRIII-A can be triggered also by oligomeric IgE. FcgammaRIII-B is a GPI-linked monomeric receptor expressed on neutrophils and is involved in their activation and induction of a proadhesive phenotype.,FcgammaRIII, IGFR3, FCRIII
Pathways:	Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process

Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µL reagent / 100 µL of whole blood or 10^6 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.
Restrictions:	For Research Use only

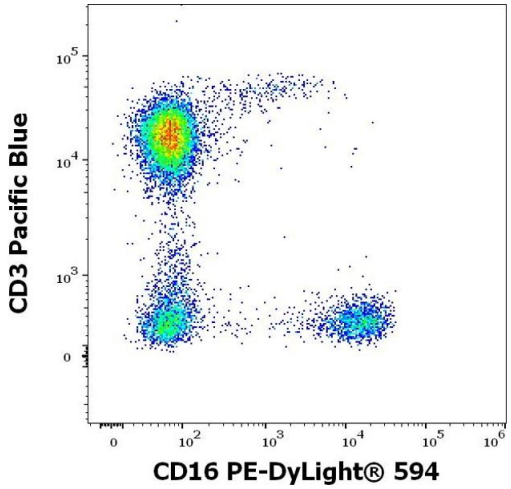
Handling

Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.



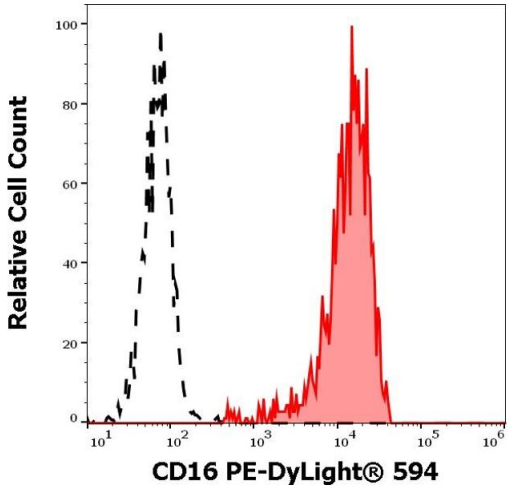
Flow Cytometry

Image 1. Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD16 (3G8) PE-DyLight® 594 antibody (4 µL reagent / 100 µL of peripheral whole blood).



Flow Cytometry

Image 2. Flow cytometry multicolor surface staining of human lymphocytes stained using anti-human CD16 (3G8) PE-DyLight® 594 antibody (4 µL reagent / 100 µL of peripheral whole blood) and anti-human CD3 (UCHT1) Pacific Blue antibody (4 µL reagent / 100 µL of peripheral whole blood).



Flow Cytometry

Image 3. Separation of human CD16 positive CD3 negative NK cells (red-filled) from CD16 negative CD3 positive T cells (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD16 (3G8) PE-DyLight® 594 antibody (4 µL reagent / 100 µ L of peripheral whole blood).