

30-2645: Anti-Human CD16 PE-DyLight® 594 (Clone : 3G8)

Clonality :	Monoclonal
Clone Name :	3G8
Application :	FACS
Reactivity :	Human
Gene :	FCGR3A
Gene ID :	2214
Alternative Name :	FcgammaRIII, IGFR3, FCRIII,
Isotype :	Mouse IgG1 kappa
Immunogen Information :	Human neutrophils

Description

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.

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).

Product Info

Amount :	100 tests
Purification :	The purified antibody is conjugated with tandem dye PE-DyLight® 594 under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Content :	Formulation : Stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide
Storage condition :	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.

Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

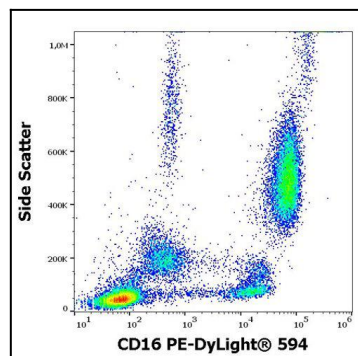


Figure 1 : Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD16 (3G8) PE-DyLight® 594 antibody (4 µl reagent / 100 µl of peripheral whole blood).

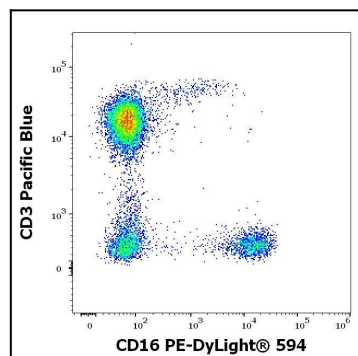


Figure 2 : Flow cytometry multicolor surface staining of human lymphocytes stained using anti-human CD16 (3G8) PE-DyLight® 594 antibody (4 µl reagent / 100 µl of peripheral whole blood) and anti-human CD3 (UCHT1) Pacific Blue™ antibody (4 µl reagent / 100 µl of peripheral whole blood).

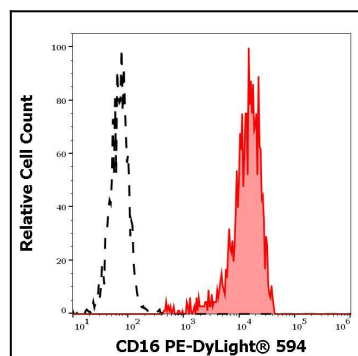


Figure 3 : Separation of human CD16 positive CD3 negative NK cells (red-filled) from CD16 negative CD3 positive T cells (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD16 (3G8) PE-DyLight® 594 antibody (4 µl reagent / 100 µl of peripheral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