Monoclonal Antibody to CD16
Purified Antibody (0.025 mg)

Clone: 3G8
Isotype: Mouse IgG1
Specificity: The mouse monoclonal antibody 3G8 recognizes 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).

Regulatory Status: RUO
Immunogen: Human neutrophils
Species Reactivity: Human, Non-Human Primates
Application: Flow Cytometry
Recommended dilution: 6 µg/ml
Immunoprecipitation
Immunohistochemistry (frozen sections)
Application note: acetone fixation
Functional Application
In vitro Stimulation of NK cell proliferation, blocking of IgG binding and phagocytosis, inhibition of cytotoxic activity, in vivo NK cell depletion

Purity: > 95% (by SDS-PAGE)
Purification: Purified by protein-A affinity chromatography
Concentration: 1 mg/ml
Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
Expiration: See vial label
Lot Number: See vial label

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.
References:

*Leukocyte Typing IV., Knapp W. et al. (Eds.), Oxford University Press (1989).
*And many other.