

1B-646-C100

## Monoclonal Antibody to CD16 Biotin conjugated (0.1 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). HLDA V; WS Code NK80
Regulatory Status:	RUO
Immunogen:	Human neutrophils
Species Reactivity:	Human, Non-Human Primates
Preparation:	The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.
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.
Usage:	Biotinylated antibody is designed for flow cytometry analysis. Working concentrations should be determined by the investigator.
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.

For laboratory research only, not for drug, diagnostic or other use.



Antibodies References:

\*Leukocyte Typing IV., Knapp W. et al. (Eds.), Oxford University Press (1989). \*Leukocyte Typing V., Schlossman S. et al. (Eds.), Oxford University Press (1995). \*Zhu X, Hamann KJ, Muñoz NM, Rubio N, Mayer D, Herrnreiter A, Leff AR: Intracellular expression of Fc gamma RIII (CD16) and its mobilization by chemoattractants in human eosinophils. J Immunol. 1998 Sep 1;161(5):2574-9. \*Metes D, Ernst LK, Chambers WH, Sulica A, Herberman RB, Morel PA: Expression of functional CD32 molecules on human NK cells is determined by an allelic polymorphism of the FcgammaRIIC gene. Blood. 1998 Apr 1;91(7):2369-80. \*Wijngaarden S, van Roon JA, van de Winkel JG, Bijlsma JW, Lafeber FP: Down-regulation of activating Fcgamma receptors on monocytes of patients with rheumatoid arthritis upon methotrexate treatment.

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\*And many other.

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