



1B-214-C100

## Monoclonal Antibody to CD16 Biotin conjugated (0.1 mg)

<b>Clone:</b>	MEM-154
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	<p>The antibody MEM-154 reacts with the epitope on CD16 antigen that residing in proximity to FG loop (probably BC or C'E loop). CD16 is a low affinity receptor for aggregated IgG (FcγRIII antigen). The antibody MEM-154 reacts with CD16+ granulocytes.</p> <p>HLDA V; WS Code M MA068 HLDA V; WS Code NK NK51</p>
<b>Immunogen:</b>	Human granulocytes
<b>Species Reactivity:</b>	Human
<b>Preparation:</b>	The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.
<b>Concentration:</b>	1 mg/ml
<b>Storage Buffer:</b>	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
<b>Storage / Stability:</b>	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
<b>Usage:</b>	<p>Biotinylated antibody is designed for indirect immunofluorescence analysis by Flow Cytometry.</p> <p>Suggested working dilution is 1:500. Indicated dilution is recommended starting point for use of this product. Working concentrations should be determined by the investigator.</p>
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	<p>CD16 (FcγRIII) is a 50-65 kDa glycoprotein serving as a low affinity IgG receptor. Human FcγRIII is expressed in two forms &amp;#8211; FcγRIII-A and -B. FcγRIII-A is a transmembrane protein of monocytes, macrophages, NK cells and a subset of T cells. It is associated with FcεRI-γ subunit and is responsible for antibody-dependent NK cell cytotoxicity. Mast cell FcγRIII-A is associated, moreover, with FcεRI-β subunit. Besides IgG, FcγRIII-A can be triggered also by oligomeric IgE. FcγRIII-B is a GPI-linked monomeric receptor expressed on neutrophils and is involved in their activation and induction of a proadhesive phenotype.</p>

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



**Antibodies**

**References:**

- \*Gessner JE, Grussenmeyer T, Kolanus W, Schmidt RE: The human low affinity immunoglobulin G Fc receptor III-A and III-B genes. Molecular characterization of the promoter regions. *J Biol Chem.* 1995 Jan 20;270(3):1350-61.
- \*Kocher M, Siegel ME, Edberg JC, Kimberly RP: Cross-linking of Fc gamma receptor IIa and Fc gamma receptor IIIb induces different proadhesive phenotypes on human neutrophils. *J Immunol.* 1997 Oct 15;159(8):3940-8.
- \*Arase N, Arase H, Hirano S, Yokosuka T, Sakurai D, Saito T: IgE-mediated activation of NK cells through Fc gamma RIII. *J Immunol.* 2003 Mar 15;170(6):3054-8.
- \*Leukocyte Typing V., Schlossman S. et al. (Eds.), Oxford University Press (1995).
- \*de Haas M, Koene HR, Kleijer M, de Vries E, Simsek S, van Tol MJ, Roos D, von dem Borne AE: A triallelic Fc gamma receptor type IIIA polymorphism influences the binding of human IgG by NK cell Fc gamma RIIIa. *J Immunol.* 1996 Apr 15;156(8):3948-55.
- \*Tamm A, Schmidt RE: The binding epitopes of human CD16 (Fc gamma RIII) monoclonal antibodies. Implications for ligand binding. *J Immunol.* 1996 Aug 15;157(4):1576-81.

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