

1F-214-T025

## Monoclonal Antibody to CD16 Fluorescein (FITC) conjugated (25 tests)

<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 Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use. No reconstitution is necessary.
<b>Storage Buffer:</b>	The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.
<b>Storage / Stability:</b>	<p>Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.</p> <p>Do not use after expiration date stamped on vial label.</p> <p>Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.</p>
<b>Usage:</b>	<p>The reagent is designed for Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension.</p> <p>The content of a vial (0.5 ml) is sufficient for 25 tests.</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-gamma subunit and is responsible for antibody-dependent NK cell cytotoxicity. Mast cell FcγRIII-A is associated, moreover, with FcεRI-beta 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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