

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>	The antibody MEM-154 reacts with an epitope on CD16 antigen that is residing in proximity to FG loop (probably BC or C'E loop). CD16 is a low affinity receptor for aggregated IgG (FcγR3 antigen). The antibody MEM-154 reacts with CD16+ granulocytes. HLDA V; WS Code M MA068 HLDA V; WS Code NK NK51
<b>Regulatory Status:</b>	RUO
<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 stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
<b>Storage / Stability:</b>	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
<b>Usage:</b>	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. The content of a vial (0.5 ml) is sufficient for 25 tests.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	CD16 (FcγR3) is a 50-65 kDa glycoprotein serving as a low affinity IgG receptor. Human FcγR3 is expressed in two forms &#8211; FcγR3-A and -B. FcγR3-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 FcγR3-A is associated, moreover, with FcεRI-β subunit. Besides IgG, FcγR3-A can be triggered also by oligomeric IgE. FcγR3-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:**

- \*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.
- \*Koene HR, Kleijer M, Algra J, Roos D, von dem Borne AE, de Haas M: Fc gammaRIIIa-158V/F polymorphism influences the binding of IgG by natural killer cell Fc gammaRIIIa, independently of the Fc gammaRIIIa-48L/R/H phenotype. *Blood.* 1997 Aug 1;90(3):1109-14.
- \*Gasdaska JR, Sherwood S, Regan JT, Dickey LF: An afucosylated anti-CD20 monoclonal antibody with greater antibody-dependent cellular cytotoxicity and B-cell depletion and lower complement-dependent cytotoxicity than rituximab. *Mol Immunol.* 2012 Mar;50(3):134-41
- \*Ohradanova-Repic A, Machacek C, Charvet C, Lager F, Le Roux D, Platzer R, Leksa V, Mitulovic G, Burkard TR, Zlabinger GJ, Fischer MB, Feuillet V, Renault G, Blüml S, Benko M, Suchanek M, Huppa JB, Matsuyama T, Cavaco-Paulo A, Bismuth G, Stockinger H: Extracellular Purine Metabolism Is the Switchboard of Immunosuppressive Macrophages and a Novel Target to Treat Diseases With Macrophage Imbalances. *Front Immunol.* 2018 Apr 27;9:852.

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