

## Monoclonal Antibody to CD16 - FITC

<b>Alternate names:</b>	CD16A, FCG3, FCGR3, FCGR3A, Fc-gamma RIII, Fc-gamma RIII-alpha, Fc-gamma RIIIa, FcR-10, FcRIII, FcRIIIa, IGFR3, IgG Fc receptor III-2, Low affinity immunoglobulin gamma Fc region receptor III-A
<b>Catalog No.:</b>	SM3011F
<b>Quantity:</b>	100 Tests
<b>Background:</b>	CD16 (FcγRIII) is a 50-65 kDa glycoprotein serving as a low affinity IgG receptor. Human FcγRIII is expressed in two forms 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-g subunit and is responsible for antibody-dependent NK cell cytotoxicity. Mast cell FcγRIII-A is associated, moreover, with FcεRI-b subunit. Besides IgG, FcεRI-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.
<b>Uniprot ID:</b>	<a href="#">P08637</a>
<b>NCBI:</b>	<a href="#">NP_000560.5</a>
<b>GeneID:</b>	<a href="#">2214</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Clone:</b>	MEM-154
<b>Immunogen:</b>	Human granulocytes
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction. <b>Buffer System:</b> PBS containing 15 mM Sodium Azide as preservative and 0.2% (w/v) high-grade Protease free BSA as a stabilizing agent. <b>Label:</b> FITC – Conjugated with Fluorescein isothiocyanate under optimum conditions. The reagent is free of unconjugated
<b>Applications:</b>	<b>Flow Cytometry:</b> Analysis of Human blood cells using 20 µl reagent / 100 µl of whole blood or 10e6 cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	The antibody 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. <b>Species:</b> Human. Other species not tested.

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Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
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**Storage:**

Store the antibody at 2-8°C.

**DO NOT FREEZE!**

This product is photosensitive and should be protected from light.

Shelf life: one year from despatch.

**General References:**

1. 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.
2. 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.
3. 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.
4. Leukocyte Typing V., Schlossman S. et al. (Eds.), Oxford University Press (1995).
5. 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.
6. 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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