



10-214-C025

Monoclonal Antibody to CD16 Azide Free (0.025 mg)

Clone:	MEM-154
Isotype:	Mouse IgG1
Specificity:	<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 (FcγR3 antigen). The antibody MEM-154 reacts with CD16+ granulocytes.</p> <p>HLDA V; WS Code M MA068 HLDA V; WS Code NK NK51</p>
Immunogen:	Human granulocytes
Species Reactivity:	Human
Application:	<p>Flow Cytometry Recommended dilution: 5-10 µg/ml Positive control: PBL (peripheral blood lymphocytes) Application note: The antibody MEM-154 does not react with CD16a present on NK cells in many subjects.</p> <p>Immunoprecipitation Western Blotting Application note: Non-reducing conditions. Functional Application The antibody MEM-154 blocks binding of human IgG to FcγR3.</p>
Purity:	> 95% (by SDS-PAGE)
Purification:	Purified from hybridoma culture supernatant by protein A-affinity chromatography.
Concentration:	1 mg/ml
Storage Buffer:	Azide free phosphate buffered saline (PBS), approx. pH 7.4; 0.2 µm filter sterilized.
Storage / Stability:	Store at 2-8°C. Do not use after expiration date stamped on vial label. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.
Expiration:	See vial label
Lot Number:	See vial label
Background:	<p>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.</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.

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