

11-214-C100

Monoclonal Antibody to CD16b Purified Antibody (0.1 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 (Fcγ₃R 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 <i>Recommended dilution:</i> 5-10 µg/ml <i>Positive control:</i> PBL (peripheral blood lymphocytes) <i>Application note:</i> The antibody MEM-154 does not react with CD16a present on NK cells in many subjects.</p> <p>Immunoprecipitation Western Blotting <i>Application note:</i> Non-reducing conditions.</p> <p>Functional Application The antibody MEM-154 blocks binding of human IgG to Fcγ₃R.</p>
Purity:	> 95% (by SDS-PAGE)
Purification:	Purified from hybridoma culture supernatant by protein A-affinity chromatography.
Concentration:	1 mg/ml
Storage Buffer:	Tris buffered saline (TBS) with 15 mM sodium azide, approx. pH 8.0
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 (Fcγ₃R) is a 50-65 kDa glycoprotein serving as a low affinity IgG receptor. Human Fcγ₃R is expressed in two forms Fcγ₃R-A and -B. Fcγ₃R-A is a transmembrane protein of monocytes, macrophages, NK cells and a subset of T cells. It is associated with Fcε₁RI-gamma subunit and is responsible for antibody-dependent NK cell cytotoxicity. Mast cell Fcγ₃R-A is associated, moreover, with Fcε₁RI-beta subunit. Besides IgG, Fcγ₃R-A can be triggered also by oligomeric IgE. Fcγ₃R-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:

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- *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.
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- *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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