



11-382-C025

Monoclonal Antibody to CD16 Purified Antibody (0.025 mg)

Clone:	MEM-168
Isotype:	Mouse IgM
Specificity:	The antibody MEM-168 reacts with CD16 antigen, a low affinity receptor for aggregated IgG (Fcγ ₃ antigen). CD16 exists in two different isoforms: CD16a (Fcγ _{3A} ; 50-65 kDa; expressed on NK-cells, monocytes and macrophages) and CD16b (Fcγ _{3B} ; 48 kDa; mainly expressed on neutrophils).
Immunogen:	Human granulocytes
Species Reactivity:	Human, Non-Human Primates, Porcine
Application:	Flow Cytometry
Purity:	> 95% (by SDS-PAGE)
Purification:	Purified from ascites by gel filtration and precipitation methods.
Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
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:	CD16 (Fcγ ₃) is a 50-65 kDa glycoprotein serving as a low affinity IgG receptor. Human Fcγ ₃ is expressed in two forms Fcγ _{3A} and -B. Fcγ _{3A} is a transmembrane protein of monocytes, macrophages, NK cells and a subset of T cells. It is associated with Fcε ₁ -γ subunit and is responsible for antibody-dependent NK cell cytotoxicity. Mast cell Fcγ _{3A} is associated, moreover, with Fcε ₁ -β subunit. Besides IgG, Fcγ _{3A} can be triggered also by oligomeric IgE. Fcγ _{3B} is a GPI-linked monomeric receptor expressed on neutrophils and is involved in their activation and induction of a proadhesive phenotype.
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. *Drbal K, Moertelmaier M, Holzhauser C, Muhammad A, Fuertbauer E, Howorka S, Hinterberger M, Stockinger H, Schütz GJ: Single-molecule microscopy reveals heterogeneous dynamics of lipid raft components upon TCR engagement. Int Immunol. 2007 May;19(5):675-84.

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