

## 30-1598: Anti-CD16 / Fcγ<sub>3</sub> Monoclonal Antibody (Clone:MEM-154)-Low Endotoxin

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	MEM-154
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Gene :</b>	FCGR3A
<b>Gene ID :</b>	2214
<b>Uniprot ID :</b>	P08637
<b>Format :</b>	Low Endotoxin
<b>Alternative Name :</b>	FCGR3A,CD16A,FCG3,FCGR3,IGFR3
<b>Isotype :</b>	Mouse IgG1
<b>Immunogen Information :</b>	Human granulocytes

### Description

CD16 (Fcγ<sub>3</sub>) is a 50-65 kDa glycoprotein serving as a low affinity IgG receptor. Human Fcγ<sub>3</sub> is expressed in two forms - Fcγ<sub>3</sub>-A and -B. Fcγ<sub>3</sub>-A is a transmembrane protein of monocytes, macrophages, NK cells and a subset of T cells. It is associated with Fcε<sub>1</sub>-γ subunit and is responsible for antibody-dependent NK cell cytotoxicity. Mast cell Fcγ<sub>3</sub>-A is associated, moreover, with Fcε<sub>1</sub>-β subunit. Besides IgG, Fcγ<sub>3</sub>-A can be triggered also by oligomeric IgE. Fcγ<sub>3</sub>-B is a GPI-linked monomeric receptor expressed on neutrophils and is involved in their activation and induction of a proadhesive phenotype.

### Product Info

<b>Amount :</b>	0.1 mg
<b>Purification :</b>	Purified by protein-A affinity chromatography
<b>Storage condition :</b>	Store at 2-8°C. Do not freeze.

### Application Note

**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.

**Immunoprecipitation Western Blotting** *Application note:* Non-reducing conditions. **Functional Application** The antibody MEM-154 blocks binding of human IgG to Fcγ<sub>3</sub>.

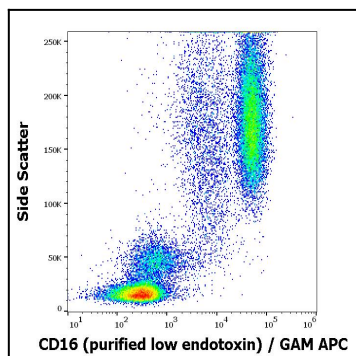


Figure 1: Flow cytometry surface staining pattern of human peripheral blood stained using anti-human CD16 (MEM-154) purified antibody (low endotoxin, concentration in sample 2  $\hat{1}$ /<sub>4</sub>g/ml) GAM APC.

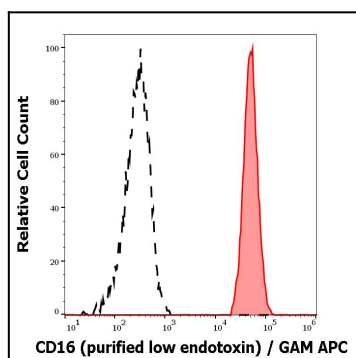


Figure 2: Separation of human neutrophil granulocytes (red-filled) from CD16 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD16 (MEM-154) purified antibody (low endotoxin, concentration in sample 2  $\hat{1}$ /<sub>4</sub>g/ml) GAM APC.