ARG62740
anti-CD16 antibody [MEM-154]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [MEM-154] recognizes CD16
Tested Reactivity	Hu
Tested Application	FACS, FuncSt, IP, WB
Specificity	The clone 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 (FcgammaRIII antigen). MEM-154 reacts with CD16+ granulocytes. HLDA V; WS Code M MA068 HLDA V; WS Code NK NK51
Host	Mouse
Clonality	Monoclonal
Clone	MEM-154
Isotype	IgG1
Target Name	CD16
Species	Human
Immunogen	Human granulocytes
Conjugation	Un-conjugated
Alternate Names	FCRIIIA; FcRIIIa; CD antigen CD16a; Fc-gamma RIII-alpha; FCR-10; FcR-10; FCRIII; FCG3; Low affinity immunoglobulin gamma Fc region receptor III-A; FCGRIII; CD16; Fc-gamma RIIIa; IgG Fc receptor III-2; IMD20; CD16A; IGFR3; CD16a antigen; FCGR3; FcRIII; Fc-gamma RIII

Application Instructions

Application table

Application	Dilution
FACS	5 - 10 µg/ml
FuncSt	Assay-dependent
IP	Assay-dependent
WB	Assay-dependent

Application Note: FACS: The clone MEM-154 does not react with CD16a present on NK cells in many subjects.
WB: Under non-reducing condition.
Functional studies: The clone MEM-154 blocks binding of human IgG to FcgammaRIII.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: FACS: PBL (peripheral blood lymphocytes)

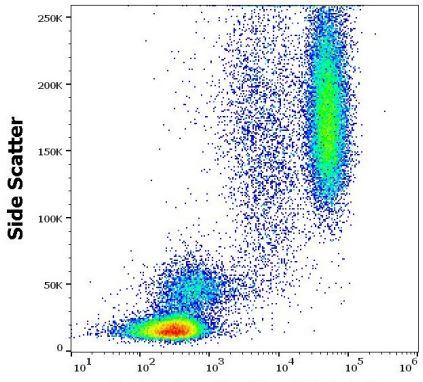
Properties

Form	Liquid
Purification	Purified from hybridoma culture supernatant by protein A-affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 2214 Human Swiss-port # P08637 Human
Gene Symbol	FCGR3A
Gene Full Name	Fc fragment of IgG, low affinity IIIa, receptor (CD16a)
Background	CD16 (FcgammaRIII) is a 50-65 kDa glycoprotein serving as a low affinity IgG receptor. Human FcgammaRIII is expressed in two forms – FcgammaRIII-A and -B. FcgammaRIII-A is a transmembrane protein of monocytes, macrophages, NK cells and a subset of T cells. It is associated with FcepsilonRI-gamma subunit and is responsible for antibody-dependent NK cell cytotoxicity. Mast cell FcgammaRIII-A is associated, moreover, with FcepsilonRI-beta subunit. Besides IgG, FcgammaRIII-A can be triggered also by oligomeric IgE. FcgammaRIII-B is a GPI-linked monomeric receptor expressed on neutrophils and is involved in their activation and induction of a proadhesive phenotype.
Function	Receptor for the Fc region of IgG. Binds complexed or aggregated IgG and also monomeric IgG. Mediates antibody-dependent cellular cytotoxicity (ADCC) and other antibody-dependent responses, such as phagocytosis. [UniProt]
Highlight	Related products: CD16 antibodies; CD16 ELISA Kits; CD16 Duos / Panels; Anti-Mouse IgG secondary antibodies; Related news: Tumor-Infiltrating Lymphocytes (TILs)
Research Area	Developmental Biology antibody; Immune System antibody; General Lymphocyte Marker Study antibody; Natural killer cells antibody
Calculated Mw	29 kDa
PTM	Glycosylated. Contains high mannose- and complex-type oligosaccharides. Glycosylation at Asn-180 is mandatory for high affinity binding to the Fc and for discrimination between fucosylated and afucosylated IgG glycoforms. The soluble form is produced by a proteolytic cleavage.

Images



ARG62740 anti-CD16 antibody [MEM-154] FACS image

Flow Cytometry: Human peripheral blood stained with ARG62740 anti-CD16 antibody [MEM-154] at 2 µg/ml dilution, followed by APC-conjugated Goat anti-Mouse antibody.