

ARG42247 anti-CD16 antibody [3G8] (APC)

Package: 50 tests

Store at: 4°C

Summary

Product Description	APC-conjugated Mouse Monoclonal antibody [3G8] recognizes CD16
Tested Reactivity	Hu, NHuPrm
Tested Application	FACS
Specificity	The mouse monoclonal antibody 3G8 recognizes an extracellular epitope of CD16, a low affinity receptor for aggregated IgG (FcγRIII antigen). CD16 exists in two different isoforms: CD16a (FcγRIIIA; 50-65 kDa; expressed on NK-cells, monocytes and macrophages) and CD16b (FcγRIIIB; 48 kDa; mainly expressed on neutrophils).
Host	Mouse
Clonality	Monoclonal
Clone	3G8
Isotype	IgG1, kappa
Target Name	CD16
Species	Human
Immunogen	Human neutrophils.
Conjugation	APC
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	<table><thead><tr><th>Application</th><th>Dilution</th></tr></thead><tbody><tr><td>FACS</td><td>10 µl / 100 µl of whole blood or 10⁶ cells</td></tr></tbody></table>	Application	Dilution	FACS	10 µl / 100 µl of whole blood or 10 ⁶ cells
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FACS	10 µl / 100 µl of whole blood or 10 ⁶ cells				
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.				

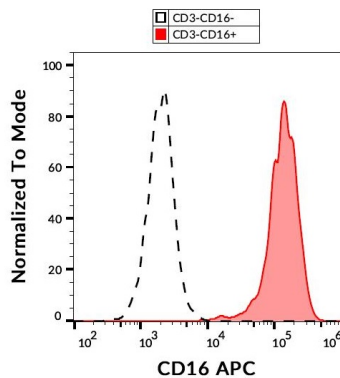
Properties

Form	Liquid
Purification	Purified
Buffer	PBS and 15 mM Sodium azide.
Preservative	15 mM Sodium azide
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. 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.

Bioinformatics

Gene Symbol	FCGR3A
Gene Full Name	Fc fragment of IgG, low affinity IIIa, receptor (CD16a)
Background	This gene encodes a receptor for the Fc portion of immunoglobulin G, and it is involved in the removal of antigen-antibody complexes from the circulation, as well as other other antibody-dependent responses. This gene (FCGR3A) is highly similar to another nearby gene (FCGR3B) located on chromosome 1. The receptor encoded by this gene is expressed on natural killer (NK) cells as an integral membrane glycoprotein anchored through a transmembrane peptide, whereas FCGR3B is expressed on polymorphonuclear neutrophils (PMN) where the receptor is anchored through a phosphatidylinositol (PI) linkage. Mutations in this gene have been linked to susceptibility to recurrent viral infections, susceptibility to systemic lupus erythematosus, and alloimmune neonatal neutropenia. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
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]
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. [UniProt]
Cellular Localization	Cell membrane; Single-pass type I membrane protein. Secreted. Note=Exists also as a soluble receptor. [UniProt]

Images



ARG42247 anti-CD16 antibody [3G8] (APC) FACS image

Flow Cytometry: Human peripheral blood stained with ARG42247 anti-CD16 antibody [3G8] (APC).