

ARG23012 anti-CD16 antibody [DJ130c]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [DJ130c] recognizes CD16 Mouse anti Human CD16 antibody, clone DJ130c recognizes human CD16, also known as Low affinity immunoglobulin gamma Fc region receptor III-A or Fc-gamma RIIIa. CD16a is a 254 amino acid ~50-65 kDa single pass type 1 transmembrane glycoprotein bearing two Ig-like C2 type domains. CD16 exists as a transmembranous form (Fc gammaRIIIA, or CD16A) and a glycosyl phosphatidylinositol (GPI) anchored form, Fc gammaRIIIB, or CD16B (Scallon et al. 1989). CD16A is expressed by NK cells, some T cells, and macrophages, whereas CD16B is primarily expressed by granulocytes (Ravetch and Perussia 1989). In addition, CD16B exists as two allelic variants NA1 and NA2 . DJ130c recognizes all polymorphonuclear cells irrespective of their NA phenotype. Mouse anti Human CD16 antibody, clone DJ130c recognizes an epitope in the first membrane-distal domain of CD16, recognizes both CD16a and CD16b and has been demonstrated to cross-react with CD16 from rhesus macaques, Macaca mulatta (Xu et al. 2012)
Tested Reactivity	Hu, Macaq
Tested Application	FACS, IHC-Fr, IHC-P
Host	Mouse
Clonality	Monoclonal
Clone	DJ130c
Isotype	IgG1
Target Name	CD16
Species	Human
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	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Application</th> <th style="width: 50%;">Dilution</th> </tr> </thead> <tbody> <tr> <td>FACS</td> <td>Assay-dependent</td> </tr> <tr> <td>IHC-Fr</td> <td>Assay-dependent</td> </tr> <tr> <td>IHC-P</td> <td>5 - 10 µg/ml</td> </tr> </tbody> </table>	Application	Dilution	FACS	Assay-dependent	IHC-Fr	Assay-dependent	IHC-P	5 - 10 µg/ml
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FACS	Assay-dependent								
IHC-Fr	Assay-dependent								
IHC-P	5 - 10 µg/ml								
Application Note	<p>IHC-P: Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0). FACS: Use 10 µl of the suggested working dilution to label 10⁶ cells in 100 µl. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>								

Properties

Form	Liquid
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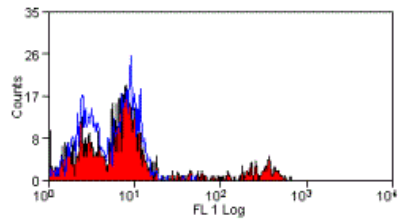
Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free 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

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]
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.

ARG23012 anti-CD16 antibody [DJ130c] FACS image

Flow Cytometry: Human peripheral blood lymphocytes stained with ARG23012 anti-CD16 antibody [DJ130c].



ARG23012 anti-CD16 antibody [DJ130c] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human spleen tissue stained with ARG23012 anti-CD16 antibody [DJ130c] at 5 - 10 µg/ml dilution. Antigen retrieval: Heat-induced.

