

## ARG23291 anti-CD16 antibody [KD1]

Package: 100 µg  
Store at: -20°C

### Summary

<b>Product Description</b>	Mouse Monoclonal antibody [KD1] recognizes CD16 Mouse anti Human CD16 antibody, clone KD1 recognizes human CD16, a 50-65 kDa cell surface molecule, which is the low affinity receptor for IgG (FcR III). CD16 exists as a transmembranous form (Fc gammaRIIIA, or CD16A) and a glycosyl phosphatidylinositol (GPI) anchored form (Fc gammaRIIIB, or CD16B). CD16A is expressed by NK cells, some T cells, and macrophages (Moretta et al. 1990), whereas CD16B is primarily expressed by granulocytes (Bonecchi et al. 1999). Clone KD1 recognizes both forms of CD16 and will therefore recognize all cell types expressing CD16. Mouse anti Human CD16, clone KD1 can be used to identify CD16 in a range of species including bovine (Boysen et al. 2010) and ovine (Elhmouzi-Younes et al. 2010).
<b>Tested Reactivity</b>	Hu, Bov, Sheep
<b>Species Does Not React With</b>	Rat, Dog
<b>Tested Application</b>	FACS, FuncSt
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone</b>	KD1
<b>Isotype</b>	IgG2a
<b>Target Name</b>	CD16
<b>Species</b>	Human
<b>Immunogen</b>	A polyclonal population of NK cells.
<b>Conjugation</b>	Un-conjugated
<b>Alternate Names</b>	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

<b>Application table</b>	<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>1:25 - 1:200</td> </tr> <tr> <td>FuncSt</td> <td>Assay-dependent</td> </tr> </tbody> </table>	Application	Dilution	FACS	1:25 - 1:200	FuncSt	Assay-dependent
Application	Dilution						
FACS	1:25 - 1:200						
FuncSt	Assay-dependent						
<b>Application Note</b>	<p>Functional assay: This product contains sodium azide, removal by dialysis is recommended prior to use in functional assays.</p> <p>FACS: Use 100 µl of the suggested working dilution to label 10<sup>6</sup> cells in 100 µl.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>						

### Properties

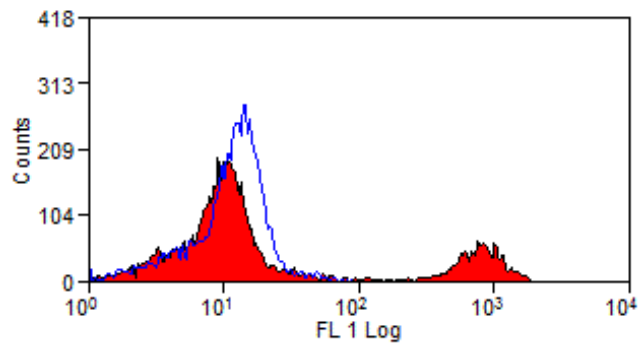
<b>Form</b>	Liquid
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Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide.
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term 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: <a href="#">CD16 antibodies</a> ; <a href="#">CD16 ELISA Kits</a> ; <a href="#">CD16 Duos / Panels</a> ; <a href="#">Anti-Mouse IgG secondary antibodies</a> ; Related news: <a href="#">Tumor-Infiltrating Lymphocytes (TILs)</a>
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. [UniProt]

ARG23291 anti-CD16 antibody [KD1] FACS image



Flow Cytometry: Human peripheral blood lymphocytes stained with ARG23291 anti-CD16 antibody [KD1] followed by Rabbit F(ab')<sub>2</sub> anti Mouse IgG (FITC).