

# Product datasheet

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ARG40693 anti-CD16 antibody

Package: 50 μg Store at: -20°C

# **Summary**

Product Description Rabbit Polyclonal antibody recognizes CD16

Tested Reactivity Hu

Tested Application FACS, ICC/IF, IHC-P

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name CD16

Species Human

Immunogen Recombinant protein corresponding to Q101-D166 of Human CD16.

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	1:150 - 1:500
	ICC/IF	1:200 - 1:1000
	IHC-P	1:200 - 1:1000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0).  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

## **Properties**

Form Liquid

Buffer 0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.

Preservative 0.05% Sodium azide

Stabilizer 4% Trehalose

Concentration 0.5 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.

#### 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-Rabbit 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

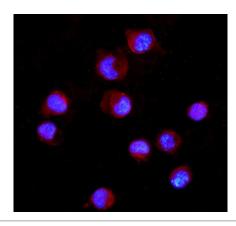
afucosylated IgG glycoforms.

The soluble form is produced by a proteolytic cleavage. [UniProt]

Cell membrane; Single-pass type I membrane protein. Secreted. Note=Exists also as a soluble receptor.

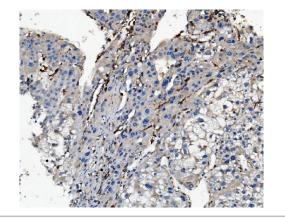
[UniProt]

# **Images**



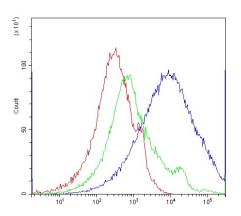
#### ARG40693 anti-CD16 antibody ICC/IF image

Immunofluorescence: K562 cells were blocked with 10% goat serum and then stained with ARG40693 anti-CD16 antibody (red) at 5  $\,$  µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



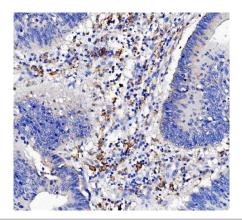
#### ARG40693 anti-CD16 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human liver cancer tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40693 anti-CD16 antibody at 2  $\mu$ g/ml dilution, overnight at 4°C.



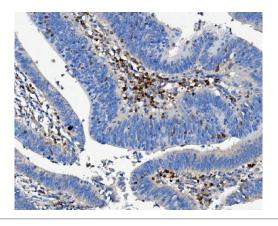
#### ARG40693 anti-CD16 antibody FACS image

Flow Cytometry: Human PBMC cells were blocked with 10% normal goat serum and then stained with ARG40693 anti-CD16 antibody (blue) at 1  $\mu$ g/10^6 cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was rabbit IgG (1  $\mu$ g/10^6 cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



## ARG40693 anti-CD16 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human rectal cancer tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40693 anti-CD16 antibody at 2  $\mu$ g/ml dilution, overnight at 4°C.



# ARG40693 anti-CD16 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human rectal cancer tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40693 anti-CD16 antibody at 2  $\mu$ g/ml dilution, overnight at 4°C.