

Product datasheet

info@arigobio.com

ARG70234
Human CD16a recombinant protein (ECD) (His-tagged, C-ter)

Package: 50 µg
Store at: -20°C

Summary

Product Description HEK293 expressed, His-tagged (C-ter) Human CD16a recombinant protein (ECD).

Tested Reactivity Hu

Tested Application Binding, SDS-PAGE

Target Name CD16a (ECD)

Species Human

A.A. Sequence Gly17 - Gln208 of Human CD16a (NP_001121065.1) with 6X His tag at the C-terminus.

Expression System HEK293

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 Note Binding activity test: Measured by its binding ability in a functional ELISA. Immobilized Recombinant

Human CD16A at 5 μg/ml (100 μl/well) can bind Recombinant IgG1 with a linear range of 10-40 μg/ml.

Properties

Form Powder

Purification Note 0.22 μm filter sterilized. Endotoxin level is 95% (by SDS-PAGE)

Buffer PBS (pH 7.4)

 $\label{eq:Reconstitution} \textbf{Reconstitute to a concentration of 0.1 - 0.5 mg/ml in sterile distilled water.}$

Storage instruction For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and

store at -20°C for up to one month, at 2-8°C for up to one week. Storage in frost free freezers is not

recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.

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 Illa, 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,

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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

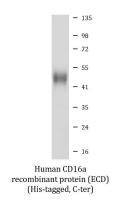
afucosylated IgG glycoforms.

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



ARG70234 Human CD16a recombinant protein (ECD) (His-tagged, Cter) SDS-PAGE image

SDS-PAGE analysis of ARG70234 Human CD16a recombinant protein (ECD) (His-tagged, C-ter).