

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

Package: 50 µg
Store at: -20°C

Summary

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| Product Description | HEK293 expressed, His-tagged (C-ter) Human CD16a recombinant protein. |
| Tested Reactivity | Hu |
| Tested Application | Binding, SDS-PAGE |
| Target Name | CD16a |
| 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

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| 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. |
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Properties

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| Form | Powder |
| Purification Note | 0.22 µm filter sterilized. Endotoxin level is 95% (by SDS-PAGE) |
| Buffer | PBS (pH 7.4) |
| Reconstitution | 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. |

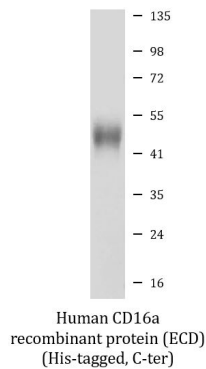
Bioinformation

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| 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]

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| 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, C-ter) SDS-PAGE image

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