

CD16a (F176) Protein, Human, Recombinant (His & Avi)

General Information

Synonyms:	FCG3;IGFR3;FcγRIIIA;FCGR3;FcγRIIIA;FCGR3A;CD16;FcRIIIa;Fc gamma RIIIA;FCGRIII;FcγRIIIA/CD16a (F176);CD16A;FcR-10;FcRIII;IMD20
Protein Construction:	Gly17-Gln208(F176)
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P08637-1
Molecular Weight:	24.7 kDa (predicted). Due to glycosylation, the protein migrates to 48-58 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	<ol style="list-style-type: none">1. Immobilized Human Fc gamma RIIIA (F176) , His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Anti-Fc gamma RIIIA Antibody, hFc Tag with the EC50 of 4.4ng/ml determined by ELISA.2. Human Fc gamma RIIIA (F176) , His Tag captured on CM5 Chip via anti-His antibody can bind Rituximab, hFc Tag with an affinity constant of 0.92µM as determined in SPR assay.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/µg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 µm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 µg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Human Fc gamma RIIIA/CD16a Protein is a receptor for the Fc region of IgG. Binds complexed or aggregated IgG

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and also monomeric IgG. Mediates antibody-dependent cellular cytotoxicity (ADCC) and other antibody-dependent responses, such as phagocytosis.

Reference

Junker F, et al. Fc Gamma Receptors and Their Role in Antigen Uptake, Presentation, and T Cell Activation. Front Immunol. 2020 Jul 3;11:1393.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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