

Recombinant Human Fc-gamma RIII alpha/CD16a Protein

Catalog No.: RP00066 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	2214	P08637

Tags

C-His

Synonyms

CD16;CD16A;FCG3;FCGR3;FCGR3A;FCR-10;FCRIII;FCRIIIA;IGFR3;IMD20;FCGR3A;CD16; CD16A; FCG3; FCGR3; FCGR3A; FCR-10; FCR3; FCR3A; IGFR3; IMD20; Fc fragment of IgG receptor IIIa

Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

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Background

This protein is 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. The protein 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.

Basic Information

Description

Recombinant Human Fc-gamma RIII alpha/CD16a Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Gly17-Gln208) of human Fc gamma RIII/CD16a (Accession #NP_001121065.1) fused with a 6×His tag at the C-terminus.

Bio-Activity

1. Measured by its binding ability in a functional ELISA. Immobilized Human FCGR3A at 1 μg/mL (100 μL/well) can bind FCGR3A Mouse mAb with a linear range of 0.13-6.1 ng/mL. 2. Measured by its binding ability in a functional ELISA. Immobilized Human FCGR3A at 1 μg/mL (100 μL/well) can bind FCGR3A Mouse mAb with a linear range of 0.06-7.1 ng/mL.

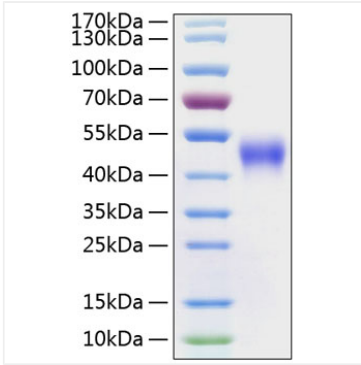
Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

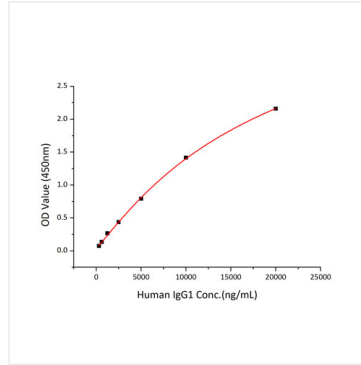
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

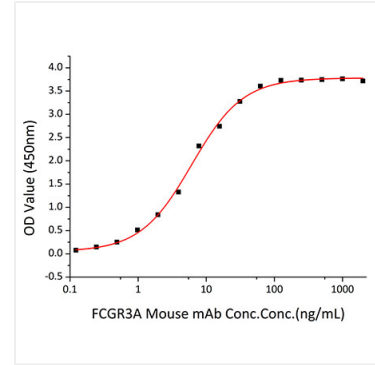
Validation Data



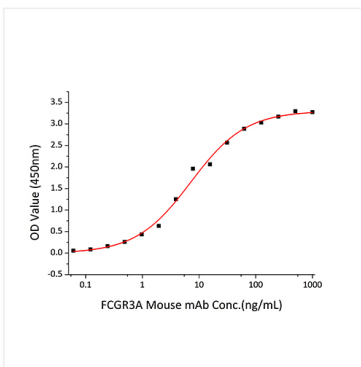
Recombinant Human Fc-gamma RIII alpha/CD16a Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 45-52 kDa.



Immobilized Recombinant Human CD16A at 5 $\mu\text{g/mL}$ (100 $\mu\text{L/well}$) can bind Recombinant IgG1 with a linear range of 10-40 $\mu\text{g/mL}$.



Immobilized recombinant Human FCGR3A at 1 $\mu\text{g/mL}$ (100 $\mu\text{L/well}$) can bind FCGR3A Mouse mAb with a linear range of 0.13-6.1 ng/mL .



Immobilized Human FCGR3A at 1 $\mu\text{g/mL}$ (100 $\mu\text{L/well}$) can bind FCGR3A Mouse mAb with a linear range of 0.06-7.1 ng/mL .