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# Recombinant Human Fc-gamma RIII alpha/CD16a Protein

Catalog No.: RP01043 Recombinant

# **Sequence Information**

**Species Gene ID Swiss Prot** Human 2214 P08637

## **Tags** C-hFc&His

#### **Synonyms**

CD16;CD16A;FCG3;FCGR3;FCGRIII;FCR-1 0;FCRIII;FCRIIIA;IGFR3;IMD20;FCGR3A; CD16; CD16A; FCG3; FCGR3; FCGRIII; FCR-10; FCRIII; FCRIIIA; IGFR3; IMD20; Fc fragment of IgG receptor IIIa

## **Product Information**

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

#### **Endotoxin**

< 0.1 EU/ $\mu$ g 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 votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (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 cells expression system. The target protein is expressed with sequence (Gly17-Gln208) of human Fc gamma RIIIA/CD16a (Accession #NP\_001121065.1) fused with an Fc, 6×His tag at the C-terminus.

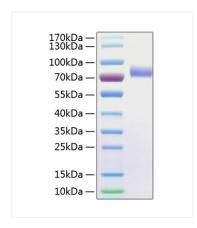
#### **Bio-Activity**

Measured by its binding ability in a functional ELISA. Immobilized Human FCGR3A at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind FCGR3A Mouse mAb with a linear range of 0.13-7.9 ng/mL.

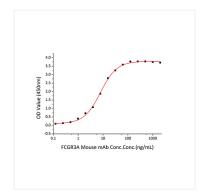
#### Storage

Store the lyophilized protein at -20  $^{\circ}$ C to -80  $^{\circ}$ C for long term.<br/>
hr>After reconstitution, the protein solution is stable at -20  $^{\circ}$ C for 3 months, at 2-8  $^{\circ}$ 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 71 kDa.



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