

RP00480B

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# Biotinylated Recombinant Human Fc gamma RIIA/FCGR2A/CD32a (H167R) Protein

Catalog No.: RP00480B

Recombinant

## Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	2212	P12318-1

### Tags

C-His&Avi

### Synonyms

Fc gamma RIIA; FCG2; FCGR2; FCGR2A; FCGR2A1; FcgRIIA; FCRIIA; fcRII-a; FCG2; CD32A

## Product Information

### Source

### Purification

≥ 95 % as determined by SDS-PAGE; ≥ 95 % as determined by HPLC.

### Endotoxin

< 1 EU/μg of the protein by LAL method.

### Formulation

Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

### 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



[www.abclonal.com](http://www.abclonal.com)

## Background

The Fc gamma Rs have been divided into three classes based on close relationships in their extracellular domains; these groups are designated Fc gamma RI (also known as CD64), Fc gamma RII (CD32), and Fc gamma RIII (CD16). Each group may be encoded by multiple genes and exist in different isoforms depending on species and cell type. The CD64 proteins are high affinity receptors ( $10^{-8}$ - $10^{-9}$  M) capable of binding monomeric IgG, whereas the CD16 and CD32 proteins bind IgG with lower affinities ( $10^{-6}$ - $10^{-7}$  M) only recognizing IgG aggregates surrounding multivalent antigens.

## Basic Information

### Description

Biotinylated Recombinant Human Fc gamma RIIA/FCGR2A/CD32a (H167R) Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Ala36-Ile218(H167R)) of Human Fc gamma RIIA/CD32a (Accession #P12318-1) fused with a C-His&Avi tag at the C-terminus.

### Bio-Activity

### Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

### Storage

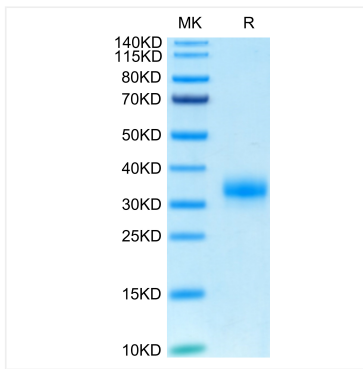
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

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

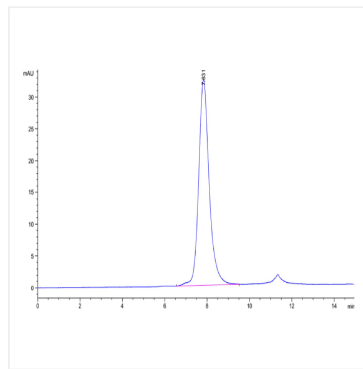
Avoid repeated freeze/thaw cycles.

\* For your safety and health, please wear a lab coat and disposable gloves when handling.

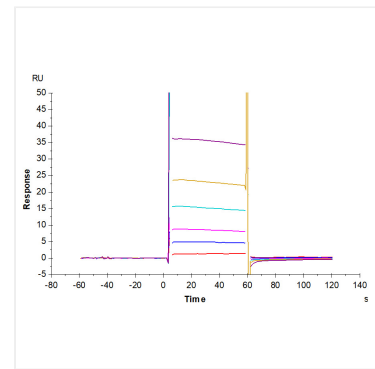
## Validation Data



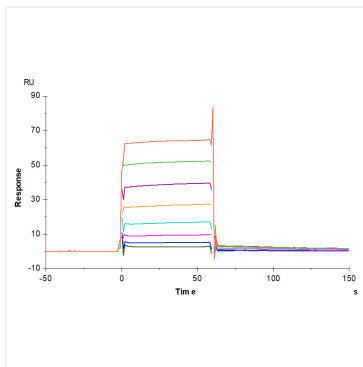
Biotinylated Recombinant Human Fc gamma RIIA/FCGR2A/CD32a (H167R) Protein was determined by Tris-Bis PAGE under reducing conditions.



The purity of Biotinylated Fc gamma RIIA (R167) is greater than 95% as determined by SEC-HPLC.



Biotinylated Human Fc gamma RIIA (R167), His-Avi Tag captured on CM5 Chip via anti-his antibody can bind Rituximab with an affinity constant of 2.17  $\mu\text{M}$  as determined in SPR assay (Biacore T200) (QC Test).



Rituximab captured on CM5 Chip via Protein A can bind Biotinylated Human Fc gamma RIIA (R167), His-Avi Tag with an affinity constant of 1.03  $\mu\text{M}$  as determined in SPR assay (Biacore T200).