

# Recombinant Human FcRn/FCGRT&B2M Protein

Catalog No.: RP00468 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	2217	P55899-1(FCGRT)&P61769-1(B2M)

### Tags

C-His

### Synonyms

FcRn alpha chain; FCGRT; FCRN; FCGRT&amp;B2M

## Product Information

Source	Purification
HEK293 cells	≥ 95 % as determined by SDS-PAGE; ≥ 95 % as determined by HPLC.

Calculated MW	Observed MW
31.5 kDa(FCGRT), 11.7 kDa(B2M)	35-40 kDa (FCGRT), 13-14 kDa (B2M)

### Endotoxin

&lt; 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 freeze-thaw cycles.

## Contact

 | 400-999-6126

## Background

The neonatal Fc receptor (FCRN) is an approximately 45 kDa transmembrane glycoprotein with structural homology to MHC class I proteins. It is widely expressed in endothelial and epithelial cells and plays an important role in IgG homeostasis and antigen presentation by dendritic cells. FCGRT & B2M heterodimer protein (FcRn complex) consist of two subunits: p51, and p14, and forms an MHC class I-like heterodimer.

## Basic Information

### Description

Recombinant Human FcRn/FCGRT&B2M Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Ala24-Ser297)&(Ile21-Met119) of Human FcRn/FCGRT&B2M (Accession #P55899-1&P61769-1) fused with a C-His 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.

### Storage

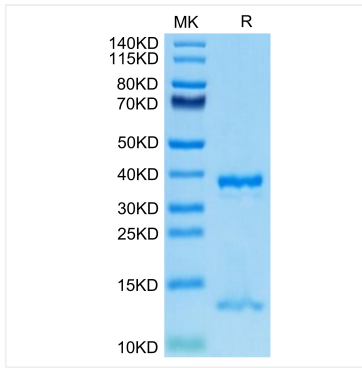
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

### Operational Notes

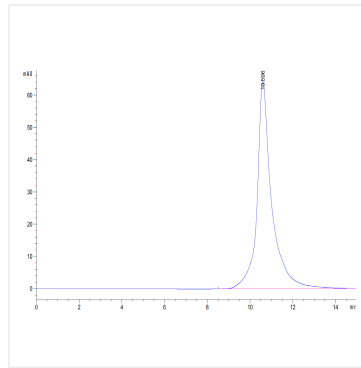
For your safety and health, please wear a lab coat and disposable gloves for handling.



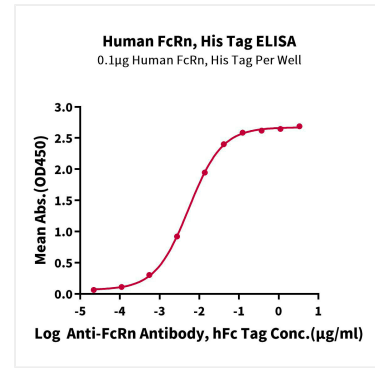
## Validation Data



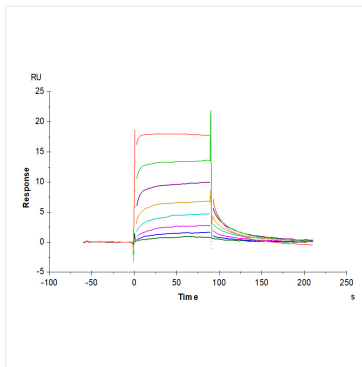
Recombinant Human FcRn/FCGRT&B2M Protein was determined by Tris-Bis PAGE under reducing conditions.



The purity of Human FcRn is greater than 95% as determined by SEC-HPLC.



Immobilized Human FcRn, His Tag at 1 µg/mL (100 µL/well) on the plate. Dose response curve for Anti-FcRn Antibody, hFc Tag with the  $EC_{50}$  of 5.4ng/mL determined by ELISA (QC Test).



Human FcRn, His Tag captured on CM5 Chip via anti-his antibody can bind Human IgG1 Fc, No Tag with an affinity constant of 0.28 µM as determined in SPR assay (Biacore T200).