

Recombinant Human FcRn/FCGRT&B2M Protein

Catalog No.: RP00468 Recombinant

Sequence Information

Species Gene ID Swiss Prot Human 2217 P55899-1(FC

> GRT)&P6176 9-1(B2M)

Tags

C-His

Synonyms

FcRn alpha chain; FCGRT; FCRN; FCGRT&B2M

Product Information

Source Purification HEK293 cells > 95% by SDS-

PAGE[]> 95% by

...-

Calculated MW Observed MW

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

Endotoxin

< 1 EU/ μ g 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 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

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

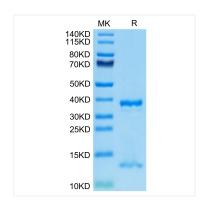
Storage

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

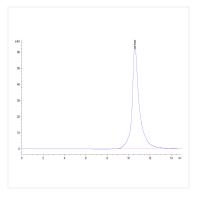
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

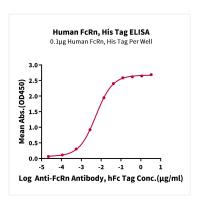
Validation Data



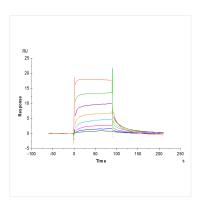
Human FcRn on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.



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



Immobilized Human FcRn, His Tag at 1 μ g/mL (100 μ L/well) on the plate. Dose response curve for Anti-FcRn Antibody, hFc Tag with the EC₅₀ 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 μ M as determined in SPR assay (Biacore T200).