

Human FcRn Protein

Cat. No. FRN-HM101

Description

Source	Recombinant Human FcRn Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Ala24-Ser297(FCGRT) & Ile21-Met119(B2M).
Accession	P55899-1(FCGRT)&P61769-1(B2M)
Molecular Weight	The protein has a predicted MW of 31.5 kDa (FCGRT) & 11.7 kDa (B2M). Due to glycosylation, the protein migrates to 35-40 kDa (FCGRT) & 13-14 kDa (B2M) based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per ug by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

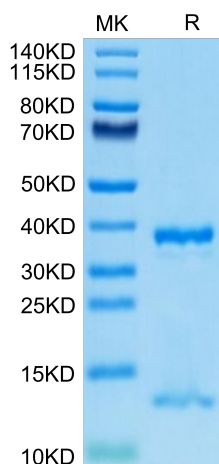
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

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.

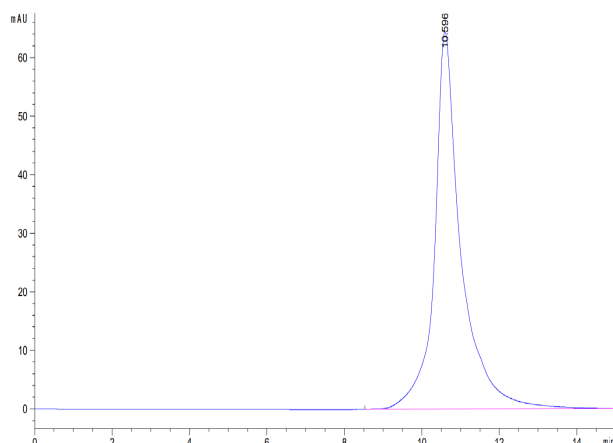
Assay Data

Tris-Bis PAGE



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

SEC-HPLC



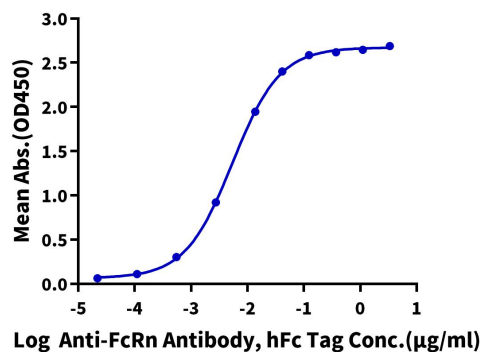
The purity of Human FcRn is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

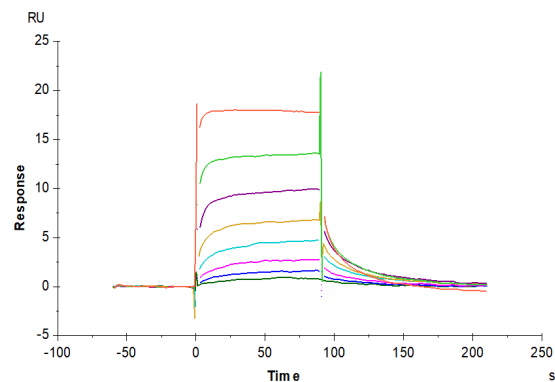
Human FcRn, His Tag ELISA

0.1µg Human FcRn, His Tag Per Well



Immobilized Human FcRn, His Tag at 1µg/ml (100µl/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).

SPR Data



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).