## Human FcRn Protein

#### Cat. No. FRN-HM101



Description	
Source	Recombinant Human FcRn Protein is expressed from HEK293 with His tag at the C-Terminus of FCGRT.
	It contains Ala24-Ser297(FCGRT) and 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 Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per ug by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

# Formulation and Storage

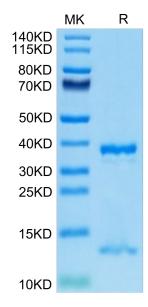
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt80°C for 3 months 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**

### **Bis-Tris PAGE**

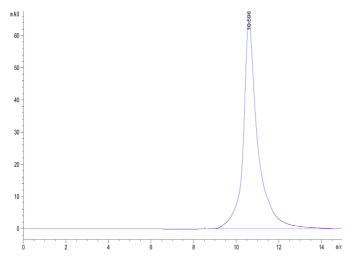


Human FcRn on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

**SEC-HPLC** 

# KAGTUS

## **Assay Data**

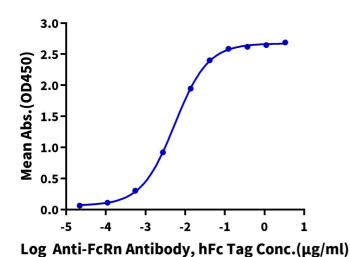


The purity of Human FcRn is greater than 95% as determined by SEC-HPLC.

### **ELISA Data**

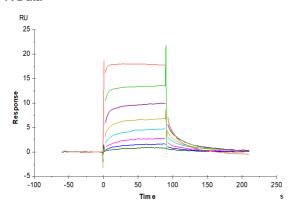
# **Human FcRn, His Tag ELISA**

0.1μg Human FcRn, His Tag Per Well



Immobilized Human FcRn, His Tag at 1  $\mu$ g/ml (100  $\mu$ l/well) on the plate. Dose response curve for Anti-FcRn Antibody, hFc Tag with the EC50 of 5.4 ng/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  $\mu$ M as determined in SPR assay (Biacore T200).