

Biotinylated Human FcRn Protein, Ultra Low Endotoxin



Cat. No. FRN-HM401B-UL

Description	
Source	Recombinant Biotinylated Human FcRn Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Ala24-Ser297(FCGRT)&Ile21-Met119(B2M).
Accession	P55899(FCGRT)&P61769((B2M)
Molecular Weight	The protein has a predicted MW of 46.5 kDa. Due to glycosylation, the protein migrates to 48-55 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.01 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

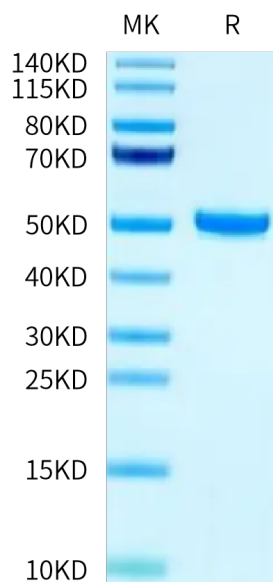
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for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

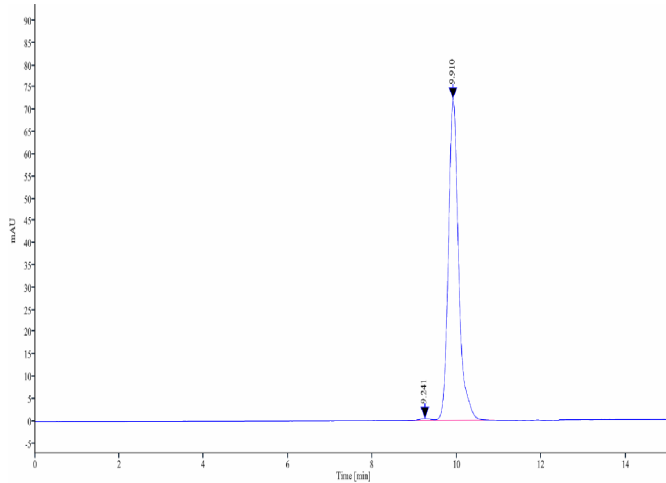
Bis-Tris PAGE



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

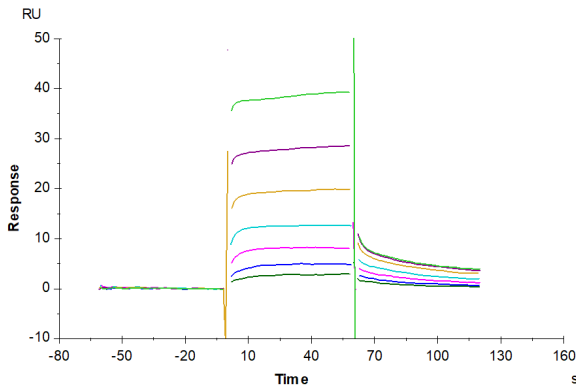
SEC-HPLC

Assay Data

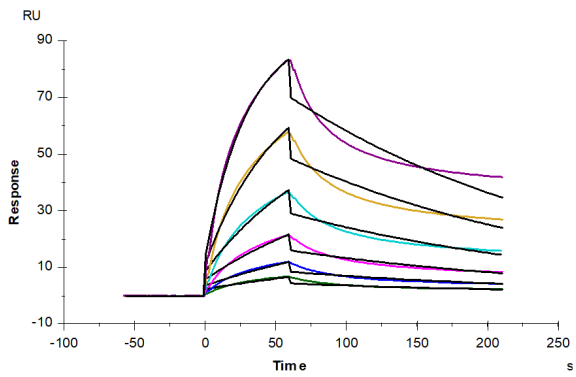


The purity of Biotinylated Human FcRn is greater than 95% as determined by SEC-HPLC.

SPR Data

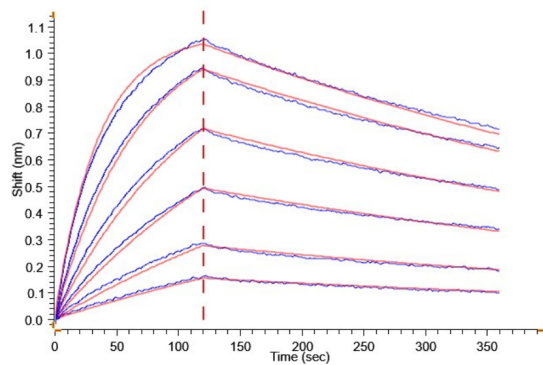


Biotinylated Human FcRn, His Tag captured on CM5 Chip via anti-his antibody can bind Trastuzumab with an affinity constant of 0.557 uM as determined in SPR assay (Biacore T200).



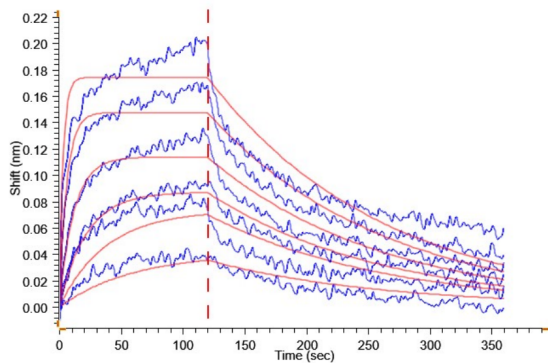
Human Serum Albumin, His Tag (Cat. BSA-HM101) immobilized on CM5 Chip can bind Biotinylated Human FcRn, His-Avi Tag with an affinity constant of 16.35 nM as determined in SPR assay (Biacore T200).

BLI Data



Loaded Biotinylated Human FcRn, His-Avi Tag on Streptavidin-Biosensor can bind Human Serum Albumin, Llama Fc Tag (Cat. BSA-HM501) with an affinity constant of 24.7 nM as determined in BLI assay.

Assay Data



Loaded Biotinylated Human FcRn, His-Avi Tag on Streptavidin-Biosensor can bind Human IgG1 Fc, No Tag (Cat. IGG-HM001) with an affinity constant of 22.8 nM as determined in BLI assay.