

# Mouse FcRn Protein

Cat. No. FRN-MM101



## Description

<b>Source</b>	Recombinant Mouse FcRn Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Ser22-Ser297 (FCGRT)&Ile21-Met119 (B2M).
<b>Accession</b>	Q61559(FCGRT)&P01887(B2M)
<b>Molecular Weight</b>	The protein has a predicted MW of 32.1 kDa (FCGRT)&11.7 kDa (B2M). Due to glycosylation, the protein migrates to 50-55 kDa (FCGRT)&14-15 kDa (B2M) based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1 EU per ug by the LAL method.
<b>Purity</b>	>95% as determined by Bis-Tris PAGE >95% as determined by HPLC

## Formulation and Storage

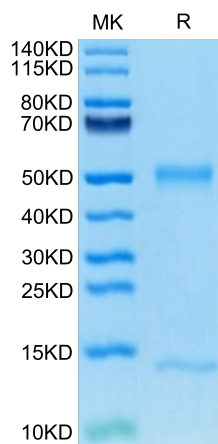
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-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.

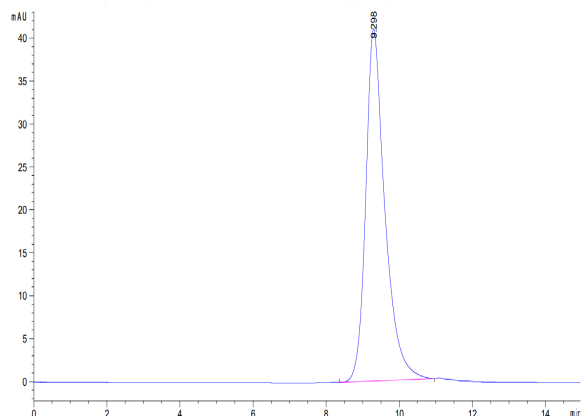
## Assay Data

### Bis-Tris PAGE



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

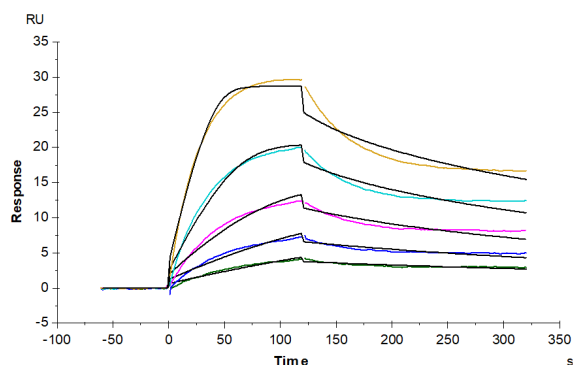
### SEC-HPLC



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

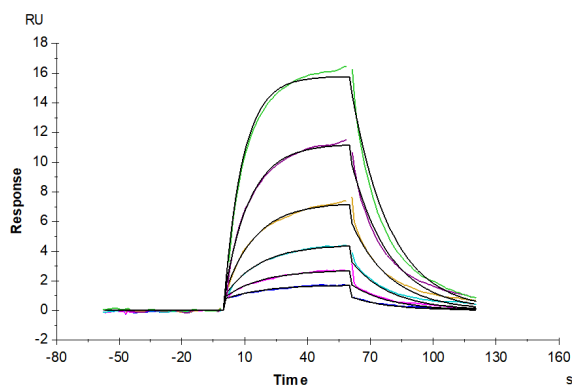
Assay Data

SPR Data



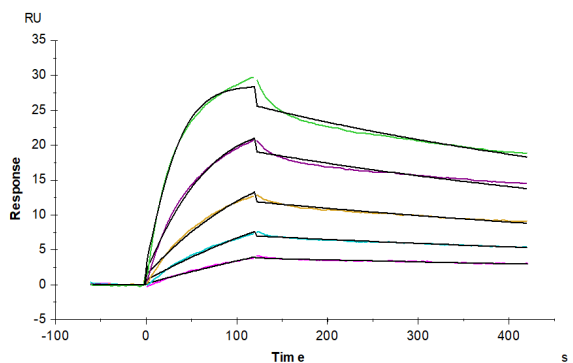
Mouse FcRn, His Tag captured on CM5 Chip via anti-his antibody can bind Trastuzumab with an affinity constant of 1.76 nM as determined in SPR assay (Biacore T200) (QC Test).

SPR Data



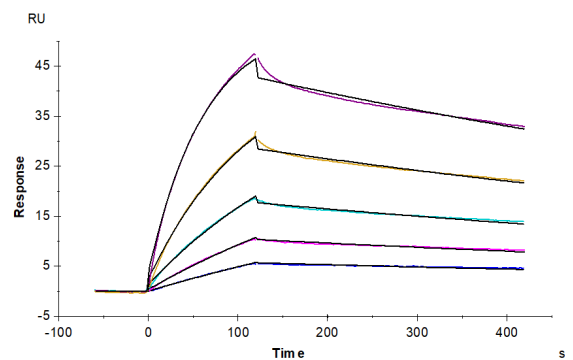
Mouse Serum Albumin, His Tag immobilized on CM5 Chip can bind Mouse FcRn, His Tag with an affinity constant of 0.18  $\mu$ M as determined in SPR assay (Biacore T200).

SPR Data



Mouse FcRn, His Tag captured on CM5 Chip via Anti-His Antibody can bind Mouse IgG2a Fc, No Tag with an affinity constant of 2.72 nM as determined in SPR assay (Biacore T200).

SPR Data



Mouse FcRn, His Tag captured on CM5 Chip via anti-his antibody can bind Mouse IgG1 Fc, No Tag with an affinity constant of 15.09 nM as determined in SPR assay (Biacore T200).