

# Rat FcRn Protein

Cat. No. FRN-RM101



## Description

<b>Source</b>	Recombinant Rat FcRn Protein is expressed from HEK293 with His tag at the C-terminus. It contains Ala23-Ser298 (FCGRT) and Ile21-Met119 (B2M).
<b>Accession</b>	P13599(FCGRT)&P07151(B2M)
<b>Molecular Weight</b>	The protein has a predicted MW of 32.60 kDa (FCGRT) and 11.63 kDa (B2M). Due to glycosylation, the protein migrates to 45-60 kDa (FCGRT) and 13-15 kDa (B2M) based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

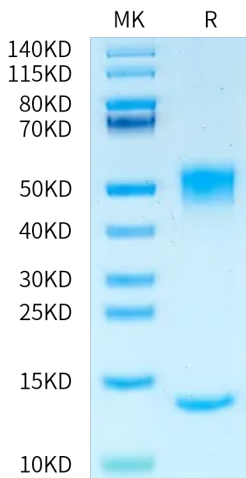
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein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

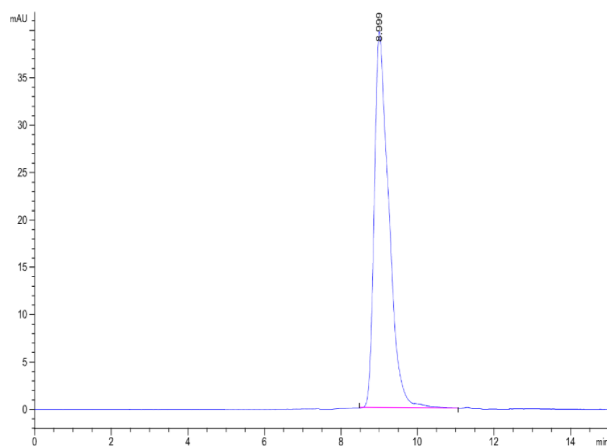
## Assay Data

### Bis-Tris PAGE



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

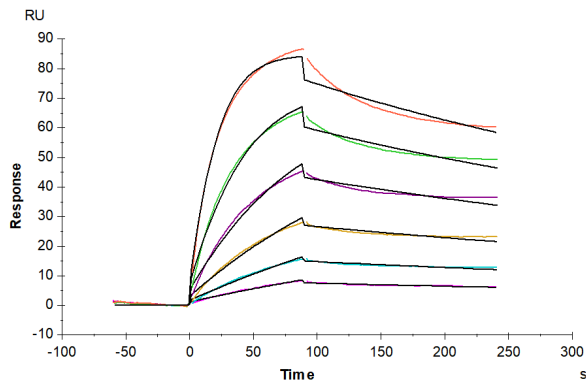
### SEC-HPLC



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

Assay Data

SPR Data



Rat FcRn, His Tag captured on CM5 Chip via Anti-His Antibody can bind Trastuzumab with an affinity constant of 3.26 nM as determined in SPR assay (Biacore T200).