

Biotinylated Rat FcRn Protein

Cat. No. FRN-RM401B

Description

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| Source | Recombinant Biotinylated Rat FcRn Protein is expressed from HEK293 with His tag and Avi Tag at the C-terminus of FCGRT. It contains Ala23-Ser298(FCGRT) and Ile21-Met119(B2M). |
| Accession | P13599(FCGRT)&P07151(B2M) |
| Molecular Weight | The protein has a predicted MW of 33.9 kDa (FCGRT) and 11.63 kDa (B2M). Due to glycosylation, the protein migrates to 45-60 kDa (FCGRT) and 12-14 kDa (B2M) based on Bis-Tris PAGE result. |
| Endotoxin | Less than 1 EU per µg by the LAL method. |
| Purity | > 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC |

Formulation and Storage

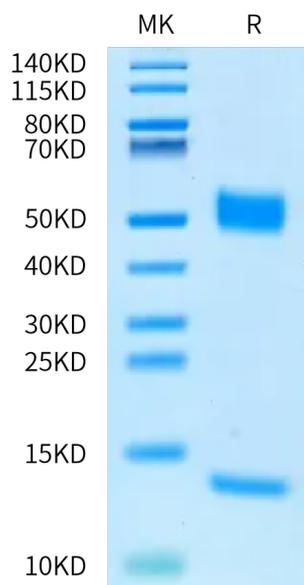
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|-----------------------|---|
| Formulation | Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization. |
| Reconstitution | Dissolve the lyophilized protein in distilled water. 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

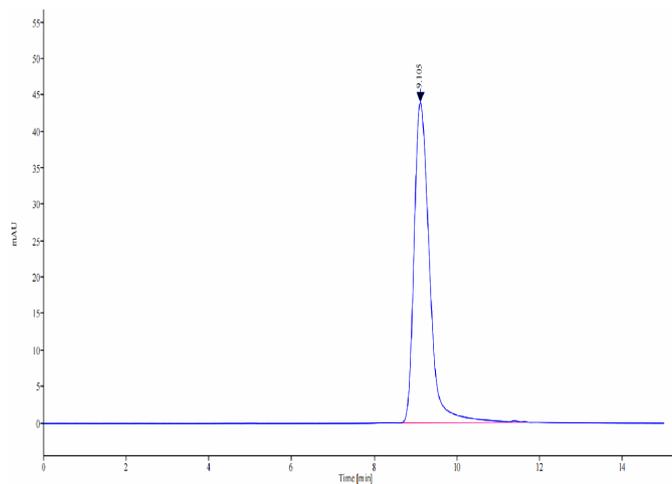
Bis-Tris PAGE



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

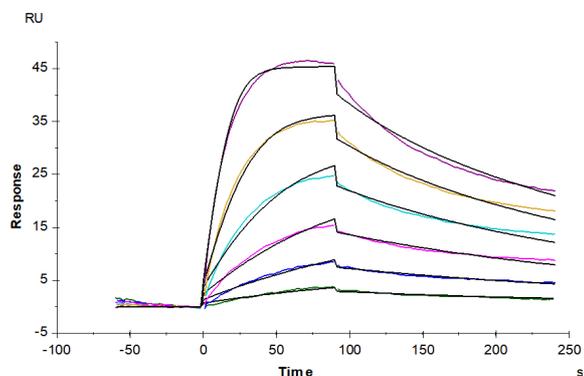
SEC-HPLC

Assay Data



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

SPR Data



Biotinylated Rat FcRn, His Tag captured on CM5 Chip via Anti-His Antibody can bind Trastuzumab with an affinity constant of 5.08 nM as determined in SPR assay (Biacore T200).