

Cynomolgus/Rhesus macaque FcRn Protein

Cat. No. FRN-CM101

Description

Source	Recombinant Cynomolgus/Rhesus macaque FcRn Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Ala24-Ser297 (FCGRT) and Ile21-Met119 (B2M).
Accession	Q8SPV9(FCGRT)&Q8SPW0(B2M)
Molecular Weight	The protein has a predicted MW of 31.5 kDa (FCGRT) and 11.6 kDa (B2M). Due to glycosylation, the protein migrates to 35-38 kDa (FCGRT) and 13-15 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

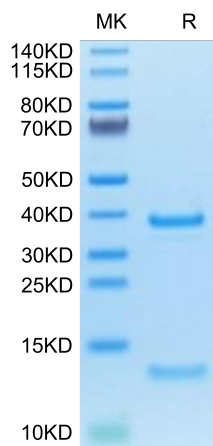
Formulation	Lyophilized from 0.22 µm filtered solution in 20mM PB, 250mM NaC (pH 8.0). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
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.

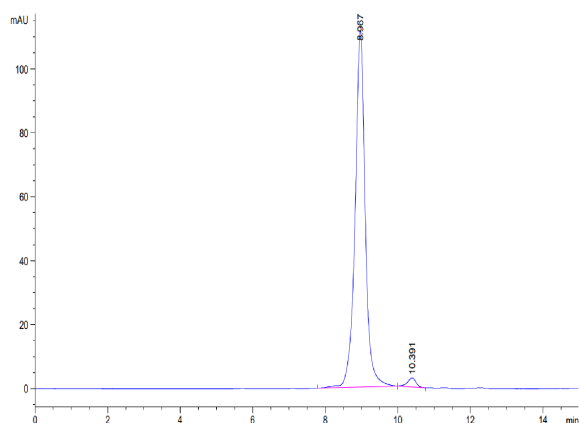
Assay Data

Bis-Tris PAGE



Cynomolgus/Rhesus macaque FcRn on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



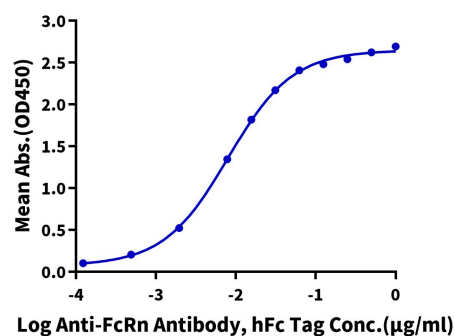
The purity of Cynomolgus/Rhesus macaque FcRn is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

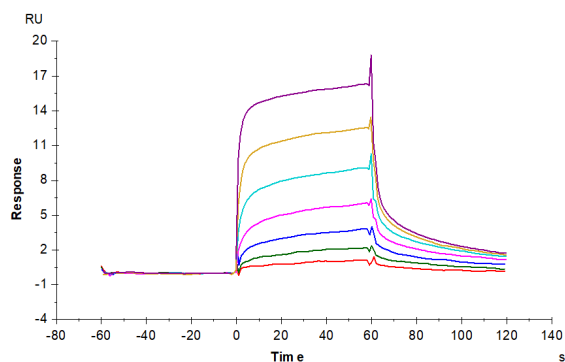
Cynomolgus/Rhesus macaque FcRn, His Tag ELISA

0.2µg Cynomolgus/Rhesus macaque FcRn, His Tag Per Well



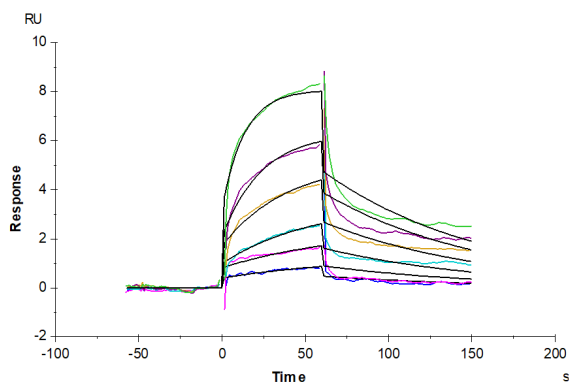
Immobilized Cynomolgus/Rhesus macaque FcRn, His Tag at 2 µg/ml (100 µl/well) on the plate. Dose response curve for Anti-FcRn Antibody, hFc Tag with the EC50 of 8.0 ng/ml determined by ELISA (QC Test).

SPR Data



Cynomolgus/Rhesus macaque FcRn, His Tag captured on CM5 Chip via Anti-His Antibody can bind Trastuzumab with an affinity constant of 0.18 µM as determined in SPR assay (Biacore T200).

SPR Data



Cynomolgus Serum Albumin, His Tag immobilized on CM5 Chip can bind Cynomolgus/Rhesus macaque FcRn, His Tag with an affinity constant of 0.13 µM as determined in SPR assay (Biacore T200).