



Synonym

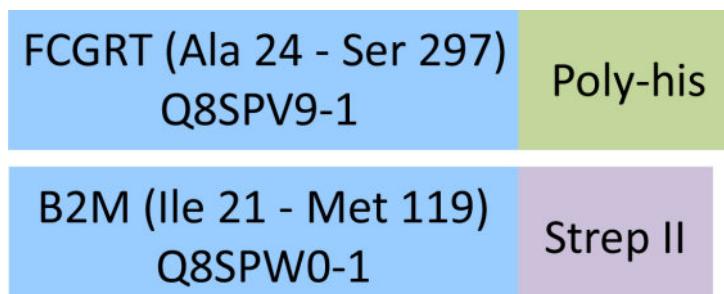
FcRn, FCGRT & B2M

Source

Cynomolgus / Rhesus macaque FCGRT&B2M Heterodimer Protein, His Tag&Strep II Tag (FCM-C5284), is expressed from human 293 cells (HEK293). It contains AA Ala 24 - Ser 297 (FCGRT) & Ile 21 - Met 119 (B2M) (Accession # [Q8SPV9-1](#) (FCGRT) & [Q8SPW0-1](#) (B2M)). In the region Ala 24 - Ser 297 (FCGRT) & Ile 21 - Met 119 (B2M), the AA sequence of Cynomolgus and Rhesus macaque FcRn (FCGRT & B2M) are homologous.

Predicted N-terminus: Ala 24 (FCGRT) & Ile 21 (B2M)

Molecular Characterization

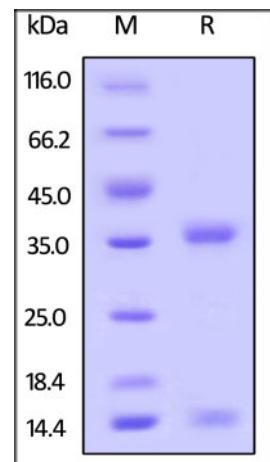


Cynomolgus / Rhesus macaque FCGRT&B2M Heterodimer Protein, His Tag&Strep II Tag, produced by co-expression of FCGRT and B2M, has a calculated MW of 32.3 kDa (FCGRT) and 13.1 kDa (B2M). Subunit FCGRT is fused with a polyhistidine tag at the C-terminus and subunit Beta-2 microglobulin (B2M) is fused with Strep II-tag at the C-terminus. The reducing (R) protein migrates as 36 kDa (FCGRT) and 14 kDa (B2M) respectively due to glycosylation.

Endotoxin

Less than 1.0 EU per μ g by the LAL method / rFC method.

SDS-PAGE



Cynomolgus / Rhesus macaque FCGRT&B2M Heterodimer Protein, His Tag&Strep II Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μ m filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

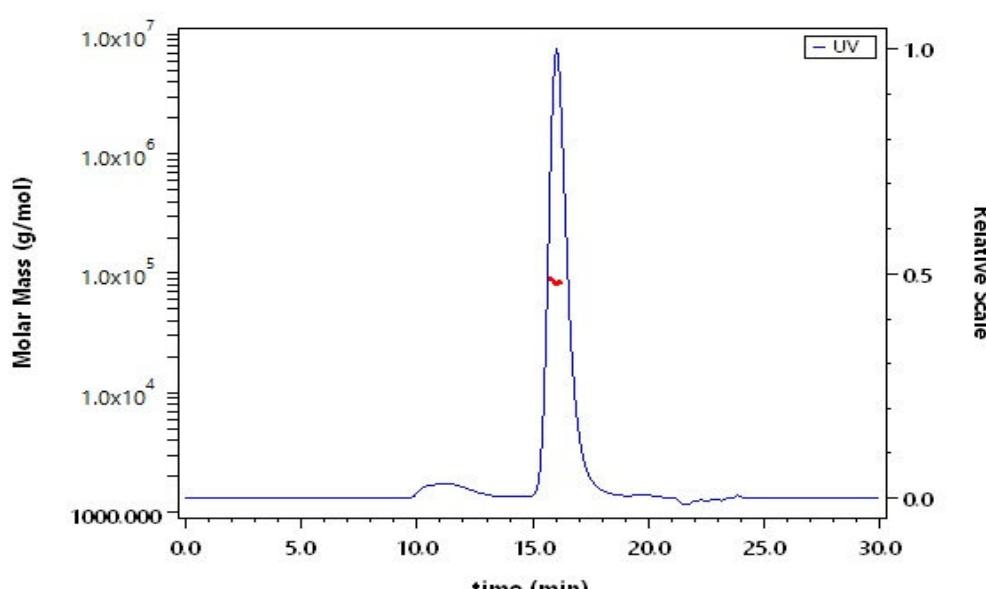
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 12 months under sterile conditions after reconstitution.

SEC-MALS



The purity of Cynomolgus / Rhesus macaque FCGRT&B2M Heterodimer Protein, His Tag&Strep II Tag (Cat. No. FCM-C5284) is more than 95% and

Discounts, Gifts,
and more!

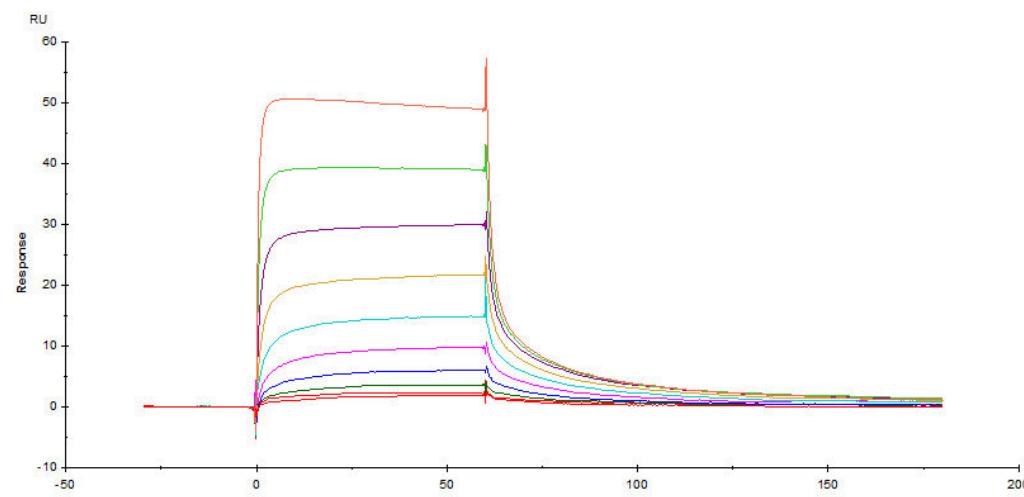




the molecular weight of this protein is around 65-75 kDa verified by SEC-MALS.

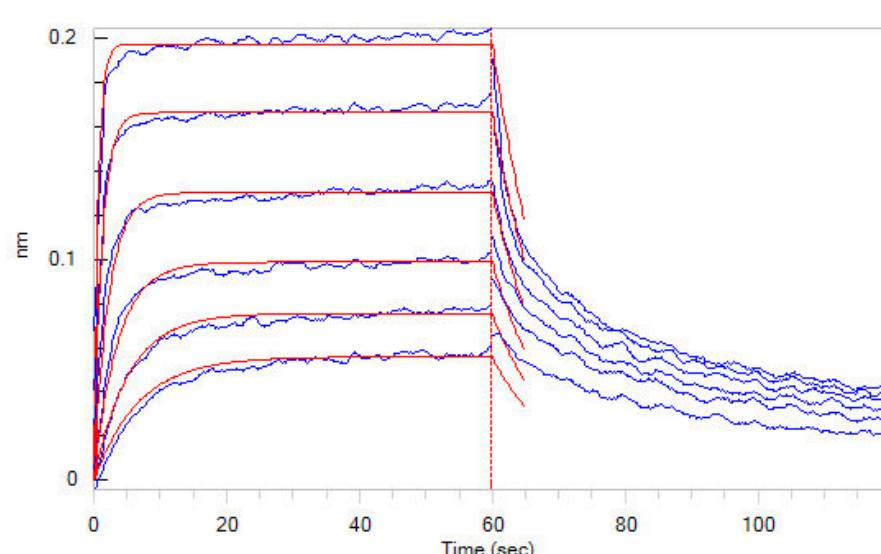
[Report](#)

Bioactivity-SPR

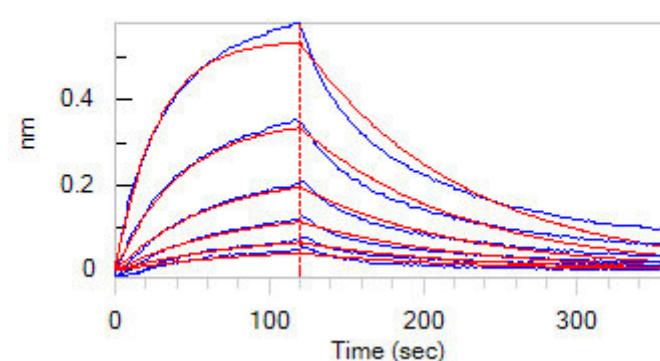


Immobilized Cynomolgus / Rhesus macaque FCGRT&B2M Heterodimer Protein, His Tag&Strep II Tag (Cat. No. FCM-C5284) on CM5 Chip via anti-His antibody, can bind Herceptin with an affinity constant of $0.403 \mu\text{M}$ as determined in a SPR assay (Biacore T200) (QC tested).

Bioactivity-BLI



Loaded Cynomolgus / Rhesus macaque FCGRT&B2M Heterodimer Protein, His Tag&Strep II Tag (Cat. No. FCM-C5284) on SA Biosensor via Biotin his antibody, can bind Herceptin with an affinity constant of $0.13 \mu\text{M}$ as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Biotinylated Cynomolgus Serum Albumin, His,Avitag on SA Biosensor, can bind Cynomolgus / Rhesus macaque FCGRT&B2M Heterodimer Protein, His Tag&Strep II Tag (Cat. No. FCM-C5284) with an affinity constant of $0.684 \mu\text{M}$ as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

FCGRT & B2M heterodimer protein (FcRn complex) consist of two subunits: p51 (equivalent to FCGRT), and p14 (equivalent to beta-2-microglobulin), and forms an MHC class I-like heterodimer. Fc fragment of IgG, receptor, transporter, alpha (FCGRT) binds to the Fc region of monomeric immunoglobulins gamma and mediates the uptake of IgG from milk. FCGRT possible role in transfer of immunoglobulin G from mother to fetus. Beta-2-microglobulin (B2M) is a component of the class I major histocompatibility complex (MHC) and involved in the presentation of peptide antigens to the immune system.

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