

Synonym

FcRn,FCGRT & B2M

Source

Rabbit FCGRT&B2M Heterodimer Protein, His Tag&Tag Free(FCM-R52W5) is expressed from human 293 cells (HEK293). It contains AA Ala 24 - Val 297 (FCGRT) & Val 22 - Tyr 120 (B2M) (Accession # [ABY47597.1](#) (FCGRT) & [ALR85722.1](#) (B2M)).
Predicted N-terminus: Ala 24 (FCGRT) & Val 22 (B2M)

Molecular Characterization

FcGRT (Ala 24 - Val 297) ABY47597.1	Poly-his
B2M (Val 22 - Tyr 120) ALR85722.1	

Rabbit FCGRT&B2M Heterodimer Protein, His Tag&Tag Free, produced by co-expression of FCGRT and B2M, has a calculated MW of 32.1 kDa (FCGRT) and 11.7 kDa (B2M). Subunit FCGRT is fused with a polyhistidine tag at the C-terminus and subunit Beta-2 microglobulin (B2M) contains no tag at the C-terminus. The reducing (R) protein migrates as 34 kDa (FCGRT) and 12 kDa (B2M) respectively due to glycosylation.

Endotoxin

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

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm 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

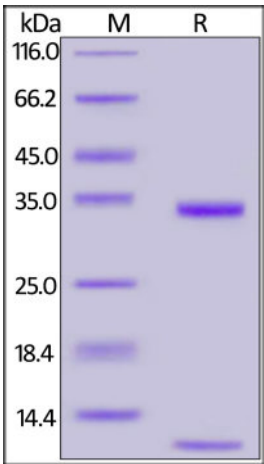
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

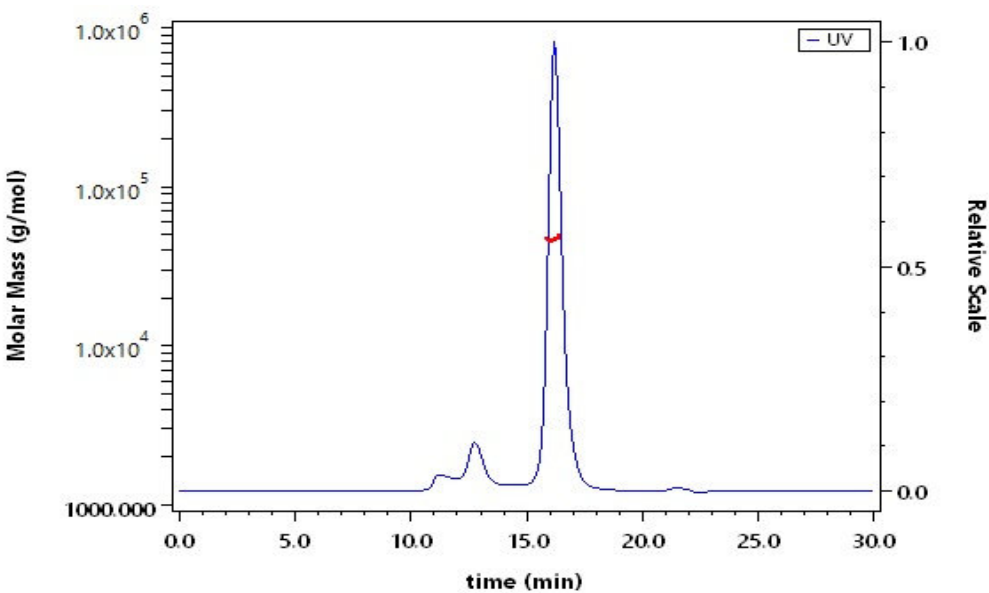
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 12 months under sterile conditions after reconstitution.

SDS-PAGE



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

SEC-MALS

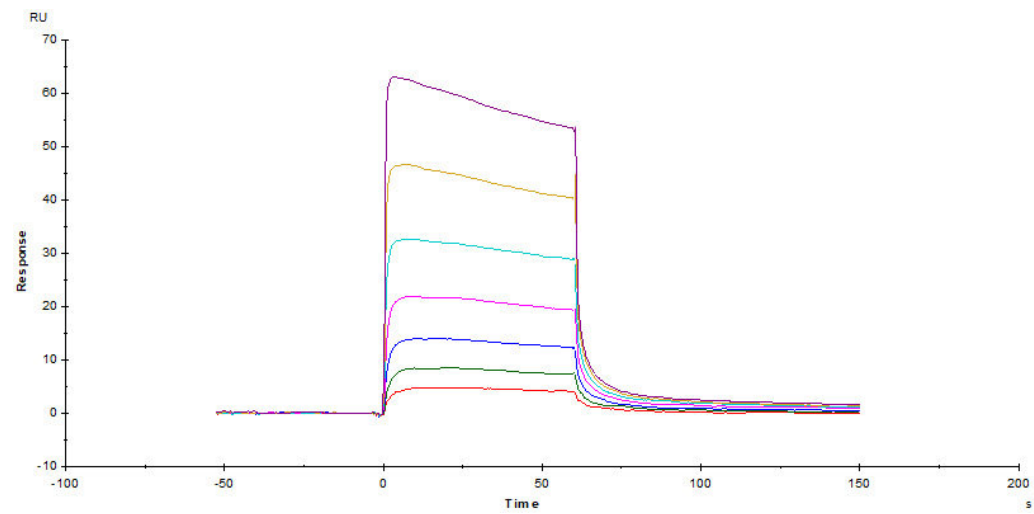


The purity of Rabbit FCGRT&B2M Heterodimer Protein, His Tag&Tag Free (Cat. No. FCM-R52W5) is more than 95% and the molecular weight of this protein is around 42-55 kDa verified by SEC-MALS.

[Report](#)

Bioactivity-SPR





Rabbit FCGRT&B2M Heterodimer Protein, His Tag&Tag Free (Cat. No. FCM-R52W5) captured on CM5 Chip via anti-His antibody can bind Herceptin® with an affinity constant of 2.28 μ M as determined in SPR assay (Biacore 8K) (QC 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.

