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Recombinant Human FcRn/FCGRT&B2M Protein

Catalog No.: RP01037 Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Human	2217/567	P55899/P61769

Tags
C-His(FCGRT)&No tag(B2M)

Synonyms
FCRN

Product Information

Source	Purification
HEK293 cells	≥ 95 % as determined by SDS-PAGE.

Calculated MW	Observed MW
30.38 kDa(FCGRT), 11.73 kDa(B2M)	38 kDa(FCGRT), 14(B2M) kDa

Endotoxin
< 0.1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

400-999-6126

cn.market@abclonal.com.cn

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 MHC class I molecules, MHC class I molecules have α1, α2, and α3 proteins which are present on all nucleated cells (excludes red blood cells) and B2M involved in the presentation of peptide antigens to the immune system.

Basic Information

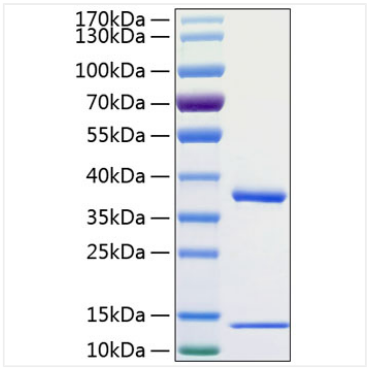
Description
Recombinant Human FcRn/FCGRT&B2M Protein is produced by HEK293 cells expression system. The target heterodimer proteins are co-expressed with the sequence (Ala24-Ser297) of human FCGRT (Accession #NP_004098.1) fused with a 6×His tag at the C-terminus and the sequence (Ile21-Met119) of human B2M (Accession #NP_004039.1).

Bio-Activity
1.Measured by its binding ability in a functional ELISA. Immobilized Human FCGRT&B2M at 5 μg/mL (100 μL/well) can bind biotinylated human IgG1 with a linear range of 1-6μg/mL.|2.Immobilized Trastuzumab on COOH Chip can bind Human FCGRT&B2M Heterodimer Protein with an affinity constant of 0.22 μM as determined in a SPR assay (OpenSPR).

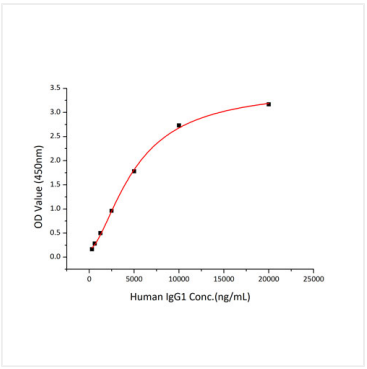
Storage
Store at -20℃.Store the lyophilized protein at -20℃ to -80 ℃ up to 1 year from the date of receipt.
After reconstitution, the protein solution is stable at -20℃ for 3 months, at 2-8℃ for up to 1 week.
Avoid repeated freeze/thaw cycles.

* 为了您的安全和健康，请穿实验服并戴一次性手套操作。

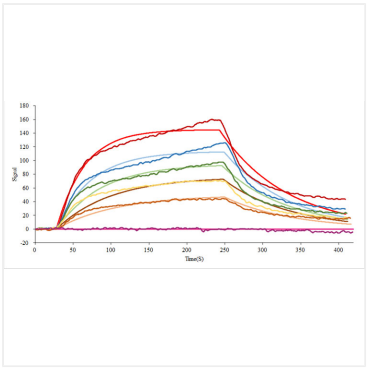
Validation Data



Recombinant Human FcRn/FCGRT&B2M Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized Human FCGRT&B2M at 5μg/mL (100 μL/well) can bind biotinylated human IgG1 with a linear range of 1-6μg/mL.



Immobilized Trastuzumab on COOH Chip, can bind Human FCGRT&B2M Heterodimer Protein with an affinity constant of 0.22 μM as determined in a SPR assay (OpenSPR).