

## Datasheet for ABIN7534672

### FcRn Protein



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#### Overview

|                      |               |
|----------------------|---------------|
| Quantity:            | 100 µg        |
| Target:              | FcRn          |
| Origin:              | Human         |
| Source:              | HEK-293 Cells |
| Protein Type:        | Recombinant   |
| Biological Activity: | Active        |

#### Product Details

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purpose:                     | Active Recombinant Human FcRn Protein                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Sequence:                    | <p>AESHLSELLYH LTAVSSPAPG TPAFWVSGWL GPQQYLSYNS LRGEAEPCGA VVWENQVSWY</p> <p>WEKETDRLRI KEKLFLEAFK ALGGKGPLYL QLLGCELGP DNTSVPTAKF ALNGEEFMNF</p> <p>DLKQGTWGGD WPEALAISQR WQQQDKAANK ELTFLFSCP HRLREHLERG RGNLEWKEPP</p> <p>SMRLKARPSS PGFSVLTCSA FSFYPPQL RFLRNGLAAG TGQGDFGPNS DGSFHASSSL</p> <p>TVKSGDEHHY CCIVQHAGLA QPLRVELESP AKSS//IQRTPKIQVY SRHPAENGKS NFLNCYVSGF</p> <p>HPSDIEVDLL KNGERIEKVE HSDLSFSKDW SFYLLYYTEF TPTEKDEYAC RVNHVTLTSQP</p> <p>KIVKWDRDM</p> |
| Specificity:                 | Ala24-Ser297(FCGRT)&Ile21-Met119(B2M)                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Purity:                      | > 97 % by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Sterility:                   | 0.22 µm filtered                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Endotoxin Level:             | < 0.1 EU/µg of the protein by LAL method.                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Biological Activity Comment: | 1.Measured by its binding ability in a functional ELISA. Immobilized Human FCGRT&B2M at 5 µ                                                                                                                                                                                                                                                                                                                                                                                |

## Product Details

g/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).

## Target Details

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|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Target:           | FcRn                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Alternative Name: | FcRn ( <a href="#">FcRn Products</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Background:       | <p>Description: FCGRT &amp; 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.</p> <p>Name: FCRN</p> |
| Gene ID:          | 2217                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| UniProt:          | <a href="#">P55899</a> , <a href="#">P61769</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Pathways:         | <a href="#">Regulation of Leukocyte Mediated Immunity</a> , <a href="#">Positive Regulation of Immune Effector Process</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## Application Details

|               |                       |
|---------------|-----------------------|
| Restrictions: | For Research Use only |
|---------------|-----------------------|

## Handling

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|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Format:         | Lyophilized                                                                                                                                                                                                                                                                                                                                                                           |
| 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 stabilizer (e.g. 0.1 % BSA, 5 % HSA, 10 % FBS or 5 % Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles. |
| Buffer:         | Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.                                                                                                                                                                                                                                                                                                                          |
| Storage:        | -20 °C, -80 °C                                                                                                                                                                                                                                                                                                                                                                        |

## Handling

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Storage Comment: Store the lyophilized protein at -20°C to -80 °C for long term.  
After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week.