Anti-FCGRT Antibody

HA500006



Product Type: Rabbit polyclonal IgG, primary antibodies

Species reactivity: Human

Applications: WB, FC

Molecular Wt: Predicted band size: 40 kDa.

Description: This gene encodes a receptor that binds the Fc region of monomeric immunoglobulin G.

The encoded protein transfers immunoglobulin G antibodies from mother to fetus across the placenta. This protein also binds immunoglobulin G to protect the antibody from degradation. Alternative splicing results in multiple transcript variants. Cell surface receptor that transfers passive humoral immunity from the mother to the newborn. Binds to the Fc region of monomeric immunoglobulin gamma and mediates its selective uptake from milk. IgG in the milk is bound at the apical surface of the intestinal epithelium. The resultant FcRn-IgG complexes are transcytosed across the intestinal epithelium and IgG is released from FcRn into blood or tissue fluids. Throughout life, contributes to effective humoral immunity by recycling IgG and extending its half-life in the circulation. Mechanistically, monomeric IgG binding to FcRn in acidic endosomes of endothelial and hematopoietic cells recycles IgG to the cell surface where it is released into the circulation. In addition of IgG, regulates homeostasis of the other most abundant

circulating protein albumin/ALB.

Immunogen: Synthetic peptide within human FCGRT aa 300-365.

Positive control: THP-1 cell lysates, THP-1.

Subcellular location: Cell membrane, Endosome, Membrane.

Database links: SwissProt: P55899 Human

Recommended Dilutions:

WB 1:500-1:1,000 **FC** 1:50-1:200

Storage Buffer: 1*TBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.



Images

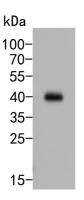


Fig1: Western blot analysis of FCGRT on THP-1 cell lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (HA500006, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.

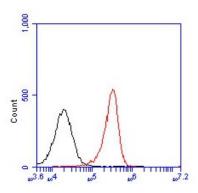


Fig2: Flow cytometric analysis of FCGRT was done on THP-1 cells. The cells were fixed, permeabilized and stained with the primary antibody (HA500006, 1/50) (red). After incubation of the primary antibody at room temperature for an hour, the cells were stained with a Alexa Fluor 488-conjugated Goat anti-Rabbit IgG Secondary antibody at 1/1000 dilution for 30 minutes. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Morosky S. et. al. The neonatal Fc receptor is a pan-echovirus receptor. Proc. Natl. Acad. Sci. U.S.A. 116:3758-3763(2019).

