

FCGRT Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19288b

Product Information

Application WB, E **Primary Accession** P55899 Other Accession NP 004098.1 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB39368 Calculated MW 39743 330-357 **Antigen Region**

Additional Information

Gene ID 2217

Other Names IgG receptor FcRn large subunit p51, FcRn, IgG Fc fragment receptor

transporter alpha chain, Neonatal Fc receptor, FCGRT, FCRN

Target/Specificity This FCGRT antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 330-357 amino acids from the

C-terminal region of human FCGRT.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions FCGRT Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name FCGRT

Synonyms FCRN

Function 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 (PubMed:10933786, PubMed:7964511). 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 (PubMed:10998088). In addition of IgG, regulates homeostasis of the other most abundant circulating protein albumin/ALB (PubMed:24469444, PubMed:28330995).

Cellular Location Cell membrane {ECO:0000250 | UniProtKB:P13599}; Single-pass type I

membrane protein. Endosome membrane

Tissue Location Expressed in full-term placenta, heart, lung, liver, muscle, kidney, pancreas,

and both fetal and adult small intestine.

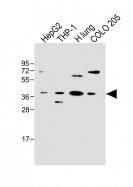
Background

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.

References

Mezo, A.R., et al. J. Biol. Chem. 285(36):27694-27701(2010) Freiberger, T., et al. Clin. Immunol. 136(3):419-425(2010) Han, S., et al. Hum. Immunol. 71(7):727-730(2010) Freiberger, T., et al. J. Reprod. Immunol. 85(2):193-197(2010) Mikulska, J.E., et al. Eur. J. Immunogenet. 27(4):231-240(2000)

Images



All lanes: Anti-FCGRT Antibody (C-term) at 1:500 dilution Lane 1: HepG2 whole cell lysate Lane 2: THP-1 whole cell lysate Lane 3: Human lung lysate Lane 4: COLO 205 whole cell lysate Lysates/proteins at 20 ug per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 40 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.