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Anti-FCRN/FCGRT Picoband Antibody

Catalog # ABO12552

Specification

Anti-FCRN/FCGRT Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P55899
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for IgG receptor FcRn large subunit p51(FCGRT) detection. Tested with WB, IHC-P in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-FCRN/FCGRT Picoband Antibody - 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

Calculated MW
39743 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Cell membrane ; Single-pass type I membrane protein .

Protein Name
IgG receptor FcRn large subunit p51

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E. coli-derived human FCGRT recombinant protein (Position: Q56-E291). Human FCGRT shares 70.2% and 68.9% amino acid (aa) sequence identity with mouse and rat FCGRT, respectively.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-FCRN/FCGRT Picoband Antibody - 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.

Anti-FCRN/FCGRT Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-FCRN/FCGRT Picoband Antibody - Images

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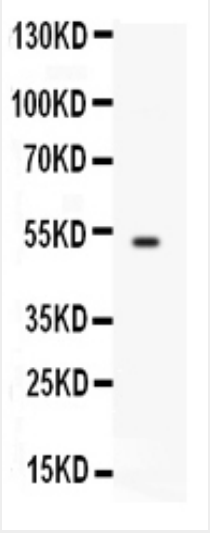
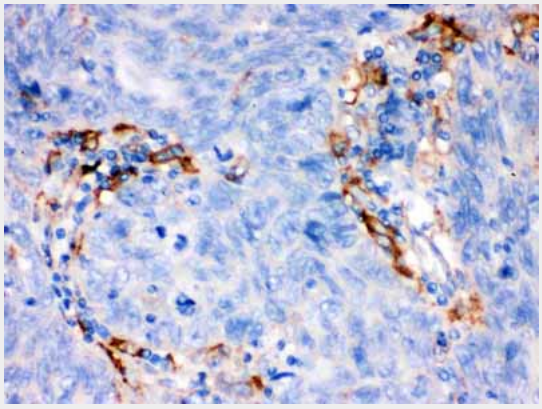


Western blot analysis of FCGRT expression in A549 whole cell lysates (lane 1). FCGRT at 50KD was detected using rabbit anti- FCGRT Antigen Affinity purified polyclonal antibody (Catalog # ABO12552) at0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .



FCGRT was detected in paraffin-embedded sections of human lung cancer tissues using rabbit anti- FCGRT Antigen Affinity purified polyclonal antibody (Catalog # ABO12552) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

Anti-FCRN/FCGRT Picoband Antibody - Background

IgG receptor FcRn large subunit p51Â is aÂ proteinÂ that in humans is encoded by theÂ FCGRTÂ gene. 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.Â In addition, it is postulated that long-range cis inactivation of theÂ FCGRTÂ gene is responsible for hypercatabolism of IgG in myotonic dystrophy. TheÂ FCGRTÂ gene is closely situated to the DMPK gene, which is mutant in DM.Â