

Anti-FCRN/FCGRT Picoband Antibody

Catalog # ABO12552

Specification

Anti-FCRN/FCGRT Picoband Antibody - Product Information

Application	WB, IHC-P
Primary Accession	<u>P55899</u>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	
Rabbit IgG polyclonal antibody for Ig	G receptor FcRn large subunit p51(FCGRT) o

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.

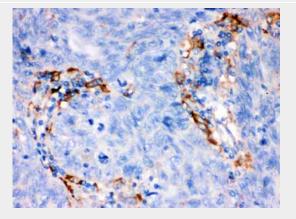
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-FCRN/FCGRT Picoband Antibody - Images



130KD -100KD -70KD -55KD - -35KD -25KD -15KD -

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 # AB012552) 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 \hat{l}_{4} g/mL. The immunohistochemical section was developed using SABC method .

Anti-FCRN/FCGRT Picoband Antibody - Background

IgG receptor FcRn large subunit p51Å is aÅ proteinÅ that in humans is encoded by theÅ FCGRTÅ 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.Å In addition, it is postulated that long-range cis inactivation of theÅ FCGRTÅ gene is responsible for hypercatabolism of IgG in myotonic dystrophy. TheÅ FCGRTÅ gene is closely situated to the DMPK gene, which is mutant in DM.Å