10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FCGRT Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19288b

Specification

FCGRT Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	P55899
Other Accession	NP_004098.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**330-357**

FCGRT Antibody (C-term) - 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~~1:500

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.

FCGRT Antibody (C-term) - 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

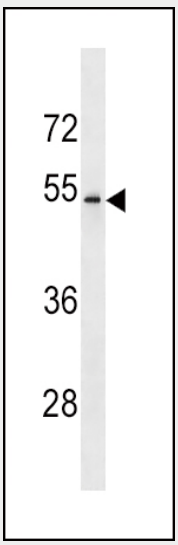
Tissue Location
Expressed in full-term placenta, heart, lung, liver, muscle, kidney, pancreas, and both fetal and adult small intestine.

FCGRT Antibody (C-term) - Protocols

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

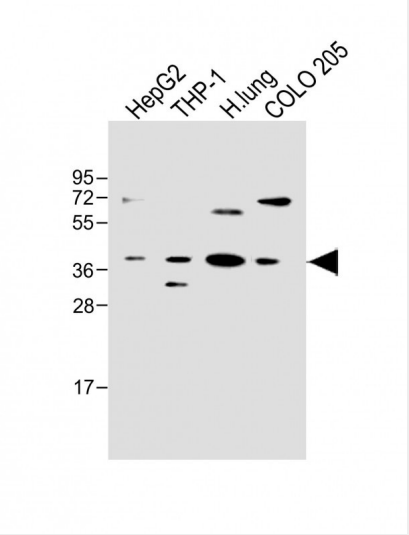
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FCGRT Antibody (C-term) - Images



FCGRT Antibody (C-term)(Cat. #AP19288b) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the FCGRT antibody detected the FCGRT protein (arrow).

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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.

FCGRT Antibody (C-term) - 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.

FCGRT Antibody (C-term) - 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)