

FCGRT Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP19288b**Specification**

FCGRT Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P55899](#)**FCGRT Antibody (C-term) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

FCGRT Antibody (C-term) Blocking Peptide - 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](http://www.uniprot.org/citations/10933786)), (PubMed: [7964511](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/10998088)). In addition of IgG, regulates homeostasis of the other most abundant circulating protein albumin/ALB (PubMed: [24469444](http://www.uniprot.org/citations/24469444)), (PubMed: [28330995](http://www.uniprot.org/citations/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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

FCGRT Antibody (C-term) Blocking Peptide - Images**FCGRT Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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)