

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

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FcRn (h): 293T Lysate: sc-159778



The Power to Question

BACKGROUND

FcRn present in the intestinal epithelium of neonatal mice and rats mediates the selective uptake of immunoglobulin G (lgG) in mothers' milk, thereby helping newborn animals to acquire passive immunity. FcRn (also designated FCGRT, Brambell receptor, FcRn α chain, lgG Gc receptor and neonatal Fc receptor) is comprised of a heavy chain and β -2-Microglobulin. FcRn heavy chain shows approximately 35% amino acid identity to an MHC class I molecule. FcRn localizes in endosomes of vascular endothelial cells and selectively recycles lgG to the cell surface, thus protecting lgG from lysosomal catabolism. This protection mechanism is a major constituent for ensuring lgG are the longest lived of all plasma proteins.

REFERENCES

- Claypool, S.M., et al. 2002. Functional reconstitution of human FcRn in Madin-Darby canine kidney cells requires coexpressed human β-2-Microglobulin. J. Biol. Chem. 277: 28038-28050.
- Praetor, A., et al. 2002. Membrane-anchored human FcRn can oligomerize in the absence of IgG. J. Mol. Biol. 321: 277-284.
- Detmer, S.A., et al. 2002. IgG transcytosis and recycling by FcRn expressed in MDCK cells reveals ligand-induced redistribution. EMBO J. 21: 5953.
- Zhou, J., et al. 2003. Generation of mutated variants of the human form of the MHC class I-related receptor, FcRn, with increased affinity for mouse immunoglobulin G. J. Mol. Biol. 332: 901-913.
- Ober, R.J., et al. 2004. Visualizing the site and dynamics of IgG salvage by the MHC class I-related receptor, FcRn. J. Immunol. 172: 2021-2029.
- Ober, R.J., et al. 2004. Exocytosis of IgG as mediated by the receptor, FcRn: an analysis at the single-molecule level. Proc. Natl. Acad. Sci. USA 101: 11076-11081.
- Zhou, J., et al. 2005. Conferring the binding properties of the mouse MHC class I-related receptor, FcRn, onto the human ortholog by sequential rounds of site-directed mutagenesis. J. Mol. Biol. 345: 1071-1081.
- 8. Getman, K.E., et al. 2005. Pharmacokinetic effects of 4C9, an anti-FcRn antibody, in rats: implications for the use of FcRn inhibitors for the treatment of humoral autoimmune and alloimmune conditions. J. Pharm. Sci. 94: 718-729.
- Ward, E.S., et al. 2005. From sorting endosomes to exocytosis: association of Rab4 and Rab11 GTPases with the Fc receptor, FcRn, during recycling. Mol. Biol. Cell 16: 2028-2038.

CHROMOSOMAL LOCATION

Genetic locus: FCGRT (human) mapping to 19q13.33.

PRODUCT

FcRn (h): 293T Lysate represents a lysate of human FcRn transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

FcRn (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive FcRn antibodies. Recommended use: 10-20 µl per lane.

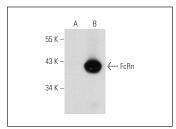
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

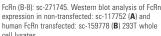
FcRn (B-8): sc-271745 is recommended as a positive control antibody for Western Blot analysis of enhanced human FcRn expression in FcRn transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

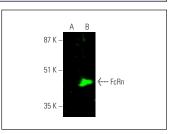
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA







FcRn (B-8): sc-271745. Near-infrared western blot analysis of FcRn expression in non-transfected: sc-117752 (A) and human FcRn transfected: sc-159778 (B) 2931 whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-1gGs BP-CFL 680: sc-516180.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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