

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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## Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

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# FcRn (m): 293T Lysate: sc-126843



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  $\alpha$  chain, lgG  $G_c$  receptor and neonatal Fc-receptor) is comprised of a heavy chain and  $\beta$ -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 selec-tively 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**

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- 4. 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.
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- 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.
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- 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 (mouse) mapping to 7 B4.

#### **PRODUCT**

FcRn (m): 293T Lysate represents a lysate of mouse FcRn transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

#### **RESEARCH USE**

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

#### **APPLICATIONS**

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

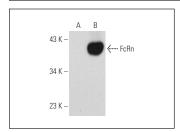
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

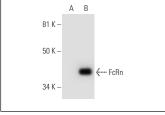
FcRn (H-4): sc-166413 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse FcRn expression in FcRn transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

#### **DATA**





FcRn (H-4): sc-166413. Western blot analysis of FcRn expression in non-transfected: sc-117752 (**A**) and mouse FcRn transfected: sc-126843 (**B**) 293T whole

FcRn (A-6): sc-393064. Western blot analysis of FcRn expression in non-transfected: sc-117752 (**A**) and mouse FcRn transfected: sc-126843 (**B**) 293T whole

#### **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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