

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse FCRN in direct ELISAs and Western blots. In direct ELISAs, approximately 6% cross-reactivity with recombinant human FCRN is observed.                                                                                                                         |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived mouse FCRN<br>Ser22-Ser301<br>Accession # AAH03786                                                                                                                                                                                      |
| <b>Conjugate</b>          | Alexa Fluor 700<br>Excitation Wavelength: 675-700 nm<br>Emission Wavelength: 723 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

|                                                 |                                                                        |
|-------------------------------------------------|------------------------------------------------------------------------|
| <b>CyTOF-ready</b>                              | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>                             | Optimal dilution of this antibody should be experimentally determined. |
| <b>Intracellular Staining by Flow Cytometry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

FcRn (IgG receptor FcRn large subunit p51/α-chain) is a 44-52 kDa member of the Ig superfamily. In mouse, it is expressed by intestinal epithelium of neonates and fetal yolk sac endoderm during pregnancy. Together with p14/β<sub>2</sub>-Microglobulin, FcRn forms an MHC I-like noncovalent heterodimer termed the FcRn complex. In rodent, FcRn transports IgG in milk into the intestine, and IgG from the mother's blood into the mouse via endodermal FcRn linked to a special FcγRIIb macrophage receptor. It is also expressed by select macrophages and DCs, and participates in endosomal-associated antigen presentation to CD4<sup>+</sup> T cells. Mature mouse FcRn is a 344 amino acid (aa) type I transmembrane glycoprotein. It contains a 276 aa extracellular region (aa 22-297) that contains an Ig-like domain (aa 201-288). The FcRn complex forms a homodimer when binding IgG. One potential splice variant shows a four aa insertion after Gly109. Over aa 22-301 of the splice variant (GenBank #:AAH03786), mouse FcRn shares 91% and 68% aa identity with rat and human FcRn, respectively.

## PRODUCT SPECIFIC NOTICES

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