

## Mouse FCRN Alexa Fluor® 488-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF6775G

100 µg

DESCRIPTION		
Species Reactivity	Mouse	
Specificity	Detects mouse FCRN in direct ELISAs and Western blots. In direct ELISAs, approximately 6% cross-reactivity with recombinant human FCRN is observed.	
Source	Polyclonal Goat IgG	
Purification	Antigen Affinity-purified	
Immunogen	Mouse myeloma cell line NS0-derived mouse FCRN Ser22-Ser301 Accession # AAH03786	
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm	
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide	
	*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Shee (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.			
CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.		
Western Blot	Optimal dilution of this antibody should be experimentally determined.		
Intracellular Staining by Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.		

PREPARATION AND STORAGE		
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.	
Stability & Storage	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/ $\alpha$ -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/ $\beta$ 2-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+ 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

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.

Rev. 9/16/2025 Page 1 of 1

Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956

China | info.cn@bio-techne.com TEL: 400.821.3475