## **Product Datasheet**

# FCRN/FCGRT Antibody - BSA Free NBP1-89128

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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## NBP1-89128

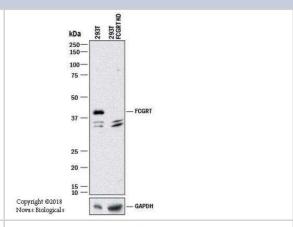
FCRN/FCGRT Antibody - BSA Free	
Product Information	
Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol
Target Molecular Weight	40 kDa
Product Description	
Host	Rabbit
Gene ID	2217
Gene Symbol	FCGRT
Species	Human, Cynomolgus Monkey
Reactivity Notes	Cynomolgus Monkey reactivity reported in scientific literature (PMID: 31746560).
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: LTFLLFSCPHRLREHLERGRGNLEWKEPPSMRLKARPSSPGFSVLTCSAFSFY PPELQLRFLRNGLAAGTGQGDFGPNSDGSFHASSSLTVKSGDEHHYCCIVQH AGLAQPLRVELESPAKS
Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Knockout Validated
Recommended Dilutions	Western Blot 0.04 - 0.4 ug/ml, Simple Western 1:20, Immunohistochemistry 1:5000 - 1:10000, Immunohistochemistry-Paraffin 1:5000 - 1:10000, Immunohistochemistry-Frozen Reported in scientific literature (PMID 24278022)., Knockout Validated
Application Notes	For IHC-Paraffin, HIER pH 6 retrieval is recommended. In Simple Western only 10 - 15 uL of the recommended dilution is used per data point.  See Simple Western Antibody Database for Simple Western validation: Tested in h. Liver, HepG2 (middle) and THP-1, separated by Size, antibody dilution of 1:20, apparent MW was 51, 44 kDa. Separated by Size-Wes, Sally Sue/Peggy



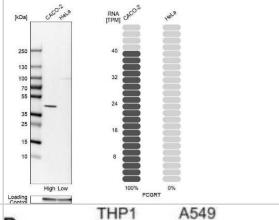
Sue

## **Images**

Western Blot: FCRN/FCGRT Antibody [NBP1-89128] - Western blot shows lysates of 293 human embryonic kidney parental cell line and FCGRT knockout (KO) 293 cell line. PVDF membrane was probed with 1:500 of Rabbit Anti-Human FCGRT Polyclonal Antibody (Catalog # NBP1-89128) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog #HAF008). Specific band was detected for FCGRT at approximately 40 kDa (as indicated) in the parental 293 cell line, but is not detectable in the knockout 293 cell line. This experiment was conducted under reducing conditions.



Western Blot: FCRN/FCGRT Antibody [NBP1-89128] - Analysis in human cell lines Caco-2 and HeLa using anti-FCGRT antibody. Corresponding FCGRT RNA-seq data are presented for the same cell lines. Loading control: anti-GAPDH.



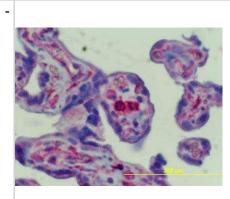
FcRn

**B-actir** 

Western Blot: FCRN/FCGRT Antibody [NBP1-89128] - Human lung epithelial A549 cells and primary bronchial epithelial cells (hAECB) lack FcgammaR (CD16, CD64, and CD32) and FcalphaR (CD89) cell surface expression as analyzed by flow cytometry (human THP1 cells as positive control). The neonatal FcR (FcRn) is expressed in both A549 cells & human THP1 cells as determined by Western blotting. Data are representative of at least two independent experiments. Absolute bacterial counts (CFUs) in human THP1 macrophages 1 h after infection with MTB preincubated with the LAM-reactive IgA1 (left) or IgG1 (right) antibody TB24PB037 or the respective isotype control antibody as indicated. Mean and SEM are indicated. Data are representative of three independent experiments. Image collected and cropped by CiteAb from the following publication

(https://embomolmed.embopress.org/lookup/doi/10.15252/emmm.20160 6330), licensed under a CC-BY license.

Immunohistochemistry-Paraffin: FCRN/FCGRT Antibody [NBP1-89128] - Staining in human placental Hoffbauer cells at a 1:65 dilution. Image from a verified customer review.





38 kDa

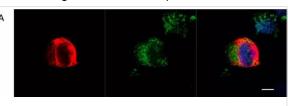
Western Blot: FCRN/FCGRT Antibody [NBP1-89128] - Analysis in control (vector only transfected HEK293T lysate) and FCGRT overexpression lysate (Co-expressed with a C-terminal myc-DDK tag (3.1 kDa) in mammalian HEK293T cells). Immunohistochemistry-Paraffin: FCRN/FCGRT Antibody [NBP1-89128] -Immunohistochemical staining of human liver shows moderate to strong cytoplasmic positivity in Kupffer cells. Immunohistochemistry-Paraffin: FCRN/FCGRT Antibody [NBP1-89128] -Immunohistochemical staining of human cerebellum shows no positivity in neuronal cells as expected. Immunohistochemistry-Paraffin: FCRN/FCGRT Antibody [NBP1-89128] -Staining of human placenta shows moderate to strong cytoplasmic positivity in Hofbauer cells.



Immunohistochemistry-Paraffin: FCRN/FCGRT Antibody [NBP1-89128] -Staining of human pancreas shows no positivity in exocrine glandular cells as expected. Simple Western: FCRN/FCGRT Antibody [NBP1-89128] - Simple Western lane view shows a specific band for FCGRT in 0.2 mg/ml of h. Liver (left), HepG2 (middle) and THP-1 (right) lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system. Simple Western: FCRN/FCGRT Antibody [NBP1-89128] -Electropherogram image(s) of corresponding Simple Western lane view. FCRN/FCGRT antibody was used at 1:20 dilution on h. Liver, HepG2, and THP-1 lysate(s). MW (kDa) FcRn localization in air-liquid interface culture of human nasal epithelial cells on day 21. Cells were co-immunolabeled for FcRn (green) and (A) a basal cell marker, cytokeratin-14 (red), or (B) a goblet cell marker, mucin-5AC (red), or (C) a ciliated cell marker, acetylated α-tubulin (red); and imaged by confocal microscopy. White scale bars represent 5 µm.



Immunocytochemistry/ Immunofluorescence: FCRN/FCGRT Antibody [NBP1-89128] - FcRn localization in air–liquid interface culture of human nasal epithelial cells on day 21. Cells were co-immunolabeled for FcRn (green) & (A) a basal cell marker, cytokeratin-14 (red), or (B) a goblet cell marker, mucin-5AC (red), or (C) a ciliated cell marker, acetylated α-tubulin (red); & imaged by confocal microscopy. White scale bars represent 5 μm. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/30893823), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



### **Publications**

Haga K, Tokui T, Miyamoto K et Al. Neonatal Fc receptor is a functional receptor for classical human astrovirus Genes Cells 2024-09-12 [PMID: 39266307]

S Latvala, B Jacobsen, MB Otteneder, A Herrmann, S Kronenberg Distribution of FcRn Across Species and Tissues J. Histochem. Cytochem., 2017-04-12;0(0):2215541770509. 2017-04-12 [PMID: 28402755]

Jacobsen B, Hill M, Reynaud L et al. FcRn Expression on Placenta and Fetal Jejunum during Early, Mid-, and Late Gestation in Minipigs Toxicologic Pathology 2016-04-01 [PMID: 26516163]

Zakrzewicz A, WUrth C, Beckert B Et al. Stabilization of Keratinocyte Monolayer Integrity in the Presence of Anti-Desmoglein-3 Antibodies through FcRn Blockade with Efgartigimod: Novel Treatment Paradigm for Pemphigus? Cells 2022-03-25 [PMID: 35326398] (WB, Human)

#### Details:

Citation using the Alexa Fluor 488 version of this antibody.

Uchida Y, Torisu K, Ueki K et al. Autophagy gene ATG7 regulates albumin transcytosis in renal tubule epithelial cells American journal of physiology. Renal physiology 2021-09-20 [PMID: 34541900]

Catlin NR, Mitchell AZ, Potchoiba MJ et al. Placental transfer of 125 iodinated humanized immunoglobulin G2 delta a in the cynomolgus monkey Birth Defects Res 2019-11-20 [PMID: 31746560] (WB, Cynomolgus Monkey)

Bequignon E, Dhommee C, Angely C et al. FcRn-Dependent Transcytosis of Monoclonal Antibody in Human Nasal Epithelial Cells In Vitro: A Prerequisite for a New Delivery Route for Therapy? Int J Mol Sci 2019-03-19 [PMID: 30893823] (IF/IHC, Human)

Dalloneau E, Baroukh N, Mavridis K et al. Downregulation of the neonatal Fc receptor expression in non-small cell lung cancer tissue is associated with a poor prognosis. Oncotarget. 2016-08-23 [PMID: 27384673] (WB, Human)

Zimmermann N, Thormann V, Hu B et al. Human isotype-dependent inhibitory antibody responses against Mycobacterium tuberculosis. EMBO Mol Med 2016-11-02 [PMID: 27729388] (WB, Human)

Ko SY, Pegu A, Rudicell RS et al. Enhanced neonatal Fc receptor function improves protection against primate SHIV infection. Nature 2014-10-30 [PMID: 25119033]

Baker K, Rath T, Flak MB et al. Neonatal Fc Receptor Expression in Dendritic Cells Mediates Protective Immunity Against Colorectal Cancer. Immunity 2013-12-12 [PMID: 24290911] (IF/IHC, Human)

Seijsing J, Lindborg M, Lofblom J et al. Robust expression of the human neonatal Fc receptor in a truncated soluble form and as a full-length membrane-bound protein in fusion with eGFP. PLoS One 2013-01-01 [PMID: 24260574]

More publications at http://www.novusbio.com/NBP1-89128





## **Novus Biologicals USA**

10730 E. Briarwood Avenue Centennial, CO 80112

USA

Phone: 303.730.1950 Toll Free: 1.888.506.6887

Fax: 303.730.1966

nb-customerservice@bio-techne.com

## **Bio-Techne Canada**

21 Canmotor Ave Toronto, ON M8Z 4E6

Canada

Phone: 905.827.6400 Toll Free: 855.668.8722 Fax: 905.827.6402

canada.inquires@bio-techne.com

## **Bio-Techne Ltd**

19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB, United Kingdom Phone: (44) (0) 1235 529449

Free Phone: 0800 37 34 15 Fax: (44) (0) 1235 533420 info.EMEA@bio-techne.com

## **General Contact Information**

www.novusbio.com

Technical Support: nb-technical@bio-

techne.com

Orders: nb-customerservice@bio-techne.com

General: novus@novusbio.com

## **Products Related to NBP1-89128**

NBP1-89128PEP FCRN/FCGRT Recombinant Protein Antigen

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NB7160 Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]

NBP2-24891 Rabbit IgG Isotype Control

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