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Datasheet for 200-301-MX8

hFcRn (DVN24) Antibody

Overview

Description:	Anti-hFcRn (MOUSE) Monoclonal Antibody - 200-301-MX8
Item No.:	200-301-MX8
Size:	100 µg
Applications:	ELISA, FC, IF
Reactivity:	Human
Host Species:	Mouse

Product Details

Background:	The MHC class I-like Fc receptor (FcRn) is an intracellular trafficking Fc receptor that is uniquely responsible for the extended serum half-life of antibodies of the IgG subclass and their ability to transport across cellular barriers. By performing these functions, FcRn affects numerous facets of antibody biology and pathobiology. Its critical role in controlling IgG pharmacokinetics has been leveraged for the design of therapeutic antibodies and related biologics. FcRn also traffics serum albumin and is responsible for the enhanced pharmacokinetic properties of albumin-conjugated therapeutics.
Synonyms:	FCRN antibody, alpha-chain antibody, FcRn antibody, Fc fragment of IgG receptor and transporter antibody, Fc receptor, IgG, alpha chain transporter antibody, FCGRT antibody, Fcgrt antibody, IgG receptor FcRn large subunit p51, Neonatal Fc receptor, FCGRT
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	DVN24
Format:	IgG2a

Target Details

Gene Name:	FCGRT
Reactivity:	Human
Immunogen:	Antibodies were generated by immunizing mouse FcRn-deficient mice with spleen cells from mice transgenic for human FcRn.

Purity/Specificity:	This protein G purified mouse monoclonal antibody was raised via hybridoma and recognizes hFcRn. Antibody isotype IgG2a kappa.
Relevant Links:	• UniProtKB - P55899

Application Details

Tested Applications:	ELISA, FC, IF
Application Note:	This monoclonal anti-hFcRn (DVN24) antibody is unconjugated and is suitable for the detection of FcRn (Fc receptor) in human samples. The FcRn antibody has been tested for Cell ELISA, ELISA, FACS and IF. For each application a titration should be performed to determine the optimal concentration.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:200 - 1:400
FC:	1.2 µg/10^6 cells
IF:	User Optimized

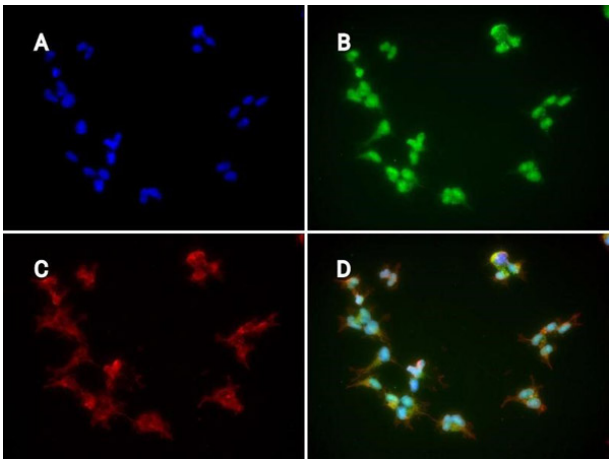
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.082 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer:	50% (v/v) Glycerol

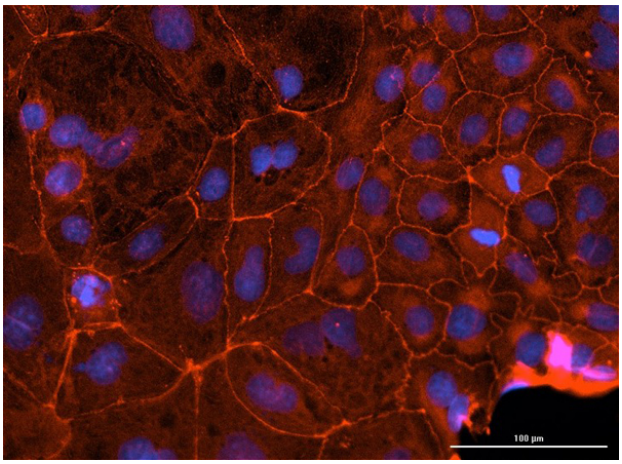
Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at 4° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

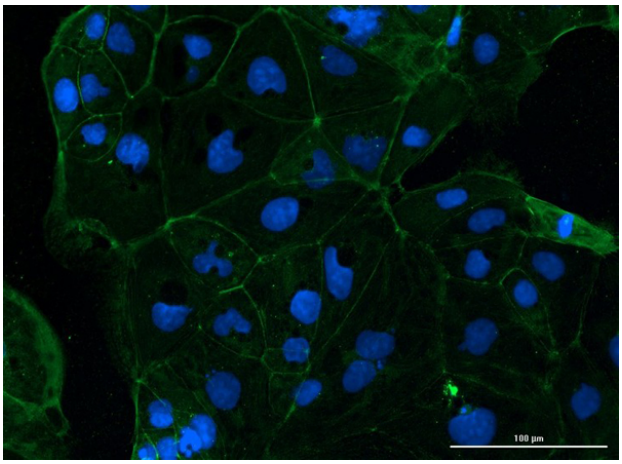
Images



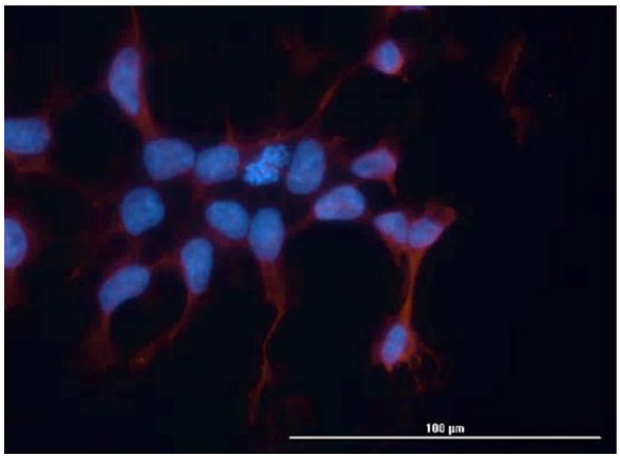
Immunofluorescence Microscopy
Immunofluorescence of Mouse Anti-hFcRn (DVN24) Antibody.
Cells: huSSECTM cells over expressing hFcRn-EGFP.
Primary Antibody: Anti-hFcRn (DVN24) Antibody at 15µg/mL.
Secondary Antibody: Rabbit Anti-Mouse IgG Texas Red Conjugated.
A: DAPI-nuclear counterstain, B: hFcRn-GFP, C: Texas Red anti-FcRn (DVN24), D: merge.



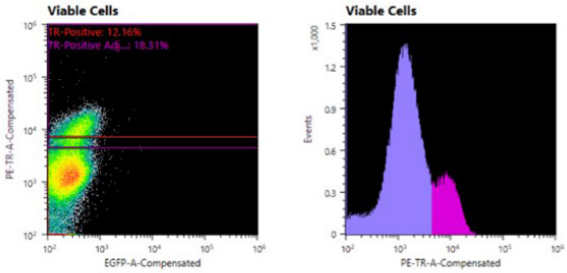
Immunofluorescence Microscopy
Immunofluorescence of Mouse Anti-hFcRn (DNV24) Antibody. Cells: HeLa cells. Fixation: Ice Cold Methanol. Permeabilization: Ice Cold Methanol. Primary Antibody: Anti-hFcRn (DNV24) Antibody at 15µg/mL overnight at 4°C. Secondary Antibody: Rabbit Anti-Mouse IgG Texas Red Conjugated (p/n 610-409-C46) at 1:200 for 1hr at room temperature. Nuclear Stain: Hoechst 33342. Location: Cytoplasmic / Cell Membrane. Image Magnification: 20X (With Deconvolution).



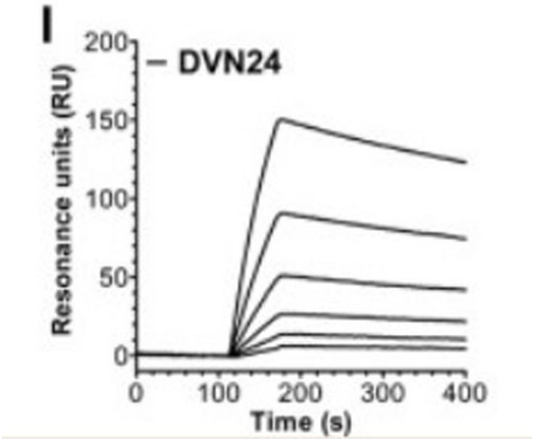
Immunofluorescence Microscopy
Immunofluorescence of Mouse Anti-hFcRn (DNV24) Antibody. Cells: HeLa cells. Fixation: Ice Cold Methanol. Permeabilization: Ice Cold Methanol. Primary Antibody: Anti-hFcRn (DNV24) Antibody at 15µg/mL overnight at 4°C. Secondary Antibody: Rabbit Anti-Mouse IgG DyLight488 (p/n 610-141-121) at 1:200 for 1hr at room temperature. Nuclear Stain: Hoechst 33342. Location: Cytoplasmic / Cell Membrane. Image Magnification: 20X (With Deconvolution).



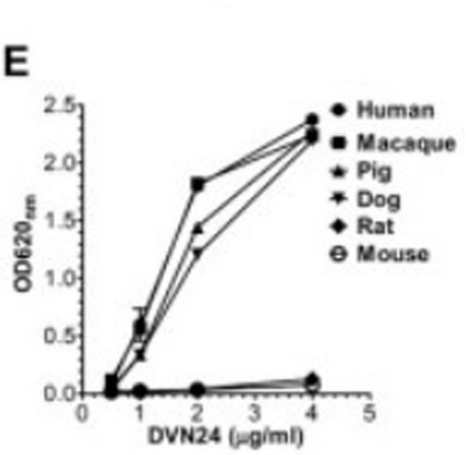
Immunofluorescence Microscopy
Immunofluorescence of Mouse Anti-hFcRn (DVN24) Antibody.
Cells: huSSECTM cells.
Fixation: 4% PFA.
Permeabilization: PBS + 0.3% Triton X-100 + 1% goat serum.
Primary Antibody: Anti-hFcRn (DVN24) Antibody at 15µg/mL overnight at 4°C.
Secondary Antibody: Rabbit Anti-Mouse IgG Texas Red Conjugated (p/n 610-409-C46) 1µg/mL for 1hr at room temperature.
Location: Intracellular.



Flow Cytometry
Flow Cytometry of Mouse Anti-hFcRn (DVN24) Antibody.
Cells: huSSECTM cells.
Primary Antibody: Anti-hFcRn (DVN24) Antibody 1.2µg incubated on ice (4°C) for 60mins.
Secondary Antibody: Rabbit Anti-Mouse IgG Texas Red Conjugated (p/n 610-409-C46) 1.2µg incubated on ice (4°C) for 60mins protected from light.



ELISA
Identification of monoclonal Abs that block albumin binding to hFcRn. Representative sensorgrams showing binding of titrated amounts of monomeric hFcRn injected over immobilized DVN24 at pH7.4. Fig 3. PMID: 24764301.



ELISA
The monoclonal Abs bind in a species-dependent manner to FcRn. ELISA binding of human, macaque, pig, dog, mouse, and rat FcRn toward DVN24. Fig 5. PMID: 24764301.

References

- Sand KMK, Dalhus B, Christianson GJ, Bern M, Foss S, Cameron J, Sleep D, Bjoras M, et al. Dissection of the Neonatal Fc Receptor (FcRn)-Albumin Interface Using Mutagenesis and Anti-FcRn Albumin-blocking Antibodies. *J Biol Chem.* (2014)

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