

Datasheet for 600-401-H04
Nephrin Antibody**Overview**

Description:	Anti-Nephrin (RABBIT) Antibody - 600-401-H04
Item No.:	600-401-H04
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Nephrin antibody detects human Nephrin. Nephrin is strongly expressed in renal glomeruli and is a member of the immunoglobulin family of cell adhesion molecules. Mutations in the Nephrin gene result in congenital nephrotic syndrome, an autosomal-recessive disorder characterized by massive proteinuria in utero and nephrosis at birth. Renal glomeruli allow normal kidneys to filter plasma so that it is very pure. Nephrin is expressed in the podocyte slit-diaphragm of the renal glomeruli in a manner that suggests that Nephrin molecules homodimerize in an anti-parallel fashion similar to cadherin interactions in adherens junctions. Thus, Nephrin may constitute the entire extracellular structure of the slit-diaphragm. Anti-nephrin antibodies are ideal for investigators involved in cell cycle proteins.
Synonyms:	Nephrin, NPHN, NPHS1, Renal glomerulus-specific cell adhesion receptor
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	NPHS1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Nephrin Antibody was produced from whole rabbit serum prepared by repeated immunizations with a peptide near the c-terminus of human Nephrin.

Purity/Specificity: Anti-Nephrin Antibody was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with Nephrin with Human, Rat and Mouse based on 100% homology with the immunizing sequence. Cross-reactivity with Nephrin from other sources has not been determined.

Relevant Links:

- [NCBI - NP_004737](#)
- [UniProtKB - O60500](#)
- [GeneID - 4868](#)

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Nephrin Antibody is tested for use in WB and IHC. Expect a band approximately ~134.7 kDa on specific lysates. Western Blot tested in human, mouse and rat samples; Immunohistochemistry in mouse and rat samples; Immunofluorescence in human, mouse and rat samples. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IF:	User Optimized
IHC:	1-2 µg/mL
WB:	1-4µg/mL

Formulation

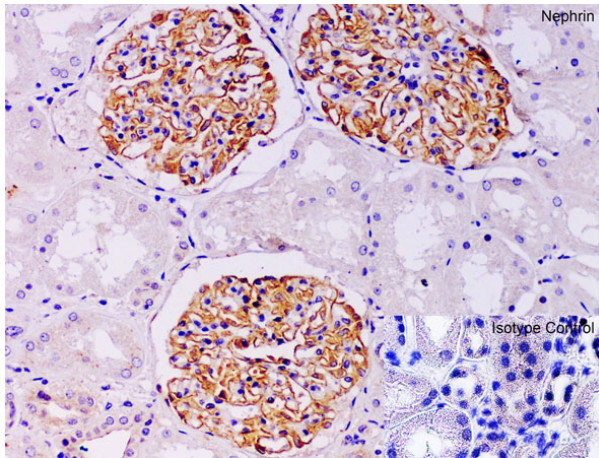
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry

Immunohistochemistry of Nephryn.

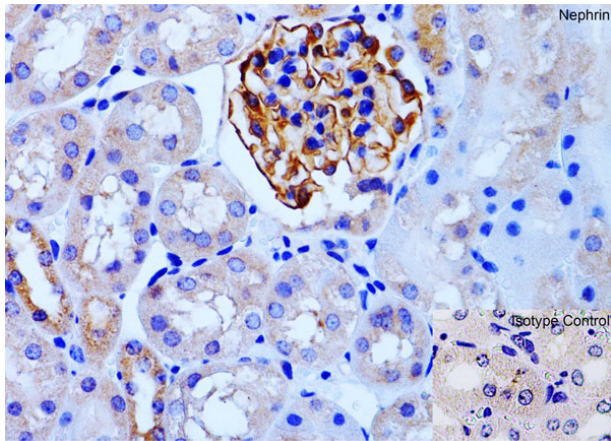
Tissue: Human Kidney.

Fixation: paraffin-embedded, fixed with formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-Nephryn antibody at 1 µg/ml overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250 was used as secondary. Counter stained with Hematoxylin.



Immunohistochemistry

Immunohistochemistry of Nephryn.

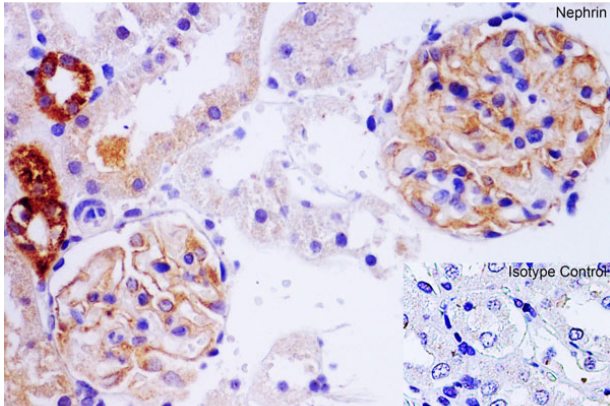
Tissue: Mouse Kidney.

Fixation: paraffin-embedded, fixed with formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-Nephryn antibody at 1 µg/ml overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250 was used as secondary. Counter stained with Hematoxylin.

**Immunohistochemistry**

Immunohistochemistry of Nephrin.

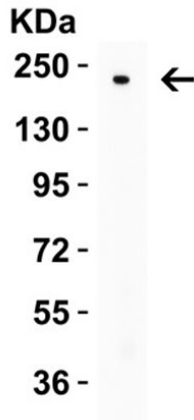
Tissue: Rat Kidney.

Fixation: paraffin-embedded, fixed with formaldehyde and blocked with 10% serum for 1 h at RT.

Antigen retrieval: heat mediation with a citrate buffer (pH6).

Primary Antibody: anti-Nephrin antibody at 1 µg/ml overnight at 4°C.

Secondary: goat anti-rabbit IgG H&L (HRP) at 1:250 was used as secondary. Counter stained with Hematoxylin.

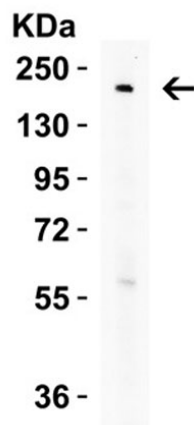
**Western Blot**

Western Blot of Nephrin.

Load: 15 µg of human kidney lysate.

Primary Antibody: Nephrin at 2 µg/mL for 1h incubation at RT in 5% NFDm/TBST.

Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.

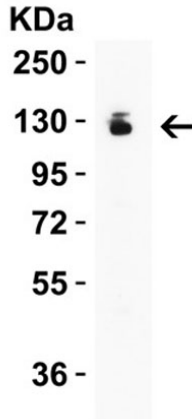
**Western Blot**

Western Blot of Nephrin.

Load: 15 µg of mouse kidney lysate.

Primary Antibody: Nephrin at 2µg/mL for 1h incubation at RT in 5% NFDm/TBST.

Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.

**Western Blot**

Western Blot of Nephryn.

Load: 15 μ g of rat brain lysate.

Primary Antibody: Nephryn at 2 μ g/mL for 1h incubation at RT in 5% NFDm/TBST.

Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.