

**Datasheet for 600-401-CZ8****Nephrin Antibody****Overview**

|                      |                                              |
|----------------------|----------------------------------------------|
| <b>Description:</b>  | Anti-Nephrin (RABBIT) Antibody - 600-401-CZ8 |
| <b>Item No.:</b>     | 600-401-CZ8                                  |
| <b>Size:</b>         | 100 µg                                       |
| <b>Applications:</b> | ELISA, IF, IHC, WB                           |
| <b>Reactivity:</b>   | Human                                        |
| <b>Host Species:</b> | Rabbit                                       |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| <b>Background:</b>   | 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 (1). 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 (2,3). |
| <b>Synonyms:</b>     | NPHN, NPHS1, Renal glomerulus-specific cell adhesion receptor3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

**Target Details**

|                        |                                                                                                                                                                  |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>      | NPHS1                                                                                                                                                            |
| <b>Reactivity:</b>     | Human                                                                                                                                                            |
| <b>Immunogen Type:</b> | Conjugated Peptide                                                                                                                                               |
| <b>Immunogen:</b>      | Anti-Nephrin antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid peptide near the C-terminus of human Nephrin. |

**Purity/Specificity:** Anti-Nephrin antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Nephrin antibody is human specific.

**Relevant Links:**

- [UniProtKB - O60500](#)
- [GeneID - 4648](#)
- [NCBI - NP\\_004637](#)

## Application Details

**Tested Applications:** ELISA, IF, IHC, WB

**Application Note:** Anti-Nephrin Antibody has been tested for use in ELISA, Western Blotting, immunofluorescence, and immunohistochemistry. Expect a band at approximately 135 kDa in Western Blots of specific cell lysates and tissues. Western Blot tested in human and mouse samples; Immunohistochemistry and Immunofluorescence in human 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.

**ELISA:** 1:10,000 - 1:20,000

**IF:** 20µg/mL

**IHC:** 5µg/mL

**WB:** 1-2 µg/mL

## Formulation

**Physical State:** Liquid (sterile filtered)

**Concentration:** 1 mg/mL by UV absorbance at 280 nm

**Buffer:** 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

**Preservative:** 0.02% (w/v) Sodium Azide

**Stabilizer:** None

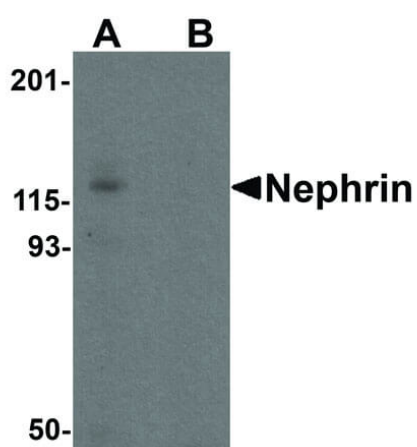
## Shipping & Handling

**Shipping Condition:** Dry Ice

**Storage Condition:** Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

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

## Images



### Western Blot

Western Blot of Rabbit anti-NEPHRIN antibody. Lane A: human kidney tissue lysate in the absence of blocking peptide. Lane B: human kidney tissue lysate in the presence of blocking peptide. Primary antibody: NEPHRIN antibody at 1 µg/mL overnight at 4°C. Secondary antibody: Goat anti-Rabbit HRP secondary antibody. Block: 5% BLOTTO. Predicted/Observed size: 94 kDa, 100 kDa for NEPHRIN.

## 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.