

**Anti-NPHS2 Antibody**  
**Catalog # ABO10647****Specification**

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**Anti-NPHS2 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q9NP85</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Podocin(NPHS2) detection. Tested with WB in Human;Mouse;Rat(Kidney).

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-NPHS2 Antibody - Additional Information**

**Gene ID** 7827

**Other Names**

Podocin, NPHS2

**Calculated MW**

42201 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Rat, Human, Mouse<br>

**Subcellular Localization**

Isoform 1: Cell membrane ; Peripheral membrane protein .

**Tissue Specificity**

Almost exclusively expressed in the podocytes of fetal and mature kidney glomeruli.

**Protein Name**

Podocin

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human NPHS2(126-143aa CVKVVQEYERVIIIFRLGH), different from the mouse sequence by one amino acid.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the band 7/mec-2 family.

**Anti-NPHS2 Antibody - Protein Information****Name** NPHS2**Function**

Plays a role in the regulation of glomerular permeability, acting probably as a linker between the plasma membrane and the cytoskeleton.

**Cellular Location**

[Isoform 1]: Cell membrane; Peripheral membrane protein

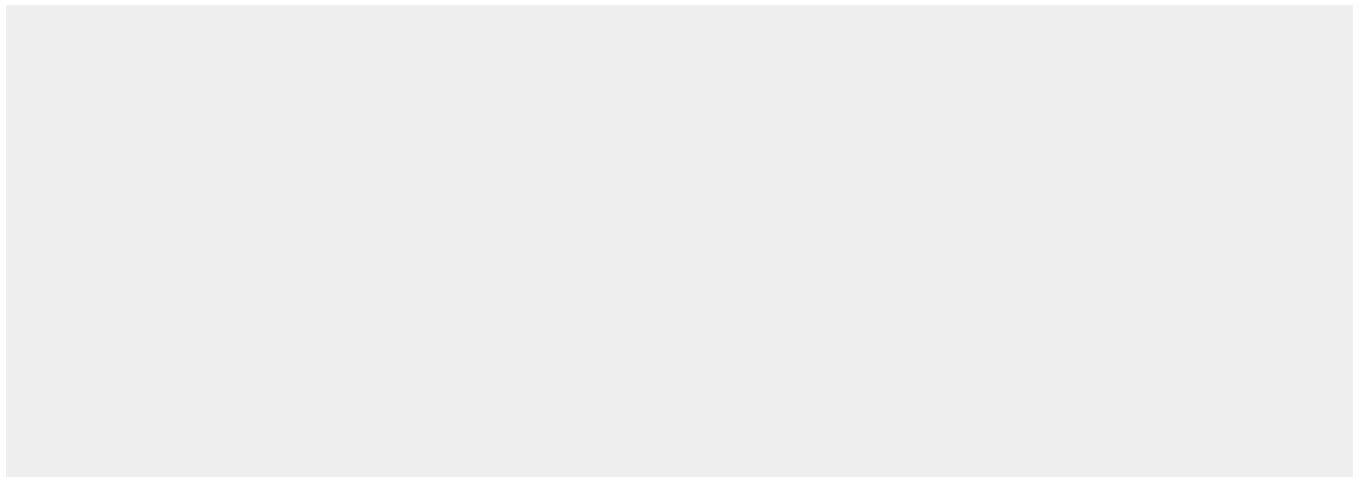
**Tissue Location**

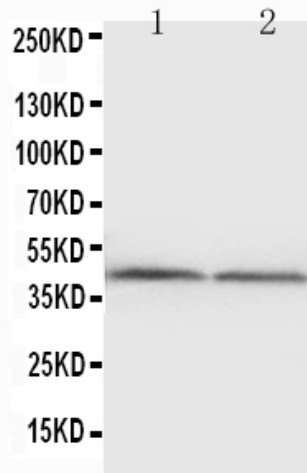
Almost exclusively expressed in the podocytes of fetal and mature kidney glomeruli

**Anti-NPHS2 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-NPHS2 Antibody - Images**



Anti-NPHS2 antibody, ABO10647, Western blottingWB: Rat Kidney Tissue Lysate

#### **Anti-NPHS2 Antibody - Background**

Podocin(PDCN) is a protein which lines the podocytes and assists in maintaining the barrier at the glomerular basement membrane. NPHS2 is a causative gene for Familial idiopathic nephrotic syndromes, which represents a heterogeneous group of kidney disorders, and include autosomal recessive steroid-resistant nephrotic syndrome, which is characterized by early childhood onset of proteinuria, rapid progression to end-stage renal disease and focal segmental glomerulosclerosis. By positional cloning, NPHS2 was mapped to 1q25-31. It is almost exclusively expressed in the podocytes of fetal and mature kidney glomeruli, and encodes a new integral membrane protein, podocin, belonging to the stomatin protein family. Boute et al.(2000) found ten different NPHS2 mutations, comprising nonsense, frameshift and missense mutations, to segregate with the disease, demonstrating a crucial role for podocin in the function of the glomerular filtration barrier.