

**Anti-NPHS2 Antibody**  
**Catalog # ABO10648****Specification**

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**Anti-NPHS2 Antibody - Product Information**

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

**Description**

Rabbit IgG polyclonal antibody for Podocin(NPHS2) detection. Tested with WB, IHC-P, IHC-F in Human;Mouse;Rat.

**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**

Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Rat, Human, Mouse<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br>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 at the C-terminus of human NPHS2(368-383aa KPVEPLNPKKKDSPML), identical to the related mouse sequence, and different from the related rat 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

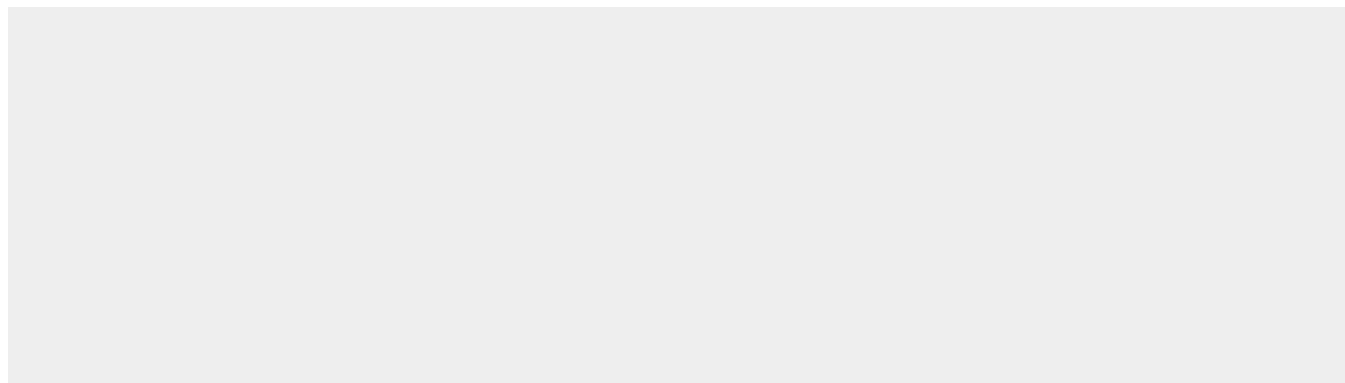
**Tissue Location**

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.

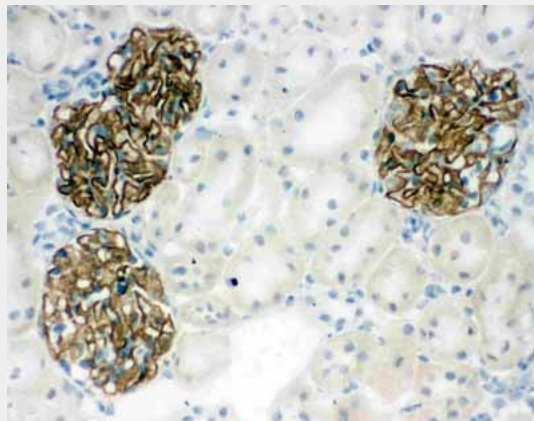
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-NPHS2 Antibody - Images**

130KD -  
100KD -  
70KD -  
55KD -  
35KD -  
25KD -  
15KD -



Anti-NPHS2 antibody, ABO10648, Western blottingWB: Rat Kidney Tissue Lysate



Anti-NPHS2 antibody, ABO10648, IHC(F)IHC(F): Rat Kidney Tissue

### 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. Ten different NPHS2 mutations were found, 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.