

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

Anti-NPHS2 Antibody - Product Information

Application	WB
Primary Accession	Q9NP85
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

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 Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

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

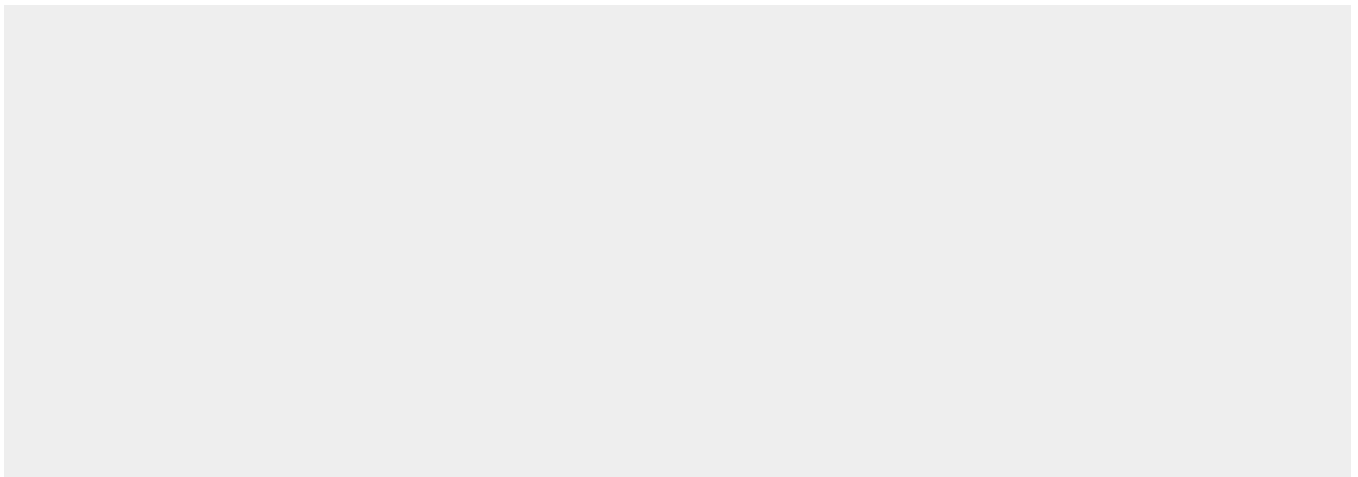
Tissue Location

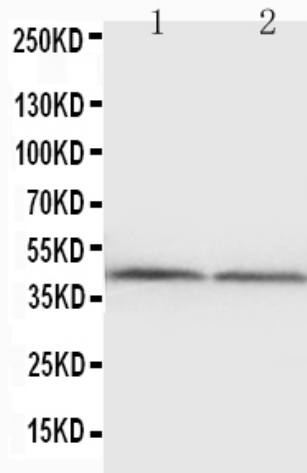
Almost exclusively expressed in the podocytes of fetal and mature kidney glomeruli

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.