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Anti-NPHS2 Antibody
Catalog # ABO10648

Specification

Anti-NPHS2 Antibody - Product Information

Application	**WB, IHC-P, IHC-F**
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, 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
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
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 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 r˚Constitution, 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 Cytomety
- Cell Culture

Anti-NPHS2 Antibody - Images

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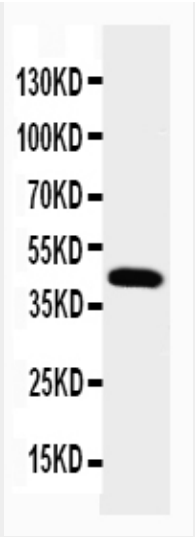
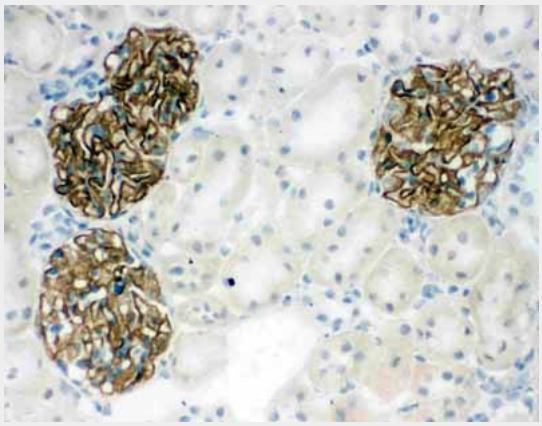


Anti-NPHS2 antibody, ABO10648, Western blottingWB: Rat Kidney Tissue Lysate



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.