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Anti-NPHS2 Antibody

Catalog # ABO10647

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.

Additional Information

Gene ID	7827
Other Names	Podocin, NPHS2
Calculated MW	42201
Application Details	Western blot, 0.1-0.5 □g/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.
Source	Eukaryota
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 CVKVVQEYERVIIFRLGH), 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 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.

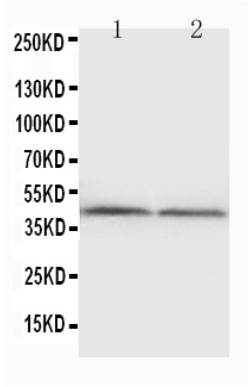
Protein Information

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

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.

Images



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