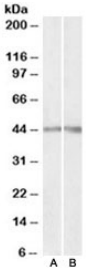
Nephrosis 2 Antibody / Podocin Antibody (R36011)

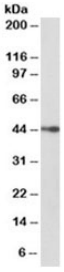
Catalog No.	Formulation	Size
R36011-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Pig
Predicted Reactivity	Cow
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	7827
Applications	Western blot: 0.3-1ug/ml ELISA (peptide) LOD: 1:64000
Limitations	This Nephrosis 2 Antibody / Podocin Antibody is available for research use only.



Nephrosis 2 Antibody Human and Mouse Kidney WB. Western blot analysis was performed with Nephrosis 2 Antibody, also called Podocin Antibody, on human kidney (lane A) and mouse kidney (lane B) tissue lysates. The antibody was used at 0.3 ug/ml. A specific band is detected at approximately 42 kDa in both species, consistent with the predicted molecular weight of podocin/NPHS2. This Nephrosis 2 Antibody demonstrates detection of podocin in human and mouse kidney tissue and supports studies of NPHS2-associated nephrotic syndrome and glomerular podocyte biology.



Nephrosis 2 Antibody Porcine Kidney WB. Western blot analysis was performed with Nephrosis 2 Antibody, also called Podocin Antibody, on porcine kidney tissue lysate. The antibody was used at 1 ug/ml. A specific band is detected at approximately 42 kDa, consistent with the predicted molecular weight of podocin/NPHS2. This Nephrosis 2 Antibody demonstrates detection of podocin in porcine kidney tissue and supports studies of glomerular podocyte biology and slit diaphragm organization.

Description

Nephrosis 2 Antibody / Podocin Antibody detects podocin, a membrane-associated protein encoded by the NPHS2 gene and expressed predominantly in glomerular podocytes. Podocytes are specialized epithelial cells that extend interdigitating foot processes around glomerular capillaries and form an essential component of the renal filtration barrier. Podocin is concentrated at the slit diaphragm between adjacent podocyte foot processes, where it contributes to the specialized protein complexes required for normal glomerular filtration.

Podocin associates functionally with several slit diaphragm proteins, including nephrin and CD2AP, and helps organize membrane domains involved in podocyte signaling and structural integrity. Proper localization of podocin is important for maintaining the architecture of podocyte foot processes and the selective permeability of the glomerular filtration barrier. A Nephrosis 2 Antibody can be used to investigate podocin expression and localization in studies of kidney development, podocyte differentiation and glomerular function.

The NPHS2 gene has an important relationship with hereditary kidney disease. Pathogenic NPHS2 variants are a well-established cause of autosomal recessive steroid-resistant nephrotic syndrome. Disruption of normal podocin function can impair slit diaphragm integrity, resulting in increased glomerular permeability and proteinuria. NPHS2 is therefore extensively studied in research examining the molecular mechanisms underlying hereditary nephrotic syndrome and progressive renal dysfunction.

Podocin is also useful for evaluating podocyte integrity in experimental models of glomerular injury. Altered expression or localization of podocin can accompany disruption of the slit diaphragm and remodeling or loss of podocyte foot processes. These changes make podocin relevant to studies of proteinuric kidney disease, glomerular pathology and mechanisms responsible for maintaining the renal filtration barrier.

NSJ Bioreagents offers Nephrosis 2 Antibody reagents for investigating NPHS2 expression and podocin localization. A Podocin Antibody can support research into glomerular podocyte biology, slit diaphragm organization, nephrotic syndrome, proteinuria and mechanisms of kidney disease.

Researchers studying NPHS2 in podocyte biology and nephrotic syndrome can explore our Podocin Antibody page for additional reagents targeting this essential component of the glomerular slit diaphragm.

Application Notes

Optimal dilution of the Nephrosis 2 Antibody / Podocin Antibody should be determined by the researcher.

Immunogen

Amino acids SPSKPVEPLNPKK were used as the immunogen for this Nephrosis 2 / Podocin antibody.

Storage

Aliquot and store the Nephrosis 2 / Podocin antibody at -20oC.

Alternate Names

Nephrosis 2 antibody, Podocin antibody, NPHS2 antibody, Nephrotic Syndrome Type 2 antibody, Slit Diaphragm Protein antibody, Glomerular Podocyte Marker antibody

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