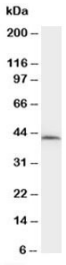
NPHS2 Antibody / Nephrotic Syndrome Type 2 Antibody (R30382)

Catalog No.	Formulation	Size
R30382	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	Q9NP85
Applications	Western blot: 0.5-1ug/ml
Limitations	This NPHS2 Antibody / Nephrotic Syndrome Type 2 Antibody is available for research use only.



NPHS2 Antibody Rat Kidney WB. Western blot analysis was performed with NPHS2 Antibody on rat kidney tissue lysate. A specific band is detected at approximately 42 kDa, consistent with the predicted molecular weight of podocin/NPHS2. This NPHS2 Antibody demonstrates detection of podocin in rat kidney tissue and supports studies of nephrotic syndrome and glomerular podocyte biology.

Description

NPHS2 Antibody / Nephrotic Syndrome Type 2 Antibody detects podocin, a membrane-associated protein encoded by the NPHS2 gene and expressed predominantly in glomerular podocytes. Podocytes are specialized epithelial cells whose interdigitating foot processes surround glomerular capillaries and contribute to the kidney filtration barrier. Podocin is concentrated at the slit diaphragm between adjacent foot processes, where it participates in protein complexes required for normal podocyte structure and glomerular filtration.

Podocin interacts functionally with slit diaphragm-associated proteins including nephrin and CD2AP. These proteins help

organize specialized membrane domains and signaling complexes that maintain the integrity of podocyte foot processes. An NPHS2 Antibody can therefore support studies examining podocin expression, slit diaphragm organization and structural changes associated with podocyte injury and glomerular dysfunction.

NPHS2 is particularly important in renal disease research because pathogenic variants in the gene are associated with autosomal recessive steroid-resistant nephrotic syndrome. Impaired podocin expression, localization or function can compromise the glomerular filtration barrier and contribute to proteinuria. NPHS2-associated disease frequently presents in childhood and can progress to chronic kidney dysfunction, making podocin an important target for studying the molecular basis of hereditary nephrotic syndrome.

Changes in podocin can also be investigated in broader studies of glomerular disease and podocyte injury. Because maintenance of differentiated podocytes is essential for normal renal filtration, alterations in slit diaphragm components can accompany disruption of podocyte architecture and loss of filtration barrier integrity. Studying NPHS2 can therefore provide insight into mechanisms connecting podocyte damage with proteinuric kidney disease.

NSJ Bioreagents offers NPHS2 Antibody reagents for investigating podocin expression and localization. A Nephrotic Syndrome Type 2 Antibody can support research into hereditary nephrotic syndrome, podocyte biology, slit diaphragm organization, glomerular filtration and mechanisms underlying renal 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

The stated application concentrations are suggested starting amounts. Titration of the NPHS2 Antibody / Nephrotic Syndrome Type 2 Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the middle region of human NPHS2 (CVKVVQEYERVIIFRLGH) was used as the immunogen for this NPHS2 antibody.

Storage

After reconstitution, the NPHS2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

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

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