

## Basic Information

Product Name	Anti-Nephrin/NPHS1 Antibody		
Gene Name	NPHS1		
Source	Rabbit		
Clonality	Polyclonal		
Isotype	IgG		
Species Reactivity	human, mouse, rat		
Tested Application	WB, IHC		
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.		
Immunogen	E.coli-derived human Nephrin recombinant protein (Position: V1084-V1241). Human Nephrin shares 79.9% and 75.3% amino acid (aa) sequence identity with mouse and rat Nephrin, respectively.		
Concentration	500 ug/ml		
Purification	Immunogen affinity purified.		
Observed MW	185 kDa		
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.		

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

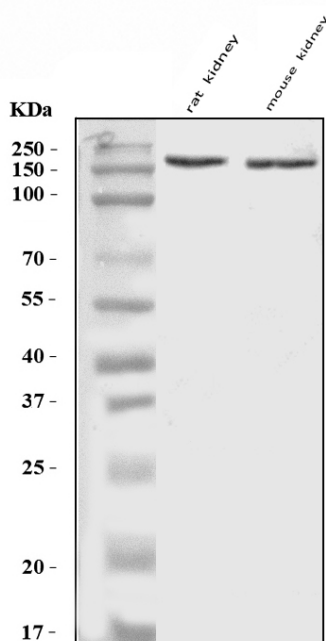
## Background Information

NPHS1, also called Nephrin, is mapped to 19q13.12. This gene encodes a member of the immunoglobulin family of cell adhesion molecules that functions in the glomerular filtration barrier in the kidney. Its gene is primarily expressed in renal tissues, and the protein is a type-1 transmembrane protein found at the slit diaphragm of glomerular podocytes. The slit diaphragm is thought to function as an ultrafilter to exclude albumin and other plasma macromolecules in the formation of urine. A defect in the gene for nephrin, NPHS1, is associated with congenital nephrotic syndrome of the Finnish type and causes massive amounts of protein to be leaked into the urine, or proteinuria. NPHS1 is also required for cardiovascular development.

## Reference

Anti-Nephrin/NPHS1 Antibody被引用在6文献中。

## Selected Validation Data

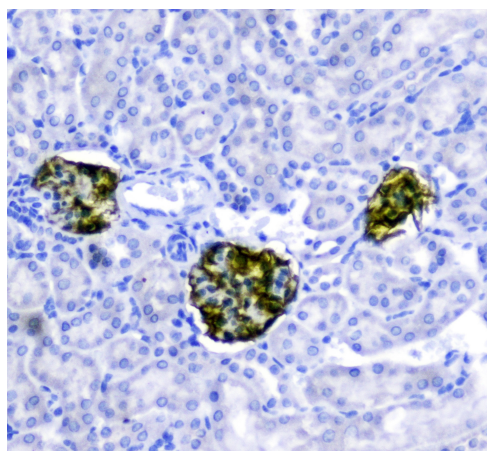


Western blot analysis of Nephrin/NPHS1 using anti-Nephrin/NPHS1 antibody (A01991). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat kidney tissue lysates,

Lane 2: mouse kidney tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Nephrin/NPHS1 antigen affinity purified polyclonal antibody (A01991) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Nephrin/NPHS1 at approximately 185 kDa. The expected band size for Nephrin/NPHS1 is at 135 kDa.



IHC analysis of Nephrin/NPHS1 using anti-Nephrin/NPHS1 antibody (A01991).

Nephrin/NPHS1 was detected in a paraffin-embedded section of mouse kidney tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Nephrin/NPHS1 Antibody (A01991) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.

Product datasheet

## Anti-Nephrin/NPHS1 Antibody

Catalog Number: **A01991**



antibody and ELISA experts

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