

Nephrin antibody (pAb)

Rabbit Anti-Human/Mouse/Rat Nephrin

Instruction Manual

Catalog Number	PK-AB718-2265
Synonyms	Nephrin Antibody: Nephrin, NPHN, NPHS1, Renal glomerulus-specific cell adhesion receptor
Description	Nephrin is strongly expressed in renal glomeruli and is a member of the immunoglobulin family of cell adhesion molecules. Mutations in the Nephrin gene result in congenital nephrotic syndrome, an autosomal-recessive disorder characterized by massive proteinuria in utero and nephrosis at birth. Renal glomeruli allow normal kidneys to filter plasma so that it is very pure. Nephrin is expressed in the podocyte slit-diaphragm of the renal glomeruli in a manner that suggests that Nephrin molecules homodimerize in an anti-parallel fashion similar to cadherin interactions in adherens junctions. Thus, Nephrin may constitute the entire extracellular structure of the slit-diaphragm. Despite its predicted molecular weight, Nephrin often migrates at a lower than expected size in SDS-PAGE.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	Rabbit polyclonal Nephrin antibody was raised against a 14 amino acid peptide from near the carboxy terminus of human Nephrin (GenBank accession no. NP_004637).
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, IHC, IF INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually.h application have to be determined individually. Nephrin antibody can be used for detection of Nephrin by Western blot at 1 µg/mL. Despite its predicted molecular weight, Nephrin often migrates at a lower than expected size in SDS-PAGE. Antibody can also be used for immunohistochemistry starting at 1 µg/mL. For immunofluorescence start at 10 µg/mL.
Images	Available upon request.
References	Kestila M, Lenkkeri U, Mannikko, et al. Positionally cloned gene for a novel glomerular protein – Nephrin – is mutated in congenital nephrotic syndrome. Mol. Cell 1998; 1:575-582. Tryggvason K. Unraveling the mechanisms of glomerular ultrafiltration: nephrin, a key component of the slit diaphragm. J. Am. Soc. Nephrol. 1999; 10:2440-5. Tryggvason K and Wartiovaara J., Molecular basis of glomerular permselectivity. Curr, Opin. Nephrol. Hypertens. 2001; 10:543-9. (07-02D)
Images	Available upon request.
Related Products	Blocking Peptide, Cat. No. PK-AB718-2265P Mouse Kidney Tissue Lysate, Cat. No. PK-AB718-1405

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