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Product datasheet for BP5030

Nephrin (NPHS1) (1243-1256) Guinea Pig Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	**Western blot:** 1/500. **Immunohistochemistry/Immunofluorescence Microscopy on frozen tissue:** 1/50. **Immunohistochemistry on Paraffin Sections:** 1/50 (microwave treatment recommended). ***Incubation Time**:* 1 h at RT or overnight at 2-8°C.
Reactivity:	Human, Mouse
Host:	Guinea Pig
Clonality:	Polyclonal
Immunogen:	Synthetic peptide (intracellular domain, aa1243-1256) EPGSLPFELRGHLV
Specificity:	The antibody reacts specifically with Nephrin. **Immunolocalization:** Antibody BP5030 stains positively podocytes of the kidney, radial glial cells of the brain, Sertoli cells of testis, and beta islet cells of the pancreas. **Tested Reactivities on Cultured Cell Lines:** PCL (Podocyte Cell Line), M-1 (Cortical Collecting Duct Cells).
Formulation:	State: Serum State: Whole Antiserum Preservative: 0.09% Sodium Azide
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	NPHS1 nephrin
Database Link:	Entrez Gene 4868 Human O60500

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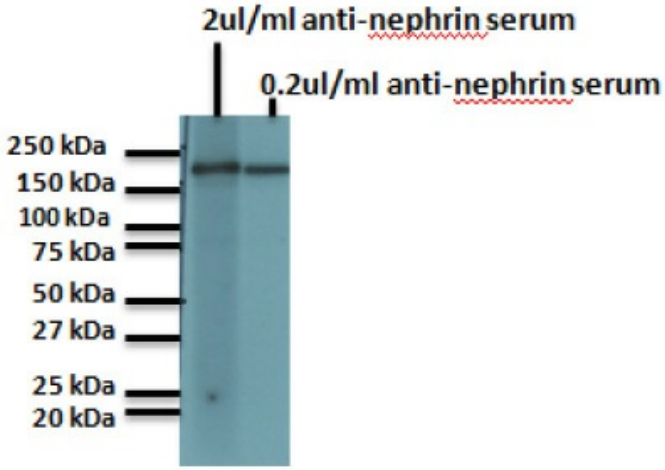
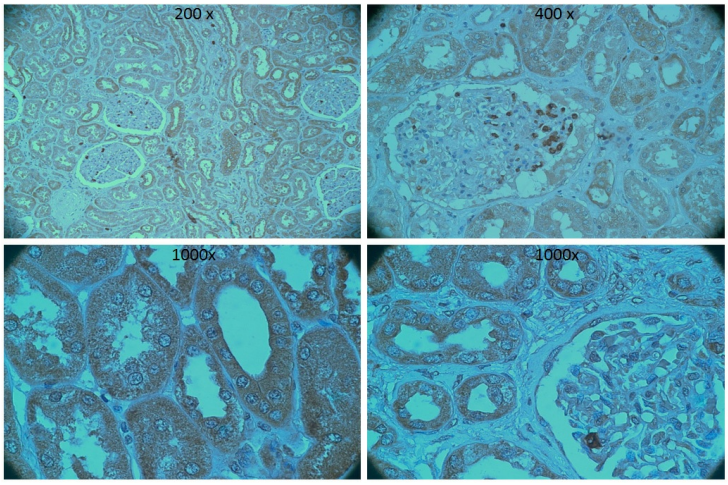
Background: Nephrin was first described as a kidney podocyte marker protein (MW 135,000 calculated from aa sequence data; apparent Mr 185,000 after SDS-PAGE). Nephrin is a transmembrane cell adhesion molecule located at the slit diaphragm.
Primary steroid resistant nephrotic syndrome (SRNS) is characterized by childhood onset of proteinuria and progression to end stage renal disease. Kidney podocytes and their slit diaphragms form the final barrier to urinary protein loss. Congenital nephrotic syndrome (CNS) is caused by mutations in NPHS1 (nephrin) or NPHS2. Nephrin, a recently identified protein is a member of a group of podocyte proteins that constitute major component of the slit diaphragm especially in the foot process. Nephrin, a cell adhesion molecule, may play a crucial role in maintaining the glomerular filtration barrier. Recent studies have suggested that mutations in the gene for Nephrin reportedly lead to congenital nephrosis. Three novel podocyte proteins, Podocin, Nephrin and alpha Actinin 4 have been identified in congenital and experimental models of proteinuria. The role of Nephrin in anti apoptotic activity in podocyte slit diaphragm is believed to be associated with vascular endothelial derived growth factors VEGF signaling.

Synonyms: NPHS1, NPHN

Product images:



Western blotting for Nephrin on Human kidney lysate using Acris Cat.-No BP5030 anti-Nephrin serum. The antibody reacts with a band of approximate size 185kDa.



Staining for Nephrin on formalin fixed paraffin embedded kidney tissue sections using Acris Cat.-No BP5030 anti-Nephrin serum following antigen retrieval. Indirect immunoperoxidase staining. DAB substrate, hematoxylene counterstain.