

Product name:	Nephrin Rabbit Polyclonal Antibody
Cat number:	ABN14562
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Nephrin. AA range:843-892
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a member of the immunoglobulin family of cell adhesion molecules that functions in the glomerular filtration barrier in the kidney. The 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. Mutations in this gene result in Finnish-type congenital nephrosis 1, characterized by severe proteinuria and loss of the slit diaphragm and foot processes.[provided by RefSeq, Oct 2009],developmental stage:In 23-week-old embryo found in epithelial podocytes of the periphery of mature and developing glomeruli.,disease:Defects in NPHS1 are the cause of congenital nephrotic syndrome of the Finnish type (NPHS1 or CNF) [MIM:256300]. CNF is an autosomal recessive disorder characterized by massive proteinuria in utero and nephrosis at birth.,function:Seems to play a role in the development or function of the kidney glomerular filtration barrier. May anchor the podocyte slit diaphragm to the actin cytoskeleton.,PTM:Phosphorylated on tyrosine residues.,similarity:Belongs to the immunoglobulin superfamily.,similarity:Contains 1 fibronectin type-III domain.,similarity:Contains 8 Ig-like C2-type (immunoglobulin-like) domains.,subcellular location:Predominantly located at podocyte slit diaphragm between podocyte foot processes. Also associated with podocyte apical plasma membrane.,subunit:Interacts with podocin/NPHS2 and KIRREL. Interacts with CD2AP C-terminal domain (By similarity). Interacts with MAGI1 PDZ 2 and 3 domains forming a tripartite complex with IGSF5/JAM4 (By similarity). Interacts with DDN; the interaction is direct.,tissue specificity:Specifically expressed in podocytes of kidney glomeruli.,