Product Name: Nephrin Rabbit Polyclonal Antibody
Catalog #: APRab14562

Summary

Production Name	Nephrin Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	NPHS1
Alternative Names	NPHS1; NPHN; Nephrin; Renal glomerulus-specific cell adhesion receptor
Gene ID	4868.0
SwissProt ID	O60500.The antiserum was produced against synthesized peptide derived from human Nephrin. AA range:843-892

Application

Dilution Ratio	IHC 1:100-1:300 ELISA: 1:40000
Molecular Weight	

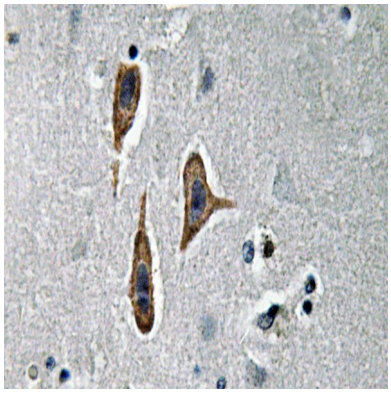
Background

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.,

Research Area

Image Data



Immunohistochemistry analysis of Nephrin antibody in paraffin-embedded human brain tissue.

Note

For research use only.