

Anti-Nephrin Picoband Antibody

Catalog # ABO10223

Product Information

Application	WB
Primary Accession	O60500
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Nephrin(NPHS1) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	4868
Other Names	Nephrin, Renal glomerulus-specific cell adhesion receptor, NPHS1, NPHN
Calculated MW	134742
Application Details	Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
Subcellular Localization	Cell membrane ; Single-pass type I membrane protein . Predominantly located at podocyte slit diaphragm between podocyte foot processes. Also associated with podocyte apical plasma membrane. .
Tissue Specificity	Specifically expressed in podocytes of kidney glomeruli.
Source	Eukaryota
Protein Name	Nephrin
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated

freezing and thawing.

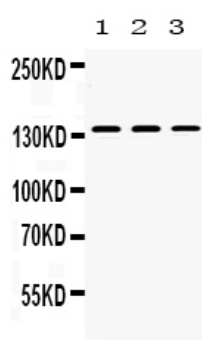
Protein Information

Name	NPHS1 (HGNC:7908)
Synonyms	NPHN
Function	Seems to play a role in the development or function of the kidney glomerular filtration barrier. Regulates glomerular vascular permeability. May anchor the podocyte slit diaphragm to the actin cytoskeleton. Plays a role in skeletal muscle formation through regulation of myoblast fusion (By similarity).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Note=Predominantly located at podocyte slit diaphragm between podocyte foot processes. Also associated with podocyte apical plasma membrane.
Tissue Location	Specifically expressed in podocytes of kidney glomeruli

Background

NPHS1, also called Nephtrin, 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. It 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.

Images



Western blot analysis of Nephtrin expression in rat kidney extract (lane 1), mouse kidney extract (lane 2) and 293T whole cell lysates (lane 3). Nephtrin at 134KD was detected using rabbit anti- Nephtrin Antigen Affinity purified polyclonal antibody (Catalog #ABO10223) at 0.5 μ g/mL. The blot was developed using chemiluminescence (ECL) method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.