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Anti-Nephrin Picoband Antibody

Catalog # ABO10223

Specification

Anti-Nephrin Picoband Antibody - 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.

Anti-Nephrin Picoband Antibody - Additional Information

Gene ID 4868

Other Names
Nephrin, Renal glomerulus-specific cell adhesion receptor, NPHS1, NPHN

Calculated MW
134742 MW KDa

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.

Protein Name
Nephrin

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

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 r˚Constitution, 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.**

Anti-Nephrin Picoband Antibody - Protein Information

Name NPHS1

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

Anti-Nephrin Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Nephrin Picoband Antibody - Images

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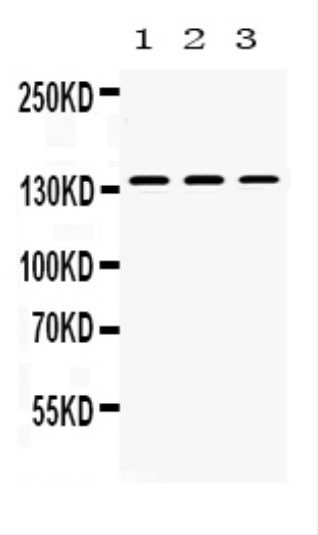

Western blot analysis of Nephrin expression in rat kidney extract (lane 1), mouse kidney extract (lane 2) and 293T whole cell lysates (lane 3). Nephrin at 134KD was detected using rabbit anti-Nephrin Antigen Affinity purified polyclonal antibody (Catalog #ABO10223) at 0.5 Î¼g/mL. The blot was developed using chemiluminescence (ECL) method .

Anti-Nephrin Picoband Antibody - Background

NPHS1, also called Nephrin, 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, orproteinuria. NPHS1 is also required for cardiovascular development.