

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 Na₃.

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.

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.

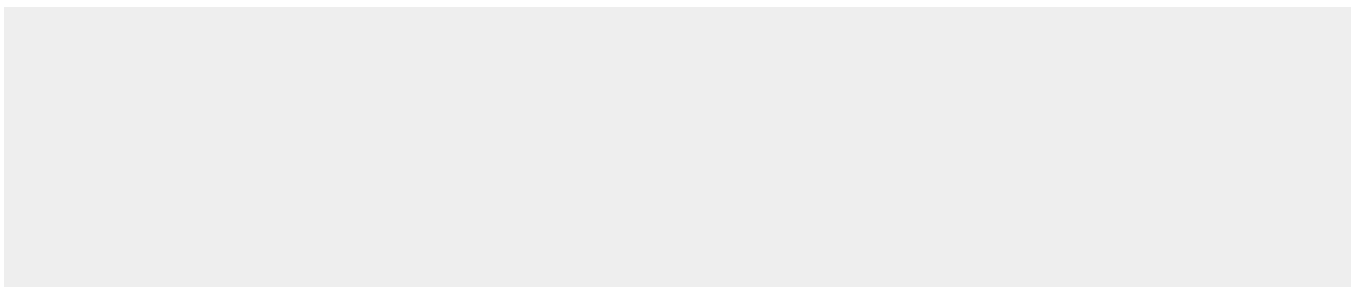
Tissue Location

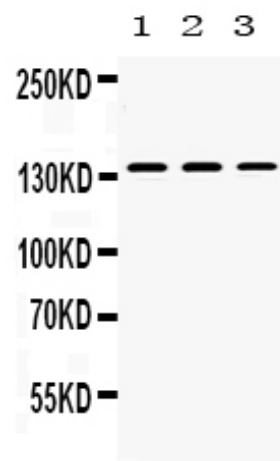
Specifically expressed in podocytes of kidney glomeruli

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 Cytometry](#)
- [Cell Culture](#)

Anti-Nephrin Picoband Antibody - 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 .

Anti-Nephtrin Picoband Antibody - 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. Its 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 nephtrin, 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.