

**Nephrin (Y1210) antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP10417a**

**Specification**

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**Nephrin (Y1210) antibody - Product Information**

Application	WB, FC,E
Primary Accession	<a href="#">O60500</a>
Other Accession	<a href="#">NP_004637.1</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	1191-1219

**Nephrin (Y1210) antibody - Additional Information**

**Gene ID** 4868

**Other Names**

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

**Target/Specificity**

This Nephrin antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1191-1219 amino acids from human Nephrin.

**Dilution**

WB~~1:2000

FC~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Nephrin (Y1210) antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Nephrin (Y1210) 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**

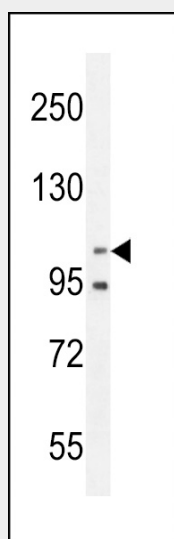
Specifically expressed in podocytes of kidney glomeruli

**Nephrin (Y1210) antibody - Protocols**

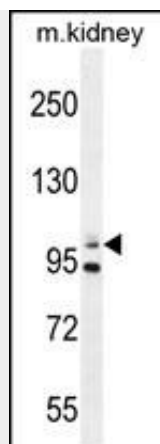
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

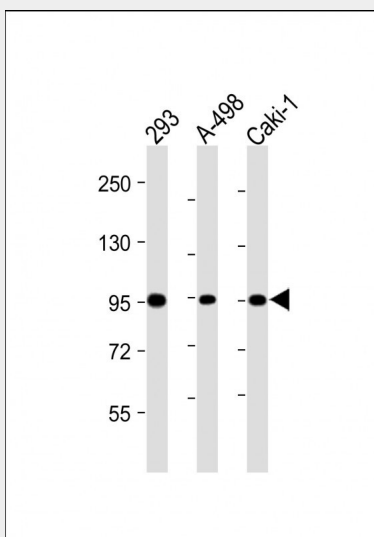
**Nephrin (Y1210) antibody - Images**



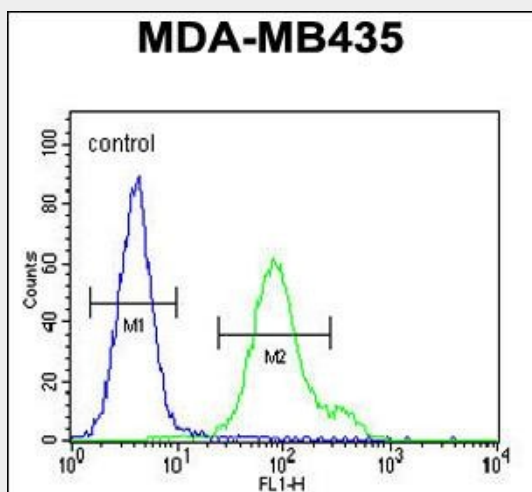
Nephrin (Y1210) antibody (Cat. #AP10417a) western blot analysis in MDA-MB435 cell line lysates (35ug/lane). This demonstrates the Nephrin antibody detected the Nephrin protein (arrow).



Nephrin (Y1210) antibody (Cat. #AP10417a) western blot analysis in mouse kidney tissue lysates (35ug/lane). This demonstrates the Nephrin antibody detected the Nephrin protein (arrow).



All lanes : Anti-Nephrin (Y1210) antibody at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: A-498 whole cell lysate Lane 3: Caki-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 135 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Nephrin Antibody (Y1210) (Cat. #AP10417a) flow cytometric analysis of MDA-MB435 cells (right

histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### **Nephrin (Y1210) antibody - 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.

### **Nephrin (Y1210) antibody - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)  
Wu, F., et al. J. Am. Soc. Nephrol. 21(9):1456-1467(2010)  
Tossidou, I., et al. J. Biol. Chem. 285(33):25285-25295(2010)  
Machuca, E., et al. J. Am. Soc. Nephrol. 21(7):1209-1217(2010)  
Aya, K., et al. Kidney Int. 57(2):401-404(2000)