10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Specification

Nephrin (Y1210) antibody - Product Information

Application	**FC, WB,E**
Primary Accession	O60500
Other Accession	NP_004637.1
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
FC~~1:10~50
WB~~1:2000
E~~Use at an assay dependent concentration.

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.

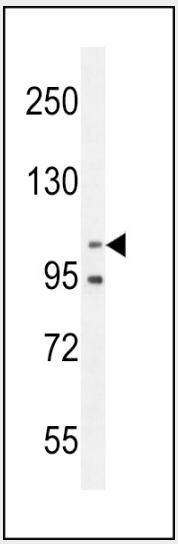
Tissue Location
Specifically expressed in podocytes of kidney glomeruli

Nephrin (Y1210) antibody - Protocols

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

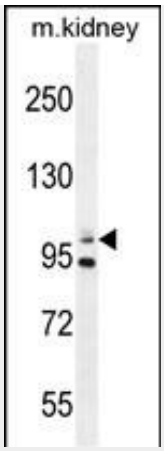
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Nephrin (Y1210) antibody - Images

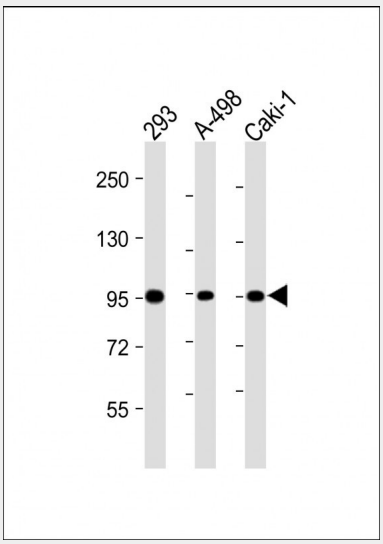


Nephrin (Y1210) antibody (Cat. #AP10417a) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the Nephrin antibody detected the Nephrin protein (arrow).

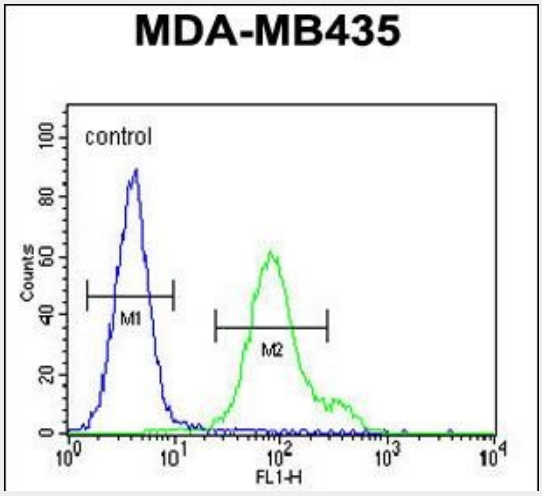
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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)