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# Nephrin (Y1210) antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10417a

## Product Information

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| **Application** | WB, FC, E |
| **Primary Accession** | O60500 |
| **Other Accession** | NP_004637.1 |
| **Reactivity** | Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB28264 |
| **Calculated MW** | 134742 |
| **Antigen Region** | 1191-1219 |

## Additional Information

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| **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 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. |

## Protein Information

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| **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 |

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| | 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 |

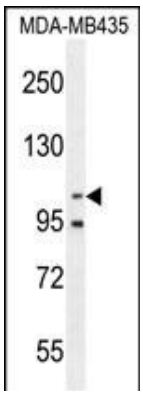
## Background

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.

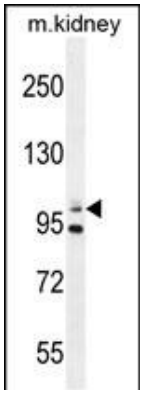
## References


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Machuca, E., et al. J. Am. Soc. Nephrol. 21(7):1209-1217(2010)
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## Images

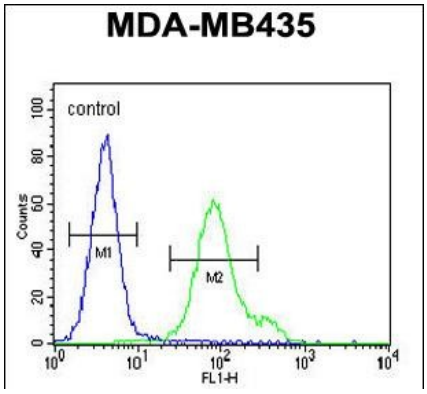



Nephrin (Y1210) antibody (Cat. #AP10417a) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the Nephrin antibody detected the Nephrin protein (arrow).




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).

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.

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