

**Nephrin Antibody (Ascites)**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM1865a****Specification**

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**Nephrin Antibody (Ascites) - Product Information**

Application	WB, IF, E
Primary Accession	<a href="#">O60500</a>
Other Accession	<a href="#">NP_004637.1</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgM, K
Antigen Region	1088-1117

**Nephrin Antibody (Ascites) - Additional Information****Gene ID** 4868**Other Names**

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

**Target/Specificity**

This Nephrin antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 1088-1117 amino acids from human Nephrin.

**Dilution**

WB~~1:500~1000

IF~~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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**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 Antibody (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

**Nephrin Antibody (Ascites) - 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**

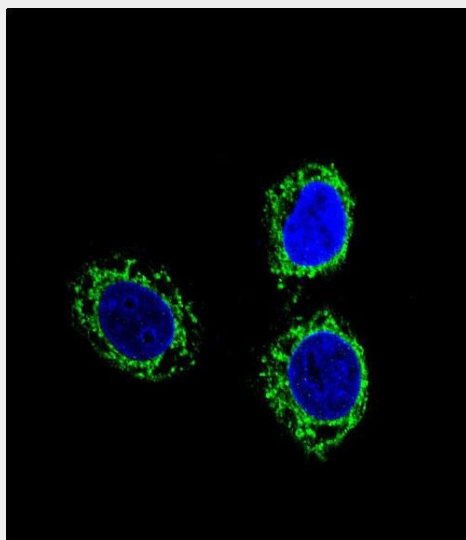
Specifically expressed in podocytes of kidney glomeruli

### **Nephrin Antibody (Ascites) - Protocols**

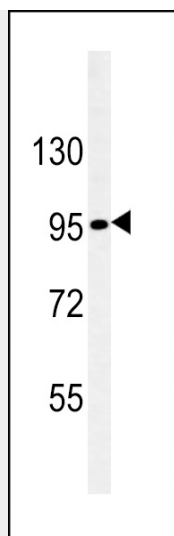
Provided below are standard protocols that you may find useful for product applications.

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

### **Nephrin Antibody (Ascites) - Images**



Confocal immunofluorescent analysis of Nephrin Antibody (C-term) (Cat#AM1865a) with HeLa cells followed by Alexa Fluor® 488-conjugated goat anti-mouse IgG (green). DAPI was used to stain the cell nuclei (blue).



Nephrin Antibody (C-term) (Cat. #AM1865a) western blot analysis in SK-BR-3 cell line lysates (15µg/lane). This demonstrates the Nephrin antibody detected the Nephrin protein (arrow). (1:100)

#### **Nephrin Antibody (Ascites) - 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 Antibody (Ascites) - 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)