

Phospho-Nephrin(Y1193)) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3746a

Specification

Phospho-Nephrin(Y1193)) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW DB,E <u>O60500</u> <u>NP_004637.1</u> Human Rabbit Polyclonal Rabbit IgG 134742

Phospho-Nephrin(Y1193)) 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 phosphopeptide corresponding to amino acid residues surrounding Y1193 of human Nephrin.

Dilution DB~~1:500 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

Phospho-Nephrin(Y1193)) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-Nephrin(Y1193)) 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

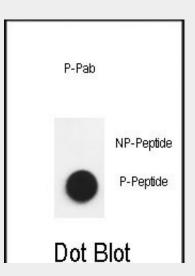
Specifically expressed in podocytes of kidney glomeruli

Phospho-Nephrin(Y1193)) 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
- <u>Cell Culture</u>

Phospho-Nephrin(Y1193)) Antibody - Images



Dot blot analysis of anti-Phospho-Nephrin (Y1193) antibody Phospho-specific Pab (Cat. #AP3746a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.

Phospho-Nephrin(Y1193)) 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.

Phospho-Nephrin(Y1193)) 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)