

Anti-Nephrin antibody [Y17-R] ab136894

★★★★★ [3 Abreviews](#) [20 References](#) [2 Images](#)

Overview

Product name	Anti-Nephrin antibody [Y17-R]
Description	Rabbit monoclonal [Y17-R] to Nephrin
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt, WB
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide derived from the centre of the fifth Ig-like domain of Human Nephrin (between residues Cys465-Cys528).
Epitope	Antibody recognizes the epitope located between Cys465 - Cys528
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	<p>pH: 8.00</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: 1% BSA, 0.32% Tris HCl</p>
Purity	Immunogen affinity purified
Purification notes	This immunoglobulin is the product of one single B-cell line from the crude anti-peptide polyclonal anti-serum. This antibody is purified using a proprietary technique and offers a completely post-translationally modified and properly glycosylated antibody. This offers increased stability.
Clonality	Monoclonal
Clone number	Y17-R
Isotype	IgG

Applications

The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab136894 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	1/5000. Predicted molecular weight: 134 kDa.

Target

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.

Tissue specificity

Specifically expressed in podocytes of kidney glomeruli.

Involvement in disease

Defects in NPHS1 are the cause of nephrotic syndrome type 1 (NPHS1) [MIM:256300]; also known as Finnish congenital nephrosis (CNF). A renal disease characterized clinically by proteinuria, hypoalbuminemia, hyperlipidemia, and edema. Kidney biopsies show non-specific histologic changes such as focal segmental glomerulosclerosis and diffuse mesangial proliferation. Some affected individuals have an inherited steroid-resistant form and progress to end-stage renal failure.

Sequence similarities

Belongs to the immunoglobulin superfamily.
Contains 1 fibronectin type-III domain.
Contains 8 Ig-like C2-type (immunoglobulin-like) domains.

Developmental stage

In 23-week-old embryo found in epithelial podocytes of the periphery of mature and developing glomeruli.

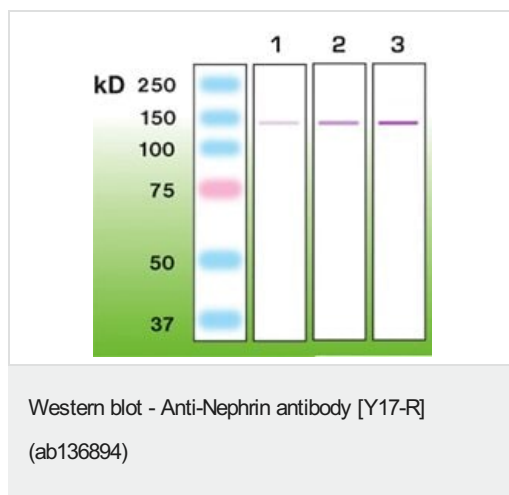
Post-translational modifications

Phosphorylated on tyrosine residues.

Cellular localization

Cell membrane. Predominantly located at podocyte slit diaphragm between podocyte foot processes. Also associated with podocyte apical plasma membrane.

Images



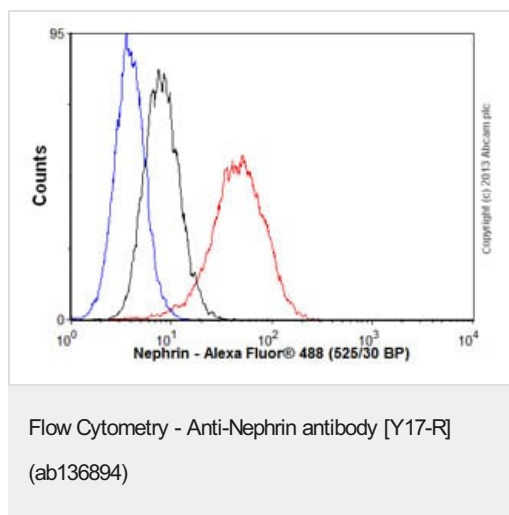
All lanes : Anti-Nephtrin antibody [Y17-R] (ab136894) at 1/5000 dilution

Lane 1 : Recombinant Mouse Nephtrin (extracellular domain, Gln 37 – Thr 1049) - 50ng

Lane 2 : Recombinant Mouse Nephtrin (extracellular domain, Gln 37 – Thr 1049) - 100ng

Lane 3 : Recombinant Mouse Nephtrin (extracellular domain, Gln 37 – Thr 1049) - 200ng

Predicted band size: 134 kDa



Overlay histogram showing HEK293 cells stained with ab136894 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab136894, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) ([ab150077](#)) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive result in 80% methanol (5 min) fixed HEK293 cells used under the same conditions. Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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