

## Product datasheet

# Anti-NPHS2 antibody [EPR13820] ab181143

Recombinant RabMAb

[15 References](#) [7 Images](#)

### Overview

<b>Product name</b>	Anti-NPHS2 antibody [EPR13820]
<b>Description</b>	Rabbit monoclonal [EPR13820] to NPHS2
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB <b>Unsuitable for:</b> ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	Human fetal kidney lysate; Human kidney tissue, human skeletal muscle tissue. Rat and mouse kidney.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR13820
<b>Isotype</b>	IgG

## Applications

---

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab181143 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
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <b><u>IHC antigen retrieval protocols</u></b> .
WB		1/2000. Detects a band of approximately 42 kDa (predicted molecular weight: 42 kDa). <b>For unpurified use at 1/10000 - 1/50000.</b>

**Application notes** Is unsuitable for ICC/IF.

## Target

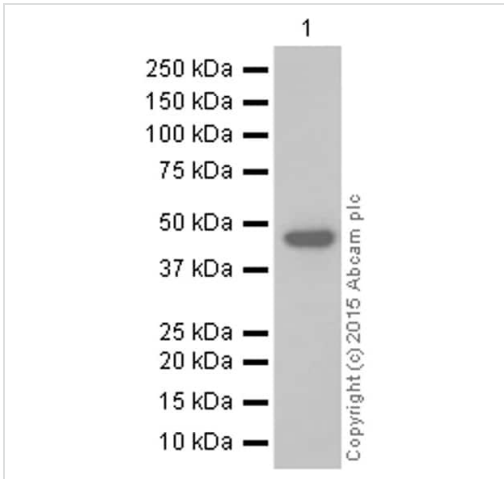
---

<b>Function</b>	Plays a role in the regulation of glomerular permeability, acting probably as a linker between the plasma membrane and the cytoskeleton.
<b>Tissue specificity</b>	Almost exclusively expressed in the podocytes of fetal and mature kidney glomeruli.
<b>Involvement in disease</b>	Defects in NPHS2 are the cause of nephrotic syndrome type 2 (NPHS2) [MIM:600995]. It is a renal disorder characterized clinically by childhood onset of proteinuria, hypoalbuminemia, hyperlipidemia, and edema. Kidney biopsies show non-specific histologic changes such as focal segmental glomerulosclerosis and diffuse mesangial proliferation. The disorder is resistant to steroid treatment and progresses to end-stage renal failure in the first or second decades. Some patients show later onset of the disorder.
<b>Sequence similarities</b>	Belongs to the band 7/mec-2 family.
<b>Cellular localization</b>	Cell membrane.

---

## Images

---



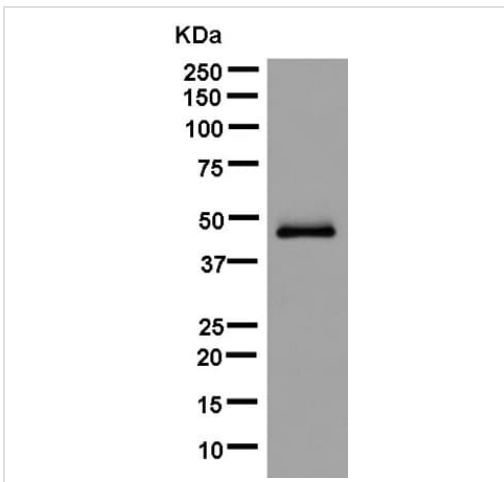
Western blot - Anti-NPHS2 antibody [EPR13820]  
(ab181143)

Anti-NPHS2 antibody [EPR13820] (ab181143) at 1/10000 dilution  
+ Human fetal kidney at 20 µg

**Secondary**

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at  
1/1000 dilution

**Predicted band size:** 42 kDa



Western blot - Anti-NPHS2 antibody [EPR13820]  
(ab181143)

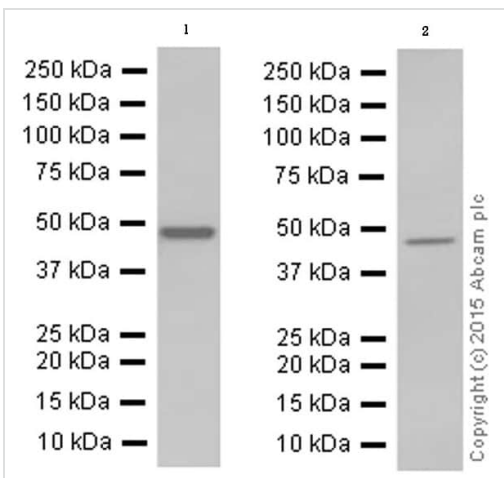
Anti-NPHS2 antibody [EPR13820] (ab181143) at 1/50000 dilution  
(unpurified) + Human fetal kidney tissue lysate at 20 µg

**Secondary**

Peroxidase-conjugated goat anti-rabbit IgG, (H+L) at 1/1000  
dilution

**Predicted band size:** 42 kDa

**Observed band size:** 42 kDa



Western blot - Anti-NPHS2 antibody [EPR13820]  
(ab181143)

**All lanes :** Anti-NPHS2 antibody [EPR13820] (ab181143) at  
1/2000 dilution

**Lane 1 :** Mouse kidney tissue lysate

**Lane 2 :** Rat kidney tissue lysate

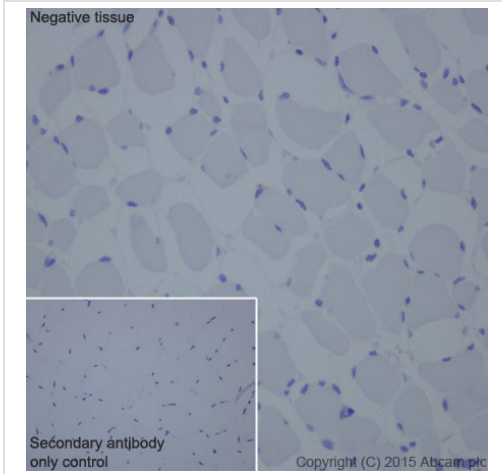
Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes :** Anti-Rabbit IgG (HRP), specific to the non-reduced form  
of IgG at 1/1000 dilution

**Predicted band size:** 42 kDa

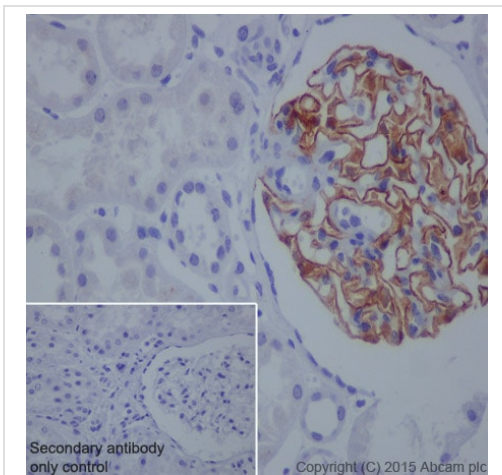
**Additional bands at:** 42 kDa. We are unsure as to the identity of  
these extra bands.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NPHS2 antibody [EPR13820] (ab181143)

ab181143 staining NPHS2 in human skeletal muscle tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/500. A goat anti-rabbit IgG H&L (HRP) **ab97051** was used as the secondary antibody at a dilution of 1/500.

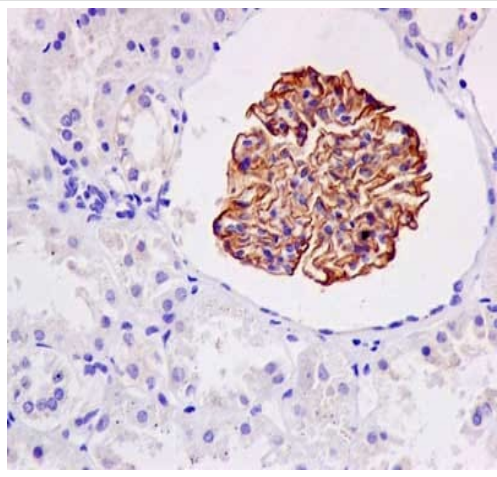
**Negative control 1:** PBS in place of primary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NPHS2 antibody [EPR13820] (ab181143)

ab181143 staining NPHS2 in human kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/500. A goat anti-rabbit IgG H&L (HRP) **ab97051** was used as the secondary antibody at a dilution of 1/500.

**Negative control 1:** PBS in place of primary antibody.






Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling NPHS2 with unpurified ab181143 at 1/500 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NPHS2 antibody [EPR13820] (ab181143)

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-NPHS2 antibody [EPR13820] (ab181143)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

## Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors