

Product datasheet

# Anti-Collagen alpha-4(IV) chain antibody ab193951

Overview

<b>Product name</b>	Anti-Collagen alpha-4(IV) chain antibody
<b>Description</b>	Goat polyclonal to Collagen alpha-4(IV) chain
	<p> This product is a <a href="#">fast track antibody</a>. It has been affinity purified and shows high titre values against the immunizing peptide by ELISA.</p> <p style="text-align: right;"><a href="#">Read the terms of use »</a></p>
<b>Host species</b>	Goat
<b>Species reactivity</b>	<p><b>Predicted to work with:</b> Human </p>
<b>Immunogen</b>	<p>Synthetic peptide corresponding to Human Collagen IV aa 1555-1565 (internal sequence) (Cysteine residue). NP_000083.3.</p> <p>Sequence:</p> <p>SEEAIRPYVSR</p> <p>Database link: <a href="#">P53420</a></p> <p style="text-align: right;">  <a href="#">Run BLAST with</a>                 <a href="#">Run BLAST with</a> </p>

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>	<p>pH: 7.30</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: 0.5% BSA, 99% Tris buffered saline</p>
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	ab193951 was purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

Fast track antibodies constitute a diverse group of products that have been released to accelerate your research, but are not yet fully characterized. They have all been affinity purified and show high titre values against the immunizing peptide (by ELISA).

[Fast track terms of use](#)

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 164 kDa. A 1 hour primary incubation is recommended for this product. Preliminary experiments in lysates of several human tissues and cell lines gave no specific signal but low background (at antibody concentration up to 1 µg/ml), we would welcome your feedback if you have tested this antibody in more suitable positive controls.

## Target

<b>Function</b>	Type IV collagen is the major structural component of glomerular basement membranes (GBM), forming a 'chicken-wire' meshwork together with laminins, proteoglycans and entactin/nidogen.
<b>Tissue specificity</b>	Alpha 3 and alpha 4 type IV collagens are colocalized and present in kidney, eye, basement membranes of lens capsule, cochlea, lung, skeletal muscle, aorta, synaptic fibers, fetal kidney and fetal lung. PubMed:8083201 reports similar levels of expression of alpha 3 and alpha 4 type IV collagens in kidney, but PubMed:7523402 reports that in kidney levels of alpha 3 type IV collagen are significantly lower than those of alpha 4 type IV collagen. Highest levels of expression of alpha 4 type IV collagen are detected in kidney, calvaria, neuroretina and cardiac muscle. Lower levels of expression are observed in brain, lung and thymus, and no expression is detected in choroid plexus, liver, adrenal, pancreas, ileum or skin.
<b>Involvement in disease</b>	Alport syndrome, autosomal recessive Hematuria, benign familial
<b>Sequence similarities</b>	Belongs to the type IV collagen family. Contains 1 collagen IV NC1 (C-terminal non-collagenous) domain.
<b>Domain</b>	Alpha chains of type IV collagen have a non-collagenous domain (NC1) at their C-terminus, frequent interruptions of the G-X-Y repeats in the long central triple-helical domain (which may cause flexibility in the triple helix), and a short N-terminal triple-helical 7S domain.
<b>Post-translational modifications</b>	Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains. Type IV collagens contain numerous cysteine residues which are involved in inter- and intramolecular disulfide bonding. 12 of these, located in the NC1 domain, are conserved in all known type IV collagens. The trimeric structure of the NC1 domains is stabilized by covalent bonds between Lys and Met residues.
<b>Cellular localization</b>	Secreted > extracellular space > extracellular matrix > basement membrane. Colocalizes with COL4A4 and COL4A5 in GBM, tubular basement membrane (TBM) and synaptic basal lamina (BL).

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

## Terms and conditions

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