




Product datasheet

Anti-COL4A5 antibody ab231957

4 Images

Overview

Product name	Anti-COL4A5 antibody
Description	Rabbit polyclonal to COL4A5
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Mouse, Human, Pig Predicted to work with: Dog 
Immunogen	Recombinant fragment corresponding to Human COL4A5 aa 1461-1685. Two N-terminal tags, His-tag and S-tag, expressed in E.coli. Sequence: GFLITRHSQTTDAPQCPQGTLQVYEGFSLLYVQGNKRAHG QDLGTAGSCL RRFSTMPFMFCNINNVCNFA SRNDYSYWLSTPEPMPMSM QPLKGQSIQPF ISRCVCEAPAVVIAVHSQTIQIPHCPQGWDLSLWIGYSFMM HTSAGAEGS GQALASPGSCLEEFRSAPFIECHGRGTCNYYANSYSFWL ATVDVSDMFSK PQSETLKAGDLRTRISRCQVCMKRT Database link: P29400  Run BLAST with  Run BLAST with
Positive control	IHC-P: Human kidney tissue. WB: Recombinant human COL4A5 protein; Mouse and pig cerebrum lysates.
General notes	This product was previously labelled as Collagen alpha-5(IV) chain

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol
Purity	Immunogen affinity purified
Purification notes	Antigen-specific affinity chromatography followed by Protein A affinity chromatography.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab231957** 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		Use a concentration of 5 - 20 µg/ml.
WB		Use a concentration of 0.2 - 2 µg/ml. Predicted molecular weight: 161 kDa.

Target

Function	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.
Tissue specificity	Isoform 2 is found in kidney.
Involvement in disease	Alport syndrome, X-linked Deletions covering the N-terminal regions of COL4A5 and COL4A6, which are localized in a head-to-head manner, are found in the chromosome Xq22.3 centromeric deletion syndrome. This results in a phenotype with features of diffuse leiomyomatosis and Alport syndrome (DL-ATS).

Sequence similarities

Belongs to the type IV collagen family.
Contains 1 collagen IV NC1 (C-terminal non-collagenous) domain.

Domain

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.

Post-translational modifications

Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.

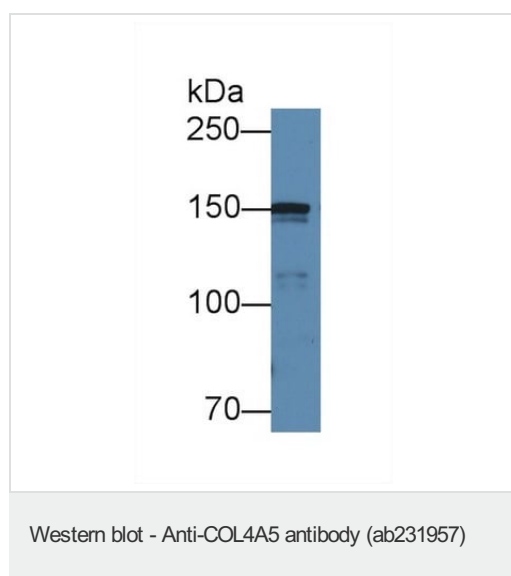
Type IV collagens contain numerous cysteine residues which are involved in inter- and intramolecular disulfide bonding. 12 of these, located in the NC1 domain, are conserved in all known type IV collagens.

The trimeric structure of the NC1 domains is stabilized by covalent bonds between Lys and Met residues.

Cellular localization

Secreted, extracellular space, extracellular matrix, basement membrane.

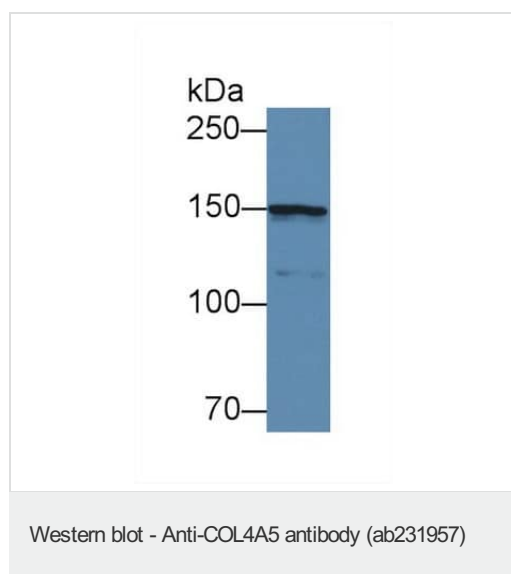
Images



Anti-COL4A5 antibody (ab231957) at 2 µg/ml + Pig cerebrum lysate.

Developed using the ECL technique.

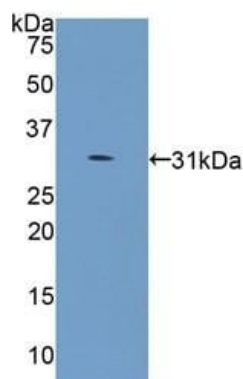
Predicted band size: 161 kDa



Anti-COL4A5 antibody (ab231957) at 2 µg/ml + Mouse cerebrum lysate.

Developed using the ECL technique.

Predicted band size: 161 kDa

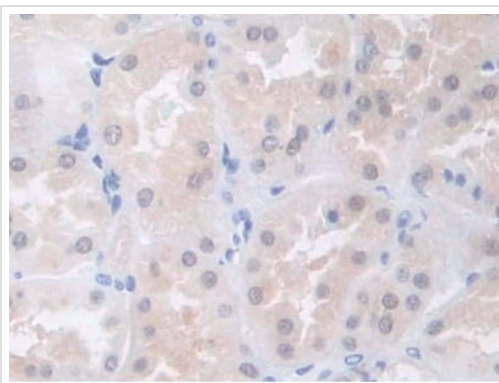


Western blot - Anti-COL4A5 antibody (ab231957)

Anti-COL4A5 antibody (ab231957) at 2 µg/ml + Recombinant human COL4A5 protein.

Developed using the ECL technique.

Predicted band size: 161 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COL4A5 antibody (ab231957)

Formalin-fixed, paraffin-embedded human kidney tissue stained for COL4A5 using ab231957 at 20 µg/mL in immunohistochemical analysis. DAB staining.

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

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