

Product datasheet

Anti-Collagen V antibody ab7046

★★★★★ 10 Abreviews 43 References 3 Images

Overview

Product name	Anti-Collagen V antibody
Description	Rabbit polyclonal to Collagen V
Host species	Rabbit
Specificity	Negligible cross-reactivity with Type I, II, III, IV or VI collagens. Non-specific cross reaction of anti-collagen antibodies with other human serum proteins or non-collagen extracellular matrix proteins is negligible.
Tested applications	Suitable for: WB, Sandwich ELISA, IHC-P, IP, IHC-Fr, ICC
Species reactivity	Reacts with: Mouse, Cow, Human
Immunogen	Full length native protein (purified) corresponding to Collagen V aa 1-1745.
General notes	<p>Some class specific anti-collagens may be specific for three-dimensional epitopes which may result in diminished reactivity with denatured collagen or formalin-fixed, paraffin embedded tissues.</p> <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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 4.8% Sodium borate, 0.15% EDTA, 0.44% Sodium chloride
Purity	Immunogen affinity purified
Purification notes	Immunoaffinity chromatography using immobilized antigens followed by extensive cross-adsorption against other collagens, human serum proteins and non-collagen extracellular matrix proteins to remove any unwanted specificities.

Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab7046 in the following tested applications.

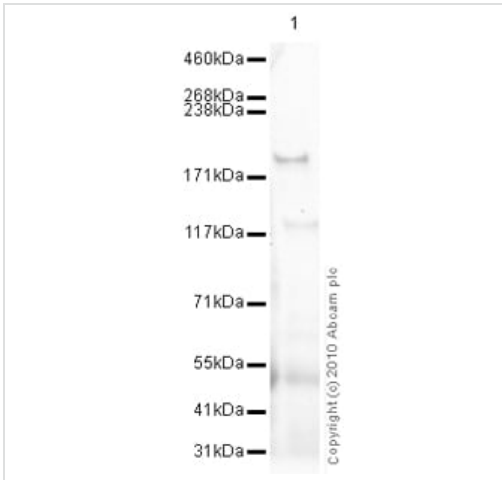
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/5000 - 1/10000. Detects a band of approximately 180 kDa (predicted molecular weight: 180 kDa). Native conditions are recommended.
Sandwich ELISA		Use at an assay dependent concentration. Can be used with a suitable biotinylated detection antibody such as Rabbit polyclonal to Collagen V (Biotin) (ab6582).
IHC-P	★★★★★ (6)	1/50 - 1/200.
IP		Use at an assay dependent concentration.
IHC-Fr	★★★★☆ (2)	Use at an assay dependent concentration.
ICC		Use at an assay dependent concentration. PubMed: 18385800

Target

Function	Type V collagen is a member of group I collagen (fibrillar forming collagen). It is a minor connective tissue component of nearly ubiquitous distribution. Type V collagen binds to DNA, heparan sulfate, thrombospondin, heparin, and insulin.
Involvement in disease	Ehlers-Danlos syndrome 1 Ehlers-Danlos syndrome 2
Sequence similarities	Belongs to the fibrillar collagen family. Contains 1 fibrillar collagen NC1 domain. Contains 1 laminin G-like domain.
Domain	The C-terminal propeptide, also known as COLFI domain, have crucial roles in tissue growth and repair by controlling both the intracellular assembly of procollagen molecules and the extracellular assembly of collagen fibrils. It binds a calcium ion which is essential for its function.
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. Sulfated on 40% of tyrosines.
Cellular localization	Secreted > extracellular space > extracellular matrix.

Images



Western blot - Anti-Collagen V antibody (ab7046)

Anti-Collagen V antibody (ab7046) at 1 µg/ml + Human pancreas tissue lysate - total protein (ab29816) at 10 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

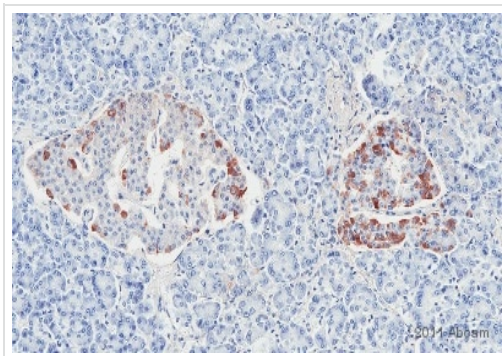
Performed under reducing conditions.

Predicted band size: 180 kDa

Observed band size: 180 kDa

Additional bands at: 122 kDa, 54 kDa. We are unsure as to the identity of these extra bands.

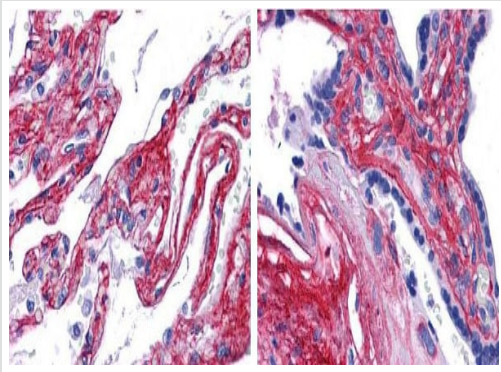
Exposure time: 8 minutes



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Collagen V antibody (ab7046)

This image is courtesy of an anonymous Abreview.

ab7046 staining Collagen V in Human pancreas tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded tissue sections). The sections were fixed in formaldehyde and subjected to heat-mediated antigen retrieval in citrate pH 6 prior to blocking with 0.25% casein for 5 minutes at 25°C. The primary antibody was diluted 1/75 in Tris-HCL and incubated with the sample for 30 minutes at 25°C. An HRP polymer-conjugated goat anti-rabbit antibody was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Collagen V antibody (ab7046)

Immunohistochemical analysis of formalin-fixed paraffin-embedded human lung (left) and placenta (right) sections labelling collagen V with ab7046 at a dilution of 1/200 for 45 minutes at room temperature. An antigen retrieval step was performed with 0.01 M sodium citrate buffer pH 6.0 at 100°C for 20 mins.

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