# abcam

#### Product datasheet

## Anti-Collagen V antibody ab7046

\*\*\*\* 11 Abreviews 50 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 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.

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.

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

**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.

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**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	*** <u>*</u>	1/50 - 1/200.
IP		Use at an assay dependent concentration.
IHC-Fr	<b>★★★★</b> <u>(2)</u>	Use at an assay dependent concentration.
ICC		Use at an assay dependent concentration. PubMed: 18385800

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.	

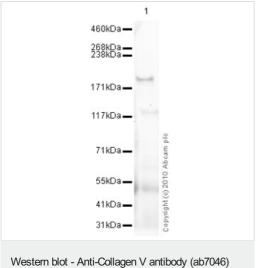
**Post-translational** Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all **modifications** of the chains.

Sulfated on 40% of tyrosines.

**Cellular localization** Secreted > extracellular space > extracellular matrix.

### Images

**Target** 



Secondary

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

tissue lysate - total protein (ab29816) at 10 µg

Anti-Collagen V antibody (ab7046) at 1 µg/ml + Human pancreas

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.

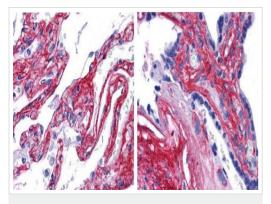
· medda-toc.

Exposure time: 8 minutes

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 paraffinembedded sections) - Anti-Collagen V antibody (ab7046)

This image is courtesy of an anonymous Abreview.



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

Immunohistochemical analysis of formalin-fixed paraffinembedded 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 retrival step was performed with 0.01 M sodium citrate buffer pH 6.0 at 100°C for 20 mins.

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