

Product datasheet

Anti-Collagen V antibody (Biotin) ab6582

Overview

Product name	Anti-Collagen V antibody (Biotin)
Description	Rabbit polyclonal to Collagen V (Biotin)
Host species	Rabbit
Conjugation	Biotin
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: IHC-Fr, IP, WB, Indirect ELISA
Species reactivity	Reacts with: Cow, Human Predicted to work with: Mammals 
Immunogen	Collagen Type V from adult human and bovine tissues
Positive control	Natural Collagen V protein (ab7530) can be used as a positive control in WB.
General notes	At least 11 genetically distinct gene products are collectively referred to as 'collagen types' or other proteins and proteoglycans of the extracellular matrix. In humans, collagens are composed of about 20 unique protein chains which under go various types of post-translational modifications and are ultimately assembled into a triple helix. This results in great diversity between collagen types. Collagens are highly conserved throughout evolution and are characterized by an uninterrupted "Glycine-X-Y" triplet repeat that is a necessary part of the triple helical structure. For these reasons it is often extremely difficult to generate antibodies with specificities to collagens. The development of type specific antibodies is dependent on NON-DENATURED three-dimensional epitopes. This preparation results in a native conformation of the protein.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 8 Preservative: 0.01% Sodium azide Constituents: 0.44% Sodium chloride, 1% BSA, 4.77% Sodium borate, 0.146% EDTA
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

Our [Abpromise guarantee](#) covers the use of **ab6582** 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-Fr		
IP		
WB		
Indirect ELISA		

Application notes

Immunohistochemistry on frozen tissue sections (1:50 to 1:200)
Indirect trapping ELISA (1:4,000 to 1:8,000) for quantitation of antigen in serum using a standard curve.
Immunoprecipitation and western blotting (1:5,000 to 1:10,000) for highly sensitive qualitative analysis.

Optimal titers for other applications should be determined by the researcher.
Greatly diminished reactivity and selectivity of these antibodies will result if denaturing and reducing conditions of SDS-PAGE and immunoblotting are used

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.

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