

Datasheet for ABIN5596829

**anti-COL3A1 antibody****3** Images**1** Publication[Go to Product page](#)

## Overview

Quantity:	500 µg
Target:	COL3A1
Reactivity:	Human, Cow, Pig
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunoprecipitation (IP), Dot Blot (DB), Flow Cytometry (FACS), Fluorescence Microscopy (FM)

## Product Details

Purpose:	Collagen Type III Antibody
Immunogen:	Immunogen: Collagen Type III from human and bovine placenta Immunogen Type: Native Protein
Isotype:	IgG
Cross-Reactivity (Details):	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.
Characteristics:	Synonyms: rabbit anti-Collagen Type III antibody, Collagen type III alpha 1 antibody, Collagen type III alpha antibody, EDS4A antibody, Ehlers Danlos syndrome type IV, autosomal dominant antibody, Fetal collagen antibody, COL3A1, Collagen alpha-1 (III) chain
Purification:	Collagen III Antibody has been prepared by immunoaffinity chromatography using immobilized antigens.

## Product Details

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Sterility: Sterile filtered

## Target Details

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Target: COL3A1

Alternative Name: COL3A1 ([COL3A1 Products](#))

Background: Background: 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. Rockland extensively purifies collagens for immunization from human and bovine placenta and cartilage by limited pepsin digestion and selective salt precipitation. This preparation results in a native conformation of the protein. Antibodies are isolated from rabbit antiserum and are extensively cross-adsorbed by immunoaffinity purification to produce 'type' specific antibodies. Greatly diminished reactivity and selectivity of these antibodies will result if denaturing and reducing conditions are used for SDS-PAGE and immunoblotting.

Gene ID: 1281

NCBI Accession: [NP\\_000081](#)

UniProt: [P02461](#)

Pathways: [Autophagy](#), [Growth Factor Binding](#)

## Application Details

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Application Notes: Flow Cytometry Dilution: User Optimized  
Immunohistochemistry Dilution: 1:50 - 1:200  
Application Note: Anti-Collagen Type III has been tested by dot Blot, western blot, and IHC and is useful for indirect trapping ELISA for quantitation of antigen in serum using a standard curve, immunoprecipitation, native (non-denaturing, non-dissociating) PAGE, immunohistochemistry, and western blotting for highly sensitive qualitative analysis.  
Western Blot Dilution: 1:1,000 - 1:10,000  
Immunoprecipitation Dilution: 1:100  
ELISA Dilution: 1:5,000 - 1:50,000  
IF Microscopy Dilution: User Optimized  
Other: User Optimized

## Application Details

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Restrictions: For Research Use only

## Handling

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Format: Liquid

Concentration: 1.0 mg/mL

Buffer: Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2  
Stabilizer: None  
Preservative: 0.01 % (w/v) Sodium Azide

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C,-20 °C

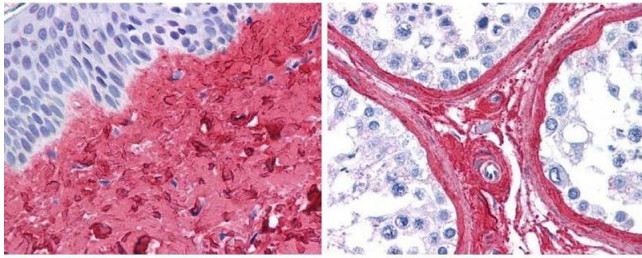
Storage Comment: Store vial at 4° C prior to opening. This product is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use. For extended storage, mix with an equal volume of glycerol, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing.

Expiry Date: 12 months

## Publications

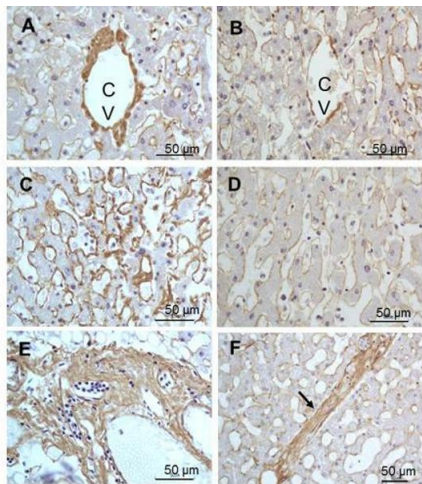
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Product cited in: Chakraborty, Wirrig, Hinton, Merrill, Spicer, Yutzey: "Twist1 promotes heart valve cell proliferation and extracellular matrix gene expression during development in vivo and is expressed in human diseased aortic valves." in: **Developmental biology**, Vol. 347, Issue 1, pp. 167-79, (2010) ([PubMed](#)).



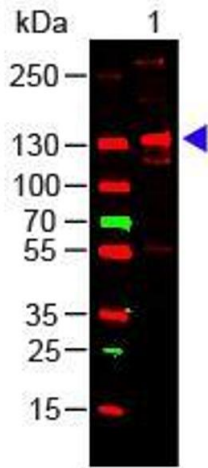
### Immunohistochemistry

**Image 1.** anti collagen III antibody (600-401-105 Lot 26016, 1:400, 45 min RT) showed strong staining in FFPE sections of human skin(left, dermis) with moderate to strong red staining and testis (right) where strong staining was observed within connective tissue between seminiferous tubules. The antibody showed strong extracellular staining within connective tissues across many organs with minimal background staining. Slides were steamed in 0.01 M sodium citrate buffer, pH 6.0 at 99-100°C - 20 minutes for antigen retrieval. Images provided courtesy of LifeSpan Biosciences, Seattle, WA



### Immunohistochemistry

**Image 2.** Immunohistochemistry of Rabbit Anti-collagen type III antibody. Tissue: right lobe of the liver section. A:Central Vein (CV) fibrosis, B: Non-fibrotic CV, C: Perisinusoidal fibrosis, D: Non-fibrotic area, E: Protoplasmic tract fibrosis, F: Septal fibrosis (arrow). Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Anti-collagen type III at 1:500 for 4°C for 24hr. Secondary antibody: Peroxidase biotin-streptavidin rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Anti-collagen type III is intra and extracellular. Staining: 3,3'-diaminobenzidine tetrahydrochloride was used as the chromogen. Nuclei were counterstained purple with hematoxylin.



### Western Blotting

**Image 3.** Western Blot of Rabbit Anti-COLLAGEN III Antibody Lane 1: Human Collagen III Load: 100 ng per lane  
 Primary antibody: Collagen III Antibody at 1:1000 o/n at 4°C  
 Secondary antibody: 649 Goat anti-rabbit at 1:20,000 for 30 min at RT Block: ABIN925618 for 30 min at RT  
 Predicted/Observed size: 138 kDa, 138 kDa