

**Anti-Collagen I Antibody**  
Catalog # ABO11450

**Specification**

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**Anti-Collagen I Antibody - Product Information**

Application	IHC, ICC, WB
Primary Accession	<a href="#">P11087</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Collagen alpha-1(I) chain(COL1A1) detection. Tested with WB, IHC-P, IHC-F, ICC in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Collagen I Antibody - Additional Information**

**Gene ID** 12842

**Other Names**

Collagen alpha-1(I) chain, Alpha-1 type I collagen, Col1a1, Cola1

**Calculated MW**

138032 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat  
Immunocytochemistry , 0.5-1 µg/ml, Mouse, Human, Rat  
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Human, Rat, Mouse  
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

**Subcellular Localization**

Secreted, extracellular space, extracellular matrix .

**Tissue Specificity**

Forms the fibrils of tendon, ligaments and bones. In bones the fibrils are mineralized with calcium hydroxyapatite.

**Protein Name**

Collagen alpha-1(I) chain

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of mouse Collagen

I(1192-1207aa QPPQEKSQDGGRYRA), identical to the related rat sequence, and different from the related human sequence by two amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the fibrillar collagen family.

**Anti-Collagen I Antibody - Protein Information**

**Name** Col1a1 {ECO:0000312|MGI:MGI:88467}

**Function**

Type I collagen is a member of group I collagen (fibrillar forming collagen).

**Cellular Location**

Secreted, extracellular space, extracellular matrix {ECO:0000255|PROSITE-ProRule:PRU00793}

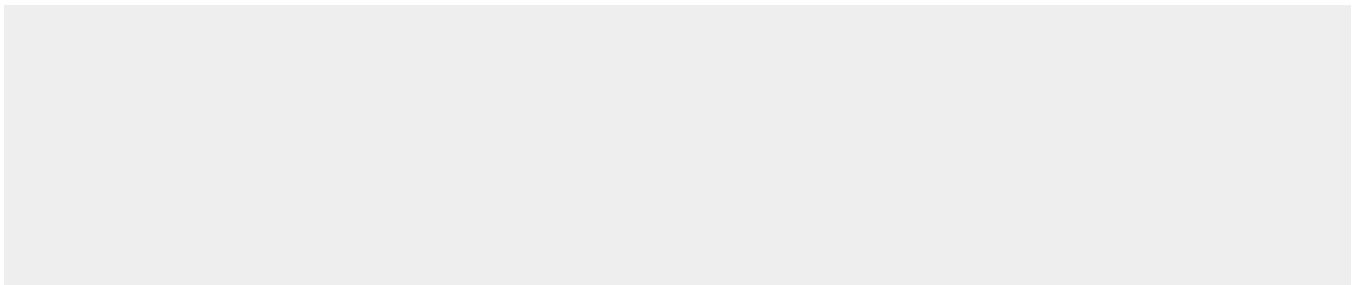
**Tissue Location**

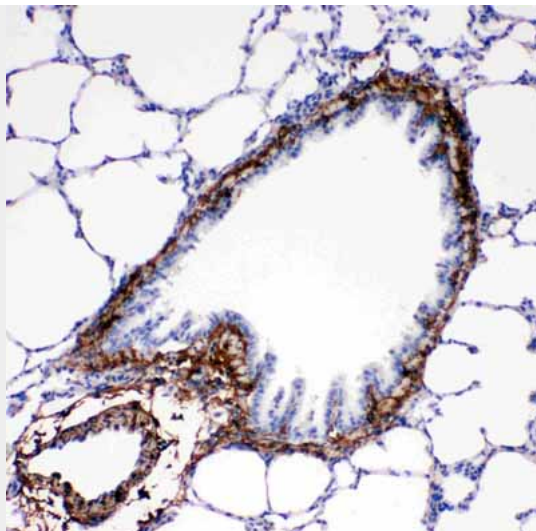
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**Anti-Collagen I Antibody - Protocols**

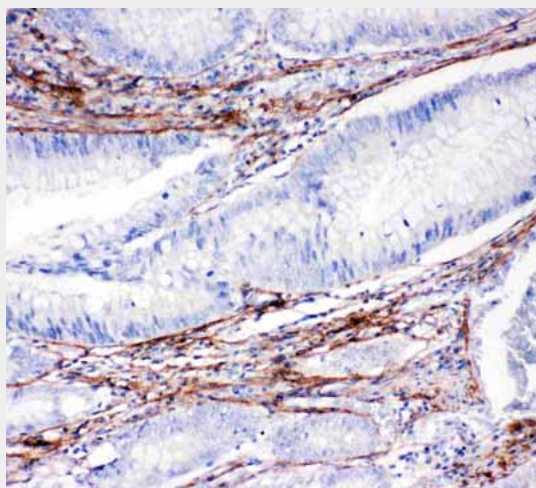
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

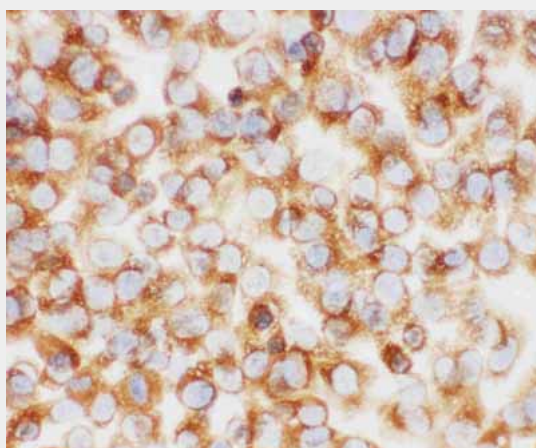
**Anti-Collagen I Antibody - Images**



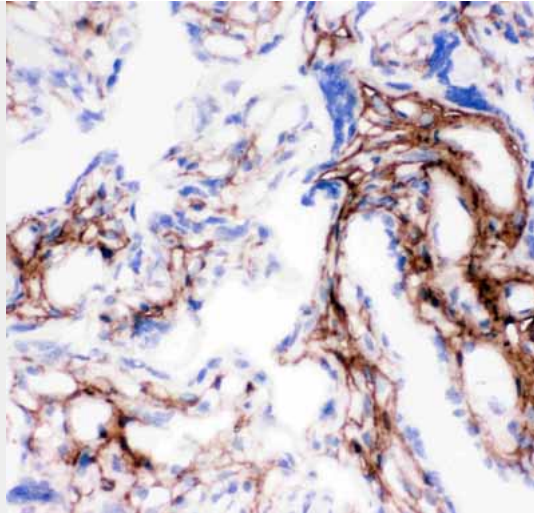
Anti-Collagen I antibody, ABO11450, IHC(P)IHC(P): Rat Lung Tissue



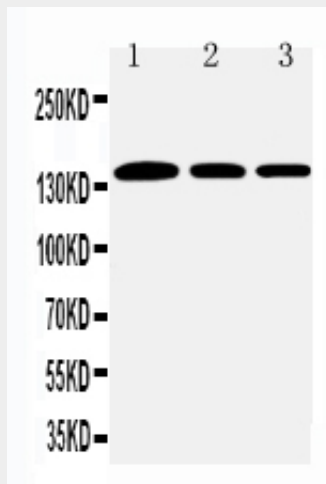
Anti-Collagen I antibody, ABO11450, IHC(P)IHC(P): Human Intestinal Cancer Tissue



Anti-Collagen I antibody, ABO11450, ICCICC: NIH3T3 Cell



Anti-Collagen I antibody, ABO11450, IHC(F)IHC(F): Human Placenta Tissue



Anti-Collagen I antibody, ABO11450, Western blotting Lane 1: Rat Lung Tissue Lysate Lane 2: Human Placenta Tissue Lysate Lane 3: Rat Testis Tissue Lysate

### Anti-Collagen I Antibody - Background

Collagen, type I, alpha 1, also known as COL1A1, is a human gene that encodes the major component of type I collagen, the fibrillar collagen found in most connective tissues, including cartilage. This gene is mapped to 17q21.33. This gene encodes the pro-alpha1 chains of type I collagen whose triple helix comprises two alpha1 chains and one alpha2 chain. Type I is a fibril-forming collagen found in most connective tissues and is abundant in bone, cornea, dermis and tendon. Mutations in this gene are associated with osteogenesis imperfecta types I-IV, Ehlers-Danlos syndrome type VIIA, Ehlers-Danlos syndrome Classical type, Caffey Disease and idiopathic osteoporosis.