

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

Anti-Collagen I Antibody - Product Information

Application	IHC, ICC, WB
Primary Accession	P11087
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 Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

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}

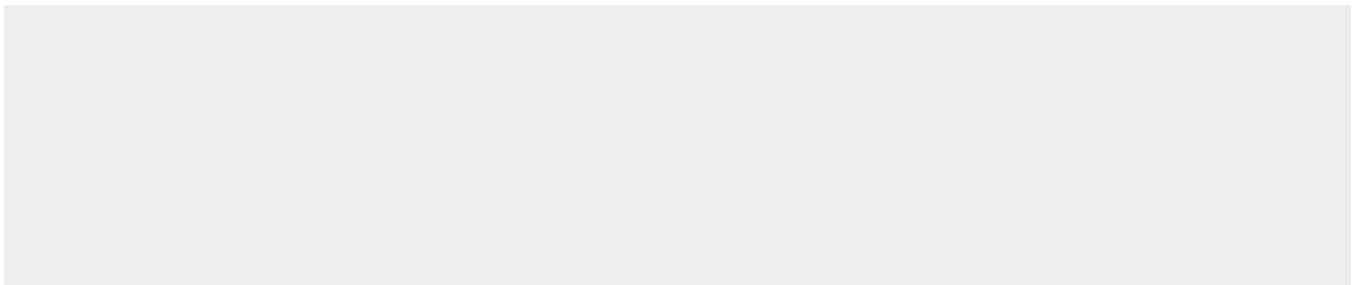
Tissue Location

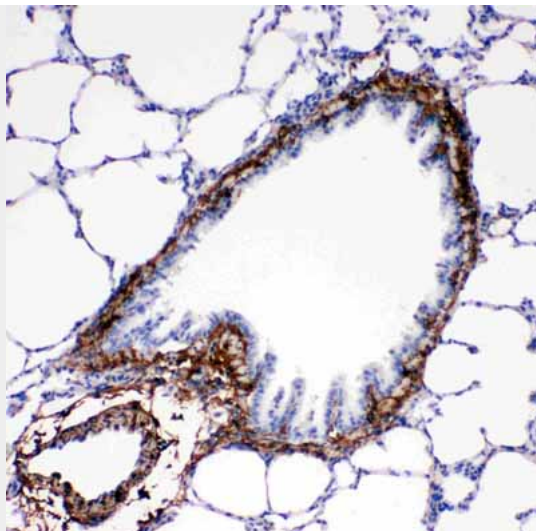
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Anti-Collagen I Antibody - Protocols

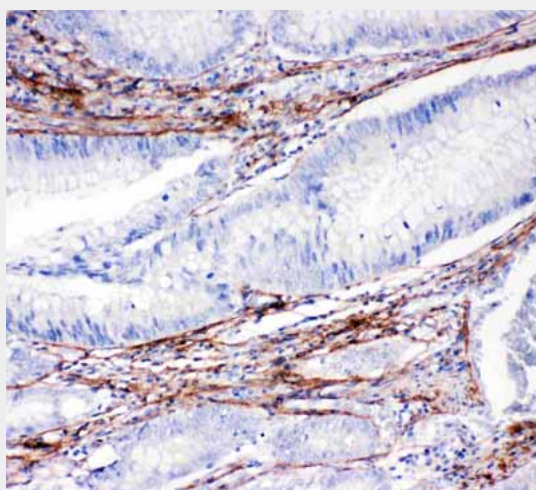
Provided below are standard protocols that you may find useful for product applications.

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

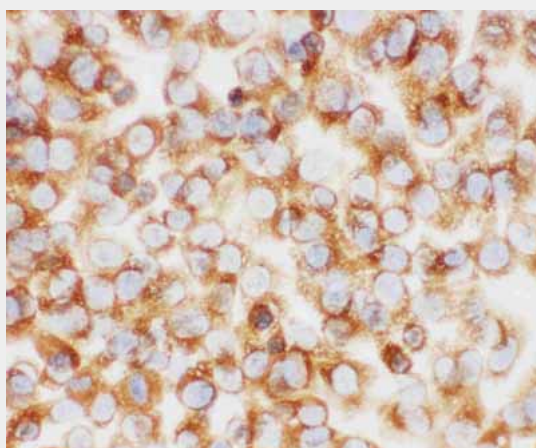
Anti-Collagen I Antibody - Images



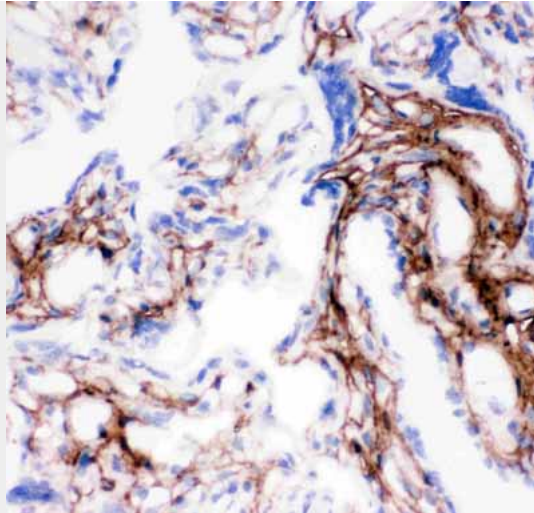
Anti-Collagen I antibody, ABO11450, IHC(P)IHC(P): Rat Lung Tissue



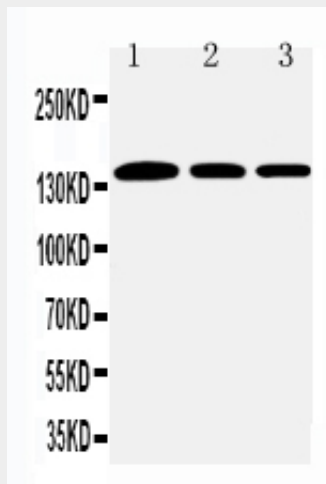
Anti-Collagen I antibody, ABO11450, IHC(P)IHC(P): Human Intestinal Cancer Tissue



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.