10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

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 QPPQEKSQDGGRYYRA), 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 r˚Constitution, 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
Forms the fibrils of tendon, ligaments and bones. In bones the fibrils are mineralized with calcium hydroxyapatite

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 Cytomety
- Cell Culture

Anti-Collagen I Antibody - Images

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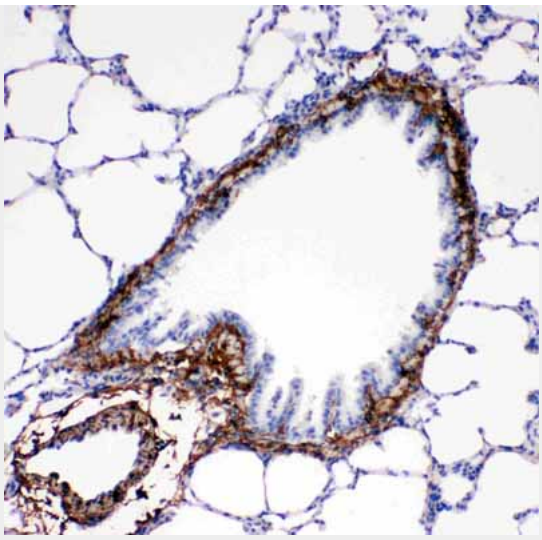
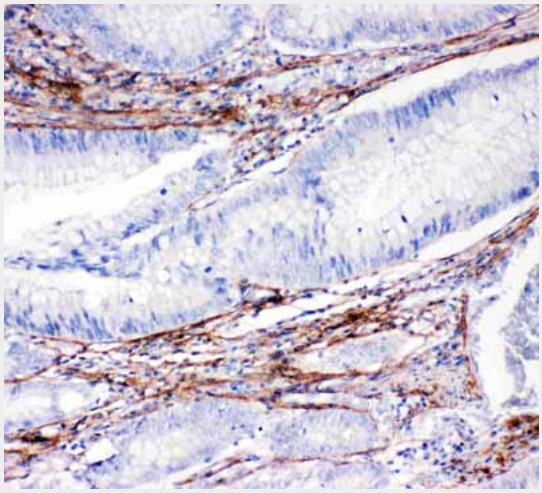
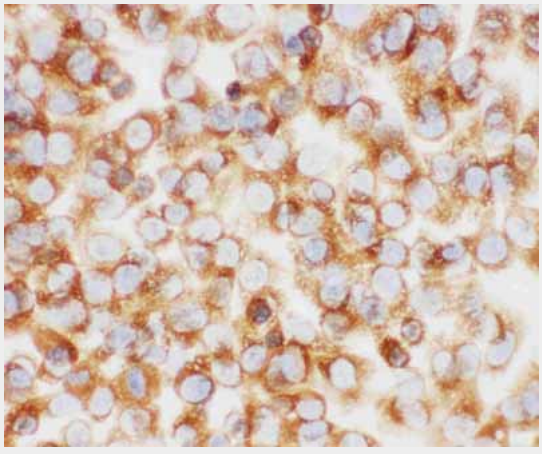


Anti-Collagen I antibody, ABO11450, IHC(P)IHC(P): Rat Lung Tissue



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



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

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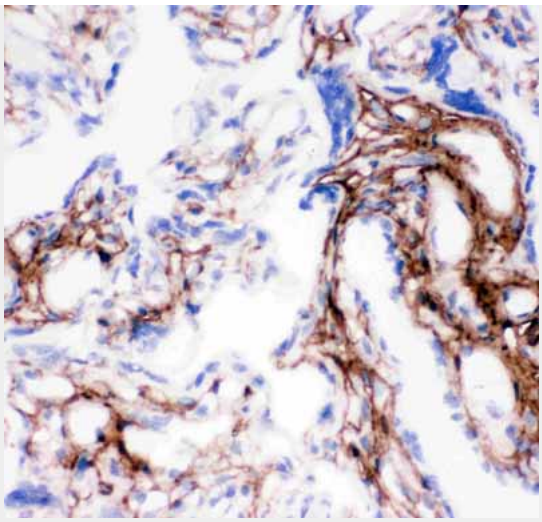
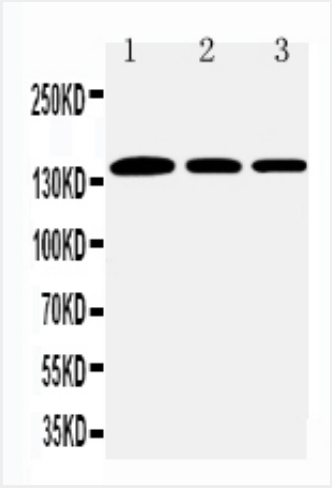


Anti-Collagen I antibody, ABO11450, IHC(F)IHC(F): Human Placenta Tissue



Anti-Collagen I antibody, ABO11450, Western blottingLane 1: Rat Lung Tissue LysateLane 2: Human Placenta Tissue LysateLane 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.