

Anti-Collagen I Picoband Antibody

Catalog # ABO12624

Product Information

Application	WB, IHC-P
Primary Accession	P11087
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Collagen alpha-1(I) chain(COL1A1) detection. Tested with WB, IHC-P in Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	12842
Other Names	Collagen alpha-1(I) chain, Alpha-1 type I collagen, Col1a1, Cola1
Calculated MW	138032
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, By Heat Western blot, 0.1-0.5 µg/ml, 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.
Source	Eukaryota
Protein Name	Collagen alpha-1(I) chain
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of mouse Collagen I (1185-1207aa YDFSFLPQPPQEKSQDGGYYRA), different from the related human sequence by three amino acids, and identical to the related rat sequence.
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.
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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

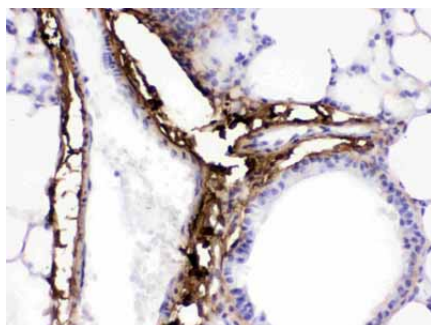
Background

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. And 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.

Images

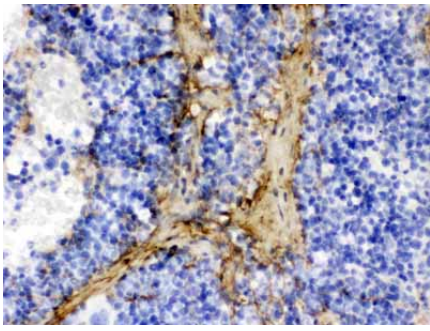


Western blot analysis of Collagen I expression in mouse kidney extract (lane 1) and mouse cardiac muscle extract (lane 2). Collagen I at 180KD was detected using rabbit anti-Collagen I Antigen Affinity purified polyclonal antibody (Catalog # ABO12624) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method.



Collagen I was detected in paraffin-embedded sections of mouse lung tissues using rabbit anti- Collagen I Antigen Affinity purified polyclonal antibody (Catalog # ABO12624) at 1 µg/mL. The immunohistochemical section was developed using SABC method.

Collagen I was detected in paraffin-embedded sections of rat spleen tissues using rabbit anti- Collagen I Antigen Affinity purified polyclonal antibody (Catalog # ABO12624) at 1 µg/mL. The immunohistochemical section was developed using SABC method.



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