

COL1A1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14490b

Specification

COL1A1 Antibody (C-term) - Product Information

Application WB, IHC-P,E Primary Accession P02452

Other Accession P02454, P11087, P02457, P02453,

<u>NP_000079.2</u> Human, Mouse

Reactivity Human, Mouse Predicted Bovine, Chicken, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 138911
Antigen Region 1077-1106

COL1A1 Antibody (C-term) - Additional Information

Gene ID 1277

Other Names

Collagen alpha-1(I) chain, Alpha-1 type I collagen, COL1A1

Target/Specificity

This COL1A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1077-1106 amino acids from the C-terminal region of human COL1A1.

Dilution

WB~~1:1000 IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

COL1A1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

COL1A1 Antibody (C-term) - Protein Information

Name COL1A1



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

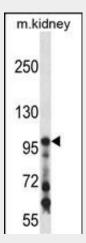
Forms the fibrils of tendon, ligaments and bones. In bones the fibrils are mineralized with calcium hydroxyapatite

COL1A1 Antibody (C-term) - Protocols

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

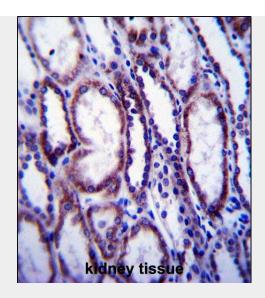
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

COL1A1 Antibody (C-term) - Images



COL1A1 Antibody (C-term) (Cat. #AP14490b) western blot analysis in mouse kidney tissue lysates (35ug/lane). This demonstrates the COL1A1 antibody detected the COL1A1 protein (arrow).





COL1A1 Antibody (C-term) (Cat. #AP14490b)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of COL1A1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

COL1A1 Antibody (C-term) - Background

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. Reciprocal translocations between chromosomes 17 and 22, where this gene and the gene for platelet-derived growth factor beta are located, are associated with a particular type of skin tumor called dermatofibrosarcoma protuberans, resulting from unregulated expression of the growth factor. Two transcripts, resulting from the use of alternate polyadenylation signals, have been identified for this gene. [provided by R. Dalgleish].

COL1A1 Antibody (C-term) - References

Blades, H.Z., et al. Bone 47(5):989-994(2010) Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010): Jin, H., et al. Osteoporos Int (2010) In press: Szczesny, G., et al. Arch Orthop Trauma Surg (2010) In press: Cheung, M.S., et al. J. Bone Miner. Res. (2010) In press:

COL1A1 Antibody (C-term) - Citations

• <u>Fabrication and In Vitro Study of Tissue-Engineered Cartilage Scaffold Derived from Wharton's Jelly Extracellular Matrix.</u>