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COL1A1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14490b

Product Information

Application	WB, IHC-P, E
Primary Accession	P02452
Other Accession	P02454, P11087, P02457, P02453, NP_000079.2
Reactivity	Human, Rat, Mouse
Predicted	Rat, Chicken, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33615
Calculated MW	138911
Antigen Region	1077-1106

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~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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.

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

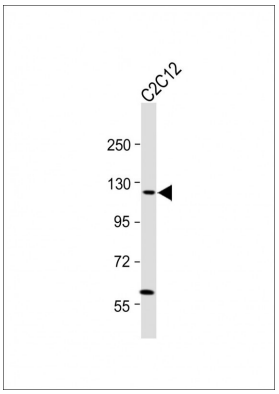
Background

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].

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 :

Images



All lanes : Anti-COL1A1 Antibody (C-term) at 1:1000 dilution Lane 1: C2C12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 125kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

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