

COL2A1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1418b

Specification

COL2A1 Antibody (C-term) - Product Information

Application Primary Accession	WB,E <u>P02458</u>
Reactivity	Human
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	1209-1237

COL2A1 Antibody (C-term) - Additional Information

Gene ID 1280

Other Names

Collagen alpha-1(II) chain, Alpha-1 type II collagen, Collagen alpha-1(II) chain, Chondrocalcin, COL2A1

Target/Specificity

This COL2A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1209-1237 amino acids from the C-terminal region of human COL2A1.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

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 COL2A1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

COL2A1 Antibody (C-term) - Protein Information

Name COL2A1 (<u>HGNC:2200</u>)

Function Type II collagen is specific for cartilaginous tissues. It is essential for the normal



embryonic development of the skeleton, for linear growth and for the ability of cartilage to resist compressive forces.

Cellular Location

Secreted, extracellular space, extracellular matrix {ECO:0000255|PROSITE-ProRule:PRU00793}

Tissue Location Isoform 2 is highly expressed in juvenile chondrocyte and low in fetal chondrocyte.

COL2A1 Antibody (C-term) - Protocols

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

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

COL2A1 Antibody (C-term) - Images



Anti-COL2A1 Antibody (C-term) at 1:1000 dilution + 293T/17 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 142 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

COL2A1 Antibody (C-term) - Background

Alpha-1 chain of type II collagen is a fibrillar collagen found in cartilage and the vitreous humor of the eye. Mutant forms of this protein are associated with achondrogenesis, chondrodysplasia, early onset familial osteoarthritis, SED congenita, Langer-Saldino achondrogenesis, Kniest dysplasia, Stickler syndrome type I, and spondyloepimetaphyseal dysplasia Strudwick type. In addition, defects in processing chondrocalcin, a calcium binding protein that is the C-propeptide of this collagen molecule, are also associated with chondrodysplasia.



COL2A1 Antibody (C-term) - References

Olavarrieta,L., Clin. Genet. 73 (3), 262-267 (2008) McAlinden,A., Hum. Mutat. 29 (1), 83-90 (2008) Forzano,F., Am. J. Med. Genet. A 143 (23), 2815-2820 (2007) **COL2A1 Antibody (C-term) - Citations**

• Abnormal expression of key genes and proteins in the canonical Wnt/β-catenin pathway of articular cartilage in a rat model of exercise-induced osteoarthritis.