

**COL2A1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1418a****Specification**

---

**COL2A1 Antibody (N-term) - Product Information**

Application	IHC-P,E
Primary Accession	<a href="#">P02458</a>
Other Accession	<a href="#">Q91717</a> , <a href="#">P05539</a> , <a href="#">P28481</a> , <a href="#">P02459</a> , <a href="#">P02454</a> , <a href="#">P11087</a> , <a href="#">P02452</a> , <a href="#">P02457</a> , <a href="#">P02453</a>
Reactivity	Human
Predicted	Bovine, Chicken, Mouse, Rat, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	469-497

**COL2A1 Antibody (N-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 469-497 amino acids from the N-terminal region of human COL2A1.

**Dilution**

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**

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

**COL2A1 Antibody (N-term) - Protein Information****Name** COL2A1 ([HGNC:2200](#))

**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**

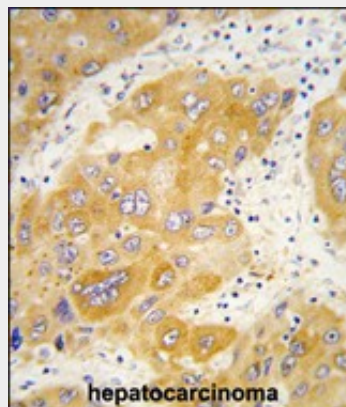
Isoform 2 is highly expressed in juvenile chondrocyte and low in fetal chondrocyte.

## **COL2A1 Antibody (N-term) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **COL2A1 Antibody (N-term) - Images**



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with COL2A1 antibody (N-term) (Cat.#AP1814a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

## **COL2A1 Antibody (N-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 (N-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 (N-term) - Citations**

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