

COL2A1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP1418a

Product Information

Application	IHC-P, E
Primary Accession	P02458
Other Accession	Q91717 , P05539 , P28481 , P02459 , P02454 , P11087 , P02452 , P02457 , P02453
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat, Chicken, Xenopus, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB13827
Calculated MW	141785
Antigen Region	469-497

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~~1:100~500 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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

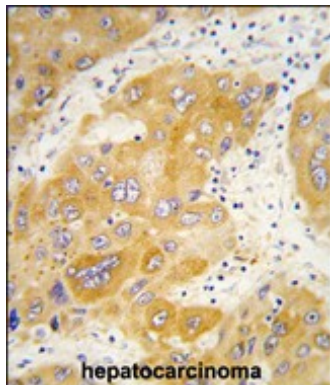
Background

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.

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)

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.

Citations

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.