

**Anti-Collagen II Antibody**  
**Catalog # ABO11451****Specification****Anti-Collagen II Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P02458</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Collagen alpha-1(II) chain(COL2A1) detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Collagen II Antibody - Additional Information****Gene ID** 1280**Other Names**

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

**Calculated MW**

141785 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**

Secreted, extracellular space, extracellular matrix .

**Tissue Specificity**

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

**Protein Name**

Collagen alpha-1(II) chain

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human Collagen II(1222-1241aa AFAGLGPREKGPDPLQYMRA), different from the related rat sequence by one amino acid, and from the related mouse sequence by two amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities**

Belongs to the fibrillar collagen family.

**Anti-Collagen II Antibody - 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}

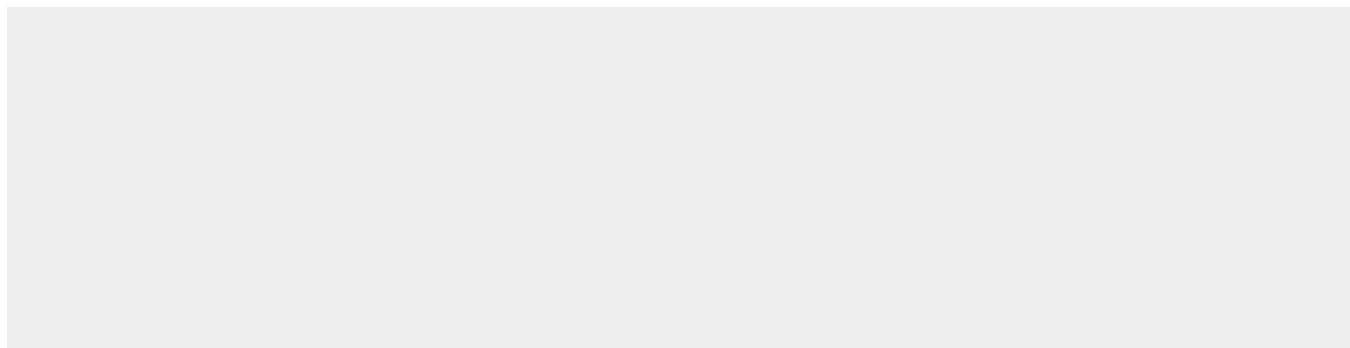
**Tissue Location**

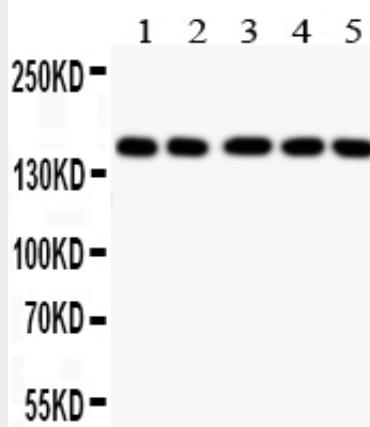
Isoform 2 is highly expressed in juvenile chondrocyte and low in fetal chondrocyte.

**Anti-Collagen II Antibody - 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](#)

**Anti-Collagen II Antibody - Images**



Anti- COL2A1 antibody, ABO11451, Western blotting  
All lanes: Anti COL2A1 (ABO11451) at 0.5ug/ml  
Lane 1: COLO320 Whole Cell Lysate at 40ug  
Lane 2: HELA Whole Cell Lysate at 40ug  
Lane 3: MCF-7 Whole Cell Lysate at 40ug  
Lane 4: A549 Whole Cell Lysate at 40ug  
Lane 5: JURKAT Whole Cell Lysate at 40ug  
Predicted bind size: 134 KD  
Observed bind size: 170KD

### Anti-Collagen II Antibody - Background

Collagen, type II, alpha 1, also known as COL2A1, is a human gene which is the major collagen synthesized by chondrocytes. COL2A1 is mapped to 12q13.11. This gene encodes the alpha-1 chain of type II collagen, a fibrillar collagen found in cartilage and the vitreous humor of the eye. Mutations in this gene 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.