

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

Anti-Collagen II Antibody - Product Information

Application	WB
Primary Accession	P02458
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

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 Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Collagen II(1222-1241aa AFAGLGPREKGPDPQLQYMRA), 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 reconstitution, 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}

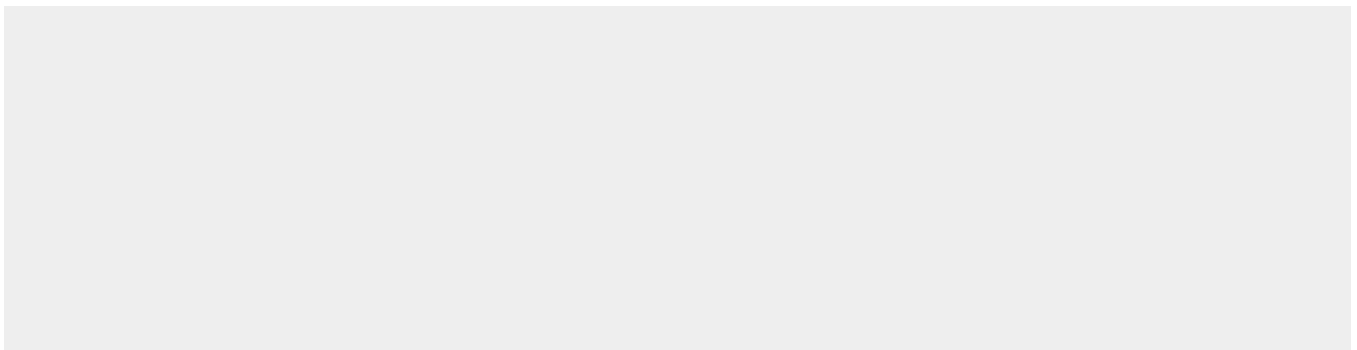
Tissue Location

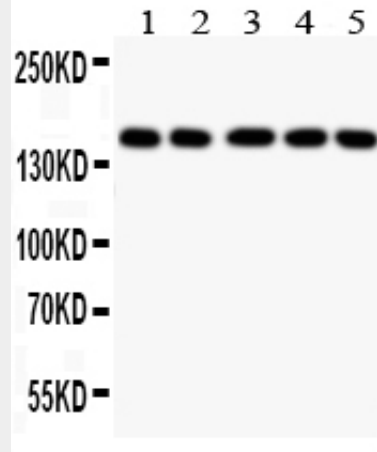
Isoform 2 is highly expressed in juvenile chondrocyte and low in fetal chondrocyte.

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.