

Anti-Collagen II Antibody

Catalog # ABO11451

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.

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
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. .
Source	Eukaryota
Protein Name	Collagen alpha-1(II) chain
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ N.
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.

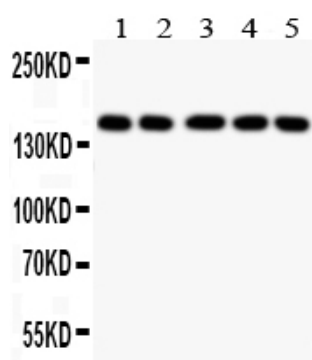
Protein Information

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

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.

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

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