

Anti-Collagen II Antibody

Catalog # ABO11452

Product Information

Application	WB, IHC-F
Primary Accession	P28481
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Collagen alpha-1(II) chain(COL2A1) detection. Tested with WB, IHC-F in Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	12824
Other Names	Collagen alpha-1(II) chain, Alpha-1 type II collagen, Collagen alpha-1(II) chain, Chondrocalcin, Col2a1
Calculated MW	141973
Application Details	Western blot, 0.1-0.5 µg/ml, Rat, Mouse Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Rat, Mouse
Subcellular Localization	Secreted, extracellular space, extracellular matrix .
Source	Eukaryota
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 mouse Collagen II1222-1241aa AFAGLGQREKGPDPMQYMRA), different from the related rat sequence by one amino acid.
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.

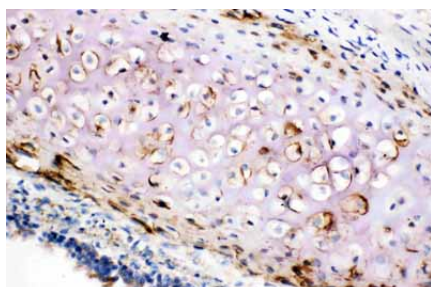
Protein Information

Name	Col2a1 {ECO:0000312 MGI:MGI:88452}
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}

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-Collagen II antibody, ABO11452, IHC(F)IHC(F): Rat Trachea Tissue



Anti-Collagen II antibody, ABO11452, Western blottingLane 1: Rat Heart Tissue LysateLane 1: Rat Brain Tissue Lysate

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