

## Anti-Collagen II/COL2A1 Antibody

Catalog Number: PA2141-1

### About Col2a1

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.

### Overview

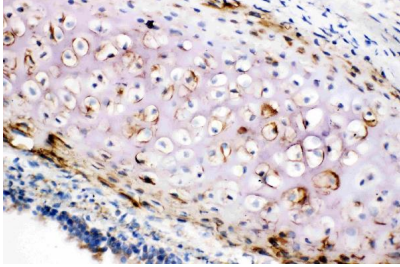
Product Name	Anti-Collagen II/COL2A1 Antibody
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-Collagen II/COL2A1 Antibody catalog # PA2141-1. Tested in IHC, WB applications. This antibody reacts with Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P28481

### Technical Details

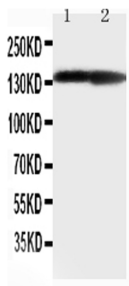
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of mouse Collagen II1222-1241aa AFAGLGQREKGPDPMQYMRA), different from the related rat sequence by one amino acid.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(F).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.1-0.5ug/ml, Rat, Mouse</p> <p>Immunohistochemistry (Frozen Section), 0.5-1ug/ml, Rat, Mouse</p>

## Anti-Collagen II/COL2A1 Antibody (PA2141-1) Images



Anti-Collagen II antibody, PA2141-1, IHC(F)  
IHC(F): Rat Trachea Tissue



Anti-Collagen II antibody, PA2141-1, Western blotting  
Lane 1: Rat Heart Tissue Lysate  
Lane 2: Rat Brain Tissue Lysate

## 42 Publications Citing This Product

1. PubMed ID: 33588606, Zhang R,Zhang Q,Zou Z,Li Z,Jin M,An J,Li H,Ma J.Curcumin Supplementation Enhances Bone Marrow Mesenchymal Stem Cells to Promote the Anabolism of Articular Chondrocytes and Cartilage Repair.Cell Transplant.2021 Jan-Dec;30:963689721993776.doi:10.1177/096368
2. PubMed ID: 33441130, Guo Z,Qiu C,Mecca C,Zhang Y,Bian J,Wang Y,Wu X,Wang T,Su W,Li X,Zhang W,Chen B,Xiang H.Elevated lymphotoxin-alpha (TNFbeta) is associated with intervertebral disc degeneration.BMC Musculoskelet Disord.2021 Jan 13;22(1):77.doi:10.1186/s12891-020-03934-7.PMID:3344
3. PubMed ID: 32964953, Zhang P,Chang BG.Inhibitory effect on the apoptosis of disc nucleus pulposus cells in rats by silencing COL9A3 gene to mediate MAPK signaling pathway: a study on the function and mechanism.Eur Rev Med Pharmacol Sci.2020 Sep;24(17):8653-8664.doi:10.26355/e

Visit [bosterbio.com/anti-collagen-ii-antibody-pa2141-1-boster.html](https://bosterbio.com/anti-collagen-ii-antibody-pa2141-1-boster.html) to see all 42 publications.

## Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Collagen II/COL2A1 Antibody