bs-10589R **[Primary Antibody]**

Collagen II Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 1280 **SWISS:** P02458

Target: Collagen II

Immunogen: KLH conjugated synthetic peptide derived from human Collagen II: 231-330/1487.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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. There are two transcripts identified for this gene. [provided by RefSeq, Jul 2008]

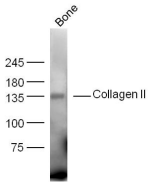
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

Reactivity: Human, Mouse (predicted: Rabbit, Pig, Cow, Chicken, Dog, Horse)

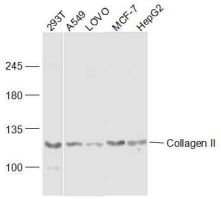
Predicted MW.: 117 kDa

Subcellular Location: Secreted ,Extracellular matrix

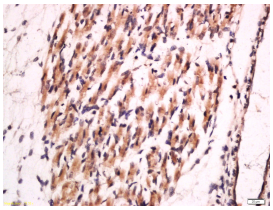
VALIDATION IMAGES



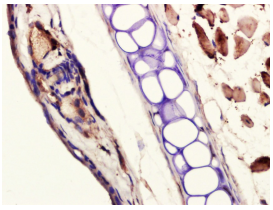
Sample: bone(Mouse) Lysate at 40 ug Primary: Anti-Collagen II(bs-10589R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 117 kD Observed band size: 134 kD



Sample: 293T(Human) Cell Lysate at 30 ug A549 (Human) Cell Lysate at 30 ug LOVO (Human) Cell Lysate at 40 ug MCF-7 (Human) Cell Lysate at 30 ug HepG2 (Human) Cell Lysate at 30 ug Primary: Anti-Collagen II (bs-10589R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 117 kD Observed band size: 117 kD



Tissue/cell: Mouse embryo tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37∩ for 20 min; Incubation: Anti-Collagen II Polyclonal Antibody, Unconjugated(bs-10589R) 1:100, overnight at 4Σ C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (mouse ear); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block

endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Collagen II) Polyclonal Antibody, Unconjugated (bs-10589R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

SELECTED CITATIONS

- **[IF=15.1]** Huihui Xu. et al. Curcumin-loaded biomimetic nanosponges for osteoarthritis alleviation by synergistically suppressing inflammation and ferroptosis. CHEM ENG J. 2024 May;:152132 IHC ;Mouse. 10.1016/j.cej.2024.152132
- **[IF=10.383]** Shengbo Sang. et al. 3D Bioprinting Using Synovium-Derived MSC-Laden Photo-Cross-Linked ECM Bioink for Cartilage Regeneration. ACS APPL MATER INTER. 2023;XXXX(XXX):XXX-XXX IF ;Rat. 36779653
- **[IF=9.933]** Qi Feng. et al. Dynamic nanocomposite microgel assembly with microporosity, injectability, tissue-adhesion and sustained drug release promotes articular cartilage repair and regeneration. 2021 Dec 07 IHC ;Mouse. 34874119
- **[IF=8.724]** Yang Ling. et al. Three-dimensional (3D) hydrogel serves as a platform to identify potential markers of chondrocyte dedifferentiation by combining RNA sequencing. Bioact Mater. 2021 Sep;6:2914 IF ;Pig. 33718672
- **[IF=7.94]** Maolin Zhang. et al. Rapid and efficient generation of cartilage pellets from mouse induced pluripotent stem cells by transcriptional activation of BMP-4 with shaking culture:. J TISSUE ENG. 2022;(): IHC ;Rat. 35923173