

**bs-0709R****[ Primary Antibody ]****Bioss**  
**ANTIBODIES**

www.bioss.com.cn

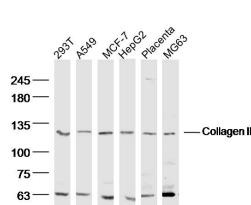
sales@bioss.com.cn

techsupport@bioss.com.cn

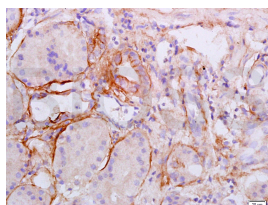
400-901-9800

**Collagen II Rabbit pAb****— DATASHEET —**

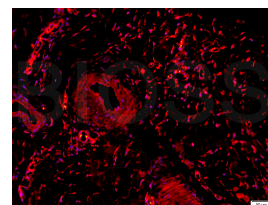
<b>Host:</b> Rabbit	<b>Isotype:</b> IgG	<b>Applications:</b> <b>WB</b> (1:500-2000)
<b>Clonality:</b> Polyclonal		<b>IHC-P</b> (1:100-500)
<b>GeneID:</b> 1280	<b>SWISS:</b> P02458	<b>IHC-F</b> (1:100-500)
<b>Target:</b> Collagen II		<b>IF</b> (1:100-500)
<b>Immunogen:</b> KLH conjugated synthetic peptide derived from human Collagen II: 1201-1300/1487.		<b>Reactivity:</b> Human, Mouse, Rabbit (predicted: Rat, Pig, Cow, Chicken, Dog, GuineaPig)
<b>Purification:</b> affinity purified by Protein A		
<b>Concentration:</b> 1mg/ml		<b>Predicted MW.:</b> 117 kDa
<b>Storage:</b> 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.		<b>Subcellular Location:</b> Secreted ,Extracellular matrix
<b>Background:</b> 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]		

**— VALIDATION IMAGES —**

Sample: 293T (human) Cell Lysate at 40 ug A549 (human) Cell Lysate at 40 ug MCF-7 (human) Cell Lysate at 40 ug HepG2 (human) Cell Lysate at 40 ug Placenta (mouse) Lysate at 40 ug MG63 (human) Cell Lysate at 40 ug Primary: Anti-Collagen II (bs-0709R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 117 kD Observed band size: 120 kD



Tissue/cell: human esophageal carcinoma; 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°C for 20 min; Incubation: Anti-Collagen II Polyclonal Antibody, Unconjugated (bs-0709R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody (SP-0023) and DAB (C-0010) staining



Tissue/cell: rabbit meniscus tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-Collagen II Polyclonal Antibody, Unconjugated (bs-0709R) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated (bs-0295G-Cy3) used at 1:200 dilution for 40 minutes at 37°C. DAPI (5ug/ml, blue, C-0033) was used to stain the cell nuclei

**— SELECTED CITATIONS —**

- **[IF=18]** Rachel H. Koh. et al. Bioceramic-mediated chondrocyte hypertrophy promotes calcified cartilage formation for rabbit osteochondral defect repair. BIOACT MATER. 2024 Oct;40:306 IF ;Mouse. 38978806
- **[IF=13.3]** Shan Mou. et al. Biphasic ECM assembled graphene oxide-collagen/nHap composites mimicking articular microenvironment for in situ osteochondral defect repair. CHEM ENG J. 2024 Nov;499:156322 WB,IHC ;Rat.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

10.1016/j.cej.2024.156322

- **[IF=10.684]** Chen Zhang. et al. The novel hyaluronic acid granular hydrogel attenuates osteoarthritis progression by inhibiting the TLR-2/NF- $\kappa$ B signaling pathway through suppressing cellular senescence. BIOENG TRANSL MED. 2022 Dec;;e10475 IHC ;Mouse. 10.1002/btm2.10475
- **[IF=10.652]** Xiaoguang Zhang. et al. Implanted 3D gelatin microcryogel enables low-dose cell therapy for osteoarthritis by preserving the viability and function of umbilical cord MSCs. Chem Eng J. 2021 Jul;416:129140 IHC ;Mouse. 10.1016/j.cej.2021.129140
- **[IF=10.317]** Maolin Zhang. et al. Recapitulation of cartilage/bone formation using iPSCs via biomimetic 3D rotary culture approach for developmental engineering. Biomaterials. 2020 Nov;260:120334 IHC ;Rat. 32862124