



## Rabbit Anti-Collagen X antibody

SL0554R

<b>Product Name:</b>	Collagen X
<b>Chinese Name:</b>	X型胶原抗体
<b>Alias:</b>	Collagen type X; Col10a 1; Collagen alpha 1(X) chain; Collagen type X alpha 1 (Schmid metaphyseal chondrodysplasia); Collagen type X alpha 1; Collagen X alpha 1 polypeptide; CollagenX; fa66d11; fb10c08; OTTHUMP00000040411; Procollagen type X alpha 1; Schmid metaphyseal chondrodysplasia; wu:fa66d11; wu:fb10c08; COAA1_HUMAN; COL10A1; Collagen alpha-1(X) chain; collagen alpha-1(X) chain precursor; Schmid metaphyseal chondrodysplasia; collagen X, alpha-1 polypeptide.
<b>文献引用</b> PubMed :	<p><b>Specific References(3)</b> SL0554R has been referenced in 3 publications.</p> <p><b>[IF=3.82]</b>Luo, Yang, et al. "Alendronate Retards the Progression of Lumbar Intervertebral Disc Degeneration in Ovariectomized Rats." Bone (2013).<b>IHC-P;Rat.</b>  <a href="#">PubMed:23500174</a></p> <p><b>[IF=2.34]</b>Zhang, X., et al. "Experimentally created unilateral anterior crossbite induces a degenerative ossification phenotype in mandibular condyle of growing Sprague-Dawley rats." Journal of Oral Rehabilitation (2013).<b>Rat.</b>  <a href="#">PubMed:23675932</a></p> <p><b>[IF=4.60]</b>Arita, Machiko, et al. "Mechanisms of Aberrant Organization of Growth Plates in Conditional Transgenic Mouse Model of Spondyloepiphyseal Dysplasia Associated with the R992C Substitution in Collagen II." The American Journal of Pathology (2014).<b>IHC-P;Mouse.</b>  <a href="#">PubMed:not posted yet</a></p>
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Cow,Rabbit,

<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	73kDa
<b>Cellular localization:</b>	Extracellular matrix
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Collagen X:601-680/680
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<p>This gene encodes the alpha chain of type X collagen, a short chain collagen expressed by hypertrophic chondrocytes during endochondral ossification. Unlike type VIII collagen, the other short chain collagen, type X collagen is a homotrimer. Mutations in this gene are associated with Schmid type metaphyseal chondrodysplasia (SMCD) and Japanese type spondylometaphyseal dysplasia (SMD). [provided by RefSeq, Jul 2008].</p> <p><b>Function:</b> Type X collagen is a product of hypertrophic chondrocytes and has been localized to presumptive mineralization zones of hyaline cartilage.</p> <p><b>Subunit:</b> Homotrimer.</p> <p><b>Subcellular Location:</b> Secreted, extracellular space, extracellular matrix.</p> <p><b>Tissue Specificity:</b> Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.</p> <p><b>DISEASE:</b> Schmid type metaphyseal chondrodysplasia (SMCD) [MIM:156500]: Dominantly inherited disorder of the osseous skeleton. The cardinal features of the phenotype are mild short stature, coxa vara and a waddling gait. Radiography usually shows sclerosis of the ribs, flaring of the metaphyses, and a wide irregular growth plate, especially of the knees. A variant form of SMCD is spondylometaphyseal dysplasia Japanese type. It is characterized by spinal involvement comprising mild platyspondyly, vertebral body abnormalities, and end-plate irregularity. Note=The disease is caused by mutations affecting the gene represented in this entry.</p>

**Similarity:**  
Contains 1 C1q domain.

**SWISS:**  
A1L4P2

**Gene ID:**  
1300

**Database links:**

[Entrez Gene: 282416](#)Cow

[Entrez Gene: 1300](#)Human

[Entrez Gene: 12813](#)Mouse

[Entrez Gene: 25681](#)Rat

[Omim: 120110](#)Human

[SwissProt: P23206](#)Cow

[SwissProt: A1L4P2](#)Human

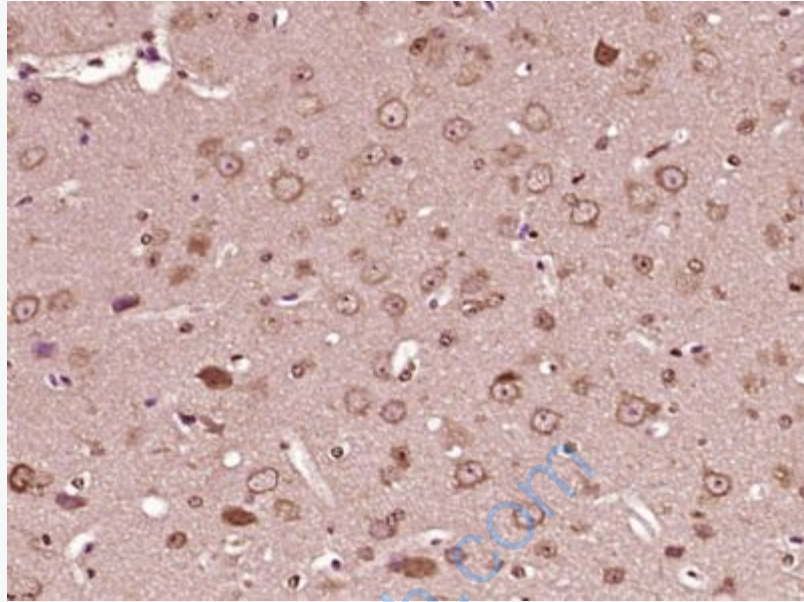
[SwissProt: Q03692](#)Human

**Important Note:**

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

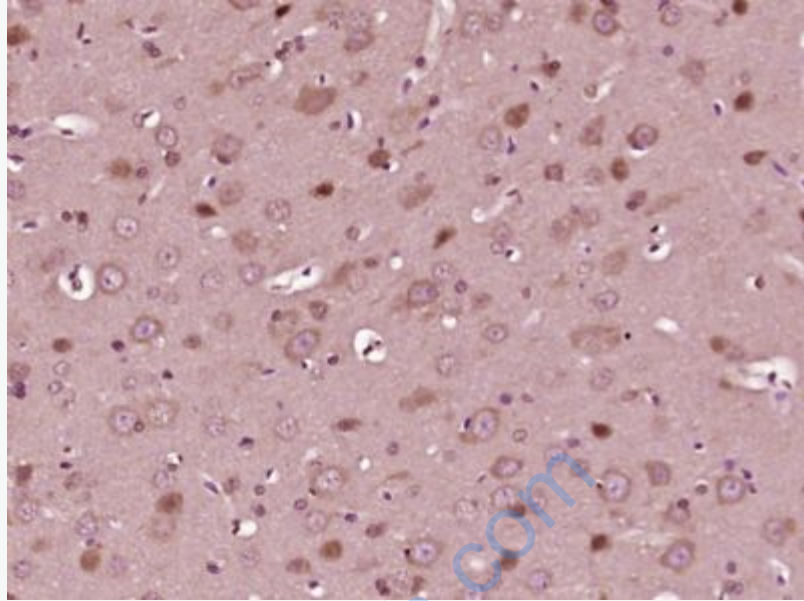
X型胶原是一种短链的非纤维性胶原，正常存在于软骨化骨中心及骨髓软骨生长板内，仅见于软骨细胞肥大区及钙化区前沿，在关节软骨见于钙化软骨层，由肥大软骨细胞特异表达，只短暂出现，可能参与软骨钙化的调节，是正常和异常骨形成的标志。

有学者认为：X型胶原在骨性关节炎中可作为软骨细胞表型不可逆转的诊断标志，是大量关节软骨细胞发生凋亡，最终导致关节软骨变薄，关节下骨变硬、增厚的主要原因。

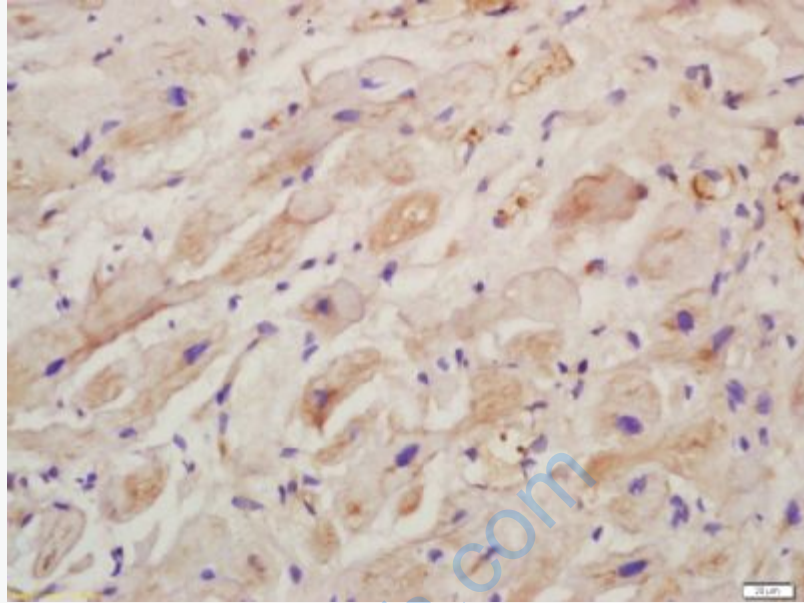


**Picture:**

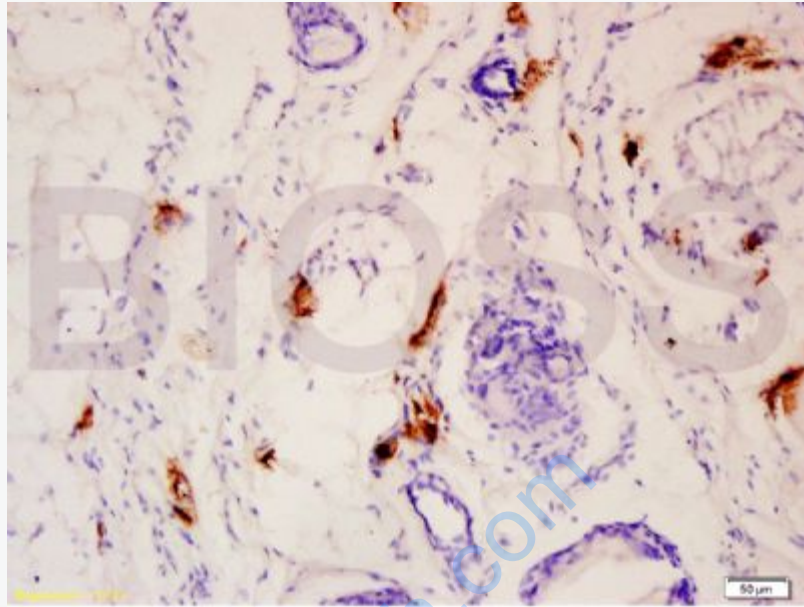
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Collagen X) Polyclonal Antibody, Unconjugated (SL0554R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat brain); 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 X) Polyclonal Antibody, Unconjugated (SL0554R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat heart tissue); 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 X) Polyclonal Antibody, Unconjugated (SL0554R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



**bs-0554R Anti-Collagen X Polyclonal Antibody**

Tissue/cell: rat skin 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) at 37 °C for 20 min

Incubation: Anti-Collagen X Polyclonal Antibody, Unconjugated(bs-0554R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody and DAB staining