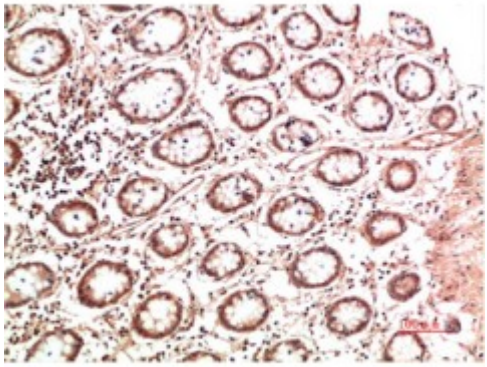
Anti-Collagen II antibody



Description	Mouse monoclonal to Collagen II.

Model	STJ98944
Host	Mouse
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	synthetic peptide derived from Collagen II.
Gene ID	1280
Gene Symbol	COL2A1
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	The antibody detects endogenous Collagen II protein .
Tissue Specificity	Isoform 2 is highly expressed in juvenile chondrocyte and low in fetal chondrocyte.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Collagen alpha-1 II chain Alpha-1 type II collagen Collagen alpha-1 II chain Chondrocalcin
Molecular Weight	142kDa
Clonality	Monoclonal
Conjugation	Unconjugated

Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:2200OMIM:108300
Alternative Names	Collagen alpha-1 II chain Alpha-1 type II collagen Collagen alpha-1 II chain Chondrocalcin
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.
Sequence and Domain Family	The C-terminal propeptide, also known as COLFI domain, have crucial roles in tissue growth and repair by controlling both the intracellular assembly of procollagen molecules and the extracellular assembly of collagen fibrils. It binds a calcium ion which is essential for its function .
Cellular Localization	Secreted, extracellular space, extracellular matrix
Post-translational Modifications	Probably 3-hydroxylated on prolines by LEPREL1 . Proline residues at the third position of the tripeptide repeating unit (G-X-P) are hydroxylated in some or all of the chains. Proline residues at the second position of the tripeptide repeating unit (G-P-X) are hydroxylated in some of the chains. The N-telopeptide is covalently linked to the helical COL2 region of alpha 1(IX), alpha 2(IX) and alpha 3(IX) chain. The C-telopeptide is covalently linked to an another site in the helical region of alpha 3(IX) COL2.