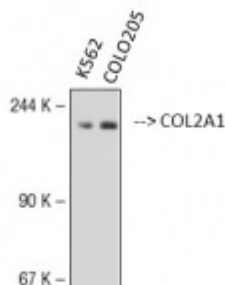


Anti-COL2A1 antibody



Western Blot (WB) analysis of 1. K562
2. COLO205 using COL2A1 Polyclonal
Antibody. (STJ92387)



Description

COL2A1 is a protein encoded by the COL2A1 gene which is approximately 141,7 kDa. COL2A1 is secreted into the extracellular space. It is involved in collagen chain trimerization, the integrin pathway, ERK signalling and focal adhesion. It is a fibrillar collagen that is essential for the normal embryonic development of the skeleton, for linear growth and for the ability of cartilage to resist compressive forces. COL2A1 isoform 2 is highly expressed in juvenile chondrocyte. Mutations in the COL2A1 gene may result in Spondyloepiphyseal dysplasia. STJ92387 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of COL2A1 protein.

Model	STJ92387
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human COL2A1
Immunogen Region	70-150 aa, N-terminal
Gene ID	1280
Gene Symbol	COL2A1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000
Specificity	COL2A1 Polyclonal Antibody detects endogenous levels of COL2A1 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	140 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
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:22000MIM: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.