Datasheet for ABIN6218621

anti-COL2A1 antibody (AA 873-1072)

5 Images

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Overview

Quantity:	20 µL
Target:	COL2A1
Binding Specificity:	AA 873-1072
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This COL2A1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 873-1072 of human COL2A1 (NP_149162.2).
Sequence:	GEPGLQGPAG PPGEKGEPGD DGPSGAEGPP GPQGLAGQRG IVGLPGQRGE RGFPGLPGPS GEPGKQGAPG ASGDRGPPGP VGPPGLTGPA GEPGREGSPG ADGPPGRDGA AGVKGDRGET GAVGAPGAPG PPGSPGPAGP TGKQGDRGEA GAQGPMGPSG PAGARGIQGP QGPRGDKGEA GEPGERGLKG HRGFTGLQGL
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Characteristics:	Polyclonal Antibodies
Purification:	Affinity purification

Target Details

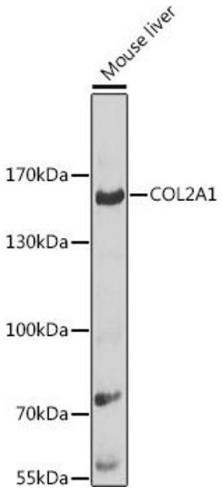
Target:	COL2A1
Alternative Name:	COL2A1 (COL2A1 Products)
Background:	This gene encodes the alpha-1 chain of type II collagen, a fibrillar collagen found in cartilage and the vitreous humor of the eye. Mutations in this gene are associated with achondrogenesis, chondrodysplasia, early onset familial 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.,COL2A1,ANFH,AOM,COL11A3,SEDC,STL1,Signal Transduction,Cell Biology & Developmental Biology,Cytoskeleton,Extracellular Matrix,Collagen,Bone,Stem Cells,Mesenchymal Stem Cells,COL2A1
Molecular Weight:	29 kDa/134 kDa/141 kDa
Gene ID:	1280
UniProt:	P02458
Pathways:	Sensory Perception of Sound, Growth Factor Binding

Application Details

Application Notes:	WB,1:500 - 1:2000,IHC,1:50 - 1:200
Restrictions:	For Research Use only

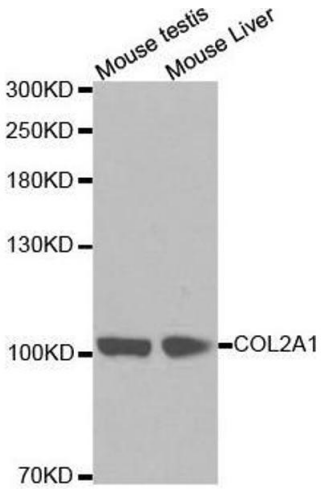
Handling

Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.



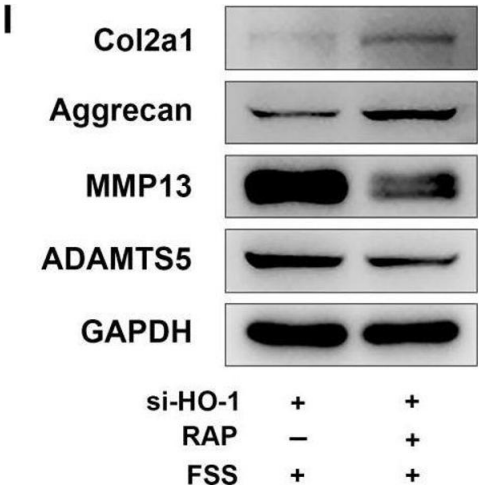
Western Blotting

Image 1. Western blot analysis of extracts of mouse liver, using COL2 antibody (560) at 1:1000 dilution.Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution.Lysates/proteins: 25 µg per lane.Blocking buffer: 3 % nonfat dry milk in TBST.Detection: ECL Basic Kit (RM00020).Exposure time: 30s.



Western Blotting

Image 2. Western blot analysis of extracts of various cell lines, using COL2A1 antibody.



Western Blotting

Image 3. Rapamycin regulates autophagy and ECM in NP cells. (A-C) Western blotting. NP cells were first transfected with HO-1 siRNA and treated with autophagy activator rapamycin (RAP, 500 nM) for 12 h. Cells were then treated with 12 dyne/cm2 FSS for 2 h, followed by western blotting for expression of the indicated proteins. Quantification of LC3-II/LC3-I ratio and Beclin-1 from three independent experiments (B,C). (D) Transmission Electron Microscopy (TEM). NP cells were treated as in panel (A). TEM images are shown. The arrows indicate double-membrane autophagosomes and autolysosomes. Bar, 500 nm. (E,F) Measurements of autophagosomes and autolysosomes. NP cells were transduced with lentivirus expressing a tandem mRFP-GFP-LC3 construct and treated as in panel

(A). Fluorescence images were obtained. Bar, 5 μm. Quantification of autophagosomes (yellow dots) and autolysosomes (free red dots) from three independent experiments (F). (G,H) sGAG content. NP cells were treated as in panel (A), followed by alcian blue staining (G) and Blyscan Sulfated Glycosaminoglycan Assay (H). Bar, 100 μm. (I-M) Western blotting. NP cells were treated as in panel (A), followed by western blotting for expression of the indicated proteins (I). Quantification of Col2a1, aggrecan, MMP13 and ADAMTS5 from three independent experiments (J-M). Results are expressed as mean ± standard deviation (s.d.). *P < 0.05 and ***P < 0.001 vs. FSS + HO-1-siRNA group. - figure provided by CiteAb. Source: PMID32195253

Please check the product details page for more images. Overall 5 images are available for ABIN6218621.