

Rabbit Collagen II Polyclonal Antibody | anti-COL2A1 antibody

Collagen II Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA322089	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

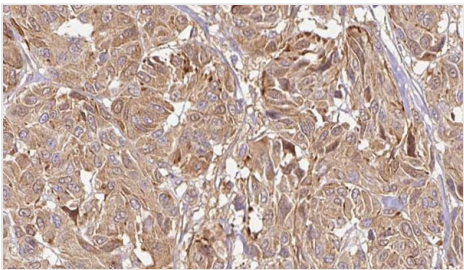
PRODUCT SYNONYMS

Collagen II; Polyclonal Antibody; Collagen II Antibody; Alpha 1 type II collagen; Collagen II alpha 1 polypeptide; Procollagen type II alpha 1; anti-COL2A1 antibody

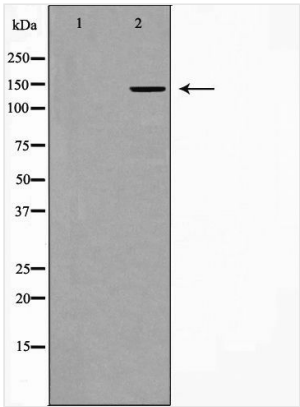
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Collagen II antibody detects endogenous levels of total Collagen II
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1487
Applicable Applications for anti-COL2A1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Collagen II
Subcellular Location	Secreted > Extracellular Space > Extracellular Matrix.
Tissue Specificity	Isoform 2 is highly expressed in juvenile chondrocyte and low in fetal chondrocyte.
Predicted Cross Reactivity	Bovine, Horse, Sheep, Rabbit, Chicken, Xenopus
Similarity	Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Chicken (80%), Xenopus (90%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemisry)
AAA322089 at 1/100 staining Human Melanoma tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of Collagen II expression in 3T3 cells. The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)
AAA322089 staining COLO205 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-COL2A1 antibody

Description: 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.

Subunit Structure: Homotrimers of alpha 1(II) chains.

Post-translational Modifications: 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. Contains mostly 4-hydroxyproline. Prolines at the third position of the tripeptide repeating unit (G-X-P) are 4-hydroxylated in some or all of the chains. Contains 3-hydroxyproline at a few sites. This modification occurs on the first proline residue in the sequence motif Gly-Pro-Hyp, where Hyp is 4-hydroxyproline. Lysine residues at the third position of the tripeptide repeating unit (G-X-Y) are 5-hydroxylated in some or all of the chains. O-glycosylated on hydroxylated lysine residues. The O-linked glycan consists of a Glc-Gal disaccharide.

Similarity: 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 (By similarity). Belongs to the fibrillar collagen family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	111118976
NCBI GeneID	1280
NCBI Accession #	NP_001835.3
NCBI GenBank Nucleotide #	NM_001844.4

UniProt Accession #	P02458 ; Q12985 ; Q14009 ; Q14044 ; Q14045 ; Q14046 ; Q14047 ; Q14056 ; Q14058 ; Q16672 ; Q1JQ82 ; A6NGA0
Molecular Weight	Observed: 141 kDa Predicted: 142 kDa
NCBI Official Full Name	collagen alpha-1(II) chain isoform 1
NCBI Official Synonym Full Names	collagen type II alpha 1 chain
NCBI Official Symbol	COL2A1
NCBI Official Synonym Symbols	AOM; ANFH; SEDC; STL1; COL11A3
NCBI Protein Information	collagen alpha-1(II) chain
UniProt Protein Name	Collagen alpha-1(II) chain
UniProt Gene Name	COL2A1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/collagen-ii-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/322089>