

Rabbit COL18A1 Polyclonal Antibody | anti-COL18A1 antibody

COL18A1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326342	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

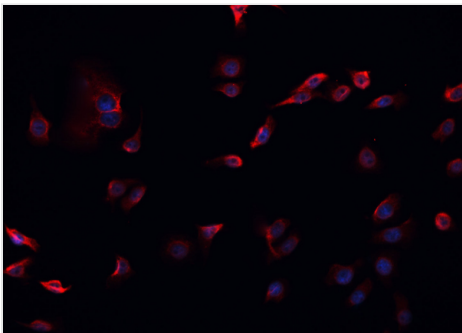
PRODUCT SYNONYMS

COL18A1; Polyclonal Antibody; COL18A1 Antibody; Antiangiogenic agent; COIA1_HUMAN; Col18a1; Collagen alpha 1(XVIII) chain; Collagen type XVIII alpha 1; Endostatin; KNO; KNO1; KS; Multi functional protein MFP; anti-COL18A1 antibody

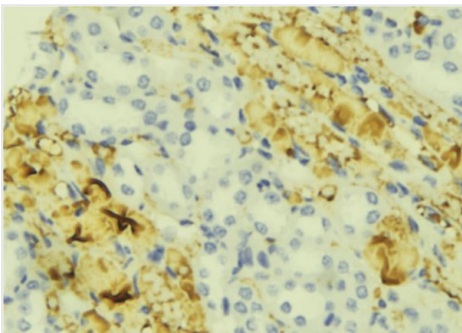
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	COL18A1 antibody detects endogenous levels of total COL18A1
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	1516
Applicable Applications for anti-COL18A1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide of human COL18A1
Subcellular Location	Secreted, Extracellular Space, Extracellular Matrix.
Tissue Specificity	Present in multiple organs with highest levels in liver, lung and kidney.
Predicted Cross Reactivity	Bovine, Horse, Sheep, Dog, Xenopus
Similarity	Bovine (100%), Horse (100%), Sheep (100%), Dog (100%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



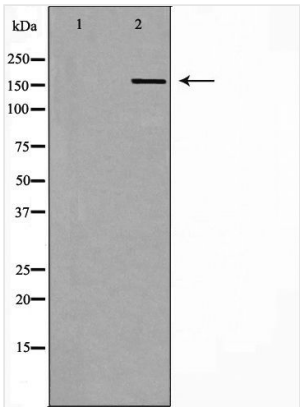
IF (Immunofluorescence)
AAA326342 staining HepG2 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



IHC (Immunohistochemistry)
AAA326342 at 1/100 staining Mouse liver 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 extracts from 293 and HeLa, using COL18A1 Antibody.



WB (Western Blot)
Western blot analysis of extracts of A431, using COL18A1 antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-COL18A1 antibody

Description: This gene encodes the alpha chain of type XVIII collagen. This collagen is one of the multiplexins, extracellular matrix proteins that contain multiple triple-helix domains (collagenous domains) interrupted by non-collagenous domains. The proteolytically produced C-terminal fragment of type XVIII collagen is endostatin, a potent antiangiogenic protein. Mutations in this gene are associated with Knobloch syndrome. The main features of this syndrome involve retinal abnormalities, so type XVIII collagen may play an important role in retinal structure and in neural tube closure. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2008]

Function: Probably plays a major role in determining the retinal structure as well as in the closure of the neural tube.

Subunit Structure: Non-collagenous domain 1 forms homotrimers. Endostatin is monomeric (PubMed:11257123). Recombinant non-collagenous domain 1 has stronger affinity to NID1, HSPG2 and laminin-1:NID1 complex and lower affinity to FBLN1 and FBLN2 than endostatin. Endostatin interacts with KDR/VEGFR2. Endostatin interacts with the ITGA5:ITGB1 complex (By similarity).

Post-translational Modifications: Prolines at the third position of the tripeptide repeating unit (G-X-Y) of the triple-helical regions are hydroxylated. Circulating endostatins are found as sialoglycoprotein and asialoglycoprotein structures. Undergoes proteolytic processing by cathepsin-L and elastase-like proteases to generate both NC1 trimers and endostatin monomers (PubMed:10626789). In vitro, several proteolytic cleavage sites in the non-collagenous domain 1 hinge region generating different endostatin-like peptides are reported (By similarity).

Similarity: Belongs to the multiplexin collagen family.

NCBI AND UNIPROT INFORMATION

NCBI GI # 110611235

NCBI GeneID	80781
NCBI Accession #	NP_085059.2
NCBI GenBank Nucleotide #	NM_030582.3
UniProt Accession #	P39060; Q58EX6; Q6RZ39; Q6RZ40; Q6RZ41; Q8N4S4; Q8WXI5; Q96T70; Q9UK38; Q9Y6Q7; Q9Y6Q8; A8MVI4
Molecular Weight	Observed: 178 kDa Predicted: 179 kDa
NCBI Official Full Name	collagen alpha-1(XVIII) chain isoform 1 preproprotein
NCBI Official Synonym Full Names	collagen type XVIII alpha 1 chain
NCBI Official Symbol	COL18A1
NCBI Official Synonym Symbols	KS; KNO; KNO1
NCBI Protein Information	collagen alpha-1(XVIII) chain
UniProt Protein Name	Collagen alpha-1(XVIII) chain
UniProt Gene Name	COL18A1
UniProt Synonym Gene Names	NC1

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/col18a1-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/326342>