

Rabbit Collagen III Polyclonal Antibody | anti-COL3A1 antibody

Collagen III Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA322090	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

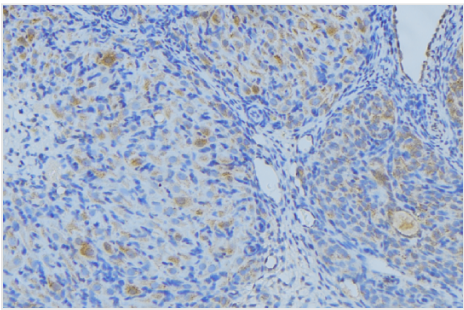
PRODUCT SYNONYMS

Collagen III; Polyclonal Antibody; Collagen III Antibody; Alpha 1 type III collagen; Alpha1 (III) collagen; CO3A1_HUMAN; COL 3A1; COL3A1; Collagen alpha 1(III) chain; Collagen alpha-1(III) chain; Collagen III alpha 1 chain precursor; Collagen III alpha 1 polypeptide; Collagen type III alpha 1 (Ehlers Danlos syndrome type IV autosomal dominant); Collagen type III alpha 1; Collagen type III alpha 1 chain; Collagen type III alpha; Collagen; fetal; EDS4A; Ehlers Danlos syndrome type IV; autosomal dominant; Fetal collagen; Type III collagen; anti-COL3A1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Collagen III antibody detects endogenous levels of total Collagen III
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	1466
Applicable Applications for anti-COL3A1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Collagen III
Subcellular Location	Secreted > Extracellular Space > Extracellular Matrix.
Predicted Cross Reactivity	Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (88%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

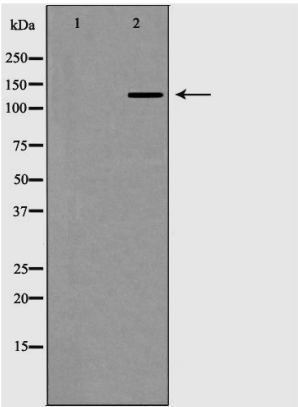
IMAGES



IHC (Immunohistochemistry)
AAA322090 at 1/100 staining Human uterus 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.



IF (Immunofluorescence)
AAA322090 staining HeLa 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.



WB (Western Blot)
Western blot analysis of Collagen III expression in HT1080 Whole cell lysate. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-COL3A1 antibody	Description: Defects in COL3A1 are a cause of Ehlers-Danlos syndrome type 3 (EDS3) [MIM:130020]; also known as benign hypermobility syndrome. EDS is a connective tissue disorder characterized by hyperextensible skin, atrophic cutaneous scars due to tissue fragility and joint hyperlaxity. EDS3 is a form of Ehlers-Danlos syndrome characterized by marked joint hyperextensibility without skeletal deformity. Function: Collagen type III occurs in most soft connective tissues along with type I collagen. Involved in regulation of cortical development. Is the major ligand of ADGRG1 in the developing brain and binding to ADGRG1 inhibits neuronal migration and activates the RhoA pathway by coupling ADGRG1 to GNA13 and possibly GNA12. Subunit Structure: Trimers of identical alpha 1(III) chains. The chains are linked to each other by interchain disulfide bonds. Trimers are also cross-linked via hydroxylysines. Post-translational Modifications: Proline residues at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains. O-linked glycan consists of a Glc-Gal disaccharide bound to the oxygen atom of a post-translationally added hydroxyl group. 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. Belongs to the fibrillar collagen family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4502951
NCBI GeneID	1281
NCBI Accession #	NP_000081.1

NCBI GenBank Nucleotide #	NM_000090.3
UniProt Accession #	P02461; P78429; Q15112; Q16403; Q53S91; Q541P8; Q6LDB3; Q6LDJ2; Q6LDJ3; Q7KZ56; D2JYH5; D3DPH4
Molecular Weight	Observed: 138 kDa Predicted: 139 kDa
NCBI Official Full Name	collagen alpha-1(III) chain preproprotein
NCBI Official Synonym Full Names	collagen type III alpha 1 chain
NCBI Official Symbol	COL3A1
NCBI Official Synonym Symbols	EDS4A; EDSVASC
NCBI Protein Information	collagen alpha-1(III) chain
UniProt Protein Name	Collagen alpha-1(III) chain
UniProt Gene Name	COL3A1

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-iii-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/322090>