10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

COL5A1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10487A

Product Information

Application	WB, IHC-P-Leica, E
Primary Accession	P20908
Other Accession	NP_000084.3
Reactivity	Human, Mouse, Rat
Predicted	Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB28077
Calculated MW	183560
Antigen Region	54-82

Additional Information

Gene ID	1289
Other Names	Collagen alpha-1(V) chain, COL5A1
Target/Specificity	This COL5A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 54-82 amino acids from the N-terminal region of human COL5A1.
Dilution	WB~~1:1000 IHC-P-Leica~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	COL5A1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	COL5A1
Function	Type V collagen is a member of group I collagen (fibrillar forming collagen). It is a minor connective tissue component of nearly ubiquitous distribution.

	Type V collagen binds to DNA, heparan sulfate, thrombospondin, heparin, and insulin.
Cellular Location	Secreted, extracellular space, extracellular matrix {ECO:0000255|PROSITE-ProRule:PRU00793}

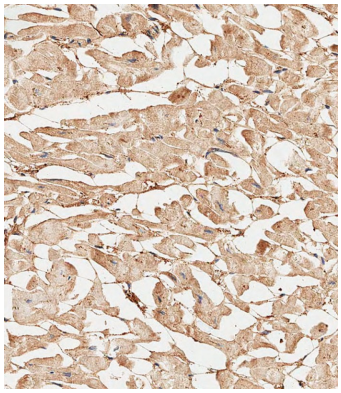
Background

COL5A1 encodes an alpha chain for one of the low abundance fibrillar collagens. Fibrillar collagen molecules are trimers that can be composed of one or more types of alpha chains. Type V collagen is found in tissues containing type I collagen and appears to regulate the assembly of heterotypic fibers composed of both type I and type V collagen. COL5A1 product is closely related to type XI collagen and it is possible that the collagen chains of types V and XI constitute a single collagen type with tissue-specific chain combinations. Mutations in this gene are associated with Ehlers-Danlos syndrome, types I and II. [provided by RefSeq].

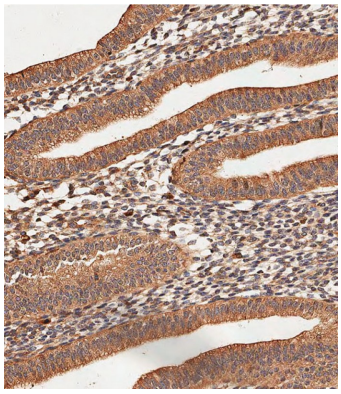
References

Vitart, V., et al. Hum. Mol. Genet. 19(21):4304-4311(2010)
Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010) :
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Posthumus, M., et al. Med Sci Sports Exerc (2010) In press :
Borck, G., et al. Am. J. Med. Genet. A 152A (8), 2090-2093 (2010) :

Images

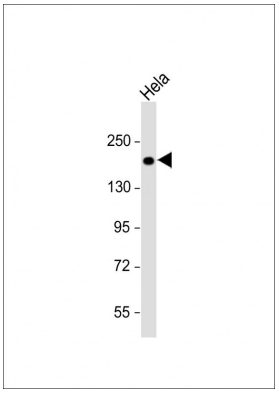


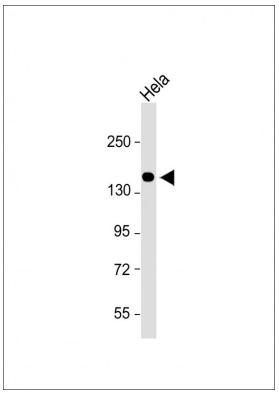
Immunohistochemical analysis of paraffin-embedded Human heart tissue using AP10487A performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



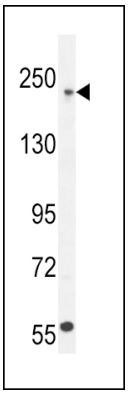
Immunohistochemical analysis of paraffin-embedded Human uterus tissue using AP10487A performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

Anti-COL5A1 Antibody (N-term) at 1:1000 dilution + Hela whole cell lysate Lysates/proteins at 20 ug per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 184 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

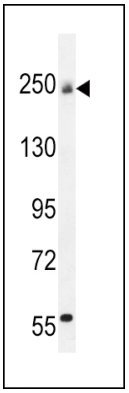




Anti-COL5A1 Antibody (N-term) at 1:2000 dilution + Hela whole cell lysate Lysates/proteins at 20 ug per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 184 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

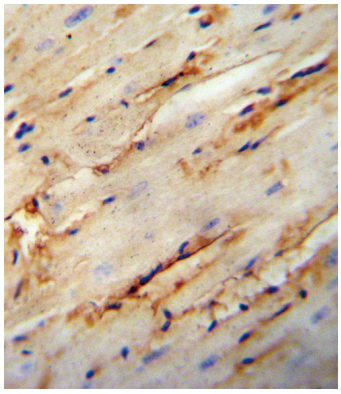


COL5A1 Antibody (N-term) (Cat. #AP10487a) western blot analysis in U251 cell line lysates (35ug/lane).This demonstrates the COL5A1 antibody detected the COL5A1 protein (arrow).



COL5A1 Antibody (N-term) (Cat. #AP10487a) western blot analysis in mouse bladder tissue lysates (35ug/lane).This demonstrates the COL5A1 antibody detected the COL5A1 protein (arrow).

COL5A1 antibody (N-term) (Cat. #AP10487a) immunohistochemistry analysis in formalin fixed and paraffin embedded mouse heart tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the COL5A1 antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



Citations

- COL5A1 Serves as a Biomarker of Tumor Progression and Poor Prognosis and May Be a Potential Therapeutic Target in Gliomas

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.