Product Name: COL5A1 Rabbit Polyclonal Antibody
Catalog #: APRab09191

Summary

Production Name	COL5A1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF,IHC,WB,
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	COL5A1
Alternative Names	COL5A1; Collagen alpha-1(V) chain
Gene ID	1289.0
SwissProt ID	P20908.The antiserum was produced against synthesized peptide derived from human Collagen V alpha1. AA range:301-350

Application

Dilution Ratio	WB 1:500 - 1:2000 IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
Molecular Weight	200kD

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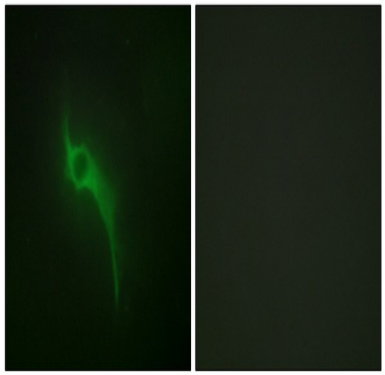
Background

This gene 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. This gene 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. The encoded procollagen protein occurs commonly as the heterotrimer pro-alpha1(V)-pro-alpha1(V)-pro-alpha2(V). Mutations in this gene are associated with Ehlers-Danlos syndrome, types I and II. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, May 2013],disease:Defects in COL5A1 are a cause of Ehlers-Danlos syndrome type 1 (EDS1) [MIM:130000]; also known as Ehlers-Danlos syndrome gravis or severe classic type Ehlers-Danlos syndrome. EDS is a connective tissue disorder characterized by hyperextensible skin, atrophic cutaneous scars due to tissue fragility and joint hyperlaxity. EDS1 is the severe form of classic Ehlers-Danlos syndrome.,disease:Defects in COL5A1 are a cause of Ehlers-Danlos syndrome type 2 (EDS2) [MIM:130010]; also known as Ehlers-Danlos syndrome mitis or mild classic type Ehlers Danlos syndrome.,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.,PTM:Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.,PTM:Sulfated on 40% of tyrosines.,similarity:Belongs to the fibrillar collagen family.,similarity:Contains 1 laminin G-like domain.,similarity:Contains 1 TSP N-terminal (TSPN) domain.,subunit:Trimers of two alpha 1(V) and one alpha 2(V) chains in most tissues and trimers of one alpha 1(V), one alpha 2(V), and one alpha 3(V) chains in placenta. Interacts with CSPG4.,

Research Area

Focal adhesion;ECM-receptor interaction;

Image Data



Immunofluorescence analysis of HeLa cells, using Collagen V alpha1 Antibody. The picture on the right is blocked with the synthesized peptide.

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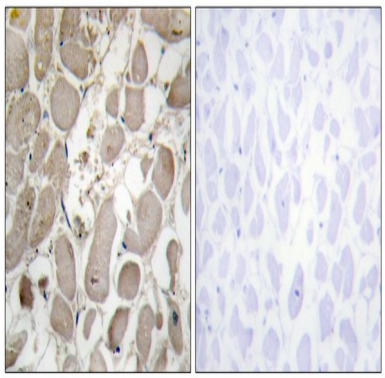
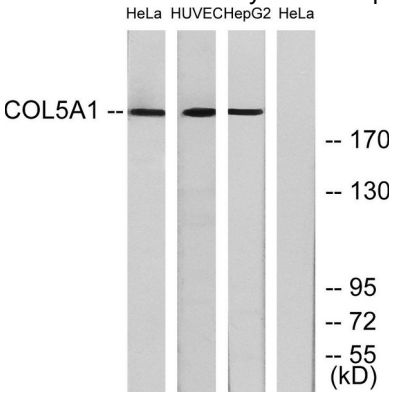
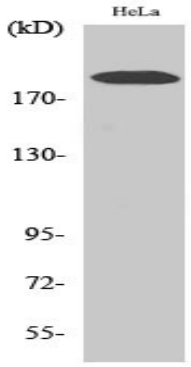


Immunohistochemistry analysis of paraffin-embedded human heart tissue, using Collagen V alpha1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HeLa, and HUVEC, and HepG2 cells, using Collagen V alpha1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using COL5A1 Polyclonal Antibody

Note

For research use only.