EnkiLife

Summary

Production Name	COL5A2 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC-P,IF-P,IF-F,ICC/IF,ELISA
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	COL5A2
Alternative Names	COL5A2; Collagen alpha-2(V) chain
Gene ID	1290.0
SwissProt ID	P05997.The antiserum was produced against synthesized peptide derived from human Collagen V alpha2. AA range:1-50

Application

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Dilution Ratio	IHC-P 1:100-1:300, IF-P/IF-F/ICC/IF 1:200-1:1000, ELISA 1:40000.Not yet tested in other applications.
Molecular Weight	

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. Mutations in this gene are associated with Ehlers-Danlos syndrome, types I and II. [provided by RefSeq, Jul 2008],disease:Defects in COL5A2 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 COL5A2 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.,disease:Genetic variation in COL5A2 is associated with spontaneous cervical artery dissections (sCAD). sCAD are an important cause of stroke among young and middle-aged patients. Ultrastructural abnormalities are observed in skin biopsies of most patients with sCAD. Major findings included enlarged and irregular collagen fibrils and pronounced elastic fibers fragmentation.,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. Type V collagen is a key determinant in the assembly of tissue-specific matrices.,PTM:Prolines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.,similarity:Belongs to the fibrillar collagen family.,similarity:Contains 1 VWFC 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.,

Research Area

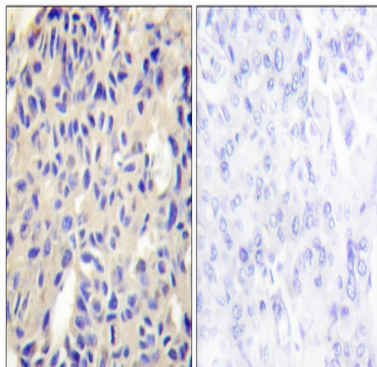Focal adhesion;ECM-receptor interaction;

Image Data
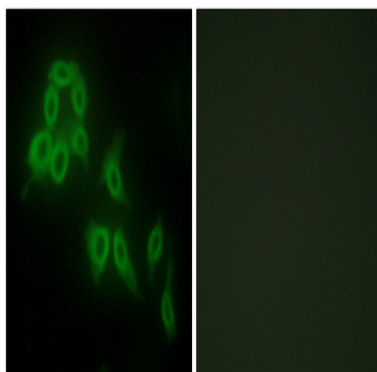
Immunofluorescence analysis of HepG2 cells, using Collagen V alpha2 Antibody. The picture on the right is blocked with the

synthesized peptide.

Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using Collagen V alpha2 Antibody.

The picture on the right is blocked with the synthesized peptide.

Note

For research use only.