

COL12A1 Polyclonal Antibody

Catalog No :	YT1010
Reactivity :	Human;Rat;Mouse;
Applications :	IHC;IF;ELISA
Target :	COL12A1
Fields :	>>Protein digestion and absorption
Gene Name :	COL12A1
Protein Name :	Collagen alpha-1(XII) chain
Human Gene Id :	1303
Human Swiss Prot No :	Q99715
Mouse Swiss Prot No :	Q60847
Immunogen :	The antiserum was produced against synthesized peptide derived from human Collagen XII alpha1. AA range:1481-1530
Specificity :	COL12A1 Polyclonal Antibody detects endogenous levels of COL12A1 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 333kD

Background : This gene encodes the alpha chain of type XII collagen, a member of the FACIT (fibril-associated collagens with interrupted triple helices) collagen family. Type XII collagen is a homotrimer found in association with type I collagen, an association that is thought to modify the interactions between collagen I fibrils and the surrounding matrix. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008],

Function : alternative products:The final tissue form of collagen XII may contain homotrimers of either isoform 1 or isoform 2 or any combination of isoform 1 and isoform 2,function:Type XII collagen interacts with type I collagen-containing fibrils, the COL1 domain could be associated with the surface of the fibrils, and the COL2 and NC3 domains may be localized in the perifibrillar matrix.,PTM:Hydroxylation on proline residues within the sequence motif, GXPG, is most likely to be 4-hydroxy as this fits the requirement for 4-hydroxylation in vertebrates.,PTM:O-glycosylation of isoform 1; glycosaminoglycan of chondroitin-sulfate type.,PTM:The triple-helical tail is stabilized by disulfide bonds at each end.,similarity:Belongs to the fibril-associated collagens with interrupted helices (FACIT) family.,similarity:Contains 1 TSP N-terminal (TSPN) domain.,similarity:Contains 18 fibronectin type-III dom

Subcellular Location : Secreted, extracellular space, extracellular matrix .

Expression : Found in collagen I-containing tissues: both isoform 1 and isoform 2 appear in amnion, chorion, skeletal muscle, small intestine, and in cell culture of dermal fibroblasts, keratinocytes and endothelial cells. Only isoform 2 is found in lung, placenta, kidney and a squamous cell carcinoma cell line. Isoform 1 is also present in the corneal epithelial Bowman's membrane (BM) and the interfibrillar matrix of the corneal stroma, but it is not detected in the limbal BM.

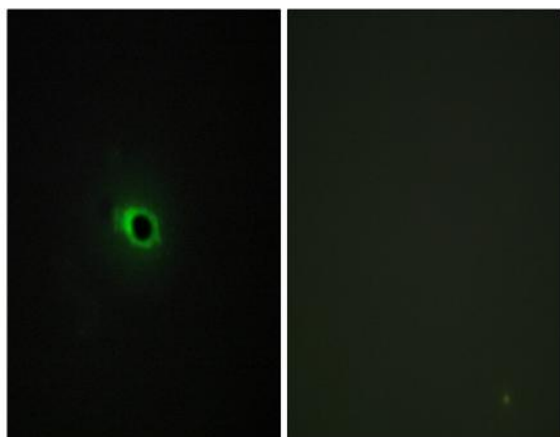
Sort : 4369

No4 : 1

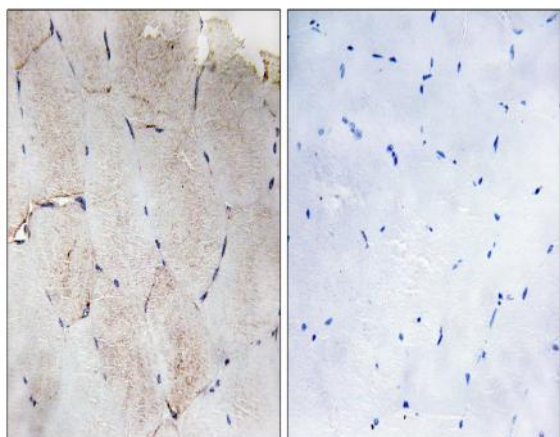
Host : Rabbit

Modifications : Unmodified

Products Images



Immunofluorescence analysis of COS7 cells, using Collagen XII alpha1 Antibody. The picture on the right is blocked with the synthesized peptide.



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