



COL12A1 Polyclonal Antibody

Catalog No	YP-Ab-16969
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	IHC;IF;ELISA
Gene Name	COL12A1
Protein Name	Collagen alpha-1(XII) chain
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	COL12A1; COL12A1L; Collagen alpha-1(XII) chain
Observed Band	
Cell Pathway	Secreted, extracellular space, extracellular matrix .
Tissue Specificity	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.
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

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],

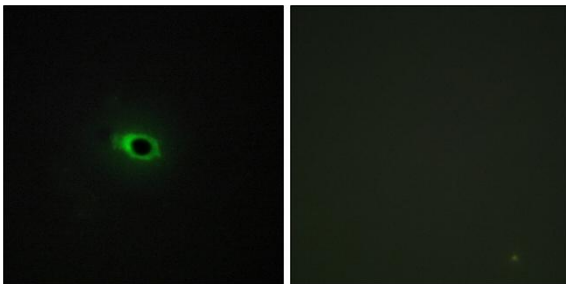
matters needing attention

Avoid repeated freezing and thawing!

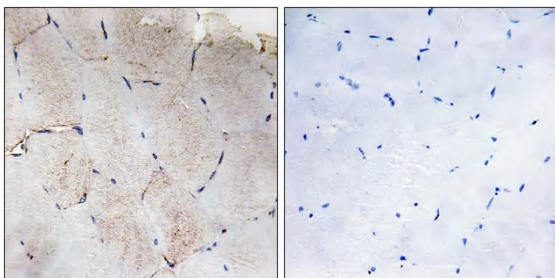
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

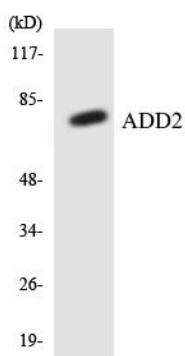
Products Images



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.



Western blot analysis of the lysates from HeLa cells using ADD2 antibody.