

## Summary

Production Name	COL12A1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF,IHC,WB,ELISA
Reactivity	Human, Rat, Mouse

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
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	COL12A1
Alternative Names	COL12A1; COL12A1L; Collagen alpha-1(XII) chain
Gene ID	1303.0
SwissProt ID	Q99715.The antiserum was produced against synthesized peptide derived from human
	Collagen XII alpha1. AA range:1481-1530

# Application

Dilution Ratio	IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
Molecular Weight	

## Background

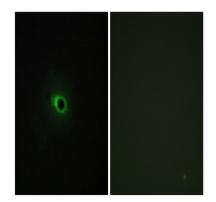
# Product Name: COL12A1 Rabbit Polyclonal Antibody Catalog #: APRab09166



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], 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 chondroitinsulfate 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 domains., similarity: Contains 4 VWFA domains., subunit: Trimer of identical chains each containing 190 kDa of non-triple-helical sequences, 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.,

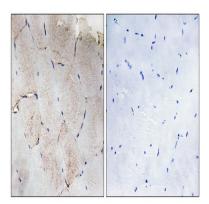
## **Research Area**

## Image Data

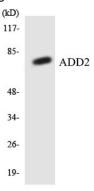


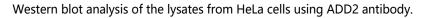
Immunofluorescence analysis of COS7 cells, using Collagen XII alpha1 Antibody. The picture on the right is blocked with the synthesized peptide.





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.





#### Note

For research use only.