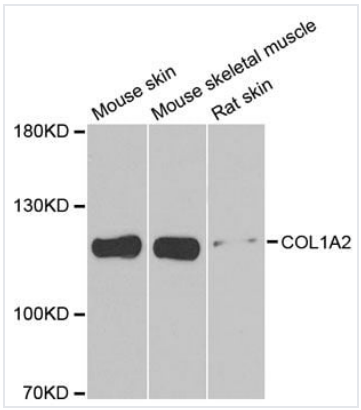
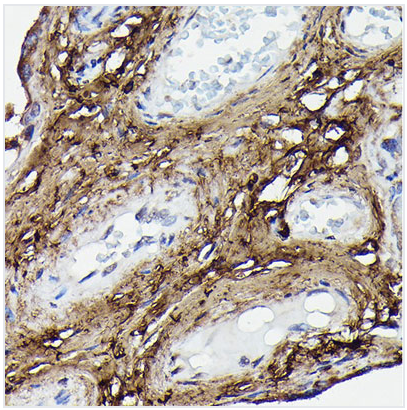
COL1A2 Antibody – Rabbit

PRODUCT OVERVIEW

Product Name	COL1A2, Antibody
Full Product Name	COL1A2 Polyclonal Antibody
Product Gene Name	anti-COL1A2 antibody
Product Synonym Names	COL1A2; OI4
Isotype	IgG
Host	Rabbit
Form/Format	PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Purity/Purification	Affinity purification
Preparation and Storage	Store at -20°C. Avoid freeze / thaw cycles.
Molecular Weight	Observed MW: 125kDa Calculated MW: 129kDa
OMIM	phenotype 259420
3D Structure	ModBase 3D Structure for P08123
Cross Reactivity	Human, Mouse, Rat
Immunogen	A synthetic peptide corresponding to a sequence within amino acids 500-600 of humanCOL1A2 (NP_000080.2).
Product Categories/Family for anti-COL1A2 antibody	Polyclonal
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-COL1A2 antibody	Western Blot (WB), Immunohistochemistry (IHC), Immunofluorescence (IF)
Application Notes for anti-COL1A2 antibody	WB: 1:500 - 1:2000 IHC: 1:50 - 1:200 IF: 1:50 - 1:200
Related Product Information for anti-COL1A2 antibody	This gene encodes the pro-alpha2 chain of type I collagen whose triple helix comprises two alpha1 chains and one alpha2 chain. Type I is a fibril-forming collagen found in most connective tissues and is abundant in bone, cornea, dermis and tendon. Mutations in this gene are associated with osteogenesis imperfecta types I-IV, Ehlers-Danlos syndrome type VIIB, recessive Ehlers-Danlos syndrome Classical type, idiopathic osteoporosis, and atypical Marfan syndrome. Symptoms associated with mutations in this gene, however, tend to be less severe than mutations in the gene for the alpha1 chain of type I collagen (COL1A1) reflecting the different role of alpha2 chains in matrix integrity. Three transcripts, resulting from the use of alternate polyadenylation signals, have been identified for this gene.
Other Notes	Small volumes of anti-COL1A2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for COL1A2 purchase	MBS9125820 is an antibody targeting COL1A2. Also known as COL1A2 Polyclonal Antibody. Host: Rabbit.



Western Blot (WB) of anti-COL1A2 antibody
Western blot analysis of extracts of various cell lines, using COL1A2 antibody at 1:1000 dilution.Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (MBS128200) at 1:10000 dilution.Lysates/proteins: 25ug per lane.Blocking buffer: 3% nonfat dry milk in TBST.Detection: ECL Basic Kit.Exposure time: 90s.



Immunohistochemistry (IHC) of anti-COL1A2 antibody
Immunohistochemistry of paraffin-embedded human placenta using COL1A2 Rabbit pAb at dilution of 1:100 (40x lens)

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for COL1A2. It may not necessarily be applicable to this product.

NCBI GI #	296439507
NCBI GeneID	1278
NCBI Accession #	P08123.7
UniProt Primary Accession #	P08123
UniProt Secondary Accession #	P02464; Q13897; Q13997; Q13998; Q14038; Q14057; Q15177; Q15947; Q16480; Q16511; Q7Z5S6
UniProt Related Accession #	P08123
NCBI Official Full Name	Collagen alpha-2(I) chain
NCBI Official Synonym Full Names	collagen, type I, alpha 2
NCBI Official Symbol	COL1A2
NCBI Official Synonym Symbols	OI4
UniProt Protein Name	Collagen alpha-2(I) chain
UniProt Synonym Protein Names	Alpha-2 type I collagen
Protein Family	Collagen
UniProt Gene Name	COL1A2
UniProt Entry Name	CO1A2_HUMAN
NCBI Protein Information	collagen alpha-2(I) chain; collagen alpha-2(I) chain; type I procollagen; alpha 2(I)-collagen; alpha-2 type I collagen; collagen I, alpha-2 polypeptide; collagen of skin, tendon and bone, alpha-2 chain

UniProt Comments for COL1A2	COL1A2: Type I collagen is a member of group I collagen (fibrillar forming collagen). Defects in COL1A2 are the cause of Ehlers-Danlos syndrome type 7B (EDS7B). EDS is a connective tissue disorder characterized by hyperextensible skin, atrophic cutaneous scars due to tissue fragility and joint hyperlaxity. EDS7B is marked by bilateral congenital hip dislocation, hyperlaxity of the joints, and recurrent partial dislocations. Defects in COL1A2 are a cause of osteogenesis imperfecta type 1 (OI1). A dominantly inherited connective tissue disorder characterized by bone fragility and blue sclerae. Osteogenesis imperfecta type 1 is non-deforming with normal height or mild short stature, and no dentinogenesis imperfecta. Defects in COL1A2 are a cause of osteogenesis imperfecta type 2 (OI2); also known as osteogenesis imperfecta congenita (OIC) or lethal perinatal. A connective tissue disorder characterized by bone fragility, with many perinatal fractures, severe bowing of long bones, undermineralization, and death in the perinatal period due to respiratory insufficiency. Defects in COL1A2 are the cause of Ehlers-Danlos syndrome autosomal recessive cardiac valvular form (EDSCV). A connective tissue disorder characterized by hyperextensible skin, atrophic cutaneous scars due to tissue fragility and joint hyperlaxity. In addition to joint laxity, skin hyperextensibility and friability, and abnormal scar formation, patients have mitral valve prolapse and insufficiency, mitral regurgitation, and aortic insufficiency. Defects in COL1A2 are a cause of osteogenesis imperfecta type 3 (OI3). A connective tissue disorder characterized by progressively deforming bones, very short stature, a triangular face, severe scoliosis, grayish sclera, and dentinogenesis imperfecta. Defects in COL1A2 are a cause of osteogenesis imperfecta type 4 (OI4); also known as osteogenesis imperfecta with normal sclerae. A connective tissue disorder characterized by moderately short stature, mild to moderate scoliosis, grayish or white sclera and dentinogenesis imperfecta. A chromosomal aberration involving COL1A2 may be a cause of lipoblastomas, which are benign tumors resulting from transformation of adipocytes, usually diagnosed in children. Translocation t(7;8)(p22;q13) with PLAG1. Belongs to the fibrillar collagen family. Protein type: Secreted; Secreted, signal peptide Chromosomal Location of Human Ortholog: 7q22.1 Cellular Component: extracellular matrix; extracellular space; endoplasmic reticulum lumen; extracellular region; collagen type I Molecular Function: protein binding, bridging; identical protein binding; protein binding; extracellular matrix structural constituent; metal ion binding; platelet-derived growth factor binding; SMAD binding Biological Process: blood vessel development; platelet activation; receptor-mediated endocytosis; extracellular matrix organization and biogenesis; collagen fibril organization; skin morphogenesis; Rho protein signal transduction; odontogenesis; extracellular matrix disassembly; collagen catabolic process; regulation of blood pressure; transforming growth factor beta receptor signaling pathway; blood coagulation; skeletal development; leukocyte migration Disease: Ehlers-danlos Syndrome, Type Vii, Autosomal Dominant; Ehlers-danlos Syndrome, Autosomal Recessive, Cardiac Valvular Form; Osteogenesis Imperfecta, Type Ii; Osteogenesis Imperfecta, Type Iii; Osteoporosis; Osteogenesis Imperfecta, Type Iv
Research Articles on COL1A2	**1.** results suggest that mitofusin-2 protein may affect the synthesis of procollagen of fibroblasts in postmenopausal patients with pelvic organ prolapse (POP); changes in Mfn2 and procollagen expression may play a role in the development of POP
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.

Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/antibody/col1a2/9125820