Recombinant Human Collagen, Type I, Alpha 1

Cat. No. COL1A1-1206H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant HumanCOL1A1 was expressed in Pichia pastoris.
Species	Human
Source	P.pastoris
Description	Collagen, type I,alpha 1, also known as COL1A1, is a human gene that encodes the majorcomponent of type I collagen, the fibrillar collagen found in most connectivetissues, including cartilage. Collagen is a protein that strengthens andsupports many tissues in the body, including cartilage, bone, tendon, skin and thewhite part of the eye (sclera). The COL1A1 gene produces a component of typeI collagen, called the pro-alpha1(I) chain. This chain combines with anotherpro-alpha1(I) chain and also with a pro-alpha2(I) chain (produced by theCOL1A2 gene) to make a molecule of type I procollagen. These triple-stranded,rope-like procollagen molecules must be processed by enzymes outside thecell. Once these molecules are processed, they arrange themselves into long,thin fibrils that cross-link to one another in the spaces around cells. Thecross-links result in the formation of very strong mature type I collagenfibers.
Form	Liquid, sterilefiltered in 0.01 M HCl.
Concentration	2.7 mg/ml
Purity	> 99.0% asdetermined by SDS-PAGE

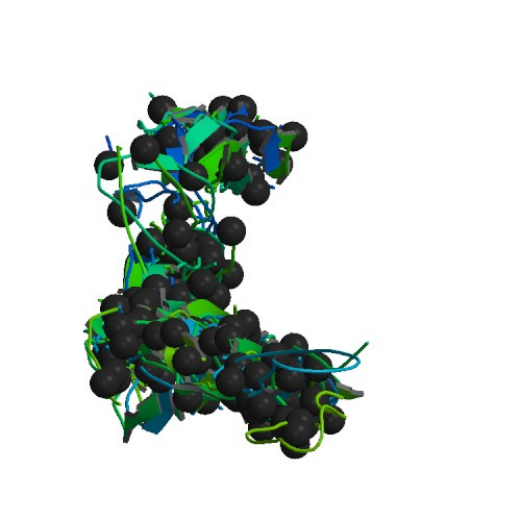
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Storage	Store at 2-4°C.
OfficialSymbol	COL1A1

GENE INFORMATION

Gene Name	COL1A1 collagen, type I, alpha 1 [Homosapiens]
Synonyms	COL1A1; collagen,type I, alpha 1; OI4; collagen alpha-1 (I) chain; Alpha-1 type I collagen;pro-alpha-1 collagen type 1; collagen alpha 1(I) chain type I; collagen ofskin, tendon and bone, alpha-1 chain
Gene ID	1277
mRNA Refseq	NM_000088
Protein Refseq	NP_000079
MIM	120150
UniProt ID	P02452
Chromosome Location	17q21.33
Pathway	Amoebiasis; Cellsurface interactions at the vascular wall; Collagen adhesion via Gp IV;ECM-receptor interaction; Focal adhesion; Inflammatory Response Pathway;Platelet Activation; vWF interaction with collagen; Hemostasis; IL4-mediatedsignaling events; Inflammatory Response Pathway; Integrin cell surfaceinteractions; NCAM signaling for neurite out-growth; Osteoblast Signaling;Platelet Adhesion to exposed collagen

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Function	extracellular matrixstructural constituent; identical protein binding; platelet-derived growthfactor binding; protein binding
PDB rendering basedon 1y0f.	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA