

## Recombinant Human COL1A1 protein, His-tagged

Cat. No. COL1A1-66H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human COL1A1(Arg253~Ala471) fused with His tag at N-terminal was expressed in E. coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	Arg253~Ala471
<b>Description</b>	This gene encodes the pro-alpha1 chains 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 VIIA, Ehlers-Danlos syndrome Classical type, Caffey Disease and idiopathic osteoporosis. Reciprocal translocations between chromosomes 17 and 22, where this gene and the gene for platelet-derived growth factor beta are located, are associated with a particular type of skin tumor called dermatofibrosarcoma protuberans, resulting from unregulated expression of the growth factor. Two transcripts, resulting from the use of alternate polyadenylation signals, have been identified for this gene.
<b>Form</b>	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300
<b>Molecular Mass</b>	20.9kDa

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<b>Endotoxin</b>	<1.0EU per 1g (determined by the LAL method)
<b>Purity</b>	> 95%
<b>Applications</b>	Positive Control; Immunogen; SDS-PAGE; WB. If bio-activity of the protein is needed, please check active protein
<b>Stability</b>	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
<b>Storage</b>	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
<b>Reconstitution</b>	Reconstitute in PBS or others.

## GENE INFORMATION

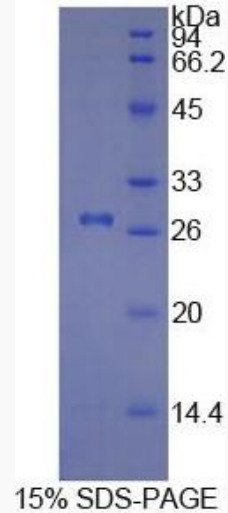
<b>Gene Name</b>	COL1A1 collagen, type I, alpha 1 [ Homo sapiens ]
<b>Official Symbol</b>	COL1A1
<b>Synonyms</b>	COL1A1; collagen, type I, alpha 1; collagen alpha-1(I) chain; OI4; alpha-1 type I collagen; pro-alpha-1 collagen type 1; collagen alpha 1 chain type I; collagen alpha-1(I) chain preproprotein; collagen of skin, tendon and bone, alpha-1 chain;
<b>Gene ID</b>	1277
<b>mRNA Refseq</b>	NM_000088

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<b>Protein Refseq</b>	NP_000079
<b>UniProt ID</b>	P02452
<b>Chromosome Location</b>	17q21.33
<b>Pathway</b>	Amoebiasis, organism-specific biosystem; Amoebiasis, conserved biosystem; Axon guidance, organism-specific biosystem; Cell surface interactions at the vascular wall, organism-specific biosystem; Developmental Biology, organism-specific biosystem; ECM-receptor interaction, organism-specific biosystem; ECM-receptor interaction, conserved biosystem;
<b>Function</b>	extracellular matrix structural constituent; identical protein binding; platelet-derived growth factor binding; protein binding;



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