

## Recombinant Human COL2A1 Protein, His-tagged

**Cat. No.** COL2A1-2156H    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human COL2A1 Protein (Asp1242-Leu1487) with a N-His tag was expressed in E. coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	Asp1242-Leu1487
<b>Description</b>	This gene encodes the alpha-1 chain of type II collagen, a fibrillar collagen found in cartilage and the vitreous humor of the eye. Mutations in this gene are associated with achondrogenesis, chondrodysplasia, early onset familial osteoarthritis, SED congenita, Langer-Saldino achondrogenesis, Kniest dysplasia, Stickler syndrome type I, and spondyloepimetaphyseal dysplasia Strudwick type. In addition, defects in processing chondrocalcin, a calcium binding protein that is the C-propeptide of this collagen molecule, are also associated with chondrodysplasia. There are two transcripts identified for this gene.
<b>Form</b>	Freeze-dried powder
<b>Molecular Mass</b>	Predicted Molecular Mass: 31.1 kDa Accurate Molecular Mass: 34 kDa
<b>Endotoxin</b>	<1.0 EU per 1g (determined by the LAL method).

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<b>Purity</b>	> 90%
<b>Applications</b>	Positive Control; Immunogen; SDS-PAGE; WB.
<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>Storage Buffer</b>	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
<b>Reconstitution</b>	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

## GENE INFORMATION

<b>Gene Name</b>	COL2A1 collagen, type II, alpha 1 [ Homo sapiens (human) ]
<b>Official Symbol</b>	COL2A1
<b>Synonyms</b>	COL2A1; collagen, type II, alpha 1; collagen, type II, alpha 1 (primary osteoarthritis, spondyloepiphyseal dysplasia, congenital), SEDC; collagen alpha-1(II) chain; chondrocalcin; cartilage collagen; alpha-1 type II collagen; collagen II, alpha-1 polypeptide; AOM; ANFH; SEDC; COL11A3; MGC131516;
<b>Gene ID</b>	1280
<b>mRNA Refseq</b>	NM_001844

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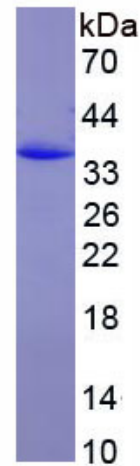
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Protein Refseq NP\_001835

MIM 120140

UniProt ID P02458



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