

Recombinant Human COL2A1 Protein, His-tagged

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

SPECIFICATION

Product Overview	Recombinant Human COL2A1 Protein (Asp1242-Leu1487) with a N-His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Asp1242-Leu1487
Description	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.
Form	Freeze-dried powder
Molecular Mass	Predicted Molecular Mass: 31.1 kDa Accurate Molecular Mass: 34 kDa
Endotoxin	<1.0 EU per 1g (determined by the LAL method).

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Purity	> 90%
Applications	Positive Control; Immunogen; SDS-PAGE; WB.
Stability	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.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
Storage Buffer	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	COL2A1 collagen, type II, alpha 1 [Homo sapiens (human)]
Official Symbol	COL2A1
Synonyms	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;
Gene ID	1280
mRNA Refseq	NM_001844

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Protein Refseq	NP_001835
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MIM	120140
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UniProt ID	P02458
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