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Datasheet for ABIN7317486

COL2A1 Protein (AA 1242-1487) (His tag)

Overview

Quantity:	50 µg
Target:	COL2A1
Protein Characteristics:	AA 1242-1487
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This COL2A1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human COL2A1 Protein (aa 1242-1487, His Tag)
Sequence:	Asp 1242-Leu 1487
Characteristics:	A DNA sequence encoding the amino acids (Asp 1242-Leu 1487) of human COL2A1 isoform 1 (P02458-2), known as chondrocalcin, was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 92 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	COL2A1
Alternative Name:	COL2A1 (COL2A1 Products)
Background:	Background: COL2A1 is the alpha-1 chain of type II collagen which is a fibrillar collagen found in

Target Details

cartilage and the vitreous humor of the eye. Mutations in this protein 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. Type II collagen is specific for cartilaginous tissues. Thus COL2A1 is essential for the normal embryonic development of the skeleton, for linear growth and for the ability of cartilage to resist compressive forces. The regulation of COL2A1, likely results from a balance of both positive and negative proteins. The inhibition of COL2A1 transcription following treatment of chick sternal chondrocytes with growth factors was accompanied by increased EF1 expression. Overexpression of EF1 in differentiated chondrocytes resulted in decreased expression of a reporter construct containing a collagen II promoter/enhancer insert.

Synonym: ANFH,AOM,COL11A3,SEDC,STL1

Molecular Weight: 29.8 kDa

Pathways: [Sensory Perception of Sound](#), [Growth Factor Binding](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile PBS, pH 7.4

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.