

Recombinant Human COL10A1, His-tagged

Cat. No. COL10A1-85H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	A DNA sequence encoding human COL10A1 corresponding to amino acid (19-680) was expressed with an N-terminal polyhistidine tag.
Species	Human
Source	Insect Cells
ProteinLength	19-680 a.a.
Description	This gene encodes the alpha chain of type X collagen, a short chain collagen expressed by hypertrophic chondrocytes during endochondral ossification. Unlike type VIII collagen, the other short chain collagen, type X collagen is a homotrimer. Mutations in this gene are associated with Schmid type metaphyseal chondrodysplasia (SMCD) and Japanese type spondylometaphyseal dysplasia (SMD).
Form	Liquid. PBS pH7.4
AA Sequence	VFYAERYQMPTGIKGPLNKTQFFIPYTIKSKGIAVRGEQGTGPPGPAGPRGH PSGPPGKPGYGSPGLQGE PGLPGPPGPSAVGKPGVPGLPGKPGERGPYGP VGPAGLPGRGPPGPPGIPGPAGISVPGKPGQQGPTGAPG PRGFPG GMNGQKGEMGYGAPGRPGERGLPGPQGPTGPSGPPGVGKRGENG DRGFPGEM GPIGPPGPQGPPGERGPEGIGKPGAAGAPGQPGIPG GPPGPPGFGKPLPGLKGERGPAGLP GG PGAKGEQGPAGLP GPQGPKGIPGSHGLPGPKGETGPAGPAGYPGAKGERGSPGSDGKPGYPGK PGLD

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GPKGNPGLPGPKGDPGVGGPPGLPGPVGPAGAKGMPGHNGEAGPRGAPGIPGTR
 GPIGPPGIPGFPKSGD PGSPGPPGPAGIATKGLNGPTGPPGPPGPRGHSGEPL
 PGPPGPPGPPGQAVMPEGFIKAGQRPSLSGTPLVSAN QGVTGMPVSAFTVILSKAY
 PAIGTPIPFDKILYNRQQHYDPRTGIFTCPQIPGIYYFSYHVHVKGTHVWVGLYKNG TP
 VMYTYDEYTKGYLDQASGSAIDLTENDQVWLQLPNAESNGLYSSEYVHSSFSGFLV
 APM

Purity >90% as determined by SDS-PAGE

Storage Store it at +4°C for short term (5 weeks). For long term storage (12 months), store it at -20°C - -70°C. Avoid freeze-thaw cycles.

GENE INFORMATION

Gene Name COL10A1 collagen, type X, alpha 1 [Homo sapiens (human)]

Official Symbol COL10A1

Synonyms COL10A1; collagen, type X, alpha 1; collagen alpha-1(X) chain; Schmid metaphyseal chondrodysplasia; COAA1_HUMAN; Col10a 1; COL10A1; Collagen alpha 1(X) chain; Collagen alpha-1(X) chain; Collagen type X alpha 1 (Schmid metaphyseal chondrodysplasia); Collagen type X alpha 1; Collagen X alpha 1 polypeptide; CollagenX; fa66d11; fb10c08; OTTHUMP00000040411; Procollagen type X alpha 1; Schmid metaphyseal chondrodysplasia; wu:fa66d11; wu:fb10c08; collagen X, alpha-1 polypeptide

Gene ID 1300

mRNA Refseq NM_000493

Protein Refseq NP_000484

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MIM	120110
UniProt ID	Q03692
Chromosome Location	6q21-q22
Pathway	Assembly of c; ollagen fibrils and other multimeric structures; Collagen biosynthesis and modifying enzymes; Endochondral Ossification
Function	metal ion binding

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