

Recombinant Human COL10A1 protein, His-tagged

Cat. No. COL10A1-490H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human COL10A1(Thr547~Met680) fused with His tag at N-terminal was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Thr547~Met680
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	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Molecular Mass	16.3kDa
AA Sequence	TGMPVSAFTVUKSK AYPAGTPIP FDKILYNRQQ HYDPRTGIFT CQIPGIYYFS YHVHVKGTHV WVGLYKNGTP VMYTYDEYTK GYLDQASGSA IIDLTENDQV WLQLPNAESN GLYSSEYVHS SFGSGLVAPM
Endotoxin	<1.0EU per 1g (determined by the LAL method)

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Purity	> 90%
Applications	SDS-PAGE; WB; ELISA; IP; CoIP; ReporterAssays; Purification; Amine Reactive Labeling.
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.
Reconstitution	Reconstitute in PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	COL10A1 collagen, type X, alpha 1 [Homo sapiens]
Official Symbol	COL10A1
Synonyms	COL10A1; collagen, type X, alpha 1; collagen alpha-1(X) chain; Schmid metaphyseal chondrodysplasia; collagen X, alpha-1 polypeptide;
Gene ID	1300
mRNA Refseq	NM_000493
Protein Refseq	NP_000484
MIM	120110

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UniProt ID	Q03692
Chromosome Location	6q21-q22
Pathway	Endochondral Ossification, organism-specific biosystem; Senescence and Autophagy, organism-specific biosystem;
Function	metal ion binding;

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