Recombinant Human COL1A1 Protein, His-tagged

Cat. No. COL1A1-1183H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human COL1A1 Protein (Gln23-Pro161) with His tag was expressed in 293F.
Species	Human
Source	HEK293
ProteinLength	Gln23-Pro161
Description	This gene encodes the pro-alpha1 chains of type I collagen whose triple helix comprises two alpha1 chains and one alpha2 chain. Type I is a fibril-forming collagen found in most connective tissues and is abundant in bone, cornea, dermis and tendon. Mutations in this gene are associated with osteogenesis imperfecta types I-IV, Ehlers-Danlos syndrome type VIIA, Ehlers-Danlos syndrome Classical type, Caffey Disease and idiopathic osteoporosis. Reciprocal translocations between chromosomes 17 and 22, where this gene and the gene for platelet-derived growth factor beta are located, are associated with a particular type of skin tumor called dermatofibrosarcoma protuberans, resulting from unregulated expression of the growth factor. Two transcripts, resulting from the use of alternate polyadenylation signals, have been identified for this gene.
Form	Freeze-dried powder
Molecular Mass	Predicted Molecular Mass: 15.9 kDa; Accurate Molecular Mass: 32 kDa

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

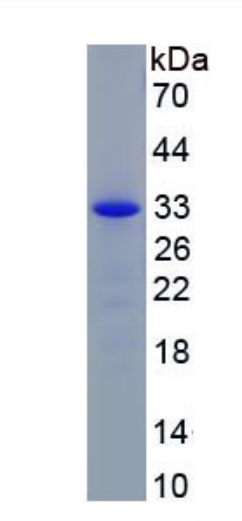
Purity	> 95%
Applications	Positive Control; Immunogen; SDS-PAGE; WB.
Stability	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation 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	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 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	COL1A1 collagen type I alpha 1 chain [Homo sapiens (human)]
Official Symbol	COL1A1
Synonyms	COL1A1; collagen type I alpha 1 chain; OI1; OI2; OI3; OI4; EDSC; CAFYD; EDSARTH1; collagen alpha-1(I) chain; alpha-1 type I collagen; alpha1(I) procollagen; collagen alpha 1 chain type I; collagen alpha-1(I) chain preproprotein; collagen of skin, tendon and bone, alpha-1 chain; collagen, type I, alpha 1; pro-alpha-1 collagen type 1; type I proalpha 1; type I procollagen alpha 1 chain
Gene ID	1277

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mRNA Refseq	NM_000088
Protein Refseq	NP_000079
MIM	120150
UniProt ID	P02452



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