

# Recombinant Human COL1A1 Protein (Gln300-Asp744), N-His tagged

Cat. No. COL1A1-12H Lot. No. (See product label)

## SPECIFICATION

### Product Overview

Purified recombinant protein of Human collagen, type I, alpha 1 (COL1A1), with N-terminal His tag, secretory expressed in HEK293 cells.

### Species

Human

### Source

HEK293

### ProteinLength

Gln300-Asp744

### 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.

### Molecular Mass

40.8 kDa

### Purity

> 90% as determined by SDS-PAGE and Coomassie blue staining

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Applications</b>	Cell culture: For culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Stability</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>Storage</b>	Store at -80 centigrade.
<b>Concentration</b>	> 50 µg/mL as determined by microplate BCA method
<b>Storage Buffer</b>	PBS, pH 7.4, 10% glycerol

## GENE INFORMATION

<b>Gene Name</b>	COL1A1 collagen type I alpha 1 chain [ Homo sapiens (human) ]
<b>Official Symbol</b>	COL1A1
<b>Synonyms</b>	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
<b>Gene ID</b>	1277
<b>mRNA Refseq</b>	NM_000088
<b>Protein Refseq</b>	NP_000079
<b>MIM</b>	120150

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

UniProt ID

P02452

SDS-PAGE



 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA