# Recombinant Human Connective Tissue Growth Factor, His-tagged

**Cat. No.** CTGF-30H **Lot. No.** (See product label)

## SPECIFICATION

| | |
|---|---|
| **Product Overview** | The Connective Tissue Growth Factor His-Tagged Fusion Protein, produced in*E. coli*, is 38.3 kDa protein containing 323 amino acid residues of the CTGF human and 23 additional amino acid residues – His Tag, Xa - cleavage site (underlined). |
| **Species** | Human |
| **Source** | E.coli |
| **Description** | Connective Tissue Growth Factor belongs to the CCN family of proteins. The CCN family presently consists of six members in human also known as: Cyr61 (Cystein rich 61), CTGF (Connective Tissue Growth Factor), Nov (Nephroblastoma Overexpressed gene), WISP-1, 2 and 3 (Wnt-1 Induced Secreted Proteins). The CCN genes encode secreted proteins associated with the Extracellular Matrix (ECM) and cell membrane. CCN proteins are matricellular proteins which are involved in the regulation of various cellular functions including: proliferation, differentiation, survival, adhesion and migration. They are expressed in derivatives of the three embryonic sheets and are implicated in the development of kidney, nervous system, muscle, bone marrow, cartilage and bone. During adulthood, they are implicated in wound healing, bone fracture repair, and pathologies such as: fibrosis, vascular ailments and tumorigenesis. Full length secreted CCN proteins can show an antiproliferative activity, whereas truncated isoforms are likely to stimulate proliferation and behave as oncogenes. |

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

| | |
|---|---|
| **Amino Acid Sequence** | MGHHHHHHHH HHSSGHIEGR HMRQNCSGPC RCPDEPAPRC PAGVSLVLDG CGCCRVCAKQ LGELCTERDPCDPHKGLFCD FGSPANRKIG VCTAKDGAPC IFGGTVYRSG ESFQSSCKYQ CTCLDGAVGC MPLCSMDVRLPSPDCPFPRR VKLPGKCCEE WVCDEPKDQT VVGPALAAYR LEDTFGPDPT MIRANCLVQT TEWSACSKTCGMGISTRVTN DNASCRLEKQ SRLCMVRPCE ADLEENIKKG KKCIRTPKIS KPIKFELSGC TSMKTYRAKF CGVCTDGRCCTPHRTTTLPV EFKCPDGEVM KKNMMFIKTC ACHYNCPGDN DIFESLYYRK MYGDMA. |
| **Specificity** | The amino acid sequence of the CTGF is 100% homologous to amino acid sequence of the Connective Tissue Growth Factor without signal sequence. |
| **Purification Method** | Three-step procedure using affinity Ni-NTA chromatography and size exclusion Chromatography before and after refolding. |
| **Purity** | Purity of Connective Tissue Growth Factor is >95% (SDS-PAGE analyzed). |
| **Formulation** | Sterile filtered and lyophilized from 0.5 mg/ml in 0.05M Acetate buffer pH-4. |
| **Solubility** | Add 0.2 ml of 0.1M Acetate buffer pH-4 and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10µg/ml. In higher concentrations the solubility of this antigen is limited. |

## GENE INFORMATION

| | |
|---|---|
| **Gene Name** | CTGF connective tissue growth factor [ Homo sapiens ] |
| **Synonyms** | CTGF; connective tissue growth factor; CCN2; NOV2; HCS24; IGFBP8; MGC102839;hypertrophic chondrocyte-specific protein 24; insulin-like growth factor-binding protein 8; OTTHUMP00000017213 |

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

| | |
|---|---|
| **Gene ID** | 1490 |
| **mRNA Refseq** | NM_001901 |
| **Protein Refseq** | NP_001892 |
| **MIM** | 121009 |
| **UniProt ID** | P29279 |
| **Chromosome Location** | 6q23.2 |
| **Function** | growth factor activity; heparin binding; insulin-like growth factor binding; integrin binding; protein binding |

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