



Connective Tissue Growth Factor, His Tag, human recombinant (rHuCTGF-His)

Catalog No: 87314
Lot No: XXXXX
Source: *E. coli*
Synonyms: CCN2, NOV2, HCS24, IGFBP8, MGC102839, CTGF, Connective Tissue Growth Factor

Background

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.

Description

Connective Tissue Growth Factor human recombinant, produced in *E. coli*, is a 38.3 kDa fusion protein containing 323 amino acid residues of CTGF human and 23 additional amino acid residues His Tag.

Physical Appearance

Lyophilized

Formulation

Filtered (0.4 µm) and lyophilized from 0.5 mg/ml in 0.05 M acetate buffer pH 4, 4% mannitol and 1% sucrose.

Solubility

It is recommended to add 0.1 M acetate buffer pH 4 to prepare a working stock solution of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10 µg/ml. In higher concentrations the solubility of this antigen is limited. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Stability

Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.

Purity

Greater than 95% as determined by SDS-PAGE.



Amino Acid Sequence

MGHHHHHHHH HHSSGHIEGR HMRQNCSGPC RCPDEPAPRC PAGVSLVLDG CGCCRVCAKQ LGELCTERDP CDPHKGLFCD
FGSPANRKIG VCTAKDGAPC IFGGTVYRSG ESFQSSCKYQ CTCLDGAVGC MPLCSMDVRL PSPDCPFPRR VKLPGKCCEE
WVCDEPKDQT VVGPALAAYR LEDTFGPDPT MIRANCLVQT TEWSACSKTC GMGISTRVTN DNASCRLEKQ SRLCMVRPCE
ADLEENIKKG KKCIRTPKIS KPIKFELSGC TSMKTYRAKF CGVCTDGRCC TPHRTTTLPV EFKCPDGEVM KKNMMFIKTC
ACHYNCPGDN DIFESLYYRK MYGDMA

Usage

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