

## **Synonym**

CCN2,NOV2,HCS24,IGFBP8,IBP-8,IGFBP-8,IGF-binding protein 8

#### Source

Human CTGF, His Tag(CTF-H52H5) is expressed from human 293 cells (HEK293). It contains AA Gln 27 - Ala 349 (Accession # Q5M8T4-1). Predicted N-terminus: Gln 27

### **Molecular Characterization**

CTGF(Gln 27 - Ala 349) Q5M8T4-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 37.4 kDa. The protein migrates as 36-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per  $\mu g$  by the LAL method / rFC method.

### **Purity**

>90% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22 µm filtered solution in

Tris with Potassium glutamate and Arginine, pH7.0 with trehalose as protectant.

Contact us for customized product form or formulation.

### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### **Storage**

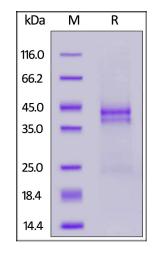
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**

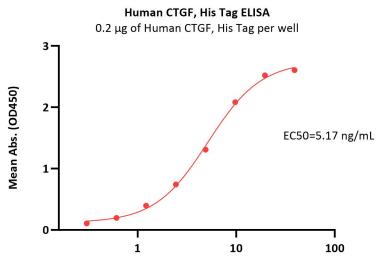


Human CTGF, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

# **Bioactivity-ELISA**



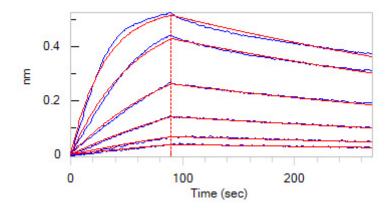




Monoclonal Anti-Human CTGF Antibody, Human IgG1 Conc. (ng/mL)

Immobilized Human CTGF, His Tag (Cat. No. CTF-H52H5) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Monoclonal Anti-Human CTGF Antibody, Human IgG1 with a linear range of 0.3-10 ng/mL (QC tested).

### **Bioactivity-BLI**



Loaded Monoclonal Anti-Human CTGF Antibody, Human IgG1 on AHC Biosensor, can bind Human CTGF, His Tag (Cat. No. CTF-H52H5) with an affinity constant of 6.29 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

# Background

Connective Tissue Growth Factor (CTGF), also known as CCN2, is a member of the CCN (CCN1-6) family of modular matricellular proteins. Like other CCN proteins, mature human CTGF consists of IGF-binding protein domain, a vWF-C domain, a TSP-1 domain, and a cysteine knot heparin-binding domain. CTGF promotes proliferation and differentiation of chondrocytes. Mediates heparin- and divalent cation-dependent cell adhesion in many cell types including fibroblasts, myofibroblasts, endothelial and epithelial cells. Enhances fibroblast growth factor-induced DNA synthesis. Analysis of CCN2 function in vivo has focused primarily on its key role as a mediator of excess ECM synthesis in multiple fibrotic diseases.

