

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 µg by the LAL 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.

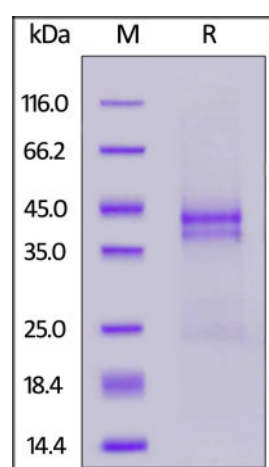
Storage

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

Please avoid repeated freeze-thaw cycles.

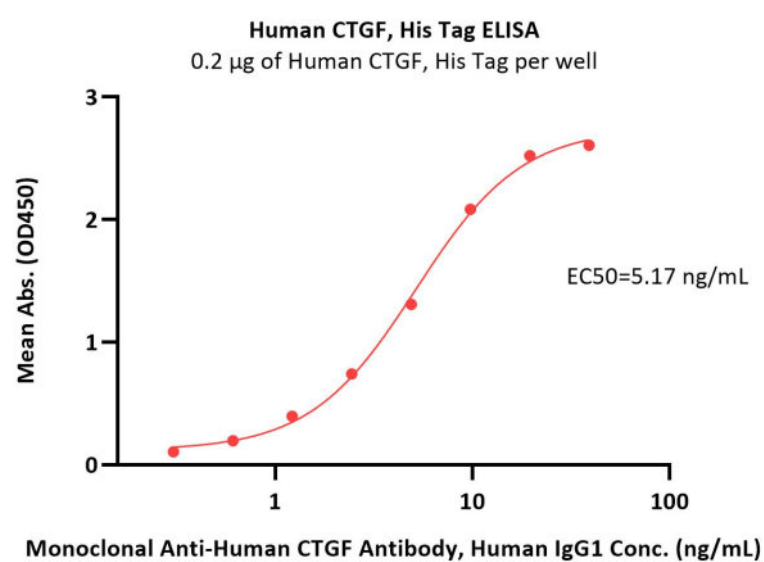
This product is stable after storage at:

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

SDS-PAGE

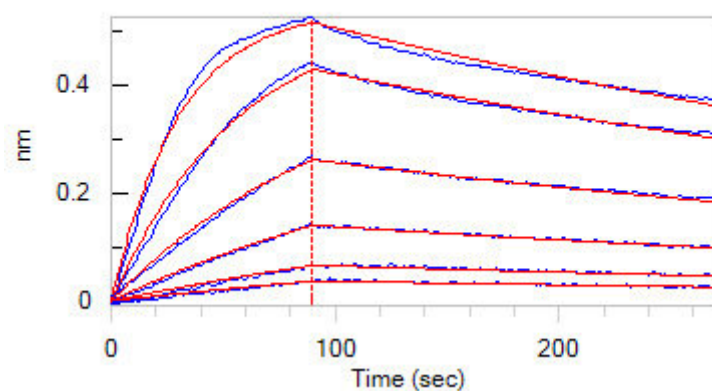
Human CTGF, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Human CTGF, His Tag (Cat. No. CTF-H52H5) at 2 µg/mL (100 µL/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.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.