

Synonym

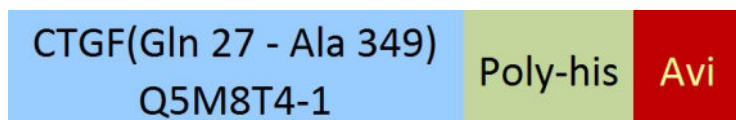
CCN2,NOV2,HCS24,IGFBP8,IBP-8,IGFBP-8,IGF-binding protein 8

Source

Biotinylated Human CTGF Protein, His,Avitag(CTF-H82E6) is expressed from human 293 cells (HEK293). It contains AA Gln 27 - Ala 349 (Accession # [Q5M8T4-1](#)).

Predicted N-terminus: Gln 27

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 39.2 kDa. The protein migrates as 40-42 kDa and 43-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

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

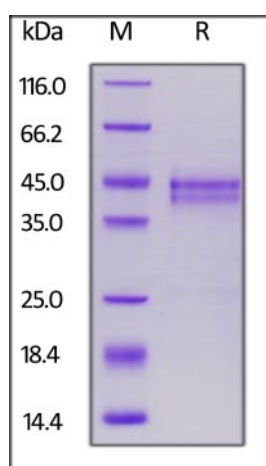
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

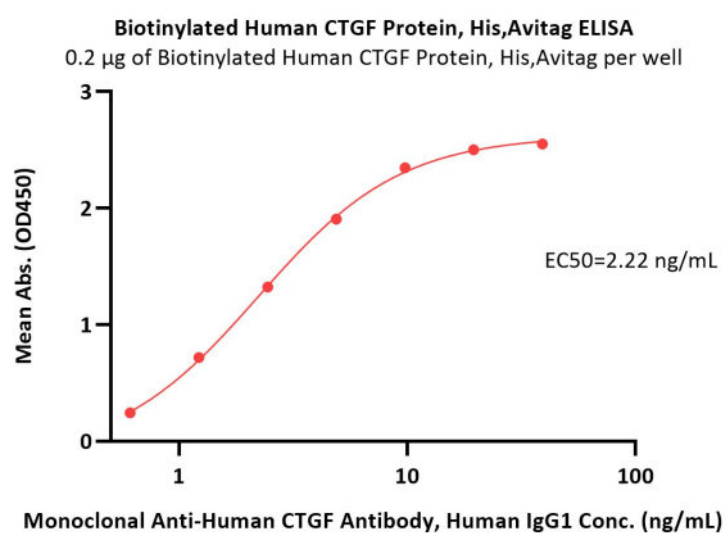
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human CTGF Protein, His,Avitag 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 Biotinylated Human CTGF Protein, His,Avitag (Cat. No. CTF-H82E6) at 2 µg/mL (100 µL/well) on streptavidin precoated (0.2 µg/well) plate, can bind Monoclonal Anti-Human CTGF Antibody, Human IgG1 with a linear range of 0.6-5 ng/mL (QC 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.