

## Recombinant Human CTGF (Connective Tissue Growth Factor)

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### Product Description

CTGF is a member of the CCN family of secreted cysteine-rich regulatory proteins, and is the major mitogenic and chemoattractant protein produced by umbilical vein and vascular endothelial cells. CTGF stimulates the proliferation and differentiation of chondrocytes, induces angiogenesis, promotes cell adhesion of fibroblasts, endothelial and epithelial cells, and binds to IGF, TGF  $\beta$ 1 and BMP-4. CTGF is comprised of four distinct structural domains (modules), which are identified as IGF binding protein (IGFBP), von Willebrand Factor C (VWFC), thrombospondin type-I (TSP type-I), and C-terminal cysteine knot-like (CTCK) domains. Full length CTGF can be proteolytically cleaved in certain tissues to yield N-terminal truncated isoforms, which, depending on the isoform, contain only the TSP type-I and CTCK domains or contain only the CTCK domain.

### Typical Specifications

<b>Species</b>	Human
<b>Expression</b>	E. coli Cell Expressed
<b>Activity</b>	Typically 1.0-2.0 $\mu$ g/mL ED <sub>50</sub>
<b>Purity</b>	>95%
<b>Endotoxin</b>	<1.0 EU/ $\mu$ g
<b>Molecular Mass</b>	11.0 kDa
<b>Formulation</b>	10mM Sodium Acetate, pH 6.0
<b>Country of Origin</b>	USA

### Purity Confirmation

This was determined by SDS-PAGE gel and HPLC analysis.

### Activity Assay

Determined by the dose-dependent stimulation of the proliferation of HUVEC cells.

### AA Sequence

GKKCIRTPKI	SKPIKFELSG	CTSMKTYRAK
FCGVCTDGRC	CTPHRTTTLTP	VEFKCPDGEV
MKKNMMFIKT	CACHYNCPGD	NDIFESLYYR
KMYGDMA		

### Reconstitution Buffer

Centrifuge the vial prior to opening.  
Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex.

### Storage

For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% HSA) and store in working aliquots at -20°C to -80°C.

#### Limited Use and Restrictions

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