

Human CTGF ELISA Kit | CTGF elisa kit

CTGF (Human) OmniKine ELISA Kit

CATALOG #
AAA315602

REACTIVITY
Human

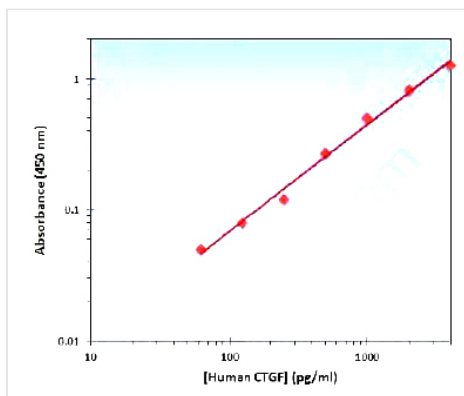
PRODUCT SYNONYMS

CTGF; CTGF (Human) OmniKine ELISA Kit; Connective tissue growth factor; CCN family member 2; Hypertrophic chondrocyte-specific protein 24; Insulin-like growth factor-binding protein 8; CCN2; HCS24; IGFBP8; CTGF elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Form/Format	12 x 8-Well Microstrips
Sequence Length	349
Assay Type	Quantitative Sandwich
Preparation and Storage	Store entire kit at 4 degree C until use.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for CTGF elisa kit	Principle of the Assay: The OmniKine™ Human CTGF ELISA Kit contains the components necessary for quantitative determination of natural or recombinant Human CTGF concentrations within any experimental sample including cell lysates, serum and plasma. This particular immunoassay utilizes the quantitative technique of a "Sandwich" Enzyme-Linked Immunosorbent Assay (ELISA) where the target protein (antigen) is bound in a "sandwich" format by the primary capture antibodies coated to each well-bottom and the secondary detection antibodies added subsequently by the investigator. The capture antibodies coated to the bottom of each well are specific for a particular epitope on Human CTGF while the user-added detection antibodies bind to epitopes on the captured target protein. At each step of the procedure, a series of wash steps must be performed to ensure the elimination of non-specific binding between proteins to other proteins or to the solid phase. After incubation and "sandwiching" of the target antigen, a peroxidase enzyme is conjugated to the constant heavy chain of the secondary antibody (either covalently or via Avidin/Streptavidin-Biotin interactions), allowing for a colorimetric reaction to ensue upon substrate addition. When the substrate TMB (3, 3', 5, 5'-Tetramethylbenzidine) is added, the reaction catalyzed by peroxidase yields a blue color that is representative of the antigen concentration. Upon sufficient color development, the reaction can be terminated through addition of Stop Solution (2 N Sulfuric Acid) where the color of the solution will turn yellow. The absorbance of each well can then be read by a spectrophotometer, allowing for generation of a standard curve and subsequent determination of protein concentration. Background/Introduction: Human CTGF, also known as Connective Tissue Growth Factor, is a 349 amino acid growth factor encoded by the CTGF gene located at locus 6q23.1 on chromosome 6. Following translation, CTGF undergoes proteolytic processing where the 26 residue signal sequence is cleaved and CTGF is allowed to fold into its mature form. CTGF is characterized as a major connective tissue mitogen secreted by vascular endothelial cells. These growth factors typically are known to promote proliferation and differentiation of chondrocytes, mediate heparin- and divalent cation-dependent cell adhesion in many cell types including fibroblasts, myofibroblasts, endothelial and epithelial cells. Moreover, they tend to enhance fibroblast growth factor-induced DNA synthesis. Belonging to the CCN family, the CTGF protein contains a C-terminal cysteine knot-like domain (CTCK), an IGF-BP N-terminal domain, a TSP type-1 domain, and a VWFC domain. Furthermore, this particular growth factor is mainly expressed in bone marrow and thymic cells.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4503123
NCBI GeneID	1490
NCBI Accession #	NP_001892.1
NCBI GenBank Nucleotide #	NM_001901.2
UniProt Accession #	P29279; Q6LCY0; Q96A79; Q96QX2; Q9UDL6; E1P578
Molecular Weight	35,205 Da
NCBI Official Full Name	connective tissue growth factor
NCBI Official Synonym Full Names	connective tissue growth factor
NCBI Official Symbol	CTGF
NCBI Official Synonym Symbols	CCN2; NOV2; HCS24; IGF-BP8
NCBI Protein Information	connective tissue growth factor
UniProt Protein Name	Connective tissue growth factor
UniProt Gene Name	CTGF
UniProt Synonym Gene Names	CCN2; HCS24; IGF-BP8; IBP-8; IGF-binding protein 8; IGF-BP-8

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.