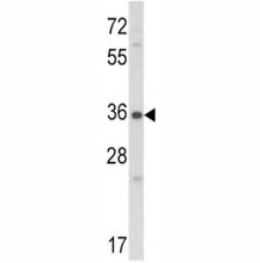
Connective Tissue Growth Factor Antibody (F50760)

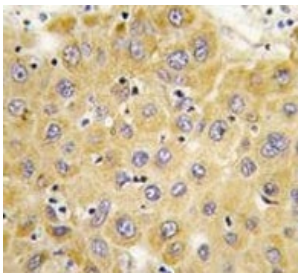
Catalog No.	Formulation	Size
F50760-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F50760-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat, Bovine, Pig
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	P29279
Localization	Cytoplasmic, secreted
Applications	Western blot: 1:1000 IHC (Paraffin): 1:10-1:50
Limitations	This Connective Tissue Growth Factor antibody is available for research use only.



Connective Tissue Growth Factor Antibody WB. Western blot analysis of NCI-H460 cell lysate using Connective Tissue Growth Factor Antibody demonstrates a distinct immunoreactive band at approximately 38 kDa. The observed molecular weight is consistent with the predicted size of Connective Tissue Growth Factor (CTGF), also known as Cellular Communication Network Factor 2 (CCN2), a secreted matricellular protein involved in extracellular matrix regulation, tissue remodeling, wound healing, and cellular signaling. The strong, discrete band supports specific recognition of CTGF in human cells and demonstrates the utility of this antibody for studies of fibrosis, connective tissue biology, tumor microenvironment interactions, and extracellular matrix remodeling pathways.



Connective Tissue Growth Factor Antibody Hepatocellular Carcinoma IHC. Immunohistochemistry staining of FFPE human hepatocellular carcinoma tissue using Connective Tissue Growth Factor Antibody demonstrates moderate cytoplasmic HRP-DAB brown staining within malignant hepatocellular populations. The staining pattern is consistent with expression of Connective Tissue Growth Factor (CTGF), also known as Cellular Communication Network Factor 2 (CCN2), a matricellular protein involved in extracellular matrix regulation, tissue remodeling, cellular signaling, and tumor-stroma interactions. The observed immunoreactivity highlights CTGF expression within neoplastic cells and supports its established role in pathways associated with tumor progression, angiogenesis, wound healing, and extracellular matrix remodeling. This staining pattern demonstrates the utility of CTGF antibodies for studies of liver cancer biology, connective tissue signaling, and tumor microenvironment regulation.

Description

Connective Tissue Growth Factor Antibody recognizes Connective Tissue Growth Factor (CTGF), also known as Cellular Communication Network Factor 2 (CCN2), a secreted matricellular protein that regulates extracellular matrix production, tissue remodeling, cellular differentiation, and intercellular signaling. CTGF is a member of the CCN family of extracellular regulatory proteins and functions as a key mediator between cells and their surrounding microenvironment. Through interactions with growth factors, integrins, extracellular matrix proteins, and cell surface receptors, CTGF coordinates biological processes involved in tissue development, maintenance, repair, and remodeling.

CTGF is widely expressed in connective tissues and plays an important role in regulating extracellular matrix homeostasis. The protein influences cellular adhesion, migration, proliferation, differentiation, and matrix deposition, making it a critical component of tissue architecture and structural integrity. Unlike classical growth factors that primarily stimulate proliferation through receptor activation, CTGF functions as a multifunctional signaling modulator that integrates extracellular cues and regulates complex cellular responses within the tissue microenvironment.

One of the best characterized functions of CTGF is its role in fibrosis and wound healing. CTGF expression is frequently induced by Transforming Growth Factor Beta (TGF-beta) signaling and contributes to fibroblast activation, collagen synthesis, and extracellular matrix accumulation. Elevated CTGF expression has been observed in fibrotic diseases affecting multiple organs including the liver, lung, kidney, heart, and skin. Consequently, CTGF has become an important biomarker and research target for investigators studying tissue repair, pathological remodeling, and fibrotic disease mechanisms.

In addition to fibrosis research, CTGF is involved in embryonic development, angiogenesis, skeletal formation, organogenesis, and cancer progression. During development, CTGF contributes to cartilage maturation, bone formation, vascular remodeling, and connective tissue organization. In cancer, altered CTGF expression has been associated with tumor-stroma interactions, extracellular matrix remodeling, angiogenesis, invasion, and metastatic potential. These diverse biological activities have established CTGF as an important regulator of both normal physiological processes and disease-associated tissue remodeling.

At NSJ Bioreagents, we provide highly validated antibodies for extracellular matrix biology, developmental biology, tissue remodeling, fibrosis research, and cancer research applications. Connective Tissue Growth Factor Antibody is useful for investigations of CTGF signaling, extracellular matrix regulation, wound healing, fibrosis, angiogenesis, tumor microenvironment biology, and connective tissue development. Continued study of CTGF is advancing our understanding of how extracellular signaling networks regulate tissue structure, regeneration, and disease progression.

Researchers studying connective tissue growth factor signaling, extracellular matrix regulation, fibrosis, and tissue remodeling may also be interested in our CTGF Antibody page.

Application Notes

Titration of the Connective Tissue Growth Factor antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 315-349 from the human protein was used as the immunogen for this Connective Tissue Growth Factor antibody.

Storage

Aliquot the Connective Tissue Growth Factor antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Connective Tissue Growth Factor Antibody, CTGF Antibody, CCN2 Antibody, Cellular Communication Network Factor 2 Antibody, CCN Family Member 2 Antibody, IGFBP8 Antibody

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