SANTA CRUZ BIOTECHNOLOGY, INC.

# CTGF (B-6): sc-373936

## BACKGROUND

Connective tissue growth factor (CTGF, also known as hypertrophic chondrocyte-specific gene product 24 or Hcs24), is a member of the CCN family of immediate early proteins, which are involved in cell proliferation, migration and matrix production. CTGF is a cysteine-rich peptide that is secreted by endothelial cells, fibroblasts, smooth muscle cells and myofibroblasts. Its expression is increased in various human and animal fibrotic diseases. Specifically, CTGF has been observed to be strongly upregulated in human proliferative and fibrogenic renal disease. In addition, CTGF is a growth factor for vascular smooth muscle cells (VSMC) and may play a similar role in promoting VSMC growth and migration *in vitro*.

## REFERENCES


1. Fan, W.H., et al. 2000. Connective tissue growth factor (CTGF) stimulates vascular smooth muscle cell growth and migration *in vitro*. Eur. J. Cell Biol. 79: 915-923.
2. Ehrchen, J., et al. 2001. Expression and regulation of osteopontin and connective tissue growth factor transcripts in rat anterior pituitary. J. Endocrinol. 169: 87-96.


## CHROMOSOMAL LOCATION

Genetic locus: CTGF (human) mapping to 6q23.2; Ctgf (mouse) mapping to 10 A4.

## SOURCE

CTGF (B-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 170-207 within an internal region of CTGF of human origin.

## PRODUCT

Each vial contains 200 µg $IgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CTGF (B-6) is available conjugated to agarose (sc-373936 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-373936 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-373936 PE), fluorescein (sc-373936 FITC), Alexa Fluor® 488 (sc-373936 AF488), Alexa Fluor® 546 (sc-373936 AF546), Alexa Fluor® 594 (sc-373936 AF594) or Alexa Fluor® 647 (sc-373936 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-373936 AF680) or Alexa Fluor® 790 (sc-373936 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-373936 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).



## STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

CTGF (B-6) is recommended for detection of CTGF of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

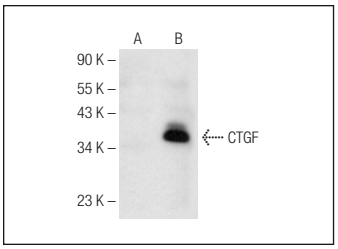
CTGF (B-6) is also recommended for detection of CTGF in additional species, including equine, canine and bovine.

Suitable for use as control antibody for CTGF siRNA (h): sc-39329, CTGF siRNA (m): sc-39330, CTGF siRNA (r): sc-270415, CTGF shRNA Plasmid (h): sc-39329-SH, CTGF shRNA Plasmid (m): sc-39330-SH, CTGF shRNA Plasmid (r): sc-270415-SH, CTGF shRNA (h) Lentiviral Particles: sc-39329-V, CTGF shRNA (m) Lentiviral Particles: sc-39330-V and CTGF shRNA (r) Lentiviral Particles: sc-270415-V.

Molecular Weight of CTGF: 38 kDa.

Positive Controls: A-10 cell lysate: sc-3806, HeLa whole cell lysate: sc-2200 or CTGF (h): 293T Lysate: sc-111612.

## DATA




CTGF (B-6): sc-373936. Western blot analysis of CTGF expression in non-transfected: sc-117752 (**A**) and human CTGF transfected: sc-111612 (**B**) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS


1. Ma, L., et al. 2014. Cluster of differentiation 166 (CD166) regulated by phosphatidylinositide 3-kinase (PI3K)/Akt signaling to exert its anti-apoptotic role via yes-associated protein (YAP) in liver cancer. J. Biol. Chem. 289: 6921-6933.
2. Yoon, J.J., et al. 2020. Sauchinone protects renal mesangial cell dysfunction against Angiotensin II by improving renal fibrosis and inflammation. Int. J. Mol. Sci. 21: 7003.
3. Bansod, S., et al. 2021. Inhibition of discoidin domain receptors by imatinib prevented pancreatic fibrosis demonstrated in experimental chronic pancreatitis model. Sci. Rep. 11: 12894.
4. Yang, L., et al. 2022. Elucidating the novel mechanism of ligustrazine in preventing postoperative peritoneal adhesion formation. Oxid. Med. Cell. Longev. 2022: 9226022.


## RESEARCH USE

For research use only, not for use in diagnostic procedures.