

CTGF (H-55): sc-25440

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 was 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 it may play a similar role in promoting VSMC growth and migration *in vivo*.

CHROMOSOMAL LOCATION

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

SOURCE

CTGF (H-55) is a rabbit polyclonal antibody raised against amino acids 295-349 of CTGF of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CTGF (H-55) is available conjugated to agarose (sc-25440 AC), 500 µg/0.25 ml agarose in 1 ml, for IP.

APPLICATIONS

CTGF (H-55) is recommended for detection of CTGF of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 (H-55) is also recommended for detection of CTGF in additional species, including equine, canine, bovine, porcine and avian.

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

Molecular Weight of CTGF: 38 kDa.

Positive Controls: mouse heart extract: sc-2254, A-10 cell lysate: sc-3806 or HeLa whole cell lysate: sc-2200.

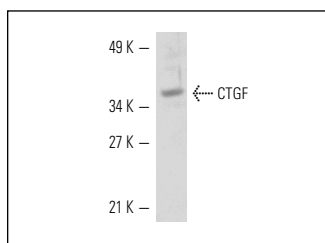
STORAGE

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

RESEARCH USE

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

DATA



CTGF (H-55): sc-25440. Western blot analysis of CTGF expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

- Berquin, I., et al. 2005. Expression signature of the mouse prostate. *J. Biol. Chem.* 280: 36442-36451.
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- Takeuchi, H., et al. 2009. Effect of transforming growth factor-β1 on expression of the connective tissue growth factor (CCN2/CTGF) gene in normal human gingival fibroblasts and periodontal ligament cells. *J. Periodont. Res.* 44: 161-169.
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- Ruttenstock, E.M., et al. 2011. Prenatal administration of retinoic acid upregulates connective tissue growth factor in the nitrofen CDH model. *Pediatr. Surg. Int.* 27: 573-577.
- Dendooven, A., et al. 2011. Connective tissue growth factor (CTGF/CCN2) ELISA: a novel tool for monitoring fibrosis. *Biomarkers* 16: 289-301.
- Kushwaha, S., et al. 2011. Protective effects of enalapril in streptozotocin-induced diabetic rat: studies of DNA damage, apoptosis and expression of CCN2 in the heart, kidney and liver. *J. Appl. Toxicol.* 2: 662-672.



Try **CTGF (E-5): sc-365970** or **CTGF (B-6): sc-373936**, our highly recommended monoclonal alternatives to CTGF (H-55). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **CTGF (E-5): sc-365970**.