

CTGF (C-19): sc-14940

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 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus 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.

Blocking peptide available for competition studies, sc-14940 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

CTGF (C-19) 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), 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 (C-19) is also recommended for detection of CTGF in additional species, including equine, 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.

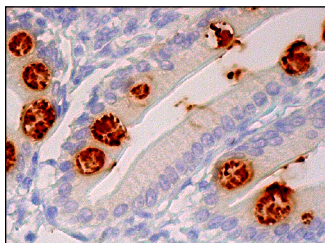
Molecular Weight of CTGF: 38 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CTGF (C-19): sc-14940. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of Goblet cells.

SELECT PRODUCT CITATIONS

1. Fuchshofer, R., et al. 2007. Bone morphogenetic protein-7 is an antagonist of transforming growth factor-β2 in human trabecular meshwork cells. *Invest. Ophthalmol. Vis. Sci.* 48: 715-726.
2. Bao, J., et al. 2008. A novel accurate rapid ELISA for detection of urinary connective tissue growth factor, a biomarker of chronic allograft nephropathy. *Transplant. Proc.* 40: 2361-2364.
3. Docherty, N.G., et al. 2009. Increased E-cadherin expression in the ligated kidney following unilateral ureteric obstruction. *Kidney Int.* 75: 205-213.
4. Shi, Y., et al. 2009. Urinary connective tissue growth factor increases far earlier than histopathological damage and functional deterioration in early chronic renal allograft injury. *Scand. J. Urol. Nephrol.* 43: 390-399.
5. Yang, X., et al. 2012. Mechanism of fibrotic cardiomyopathy in mice expressing truncated Rho-associated coiled-coil protein kinase 1. *FASEB J.* 26: 2105-2116.
6. Feng, W., et al. 2012. Role of the transcription factor erythroblastosis virus E26 oncogen homolog-1 (ETS-1) as mediator of the renal proinflammatory and profibrotic effects of angiotensin II. *Hypertension* 60: 1226-1233.

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Try **CTGF (E-5): sc-365970** or **CTGF (B-6): sc-373936**, our highly recommended monoclonal alternatives to CTGF (C-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **CTGF (E-5): sc-365970**.