SANTA CRUZ BIOTECHNOLOGY, INC.

CTGF (h): 293T Lysate: sc-111612

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. Hirasaki, S., et al. 2001. Expression of NOV, CYR61 and CTGF genes in human hepatocellular carcinoma. Hepatol. Res. 19: 294-305.
3. 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.
4. Nakanishi, T., et al. 2001. Overexpression of connective tissue growth factor/hypertrophic chondrocyte-specific gene product 24 decreases bone density in adult mice and induces dwarfism. Biochem. Biophys. Res. Commun. 281: 678-681.
5. Kasaragod, A.B., et al. 2001. Connective tissue growth factor expression in pediatric myofibroblastic tumors. Pediatr. Dev. Pathol. 4: 37-45.
6. Ito, Y., et al. 2001. Kinetics of connective tissue growth factor expression during experimental proliferative glomerulonephritis. J. Am. Soc. Nephrol. 12: 472-484.

CHROMOSOMAL LOCATION

Genetic locus: CTGF (human) mapping to 6q23.2.

PRODUCT

CTGF (h): 293T Lysate represents a lysate of human CTGF transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

CTGF (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CTGF antibodies. Recommended use: 10-20 µl per lane.

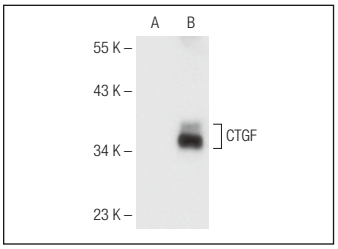
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TGF (E-5): sc-365970 is recommended as a positive control antibody for Western Blot analysis of enhanced human CTGF expression in CTGF transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

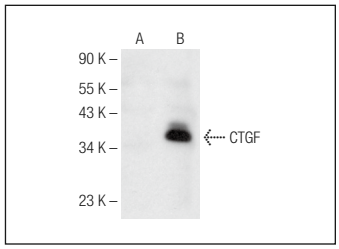
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



CTGF (E-5): sc-365970. Western blot analysis of CTGF expression in non-transfected: sc-117752 (**A**) and human CTGF transfected: sc-111612 (**B**) 293T whole cell lysates.



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.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.