SANTA CRUZ BIOTECHNOLOGY, INC.

CTHRC1 (H-213): sc-98747



BACKGROUND

CTHRC1 (collagen triple helix repeat containing 1) is a 243 amino acid secreted protein that localizes to the extracellular matrix and contains one collagen-like domain. Expressed as two alternatively spliced isoforms, the first of which is expressed in calcified atherosclerotic plaque and chondrocyte-like cells, CTHRC1 is thought to function as a negative regulator of collagen matrix deposition and may also play a role in the stabilization of ligand-receptor interactions in the Wnt pathway. CTHRC1 is widely present in a variety of cancers, including melanoma and breast carcinoma, and may participate in cancer cell migration and cancer tissue invasion and metastasis. The gene encoding CTHRC1 maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies.

REFERENCES

- 1. Pyagay, P., et al. 2005. Collagen triple helix repeat containing 1, a novel secreted protein in injured and diseased arteries, inhibits collagen expression and promotes cell migration. Circ. Res. 96: 261-268.
- 2. Tang, L., et al. 2006. Aberrant expression of collagen triple helix repeat containing 1 in human solid cancers. Clin. Cancer Res. 12: 3716-3722.

CHROMOSOMAL LOCATION

Genetic locus: CTHRC1 (human) mapping to 8q22.3; Cthrc1 (mouse) mapping to 15 B3.1.

SOURCE

CTHRC1 (H-213) is a rabbit polyclonal antibody raised against amino acids 40-236 mapping at the C-terminus of CTHRC1 of human origin.

PRODUCT

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

APPLICATIONS

CTHRC1 (H-213) is recommended for detection of CTHRC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

CTHRC1 (H-213) is also recommended for detection of CTHRC1 in additional species, including equine, bovine, porcine and avian.

Suitable for use as control antibody for CTHRC1 siRNA (h): sc-77043, CTHRC1 siRNA (m): sc-77044, CTHRC1 shRNA Plasmid (h): sc-77043-SH, CTHRC1 shRNA Plasmid (m): sc-77044-SH, CTHRC1 shRNA (h) Lentiviral Particles: sc-77043-V and CTHRC1 shRNA (m) Lentiviral Particles: sc-77044-V.

Molecular Weight of CTHRC1: 25 kDa.

Positive Controls: MEG-01 cell lysate: sc-2283, HEK293 whole cell lysate: sc-45136 or Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



of CTHRC1 (H-213), SC-39747, Western bloc analysis of CTHRC1 expression in MEG-01 (**A**), Hep G2 (**B**), HEK293 (**C**), A-375 (**D**) and Jurkat (**E**) whole cell lysates and HeLa nuclear extract (**F**).

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.

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try **CTHRC1 (1G12):** sc-293270, our highly recommended monoclonal alternative to CTHRC1 (H-213).