SANTA CRUZ BIOTECHNOLOGY, INC.

scc-112 (C-18): sc-50780

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

scc-112 is a nuclear cell-cycle regulated protein that is comprised of 1,297 amino acids. scc-112 mRNA and protein levels are detected at high levels during the G_2/M phase of the cell cycle in MDA-MB 435 breast cancer cells. scc-112 protein expression is also high in normal renal tissues as compared to the equilvalent renal tumor tissues. The level of scc-112 in normal kidney and breast tissues is significantly higher than in corresponding tumor tissues, suggesting that scc-112 is downregulated in tumor tissues and that scc-112 gene expression is associated with normal cell growth and proliferations. The human scc-112 protein is homologus to the mouse 9030416H16Rik protein. SCC-112, the gene which encodes the human scc-112 protein, maps to chromosome 4p14.

REFERENCES

1. Strausberg, R.L., Feingold, E.A., Grouse, L.H., Derge, J.G., Klausner, R.D., Collins, F.S., Wagner, L., Shenmen, C.M., Schuler, G.D., Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., et al. 2002. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Proc. Nat. Acad. Sci. USA 99: 16899-16903.
2. Kumar, D., Sakabe, I., Patel, S., Zhang, Y., Ahmad, I., Gehan, E.A., Whiteside, T.L. and Kasid. U. 2004. scc-112, a novel cell cycle-regulated molecule, exhibits reduced expression in human renal carcinomas. Gene 328: 187-196.
3. Okazaki, N., F-Kikuno, R., Ohara, R., Inamoto, S., Koseki, H., Hiraoka, S., Saga, Y., Seino, S., Nishimura, M., Kaisho, T., Hoshino, K., Kitamura, H., Nagase, T., Ohara, O. and Koga, H. 2004. Prediction of the coding sequences of mouse homologues of KIAA gene: IV. The complete nucleotide sequences of 500 mouse KIAA-homologous cDNAs identified by screening of terminal sequences of cDNA clones randomly sampled from size-fractionated libraries. DNA Res. 11: 205-218.

CHROMOSOMAL LOCATION

Genetic locus: PDS5A (human) mapping to 4p14.

SOURCE

scc-112 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of scc-112 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-50780 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

scc-112 (C-18) is recommended for detection of scc-112 of 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).

scc-112 (C-18) is also recommended for detection of scc-112 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for scc-112 siRNA (h): sc-61497, scc-112 shRNA Plasmid (h): sc-61497-SH and scc-112 shRNA (h) Lentiviral Particles: sc-61497-V.

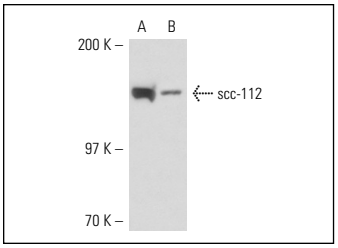
Molecular Weight of scc-112: 150 kDa.

Positive Controls: SW480 nuclear extract: sc-2155 or BT-20 cell lysate: sc-2223.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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



scc-112 (C-18): sc-50780. Western blot analysis of scc-112 expression in SW480 nuclear extract (**A**) and BT-20 whole cell lysate (**B**).

PROTOCOLS

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