

# scc-112 (A-10): sc-515263

## 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<sub>2</sub>/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 equivalent 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 homologous 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., et al. 2002. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. *Proc. Natl. Acad. Sci. USA* 99: 16899-16903.
2. Kumar, D., et al. 2004. scc-112, a novel cell cycle-regulated molecule, exhibits reduced expression in human renal carcinomas. *Gene* 328: 187-196.
3. Okazaki, N., et al. 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 (A-10) is a mouse monoclonal antibody raised against amino acids 1132-1337 mapping at the C-terminus of scc-112 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

scc-112 (A-10) is available conjugated to agarose (sc-515263 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515263 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515263 PE), fluorescein (sc-515263 FITC), Alexa Fluor® 488 (sc-515263 AF488), Alexa Fluor® 546 (sc-515263 AF546), Alexa Fluor® 594 (sc-515263 AF594) or Alexa Fluor® 647 (sc-515263 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515263 AF680) or Alexa Fluor® 790 (sc-515263 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## 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 (A-10) is recommended for detection of scc-112 of human origin by Western Blotting (starting dilution 1:100, 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).

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.

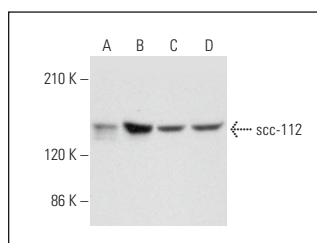
Positive Controls: SW480 nuclear extract: sc-2155, HeLa nuclear extract: sc-2120 or A549 cell lysate: sc-2413.

## RECOMMENDED SUPPORT REAGENTS

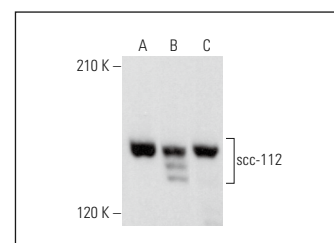
To ensure optimal results, the following support reagents are recommended:

- 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.
- 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



scc-112 (A-10): sc-515263. Western blot analysis of scc-112 expression in SW480 (A) and HeLa (B) nuclear extracts and A549 (C) and BT-20 (D) whole cell lysates.



scc-112 (A-10): sc-515263. Western blot analysis of scc-112 expression in A549 (A), MDA-MB-231 (B) and K-562 (C) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Wagner, K., et al. 2019. The SUMO isopeptidase SENP6 functions as a rheostat of chromatin residency in genome maintenance and chromosome dynamics. *Cell Rep.* 29: 480-494.e5.
2. Wu, Z., et al. 2022. cccDNA surrogate MC-HBV-based screen identifies cohesin complex as a novel HBV restriction factor. *Cell. Mol. Gastroenterol. Hepatol.* 14: 1177-1198.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

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