SANTA CRUZ BIOTECHNOLOGY, INC.

SURF-6 (A-5): sc-515439

BACKGROUND

SURF-6 (surfeit locus protein-6) is a 361 amino acid protein that localizes to granular components of the nucleolus. Expressed ubiquitously with expression levels regulated during the cell cycle, SURF-6 is thought to function as a housekeeping protein that binds both RNA and DNA *in vitro* and may be involved in ribosome assembly and biosynthesis. In mice, cells lacking SURF-6 are nonviable, further implicating a role for SURF-6 in ribosome biogenesis and, possibly, proper cell cycle progression. Human SURF-6 shares structural similarity with its fish and mouse orthologs, suggesting an evolutionary conserved role between species. SURF-6 is encoded by a gene that is located on chromosome 9 in the Surfeit gene locus, which is one of the tightest gene clusters in the human genome.

REFERENCES

1. Magoulas, C. and Fried, M. 1996. The SURF-6 gene of the mouse surfeit locus encodes a novel nucleolar protein. DNA Cell Biol. 15: 305-316.
2. Magoulas, C., et al. 1998. The SURF-6 protein is a component of the nucleolar matrix and has a high binding capacity for nucleic acids *in vitro*. Eur. J. Cell Biol. 75: 174-183.
3. Duhig, T., et al. 1998. The human surfeit locus. Genomics 52: 72-78.
4. Magoulas, C. and Fried, M. 2000. Isolation and genomic analysis of the human SURF-6 gene: a member of the surfeit locus. Gene 243: 115-123.
5. Wolff, C.M., et al. 2002. Cloning and expression of the surfeit locus member SURF-6 during embryogenesis in *Xenopus laevis*. DNA Seq. 13: 149-152.
6. Polzikov, M., et al. 2005. Identification of an evolutionary conserved SURF-6 domain in a family of nucleolar proteins extending from human to yeast. Biochem. Biophys. Res. Commun. 327: 143-149.

CHROMOSOMAL LOCATION

Genetic locus: SURF6 (human) mapping to 9q34.2; Surf6 (mouse) mapping to 2 A3.

SOURCE

SURF-6 (A-5) is a mouse monoclonal antibody raised against amino acids 265-310 mapping near the C-terminus of SURF-6 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SURF-6 (A-5) is available conjugated to agarose (sc-515439 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515439 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515439 PE), fluorescein (sc-515439 FITC), Alexa Fluor® 488 (sc-515439 AF488), Alexa Fluor® 546 (sc-515439 AF546), Alexa Fluor® 594 (sc-515439 AF594) or Alexa Fluor® 647 (sc-515439 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515439 AF680) or Alexa Fluor® 790 (sc-515439 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

SURF-6 (A-5) is recommended for detection of SURF-6 of mouse, rat and 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 SURF-6 siRNA (h): sc-92816, SURF-6 siRNA (m): sc-153936, SURF-6 shRNA Plasmid (h): sc-92816-SH, SURF-6 shRNA Plasmid (m): sc-153936-SH, SURF-6 shRNA (h) Lentiviral Particles: sc-92816-V and SURF-6 shRNA (m) Lentiviral Particles: sc-153936-V.

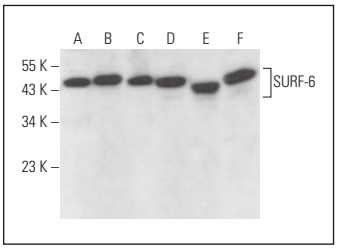
Molecular Weight of SURF-6: 41 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Jurkat nuclear extract: sc-2132 or A549 nuclear extract.

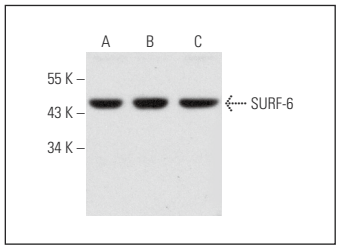
RECOMMENDED SUPPORT REAGENTS

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



SURF-6 (A-5): sc-515439. Western blot analysis of SURF-6 expression in HeLa (**A**), SW480 (**B**) and KNRK (**C**) nuclear extracts and HL-60 (**D**), J774.A1 (**E**) and PC-12 (**F**) whole cell lysates.



SURF-6 (A-5): sc-515439. Western blot analysis of SURF-6 expression in HeLa (**A**), Jurkat (**B**) and A549 (**C**) nuclear extracts.

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 for detailed protocols and support products.