

SURF-6 (F-23): sc-102123

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.
7. Gurchenkov, V.V., et al. 2005. Properties and functions of a new nucleolar protein, SURF-6, in 3T3 mouse cells. *Bioorg. Khim.* 31: 578-585.
8. Romanova, L.G., et al. 2006. Implication of nucleolar protein SURF-6 in ribosome biogenesis and preimplantation mouse development. *Biol. Reprod.* 75: 690-696.

CHROMOSOMAL LOCATION

Genetic locus: SURF6 (human) mapping to 9q34.2.

SOURCE

SURF-6 (F-23) is a purified rabbit polyclonal antibody raised against SURF-6 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

SURF-6 (F-23) is recommended for detection of SURF-6 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), immunohistochemistry (including paraffin-embedded sections) (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 shRNA Plasmid (h): sc-92816-SH and SURF-6 shRNA (h) Lentiviral Particles: sc-92816-V.

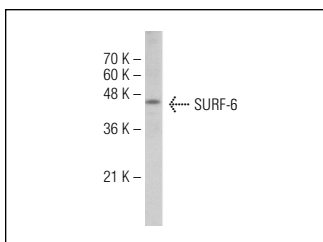
Molecular Weight of SURF-6: 41 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

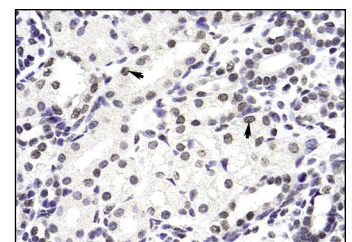
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



SURF-6 (F-23): sc-102123. Western blot analysis of SURF-6 expression in Jurkat whole cell lysate.



SURF-6 (F-23): sc-102123. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing nuclear staining.

RESEARCH USE

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

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Try **SURF-6 (A-5): sc-515439**, our highly recommended monoclonal alternative to SURF-6 (F-23).