

SURF-6 (G-13): sc-132110

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

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3. Duhig, T., et al. 1998. The human Surfeit locus. *Genomics* 52: 72-78.
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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.
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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 SURF6 in ribosome biogenesis and preimplantation mouse development. *Biol. Reprod.* 75: 690-696.
9. Polzikov, M., et al. 2007. The nucleolar protein SURF-6 is essential for viability in mouse NIH/3T3 cells. *Mol. Biol. Rep.* 34: 155-160.

CHROMOSOMAL LOCATION

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

SOURCE

SURF-6 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SURF-6 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-132110 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SURF-6 (G-13) is recommended for detection of SURF-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other SURF family members.

SURF-6 (G-13) is also recommended for detection of SURF-6 in additional species, including equine, canine and bovine.

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: Jurkat whole cell lysate: sc-2204.

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) 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.

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.