SNURF (T-15): sc-169381

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BIOTECHNOLOGY

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BACKGROUND

SNURF (SNRPN upstream reading frame protein) is a 71 amino acid nuclear protein that is produced along with Sm N (small nuclear ribonucleoprotein-associated protein N) from a bicistronic transcript. While polycistronic transcripts are common in prokaryotes, they are rare in eukaryotes. The SNURF and Sm N genes are located within a region of paternal human chromosome 15 that is associated with Prader-Willi syndrome, a rare genetic disorder that is characterized by short stature, behavioral issues, hypotonia, hypogonadism, obesity and mild mental retardation. The SNURF-Sm N transcript is translated in normal tissues and cell lines, but is not translated in individuals with Prader-Willi syndrome. SNURF is expressed in skeletal muscle, brain, lung, kidney, liver, heart, pancreas and lymphoblasts.

REFERENCES

1. Ohosone, Y., et al. 1989. Molecular cloning of cDNA encoding Sm autoantigen: derivation of a cDNA for a B polypeptide of the U series of small nuclear ribonucleoprotein particles. Proc. Natl. Acad. Sci. USA 86: 4249-4253.

2. Tsai, T.F., et al. 1999. Paternal deletion from Snrpn to Ube3a in the mouse causes hypotonia, growth retardation and partial lethality and provides evidence for a gene contributing to Prader-Willi syndrome. Hum. Mol. Genet. 8: 1357-1364.

3. Gray, T.A., et al. 1999. An imprinted, mammalian bicistronic transcript encodes two independent proteins. Proc. Natl. Acad. Sci. USA 96: 5616-5621.

4. Tsai, T.F., et al. 2002. Evidence for translational regulation of the imprinted Snurf-Snrpn locus in mice. Hum. Mol. Genet. 11: 1659-1668.

5. Mapendano, C.K., et al. 2006. Expression of the Snurf-Snrpn IC transcript in the oocyte and its putative role in the imprinting establishment of the mouse 7C imprinting domain. J. Hum. Genet. 51: 236-243.

6. Online Mendelian Inheritance in Man, OMIM™. 2010. Johns Hopkins University, Baltimore, MD. MIM Number: 176270. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: SNURF (human) mapping to 15q11.2; Snurf (mouse) mapping to 7 C.

SOURCE

SNURF (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SNURF of human origin.

STORAGE

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

PROTOCOLS

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

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-169381 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SNURF (T-15) is recommended for detection of SNURF 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).

SNURF (T-15) is also recommended for detection of SNURF in additional species, including equine and canine.

Suitable for use as control antibody for SNURF siRNA (m): sc-153662, SNURF shRNA Plasmid (m): sc-153662-SH and SNURF shRNA (m) Lentiviral Particles: sc-153662-V.

Molecular Weight of SNURF: 8 kDa.

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.

RESEARCH USE

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