## SANTA CRUZ BIOTECHNOLOGY, INC.

# SRrp130 (E-16): sc-169428



#### 11010101004000

#### BACKGROUND

SRrp130 (serine-arginine-rich-splicing regulatory protein 130), also known as SFRS18 (splicing factor, arginine/serine-rich 18), is an 805 amino acid protein that localizes to nuclear speckles and belongs to the splicing factor SR family. Existing as multiple alternatively spliced isoforms that are expressed in thymus, liver, spleen, heart, placenta and skeletal muscle, SRrp130 interacts with Pinin and may be involved in pre-mRNA splicing. SRrp130 is subject to DNA damage-dependent phosphorylation, probably by ATM or ATR. The gene encoding SRrp130 maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

### REFERENCES

- Blencowe, B.J., et al. 1999. SR-related proteins and the processing of messenger RNA precursors. Biochem. Cell Biol. 77: 277-291.
- 2. Tacke, R., et al. 1999. Determinants of SR protein specificity. Curr. Opin. Cell Biol. 11: 358-362.
- Makino, N., et al. 2001. Isolation and characterization of the human gene homologous to the *Drosophila* headcase (hdc) gene in chromosome bands 6q23-q24, a region of common deletion in human pancreatic cancer. DNA Seq. 11: 547-553.
- Zimowska, G., et al. 2003. Pinin/DRS/memA interacts with SRp75, SRm300 and SRrp130 in corneal epithelial cells. Invest. Ophthalmol. Vis. Sci. 44: 4715-4723.
- Long, J.C., et al. 2009. The SR protein family of splicing factors: master regulators of gene expression. Biochem. J. 417: 15-27.
- Wang, X., et al. 2009. Differential display of expressed genes reveals a novel function of SFRS18 in regulation of intramuscular fat deposition. Int. J. Biol. Sci. 5: 28-33.

#### CHROMOSOMAL LOCATION

Genetic locus: SFRS18 (human) mapping to 6q16.2; Sfrs18 (mouse) mapping to 4 A3.

#### SOURCE

SRrp130 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SRrp130 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-169428 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### APPLICATIONS

SRrp130 (E-16) is recommended for detection of SRrp130 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 SRrp35.

SRrp130 (E-16) is also recommended for detection of SRrp130 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for SRrp130 siRNA (h): sc-95414, SRrp130 siRNA (m): sc-153832, SRrp130 shRNA Plasmid (h): sc-95414-SH, SRrp130 shRNA Plasmid (m): sc-153832-SH, SRrp130 shRNA (h) Lentiviral Particles: sc-95414-V and SRrp130 shRNA (m) Lentiviral Particles: sc-153832-V.

Molecular Weight of SRrp130: 93 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) Immunofluo-rescence: 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.