

FUSIP1 (T-16): sc-131157

BACKGROUND

FUSIP1 (FUS interacting protein (serine/arginine-rich) 1), also known as NSSR, TASR (TLS-associated protein with Ser-Arg repeats), SRp38, TASR1, TASR2, FUSIP2, SFRS13 or SRp40 (40 kDa SR-repressor protein), is a member of the serine/arginine (SR) family of splicing factors. Members of the SR family all contain one or more RNA recognition motifs (RRM) and an SR-rich domain. SR factors are not only essential for constitutive splicing but also regulate splicing in a concentration-dependent manner by influencing the selection of alternative splice sites. Expressed in a variety of tissues with low expression in kidney, liver and heart, FUSIP1 localizes to the cytoplasm and nuclear speckles. In its dephosphorylated form (occurring during M phase of the cell cycle), FUSIP1 functions as a potent general repressor of pre-mRNA splicing and can interact with U1 SnRNP 70. In its phosphorylated form, FUSIP1 interacts with Tra-2 β and, together, they may cooperate in the regulation of splicing. Four isoforms exist for FUSIP1. In neurons, FUSIP1 isoforms may act to either positively or negatively regulate alternative splicing.

REFERENCES

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3. Shin, C., et al. 2002. The SR protein SRp38 represses splicing in M phase cells. *Cell* 111: 407-417.
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CHROMOSOMAL LOCATION

Genetic locus: FUSIP1 (human) mapping to 1p36.11; Fusip1 (mouse) mapping to 4 D3.

RESEARCH USE

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

SOURCE

FUSIP1 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FUSIP1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131157 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FUSIP1 (T-16) is recommended for detection of FUSIP1 isoforms 1-4 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).

FUSIP1 (T-16) is also recommended for detection of FUSIP1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FUSIP1 siRNA (h): sc-78960, FUSIP1 siRNA (m): sc-145275, FUSIP1 shRNA Plasmid (h): sc-78960-SH, FUSIP1 shRNA Plasmid (m): sc-145275-SH, FUSIP1 shRNA (h) Lentiviral Particles: sc-78960-V and FUSIP1 shRNA (m) Lentiviral Particles: sc-145275-V.

Molecular Weight of FUSIP1: 40 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa nuclear extract: sc-2120 or Hep G2 cell lysate: sc-2227.

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.

PROTOCOLS

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