

FUSIP1 (E-23): sc-101961

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

1. Yang, L., et al. 1998. Oncoprotein TLS interacts with serine-arginine proteins involved in RNA splicing. *J. Biol. Chem.* 273: 27761-27764.
2. Komatsu, M., et al. 1999. Cloning and characterization of two neural-salient serine/arginine-rich (NSSR) proteins involved in the regulation of alternative splicing in neurones. *Genes Cells* 4: 593-606.
3. Shin, C., et al. 2002. The SR protein SRp38 represses splicing in M phase cells. *Cell* 111: 407-417.
4. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 605221. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Liu, L., et al. 2004. NSSR1 promotes neuronal differentiation of mouse embryonic carcinoma P19 cells. *Neuroreport* 15: 823-828.
6. Fushimi, K., et al. 2005. NSSRs/TASRs/SRp38s function as splicing modulators via binding to pre-mRNAs. *Genes Cells* 10: 531-541.

CHROMOSOMAL LOCATION

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

SOURCE

FUSIP1 (E-23) is a purified rabbit polyclonal antibody raised against FUSIP1 of human origin.

PRODUCT

Each vial contains 50 μ g IgG in 500 μ l 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

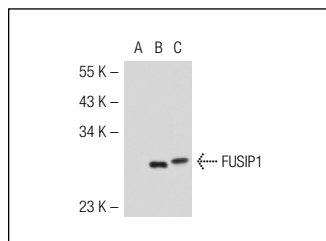
FUSIP1 (E-23) is recommended for detection of FUSIP1 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), 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 FUSIP1 siRNA (m): sc-145275, FUSIP1 shRNA Plasmid (m): sc-145275-SH and FUSIP1 shRNA (m) Lentiviral Particles: sc-145275-V.

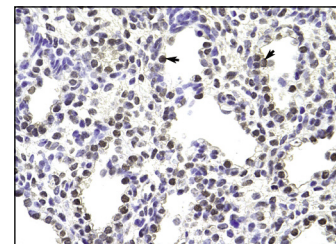
Molecular Weight of FUSIP1: 40 kDa.

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

DATA



FUSIP1 (E-23): sc-101961. Western blot analysis of FUSIP1 expression in non-transfected 293T: sc-117752 (A), mouse FUSIP1 transfected 293T: sc-125352 (B) and Hep G2 (C) whole cell lysates.



FUSIP1 (E-23): sc-101961. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lung tissue showing nuclear staining.

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.



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Try **FUSIP1 (T-18): sc-101132**, our highly recommended monoclonal alternative to FUSIP1 (E-23).