

SFRS11 (D-14): sc-160091

BACKGROUND

Pre-mRNA splicing enhancer elements are short RNA sequences capable of activating weak splice sites in nearby introns that are required for accurate splice site recognition and the control of alternative splicing. Splicing enhancer elements contain specific binding sites for serine/arginine (SR)-rich splicing factors, which include SC35, 9G8, SRp20 and SF2/ASF. The family of SR factors all contain one or more RNA recognition motifs (RRM) and a SR-rich domain. The SR factor family is not only essential for constitutive splicing, but also regulate splicing in a concentration-dependent manner by influencing the selection of alternative splice sites. SFRS11 (splicing factor, arginine/serine-rich 11), also known as arginine-rich 54 kDa nuclear protein (p54) or NET2, is a 484 amino acid nuclear protein that colocalizes with spliceosome components and belongs to the splicing factor SR family. SFRS11 may function in pre-mRNA splicing and contains one RRM (RNA recognition motif) domain.

REFERENCES

1. Chaudhary, N., et al. 1991. Primary structure of a human arginine-rich nuclear protein that colocalizes with spliceosome components. *Proc. Natl. Acad. Sci. USA* 88: 8189-8193.
2. Fu, X.D. 1993. Specific commitment of different pre-mRNAs to splicing by single SR proteins. *Nature* 365: 82-85.
3. Zhang, W.J. and Wu, J.Y. 1996. Functional properties of p54, a novel SR protein active in constitutive and alternative splicing. *Mol. Cell. Biol.* 16: 5400-5408.
4. Caceres, J.F., et al. 1998. A specific subset of SR proteins shuttles continuously between the nucleus and the cytoplasm. *Genes Dev.* 12: 55-66.
5. Schaal, T.D., et al. 1999. Selection and characterization of pre-mRNA splicing enhancers: identification of novel SR protein-specific enhancer sequences. *Mol. Cell. Biol.* 19: 1705-1719.
6. Wu, J.Y., et al. 2006. SRp54 (SFRS11), a regulator for Tau exon 10 alternative splicing identified by an expression cloning strategy. *Mol. Cell. Biol.* 26: 6739-6747.

CHROMOSOMAL LOCATION

Genetic locus: SFRS11 (human) mapping to 1p31.1; Sfrs11 (mouse) mapping to 3 H4.

SOURCE

SFRS11 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SFRS11 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-160091 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SFRS11 (D-14) is recommended for detection of SFRS11 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 SFRS family members.

SFRS11 (D-14) is also recommended for detection of SFRS11 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SFRS11 siRNA (h): sc-78865, SFRS11 siRNA (m): sc-153399, SFRS11 shRNA Plasmid (h): sc-78865-SH, SFRS11 shRNA Plasmid (m): sc-153399-SH, SFRS11 shRNA (h) Lentiviral Particles: sc-78865-V and SFRS11 shRNA (m) Lentiviral Particles: sc-153399-V.

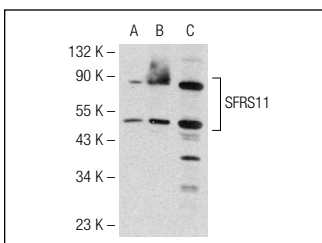
Molecular Weight of SFRS11: 54 kDa.

Positive Controls: SFRS11 (h): 293T Lysate: sc-115874 or K-562 whole cell lysate: sc-2203.

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) Immunoprecipitation: use Protein A/G PLUS-agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



SFRS11 (D-14): sc-160091. Western blot analysis of SFRS11 expression in non-transfected 293T: sc-117752 (A), human SFRS11 transfected 293T: sc-115874 (B) and K-562 (C) whole cell lysates.

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.