

SRp55 (C-6): sc-515111

BACKGROUND

Pre-mRNA splicing is a critical step in the posttranscriptional regulation of gene expression. Several protein complexes are involved in proper mRNA splicing and transport. Serine/arginine-rich (SR) proteins SRp55, SRp30c and Htra2 β 1 regulate exon 2 and 10 splicing. The first two inhibit both exons and SRp55 also plays a role in exon inclusion after the removal of intronic splicing silencer sequences. SRp55 plays a major role in maintaining normal FGFR1 α -exon inclusion.

REFERENCES

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2. Nagel, R.J., et al. 1998. Specific binding of an exonic splicing enhancer by the pre-mRNA splicing factor SRp55. *RNA* 4: 11-23.
3. Lemaire, R., et al. 1999. SF2 and SRp55 regulation of CD45 exon 4 skipping during T cell activation. *Eur. J. Immunol.* 29: 823-837.
4. Tran, Q., et al. 2003. SRp55 is a regulator of calcitonin/CGRP alternative RNA splicing. *Biochemistry* 42: 951-957.
5. Lai, M.C., et al. 2003. Differential effects of hyperphosphorylation on splicing factor SRp55. *Biochem. J.* 371: 937-945.
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7. Jin, W. and Cote, G.J. 2004. Enhancer-dependent splicing of FGFR1 α -exon is repressed by RNA interference-mediated down-regulation of SRp55. *Cancer Res.* 64: 8901-8905.
8. Yu, Q., et al. 2004. A minimal length between Tau exon 10 and 11 is required for correct splicing of exon 10. *J. Neurochem.* 90: 164-172.

CHROMOSOMAL LOCATION

Genetic locus: SRSF6 (human) mapping to 20q13.11; Srsf6 (mouse) mapping to 2 H2.

SOURCE

SRp55 (C-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 16-34 within RNA binding domain 1 near the N-terminus of SRp55 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-515111 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

SRp55 (C-6) is recommended for detection of SRp55 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SRp55 siRNA (h): sc-44118, SRp55 siRNA (m): sc-45294, SRp55 shRNA Plasmid (h): sc-44118-SH, SRp55 shRNA Plasmid (m): sc-45294-SH, SRp55 shRNA (h) Lentiviral Particles: sc-44118-V and SRp55 shRNA (m) Lentiviral Particles: sc-45294-V.

Molecular Weight of unphosphorylated SRp55: 40 kDa.

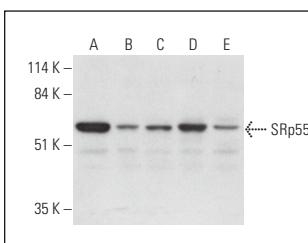
Molecular Weight of phosphorylated SRp55: 55 kDa.

Positive Controls: HL-60 nuclear extract: sc-2147, K-562 nuclear extract: sc-2130 or HeLa nuclear extract: sc-2120.

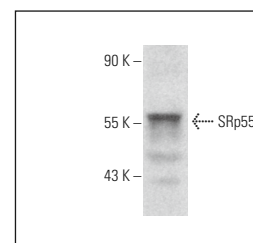
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



SRp55 (C-6): sc-515111. Western blot analysis of SRp55 expression in HeLa (A), PC-3 (B), K-562 (C) and HL-60 (D) nuclear extracts and CCRF-CEM whole cell lysate (E).



SRp55 (C-6): sc-515111. Western blot analysis of SRp55 expression in CTLL-2 whole cell lysate.

RESEARCH USE

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



See **SR (1H4): sc-13509** for SR antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.