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## Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand


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SANTA CRUZ BIOTECHNOLOGY, INC.

# SRp55 siRNA (m): sc-45294

## BACKGROUND

Pre-mRNA splicing is a critical step in the post-transcriptional regulation of gene expression. Several protein complexes are involved in proper mRNA splicing and transport. Serine/arginine-rich (SR) proteins SRp55, SRp30c, and htra2β1 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


1. Ring, H.Z., et al. 1994. The SR protein B52/SRp55 is essential for *Drosophila* development. Mol. Cell. Biol. 14: 7499-7506.
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. Human transformer 2β and SRp55 interact with a calcitonin-specific splice enhancer. Biochim. Biophys. Acta 1625: 141-152.
5. Tran, Q., et al. 2003. SRp55 is a regulator of calcitonin/CGRP alternative RNA splicing. Biochemistry 42: 951-957.
6. Lai, M.C., et al. 2003. Differential effects of hyperphosphorylation on splicing factor SRp55. Biochem. J. 371: 937-945.
7. Jin, W., et al. 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.
9. Wang, Y., et al. 2005. Tau exons 2 and 10, which are misregulated in neurodegenerative diseases, are partly regulated by silencers which bind a SRp30c.SRp55 complex that either recruits or antagonizes htra2β1. J. Biol. Chem. 280: 14230-14239.


## CHROMOSOMAL LOCATION

Genetic locus: Srsf6 (mouse) mapping to 2 H2.

## PRODUCT

SRp55 siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see SRp55 shRNA Plasmid (m): sc-45294-SH and SRp55 shRNA (m) Lentiviral Particles: sc-45294-V as alternate gene silencing products.

For independent verification of SRp55 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-45294A, sc-45294B and sc-45294C.

## RESEARCH USE

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

## STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

SRp55 siRNA (m) is recommended for the inhibition of SRp55 expression in mouse cells.

## SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

## GENE EXPRESSION MONITORING

SRp55 (C-6): sc-515111 is recommended as a control antibody for monitoring of SRp55 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor SRp55 gene expression knockdown using RT-PCR Primer: SRp55 (m)-PR: sc-45294-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

## PROTOCOLS

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