

# SRp30c (O-21): sc-134036

## 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, most of which contain one or more RNA recognition motifs (RRM) and an arginine/serine (RS)-rich domain. SRs are not only essential for constitutive splicing, but also regulate splicing in a concentration-dependent manner by influencing the selection of alternative splice sites. SRp30c, also known as SFRS9 (splicing factor, arginine/serine-rich 9), is a 221 amino acid protein that localizes to various areas within the nucleus and contains 2 RRM domains. Expressed at high levels in placenta, heart, pancreas and kidney, SRp30c functions as an SR-rich splicing factor that interacts with a variety of proteins and is capable of modulating the selection of alternative splice sites.

## REFERENCES

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2. Stoss, O., Schwaiger, F.W., Cooper, T.A. and Stamm, S. 1999. Alternative splicing determines the intracellular localization of the novel nuclear protein Nop30 and its interaction with the splicing factor SRp30c. *J. Biol. Chem.* 274: 10951-10962.
3. Hofmann, Y., Lorson, C.L., Stamm, S., Androphy, E.J. and Wirth, B. 2000. Htra2- $\beta$  1 stimulates an exonic splicing enhancer and can restore full-length SMN expression to survival motor neuron 2 (SMN2). *Proc. Natl. Acad. Sci. USA* 97: 9618-9623.
4. Young, P.J., DiDonato, C.J., Hu, D., Kothary, R., Androphy, E.J. and Lorson, C.L. 2002. SRp30c-dependent stimulation of survival motor neuron (SMN) exon 7 inclusion is facilitated by a direct interaction with hTra2  $\beta$  1. *Hum. Mol. Genet.* 11: 577-587.

## CHROMOSOMAL LOCATION

Genetic locus: SFRS9 (human) mapping to 12q24.31; Sfrs9 (mouse) mapping to 5 F.

## SOURCE

SRp30c (O-21) is an affinity purified rabbit polyclonal antibody raised against synthetic SRp30c peptide of human origin.

## PRODUCT

Each vial contains 50  $\mu$ g IgG in 500  $\mu$ 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

SRp30c (O-21) is recommended for detection of SRp30c of mouse, rat, human and *Caenorhabditis elegans* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SRp30c siRNA (h): sc-95734, SRp30c siRNA (m): sc-153822, SRp30c shRNA Plasmid (h): sc-95734-SH, SRp30c shRNA Plasmid (m): sc-153822-SH, SRp30c shRNA (h) Lentiviral Particles: sc-95734-V and SRp30c shRNA (m) Lentiviral Particles: sc-153822-V.

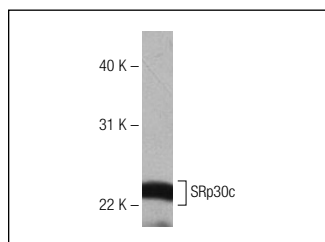
Molecular Weight of SRp30c: 26 kDa.

Positive Controls: human placenta extract: sc-363772.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

## DATA



SRp30c (O-21): sc-134036. Western blot analysis of SRp30c expression in human placenta tissue extract.

## SELECT PRODUCT CITATIONS

1. Fu, Y., Huang, B., Shi, Z., Han, J., Wang, Y., Huangfu, J. and Wu, W. 2013. SRSF1 and SRSF9 RNA binding proteins promote Wnt signalling-mediated tumorigenesis by enhancing  $\beta$ -catenin biosynthesis. *EMBO Mol. Med.* 5: 737-750.

## RESEARCH USE

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

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Try **SRp30c (1G7): sc-293314**, our highly recommended monoclonal alternative to SRp30c (O-21).