### SANTA CRUZ BIOTECHNOLOGY, INC.

# SRp40 (C-12): sc-33418



#### 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 an arginine/ serine (RS)-rich domain. They are not only essential for constitutive splicing, but also regulate splicing in a concentration-dependent manner by influencing the selection of alternative splice sites. The majority of SR proteins, including SC35 and SRp40, are confined to the nucleus, while SF2/ASF, SRp20 and 9G8 are continuously shuttled between the nucleus and the cytoplasm and contribute to mRNA transport. The activity of SR proteins in regulated splicing is antagonized by members of the hnRNP A/B family of proteins, which induce drastic shifts in the selection of splicing sites. An additional SR-associated protein, p32, tightly associates with SR factors and preferentially inhibits SF2/ASF functioning as both a splicing enhancer and splicing repressor protein by preventing the stable interaction of SF2/ASF and RNA.

#### CHROMOSOMAL LOCATION

Genetic locus: SFRS5 (human) mapping to 14q24; Sfrs5 (mouse) mapping to 12 D2.

#### SOURCE

SRp40 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of SRp40 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-33418 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **RESEARCH USE**

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

#### APPLICATIONS

SRp40 (C-12) is recommended for detection of SRp40 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).

Suitable for use as control antibody for SRp40 siRNA (h): sc-38342, SRp40 siRNA (m): sc-44894, SRp40 shRNA Plasmid (h): sc-38342-SH, SRp40 shRNA Plasmid (m): sc-44894-SH, SRp40 shRNA (h) Lentiviral Particles: sc-38342-V and SRp40 shRNA (m) Lentiviral Particles: sc-44894-V.

Molecular Weight of SRp40: 40-41 kDa.

Positive Controls: MOLT-4 nuclear extract: sc-2151.

#### **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



SRp40 (C-12): sc-33418. Western blot analysis of SRp40 expression in MOLT-4 nuclear extract.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **PROTOCOLS**

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

## MONOS Satisfation Guaranteed

Try **SR (1H4): sc-13509**, our highly recommended monoclonal alternative to SRp40 (C-12). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **SR (1H4): sc-13509**.