

# SRRM4 (S-20): sc-139291

## BACKGROUND

Serine/arginine repetitive matrix (Srm) proteins are suggested to be part of the pre- and post-splicing multiprotein mRNP complexes. Srm proteins bind to RNA and are considered to be involved in pre-mRNA processing events. Srm proteins localize to the nuclear speckle and are phosphorylated upon DNA damage either by ATM or ATR. mKIAA1853, also known as nSR100 or Srm4 (serine/arginine repetitive matrix 4), is a 608 amino acid protein that exists as two isoforms as a result of alternative splicing events.

## REFERENCES

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2. Bourquin, J.P., Stajlar, I., Meier, P., Moosmann, P., Silke, J., Baechli, T., Georgiev, O. and Schaffner, W. 1997. A serine/arginine-rich nuclear matrix cyclophilin interacts with the C-terminal domain of RNA polymerase II. *Nucleic Acids Res.* 25: 2055-2061.
3. Blencowe, B.J., Issner, R., Nickerson, J.A. and Sharp, P.A. 1998. A coactivator of pre-mRNA splicing. *Genes Dev.* 12: 996-1009.
4. Patturajan, M., Wei, X., Berezney, R. and Corden, J.L. 1998. A nuclear matrix protein interacts with the phosphorylated C-terminal domain of RNA polymerase II. *Mol. Cell. Biol.* 18: 2406-2415.
5. Matsuo, S., Ballif, B.A., Smogorzewska, A., McDonald, E.R., Hurov, K.E., Luo, J., Bakalarski, C.E., Zhao, Z., Solimini, N., Lerenthal, Y., Shiloh, Y., Gygi, S.P. and Elledge, S.J. 2007. ATM and ATR substrate analysis reveals extensive protein networks responsive to DNA damage. *Science* 316: 1160-1166.

## CHROMOSOMAL LOCATION

Genetic locus: SRRM4 (human) mapping to 12q24.23; Srm4 (mouse) mapping to 5 F.

## SOURCE

SRRM4 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SRRM4 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-139291 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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.

## APPLICATIONS

SRRM4 (S-20) is recommended for detection of SRRM4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

SRRM4 (S-20) is also recommended for detection of SRRM4 in additional species, including canine and porcine.

Suitable for use as control antibody for SRRM4 siRNA (h): sc-95978, SRRM4 siRNA (m): sc-149458, SRRM4 shRNA Plasmid (h): sc-95978-SH, SRRM4 shRNA Plasmid (m): sc-149458-SH, SRRM4 shRNA (h) Lentiviral Particles: sc-95978-V and SRRM4 shRNA (m) Lentiviral Particles: sc-149458-V.

Molecular Weight of SRRM4: 68 kDa.

## 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) 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.