

# SR140 (S-13): sc-103241

## 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 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. SR140, also known as U2-associated SR140 protein or 140 kDa Ser/Arg-rich domain protein, is a 1,029 amino acid member of the splicing factor SR family and consists of a CID domain, a RRM (RNA recognition motif) domain and a SURP motif repeat. SR140 is expressed as three alternatively spliced isoforms and is encoded by a gene located on human chromosome 3.

## REFERENCES

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3. Jumaa, H., et al. 1997. The splicing factor SRp20 modifies splicing of its own mRNA and ASF/SF2 antagonizes this regulation. *EMBO J.* 16: 5077-5085.
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5. Schaal, T.D., et al. 1999. Selection and characterization of pre-mRNA splicing enhancers: identification of novel SR protein-specific enhancer sequences. *Mol. Cell. Biol.* 19: 1705-1719.
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7. Petersen-Mahrt, S.K., et al. 1999. The splicing factor-associated protein, p32, regulates RNA splicing by inhibiting ASF/SF2 RNA binding and phosphorylation. *EMBO J.* 18: 1014-1024.
8. Blencowe, B.J. 2000. Exonic splicing enhancers: mechanism of action, diversity and role in human genetic diseases. *Trends Biochem. Sci.* 25: 106-110.
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## CHROMOSOMAL LOCATION

Genetic locus: SR140 (human) mapping to 3q23.

## SOURCE

SR140 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of SR140 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-103241 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SR140 (S-13) is recommended for detection of SR140 of 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).

SR140 (S-13) is also recommended for detection of SR140 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SR140 siRNA (h): sc-78314, SR140 shRNA Plasmid (h): sc-78314-SH and SR140 shRNA (h) Lentiviral Particles: sc-78314-V.

Molecular Weight of SR140: 140 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.

## 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.

## PROTOCOLS

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



Try **SR140 (E-3): sc-398718**, our highly recommended monoclonal alternative to SR140 (S-13).