

# 9G8/SRp20 (H-120): sc-28722

## BACKGROUND

Pre-mRNA splicing enhancer elements are short RNA sequences capable of activating weak splice sites in nearby introns. They 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, are essential for constitutive splicing and 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.

## REFERENCES

1. Fu, X.D. 1993. Specific commitment of different pre-mRNAs to splicing by single SR proteins. *Nature* 365: 82-85.
2. Mayeda, A., et al. 1994. Function of conserved domains of hnRNP A1 and other hnRNP A/B proteins. *EMBO J.* 13: 5483-5495.

## CHROMOSOMAL LOCATION

Genetic locus: SRSF7 (human) mapping to 2p22.1, SRSF3 (human) mapping to 6p21.31; Srsf7 (mouse) mapping to 17 E3, Srsf3 (mouse) mapping to 17 A3.3.

## SOURCE

9G8/SRp20 (H-120) is a rabbit polyclonal antibody raised against amino acids 1-120 mapping at the N-terminus of 9G8 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.

## RESEARCH USE

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

## APPLICATIONS

9G8/SRp20 (H-120) is recommended for detection of 9G8 and SRp20 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); partially cross reactive with other pre-mRNA splicing factors.

9G8/SRp20 (H-120) is also recommended for detection of 9G8 and SRp20 in additional species, including equine, canine, bovine, porcine and avian.

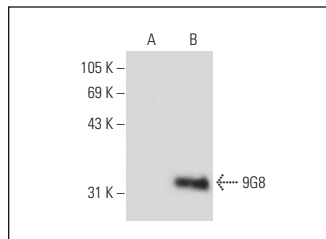
Molecular Weight of 9G8/SRp20: 35 kDa.

Positive Controls: 9G8 (m): 293T Lysate: sc-118090.

## 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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



9G8/SRp20 (H-120): sc-28722. Western blot analysis of 9G8 expression in non-transfected: sc-117752 (A) and mouse 9G8 transfected: sc-118090 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Loyer, P., et al. 2008. Characterization of cyclin L1 and L2 interactions with CDK11 and splicing factors: influence of cyclin L isoforms on splice site selection. *J. Biol. Chem.* 283: 7721-7732.
2. Calabretta, S., et al. 2015. Modulation of PKM alternative splicing by PTBP1 promotes gemcitabine resistance in pancreatic cancer cells. *Oncogene*. E-published.

## STORAGE

Store at 4° C, \*\*DO 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **9G8/SRp20 (G-3): sc-390126** or **SRp20 (C-1): sc-365772**, our highly recommended monoclonal alternatives to 9G8/SRp20 (H-120).