

# SFRS14 (S-24): sc-101131

## BACKGROUND

SFRS14 (splicing factor, arginine/serine-rich 14) is a 1,082 amino acid protein that belongs to the SR-related family of pre-mRNA processing factors. SFRS14 contains an arginine/serine-rich region at its N-terminus, two SURP motif repeats and a C-terminal G-patch domain. The SURP motif is a domain that is commonly found in splicing proteins, while the G-patch domain is typical of RNA-binding proteins in eukaryotes. Expressed in fetal brain, fetal kidney and adult testis, SFRS14 localizes to the nucleus and is believed to participate in pre-mRNA splicing mechanisms. In addition, SFRS14 contains several potential phosphorylation sites, suggesting that its activity may be regulated by phosphorylation. Three isoforms exist for SFRS14 due to alternative splicing events.

## REFERENCES

1. Nagase, T., et al. 1997. Prediction of the coding sequences of unidentified human genes. VII. The complete sequences of 100 new cDNA clones from brain which can code for large proteins *in vitro*. DNA Res. 4: 141-150.
2. Sampson, N.D. and Hewitt, J.E. 2003. SF4 and SFRS14, two related putative splicing factors on human chromosome 19p13.11. Gene 305: 91-100.
3. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607993. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: SUGP2 (human) mapping to 19p13.11.

## SOURCE

SFRS14 (S-24) is a mouse monoclonal antibody raised against recombinant SFRS14 of human origin.

## PRODUCT

Each vial contains 50 µg IgG<sub>2a</sub> kappa light chain in 500 µl of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

SFRS14 (S-24) is recommended for detection of SFRS14 of human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000), immunoprecipitation [1-2 µl per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution to be determined by researcher, dilution range 1:100-1:5000), immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:50-1:2500) and solid phase ELISA (starting dilution to be determined by researcher, dilution range 1:100-1:5000).

Suitable for use as control antibody for SFRS14 siRNA (h): sc-97679, SFRS14 shRNA Plasmid (h): sc-97679-SH and SFRS14 shRNA (h) Lentiviral Particles: sc-97679-V.

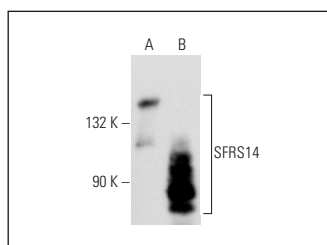
Molecular Weight of SFRS14: 120 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or SFRS14 (h): 293T Lysate: sc-113408.

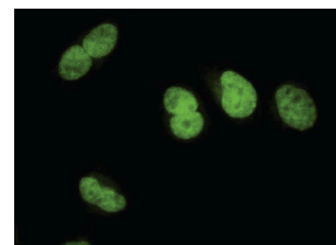
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

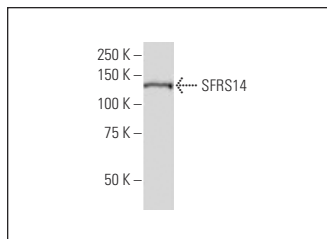
## DATA



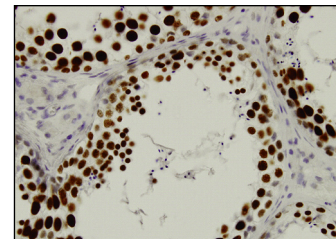
SFRS14 (S-24): sc-101131. Western blot analysis of SFRS14 expression in non-transfected: sc-117752 (A) and human SFRS14 transfected: sc-113408 (B) 293T whole cell lysates.



SFRS14 (S-24): sc-101131. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear localization.



SFRS14 (S-24): sc-101131. Western blot analysis of SFRS14 expression in HeLa nuclear extract.



SFRS14 (S-24): sc-101131. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human testis tissue showing nuclear localization.

## 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) for detailed protocols and support products.