

SFRS17A (FE-06): sc-101139

BACKGROUND

SFRS17A (splicing factor, arginine/serine-rich 17A), also known as XE7, 721P, XE7Y, CCDC133, CXYorf3 or DXYS155E, is a 695 amino acid protein that contains one RRM (RNA recognition motif) domain and localizes to nuclear speckles. Widely expressed with highest expression in lung, heart, brain, liver, kidney, pancreas, skeletal muscle, placenta and activated B cells, SFRS17A is a subunit of the spliceosome and functions to regulate alternative splice site selection for a variety of mRNA precursors. SFRS17A can also function as a monomer that can interact with ZNF265 and SF2/ASF (both of which are involved in pre-mRNA splicing and transcriptional regulation) via its Arg/Ser-rich domain. Due to alternative splicing events, SFRS17A is expressed as three different isoforms.

REFERENCES

1. Ellison, J.W., Ramos, C., Yen, P.H. and Shapiro, L.J. 1992. Structure and expression of the human pseudoautosomal gene XE7. *Hum. Mol. Genet.* 1: 691-696.
2. Ellison, J., Passage, M., Yu, L.C., Yen, P., Mohandas, T.K. and Shapiro, L. 1992. Directed isolation of human genes that escape X inactivation. *Somat. Cell Mol. Genet.* 18: 259-268.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 312095. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Mangs, A.H., Speirs, H.J., Goy, C., Adams, D.J., Markus, M.A. and Morris, B.J. 2006. XE7: a novel splicing factor that interacts with ASF/SF2 and ZNF265. *Nucleic Acids Res.* 34: 4976-4986.
5. Mangs, A.H. and Morris, B.J. 2008. ZRANB2: structural and functional insights into a novel splicing protein. *Int. J. Biochem. Cell Biol.* 40: 2353-2357.

CHROMOSOMAL LOCATION

Genetic locus: AKAP17A (human) mapping to Xp22.33/Yp11.31.

SOURCE

SFRS17A (FE-06) is a mouse monoclonal antibody raised against recombinant SFRS17A of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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 for detailed protocols and support products.

APPLICATIONS

SFRS17A (FE-06) is recommended for detection of SFRS17A 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 SFRS17A siRNA (h): sc-91582, SFRS17A shRNA Plasmid (h): sc-91582-SH and SFRS17A shRNA (h) Lentiviral Particles: sc-91582-V.

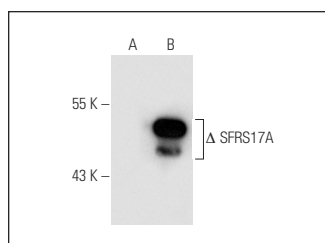
Molecular Weight of SFRS17A: 81 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or SFRS17A (h): 293T Lysate: sc-114800.

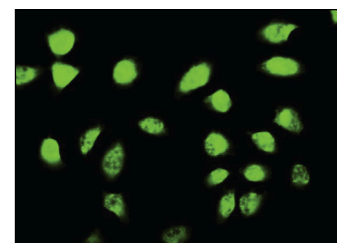
RECOMMENDED SUPPORT REAGENTS

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.

DATA



SFRS17A (FE-06): sc-101139. Western blot analysis of truncated SFRS17A expression in non-transfected: sc-117752 (A) and truncated human SFRS17A transfected: sc-114800 (B) 293T whole cell lysates.



SFRS17A (FE-06): sc-101139. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear localization.

RESEARCH USE

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