

SFRS17A (E-18): sc-83941

BACKGROUND

SFRS17A (splicing factor, arginine/serine-rich 17A), also known as XE7, 721P, XE7Y, CCDC133, CXorf3 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. 2007. 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 (E-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SFRS17A of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83941 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

SFRS17A (E-18) is recommended for detection of SFRS17A of 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); non cross-reactive with isoforms 1,2 or 3).

SFRS17A (E-18) is also recommended for detection of SFRS17A in additional species, including canine and avian.

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.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.