

SFRS1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6857a

Product Information

Application WB, IHC-P, E **Primary Accession** Q07955

Other Accession <u>Q3YLA6</u>, <u>Q6PDM2</u>, <u>Q5ZML3</u>, <u>Q0VCY7</u>

Reactivity Human

Predicted Bovine, Chicken, Mouse, Pig

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB22955Calculated MW27745Antigen Region11-38

Additional Information

Gene ID 6426

Other Names Serine/arginine-rich splicing factor 1, Alternative-splicing factor 1, ASF-1,

Splicing factor, arginine/serine-rich 1, pre-mRNA-splicing factor SF2, P33

subunit, SRSF1, ASF, SF2, SF2P33, SFRS1

Target/Specificity This SFRS1 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 11-38 amino acids from the N-terminal

region of human SFRS1.

Dilution WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions SFRS1 Antibody (N-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name SRSF1 (HGNC:10780)

Synonyms ASF, SF2, SF2P33, SFRS1

Function

Plays a role in preventing exon skipping, ensuring the accuracy of splicing and regulating alternative splicing. Interacts with other spliceosomal components, via the RS domains, to form a bridge between the 5'- and 3'-splice site binding components, U1 snRNP and U2AF. Can stimulate binding of U1 snRNP to a 5'-splice site- containing pre-mRNA. Binds to purine-rich RNA sequences, either the octamer, 5'-RGAAGAAC-3' (r=A or G) or the decamers, AGGACAGAGC/AGGACGAAGC. Binds preferentially to the 5'-CGAGGCG-3' motif in vitro. Three copies of the octamer constitute a powerful splicing enhancer in vitro, the ASF/SF2 splicing enhancer (ASE) which can specifically activate ASE-dependent splicing. Isoform ASF-2 and isoform ASF-3 act as splicing repressors. May function as export adapter involved in mRNA nuclear export through the TAP/NXF1 pathway.

Cellular Location

Cytoplasm. Nucleus speckle. Note=In nuclear speckles. Shuttles between the nucleus and the cytoplasm (PubMed:12215544, PubMed:20308322, PubMed:24449914, PubMed:9420331). Nuclear import is mediated via interaction with TNPO3 (PubMed:24449914).

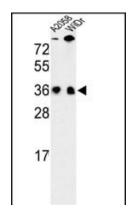
Background

SFRS1 is a member of the arginine/serine-rich splicing factor protein family, and functions in both constitutive and alternative pre-mRNA splicing. The protein binds to pre-mRNA transcripts and components of the spliceosome, and can either activate or repress splicing depending on the location of the pre-mRNA binding site. The protein's ability to activate splicing is regulated by phosphorylation and interactions with other splicing factor associated proteins.

References

Sugiyama, N., et.al., Mol. Cell Proteomics 6 (6), 1103-1109 (2007)

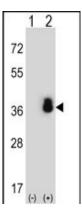
Images



Western blot analysis of SFRS1 Antibody (N-term) (Cat. #AP6857a) in A2058, WiDr cell line lysates (35ug/lane). SFRS1 (arrow) was detected using the purified Pab.



SFRS1 Antibody (N-term) (Cat. #AP6857a) IHC analysis in formalin fixed and paraffin embedded testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SFRS1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



Western blot analysis of SFRS1 (arrow) using rabbit polyclonal SFRS1 Antibody (N-term) (Cat. #AP6857a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the SFRS1 gene.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.