10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SFRS1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6857a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q07955
Other Accession	Q3YLA6, Q6PDM2, Q5ZML3, Q0VCY7
Reactivity	Human
Predicted	Bovine, Chicken, Mouse, Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22955
Calculated MW	27745
Antigen Region	11-38

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).

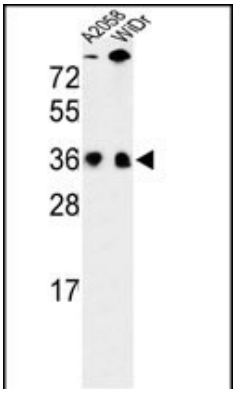
Background

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

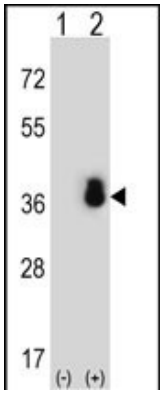
Sugiyama,N., et.al., Mol. Cell Proteomics 6 (6), 1103-1109 (2007)

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.