

SFRS1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP6857b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q07955
Other Accession	Q3YLA6 , Q6PDM2 , Q5ZML3 , Q0VCY7 , Q6NYA0 , Q7SXP4
Reactivity	Human
Predicted	Zebrafish, Bovine, Chicken, Mouse, Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20788
Calculated MW	27745
Antigen Region	158-186

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 158-186 amino acids from the C-terminal region of human SFRS1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SRSF1 (HGNC:10780)
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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).

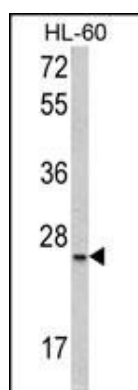
Background

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

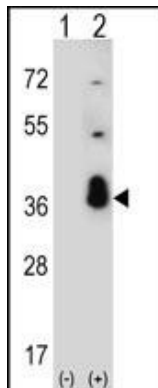
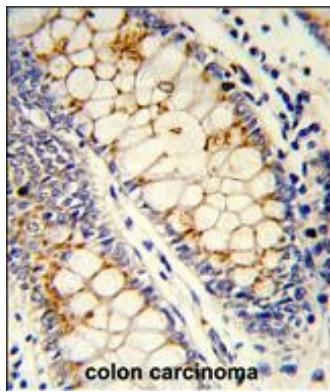
Sugiyama,N., et.al., Mol. Cell Proteomics 6 (6), 1103-1109 (2007)

Images

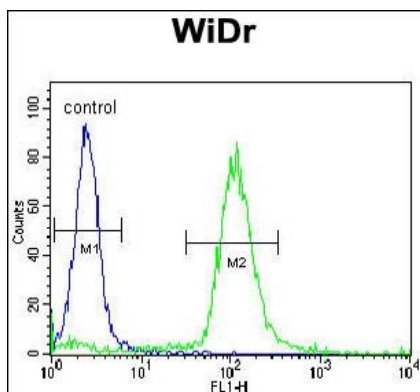


Western blot analysis of SFRS1 Antibody (C-term) (Cat. #AP6857b) in HL-60 cell line lysates (35ug/lane). SFRS1 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human colon carcinoma reacted with SFRS1 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Western blot analysis of SFRS1 (arrow) using rabbit polyclonal SFRS1 Antibody (C-term) (Cat. #AP6857b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the SFRS1 gene.



SFRS1 Antibody (C-term) (Cat. #AP6857b) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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