

SFRS3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16268c

Product Information

Application	WB, E
Primary Accession	<u>P84103</u>
Other Accession	<u>P84104, Q3SZR8, NP_003008.1</u>
Reactivity	Human
Predicted	Bovine, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35558
Calculated MW	19330
Antigen Region	82-110

Additional Information

Gene ID	6428
Other Names	Serine/arginine-rich splicing factor 3, Pre-mRNA-splicing factor SRP20, Splicing factor, arginine/serine-rich 3, SRSF3, SFRS3, SRP20
Target/Specificity	This SFRS3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 82-110 amino acids from the Central region of human SFRS3.
Dilution	WB~~1:1000 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	SFRS3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SRSF3
Synonyms	SFRS3, SRP20

Function	Splicing factor, which binds the consensus motif 5'- C[ACU][AU]C[ACU][AC]C-3' within pre-mRNA and promotes specific exons inclusion during alternative splicing (PubMed: <u>17036044</u> , PubMed: <u>26876937</u> , PubMed: <u>32440474</u>). Interaction with YTHDC1, a RNA- binding protein that recognizes and binds N6-methyladenosine (m6A)- containing RNAs, promotes recruitment of SRSF3 to its mRNA-binding elements adjacent to m6A sites within exons (PubMed: <u>26876937</u>). Also functions as an adapter involved in mRNA nuclear export (PubMed: <u>11336712</u> , PubMed: <u>18364396</u> , PubMed: <u>28984244</u>). Binds mRNA which is thought to be transferred to the NXF1-NXT1 heterodimer for export (TAP/NXF1 pathway); enhances NXF1-NXT1 RNA-binding activity (PubMed: <u>11336712</u> , PubMed: <u>18364396</u>). Involved in nuclear export of m6A- containing mRNAs via interaction with YTHDC1: interaction with YTHDC1 facilitates m6A-containing mRNA-binding to both SRSF3 and NXF1, promoting mRNA nuclear export (PubMed: <u>28984244</u>).
Cellular Location	Nucleus. Nucleus speckle. Cytoplasm. Note=Recruited to nuclear speckles following interaction with YTHDC1.

Background

SFRS3 is a member of the serine/arginine (SR)-rich family of pre-mRNA splicing factors, which constitute part of the spliceosome. Each of these factors contains an RNA recognition motif (RRM) for binding RNA and an RS domain for binding other proteins. The RS domain is rich in serine and arginine residues and facilitates interaction between different SR splicing factors. In addition to being critical for mRNA splicing, the SR proteins have also been shown to be involved in mRNA export from the nucleus and in translation. Two transcript variants, one protein-coding and the other non-coding, have been found for this gene.

References

Verma, D., et al. J. Virol. 84(22):11781-11789(2010) Anko, M.L., et al. Nat. Struct. Mol. Biol. 17(8):962-970(2010) Escudero-Paunetto, L., et al. Virology 401(2):155-164(2010) Manley, J.L., et al. Genes Dev. 24(11):1073-1074(2010) Fingert, J.H., et al. Mol. Vis. 16, 596-601 (2010) :

Images



SFRS3 Antibody (Center) (Cat. #AP16268c) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the SFRS3 antibody detected the SFRS3 protein (arrow).

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