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# SRSF3 Antibody

Catalog # ASC11923

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | P84103 |
| **Other Accession** | NP_003008, 4506901 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 19330 |
| **Concentration (mg/ml)** | 1 mg/mL |
| **Conjugate** | Unconjugated |
| **Application Notes** | SRSF3 antibody can be used for detection of SRSF3 by Western blot at 1 - 2 g/ml. |

## Additional Information

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| **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** | SRSF3; SRSF3 antibody is human, mouse and rat reactive. |
| **Reconstitution & Storage** | SRSF3 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. |
| **Precautions** | SRSF3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **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:17036044, PubMed:26876937, PubMed:32440474). 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:26876937). Also functions as an adapter involved in mRNA nuclear export (PubMed:11336712, PubMed:18364396, PubMed:28984244). Binds mRNA which is thought to be transferred to the NXF1-NXT1 heterodimer for export (TAP/NXF1 pathway); enhances NXF1-NXT1 |

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| | RNA-binding activity (PubMed:11336712, PubMed:18364396). 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:28984244). |
| **Cellular Location** | Nucleus. Nucleus speckle. Cytoplasm. Note=Recruited to nuclear speckles following interaction with YTHDC1. |

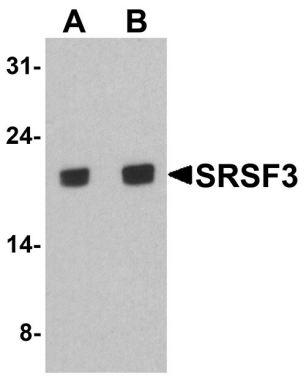
## Background

SRSF3, a member of the serine/arginine (SR)-rich family of pre-mRNA splicing factors which constitute part of the spliceosome, may be involved in RNA processing in relation with cellular proliferation and/or maturation (1,2). Each of these factors contains an RNA recognition motif (RRM) for binding RNA and an RS domain for binding other proteins (3). 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 (3,4).

## References


Sen S, Jumaa H, and Webster NJ. Splicing factor SRSF3 is crucial for hepatocyte differentiation and metabolic function. Nat. Commun. 2013; 4:1336.
Gon alves V, Matos P, and Jordan P. The beta-catenin/TCF4 pathway modifies alternative splicing through modulation of SRp20 expression. RNA 2008; 14:2538-49.
Tang Y, Horikawa I, Ajiro M, et al. Downregulation of splicing factor SRSF3 induces p53β, an alternatively spliced isoform of p53 that promotes cellular senescence. Oncogene 2013; 32:2792-8.
Jia R, Li C, McCoy JP, et al. SRp20 is a proto-oncogene critical for cell proliferation and tumor induction and maintenance. Int. J. Biol. Sci. 2010; 6:806-26.


## Images




Western blot analysis of SRSF3 in K562 cell lysate with SRSF3 antibody at (A) 1 and (B) 2 µg/ml.