

Anti-SF2 Picoband Antibody

Catalog # ABO12095

## Specification

## Anti-SF2 Picoband Antibody - Product Information

ApplicationWB, IHCPrimary Accession007955HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Serine/arginine-rich splicing factor 1(SRSF1) detection. Tested

with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-SF2 Picoband Antibody - 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

Calculated MW 27745 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat <br>

**Subcellular Localization** Cytoplasm. Nucleus speckle. In nuclear speckles. Shuttles between the nucleus and the cytoplasm.

**Protein Name** Serine/arginine-rich splicing factor 1

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen A synthetic peptide corresponding to a sequence at the N-terminus of Human SF2(6-33aa VIRGPAGNNDCRIYVGNLPPDIRTKDIE), identical to the related mouse sequence.

**Purification** Immunogen affinity purified.



**Cross Reactivity** No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the splicing factor SR family.

## **Anti-SF2 Picoband Antibody - Protein Information**

Name SRSF1 (<u>HGNC:10780</u>)

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:9420331, PubMed:24449914). Nuclear import is mediated via interaction with TNPO3 (PubMed:24449914).

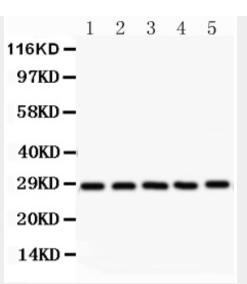
### **Anti-SF2 Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

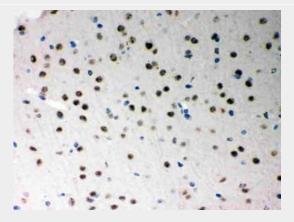
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Anti-SF2 Picoband Antibody - Images

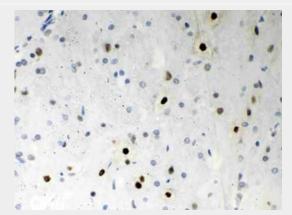




Anti- SF2 Picoband antibody, ABO12095, Western blottingAll lanes: Anti SF2 (ABO12095) at 0.5ug/mlLane 1: Rat Testis Tissue Lysate at 50ugLane 2: Rat Brain Tissue Lysate at 50ugLane 3: NEURO Whole Cell Lysate at 40ugLane 4: 293T Whole Cell Lysate at 40ugLane 5: SW620 Whole Cell Lysate at 40ugPredicted bind size: 28KDObserved bind size: 28KD

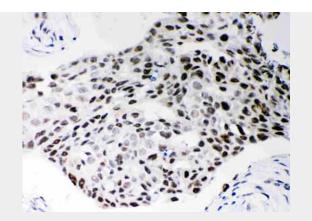


Anti- SF2 Picoband antibody, ABO12095, IHC(P)IHC(P): Mouse Brain Tissue



Anti- SF2 Picoband antibody, ABO12095, IHC(P)IHC(P): Rat Brain Tissue





Anti- SF2 Picoband antibody, ABO12095, IHC(P)IHC(P): Human Mammary Cancer Tissue

# Anti-SF2 Picoband Antibody - Background

SF2, also known as Serine/arginine-rich splicing factor 1 (SRSF1), is a protein that in humans is encoded by the SFRS1 gene. This gene encodes a member of the arginine/serine-rich splicing factor protein family. There is a pseudogene of this gene on chromosome 13. The encoded protein can either activate or repress splicing, depending on its phosphorylation state and its interaction partners. Multiple transcript variants have been found for this gene. ASF/SF2 is necessary for all splicing reactions to occur, and influences splice site selection in a concentration-dependent manner, resulting in alternative splicing.