

# SRPK2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58797

## Specification

# **SRPK2** Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC-P, IHC-F, IF, E <u>P78362</u> Rat, Pig, Dog, Bovine Rabbit Polyclonal 77527

## SRPK2 Polyclonal Antibody - Additional Information

Gene ID 6733

Other Names

SRSF protein kinase 2, 2.7.11.1, SFRS protein kinase 2, Serine/arginine-rich protein-specific kinase 2, SR-protein-specific kinase 2, SRSF protein kinase 2 N-terminal, SRSF protein kinase 2 C-terminal, SRPK2 {ECO:0000312|EMBL:AAH68547.1}

Dilution

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_E">E~~N/A</span>

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

### SRPK2 Polyclonal Antibody - Protein Information

Name SRPK2 {ECO:0000312|EMBL:AAH68547.1}

Function

Serine/arginine-rich protein-specific kinase which specifically phosphorylates its substrates at serine residues located in regions rich in arginine/serine dipeptides, known as RS domains and is involved in the phosphorylation of SR splicing factors and the regulation of splicing (PubMed:<a href="http://www.uniprot.org/citations/18559500" target="\_blank">18559500</a>, PubMed:<a href="http://www.uniprot.org/citations/18559500" target="\_blank">18559500</a>, PubMed:<a href="http://www.uniprot.org/citations/21056976" target="\_blank">21056976</a>, PubMed:<a href="http://www.uniprot.org/citations/9472028" target="\_blank">9472028</a>). Promotes neuronal apoptosis by up-regulating cyclin-D1 (CCND1) expression (PubMed:<a href="http://www.uniprot.org/citations/19592491" target="\_blank">19592491</a>). This is done by the phosphorylation of SRSF2, leading to the suppression of p53/TP53 phosphorylation thereby



relieving the repressive effect of p53/TP53 on cyclin-D1 (CCND1) expression (PubMed:<a href="http://www.uniprot.org/citations/21205200" target="\_blank">21205200</a>). Phosphorylates ACIN1, and redistributes it from the nuclear speckles to the nucleoplasm, resulting in cyclin A1 but not cyclin A2 up-regulation (PubMed:<a

href="http://www.uniprot.org/citations/18559500" target="\_blank">18559500</a>). Plays an essential role in spliceosomal B complex formation via the phosphorylation of DDX23/PRP28 (PubMed:<a href="http://www.uniprot.org/citations/18425142" target="\_blank">18425142</a>). Probably by phosphorylating DDX23, leads to the suppression of incorrect R-loops formed during transcription; R-loops are composed of a DNA:RNA hybrid and the associated non-template single-stranded DNA (PubMed:<a href="http://www.uniprot.org/citations/28076779" target="\_blank">28076779</a>). Can mediate hepatitis B virus (HBV) core protein phosphorylation (PubMed:<a href="http://www.uniprot.org/citations/12134018" target="\_blank">12134018</a>). Plays a negative role in the regulation of HBV replication through a mechanism not involving the phosphorylation of the core protein but by reducing the packaging efficiency of the pregenomic RNA (pgRNA) without affecting the formation of the viral core particles (PubMed:<a href="http://www.uniprot.org/citations/16122776" target="\_blank">16122776</a>).

#### **Cellular Location**

Cytoplasm. Nucleus, nucleoplasm. Nucleus speckle. Chromosome. Note=Shuttles between the nucleus and the cytoplasm (PubMed:19592491, PubMed:21056976, PubMed:21157427) KAT5/TIP60 inhibits its nuclear translocation (PubMed:21157427) Phosphorylation at Thr-492 by PKB/AKT1 promotes nuclear translocation (PubMed:19592491). Preferentially localizes across the entire gene coding region (PubMed:28076779). During transcription, accumulates at chromatin loci where unscheduled R-loops form and colocalizes with paused 'Ser-5'-phosphorylated POLR2A/RNA polymerase II and helicase DDX23 (PubMed:28076779).

#### **Tissue Location**

Highly expressed in brain, moderately expressed in heart and skeletal muscle and at low levels in lung, liver, and kidney

### SRPK2 Polyclonal 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>

### SRPK2 Polyclonal Antibody - Images





Paraformaldehyde-fixed, paraffin embedded (Human kidney tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SRPK2) Polyclonal Antibody, Unconjugated (bs-7923R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SRPK2) Polyclonal Antibody, Unconjugated (bs-7923R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.