10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SRPK2 Rabbit pAb

SRPK2 Rabbit pAb
Catalog # AP58797

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P78362
Reactivity	Human, Mouse
Predicted	Rat, Pig, Dog, Rabbit, Chicken, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	77527
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SRPK2
Epitope Specificity	266-350/688
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the cytoplasm. KAT5/TIP60 inhibits its nuclear translocation. Phosphorylation at Thr-492 by PKB/AKT1 promotes nuclear translocation.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	SRPK2 belongs to the protein kinase superfamily. It phosphorylates RS domain-containing proteins, such as SFRS1 and SFRS2 on serine residues. It has a role in spliceosome assembly and in mediating the trafficking of splicing factors and appears to mediate HBV core protein phosphorylation which is a prerequisite for pregenomic RNA encapsidation into viral capsids. SRPK2 highly expressed in brain, moderately expressed in heart and skeletal muscle and at low levels in lung, liver, and kidney.

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	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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.

Protein Information

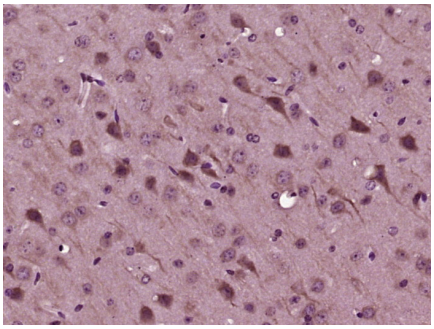
Name	SRPK2 {ECO:0000312|EMBL:AAH68547.1}
Function	Serine/arginine-rich protein-specific kinase which specifically phosphorylates its substrates at serine residues located in regions rich in arginine/serine dipeptides, known as RS domains and is involved in the phosphorylation of SR splicing factors and the regulation of splicing (PubMed:18559500, PubMed:21056976, PubMed:9472028). Promotes neuronal apoptosis by up-regulating cyclin-D1 (CCND1) expression (PubMed:19592491). 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:21205200). Phosphorylates ACIN1, and redistributes it from the nuclear speckles to the nucleoplasm, resulting in cyclin A1 but not cyclin A2 up-regulation (PubMed:18559500). Plays an essential role in spliceosomal B complex formation via the phosphorylation of DDX23/PRP28 (PubMed:18425142). 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:28076779). Can mediate hepatitis B virus (HBV) core protein phosphorylation (PubMed:12134018). 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:16122776). Phosphorylates the N-terminus of ERC1 (By similarity).
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

Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Images

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 (AP58797) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit)



(sp-0023) instructionsand DAB staining.

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