

Product Name: SRPK1 Rabbit Polyclonal Antibody**Catalog #: APRab18282**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:20000-1:40000
Molecular Weight	95kDa

Antigen Information

Gene Name	SRPK1
Alternative Names	SRPK1; SRSF protein kinase 1; SFRS protein kinase 1; Serine/arginine-rich protein-specific kinase 1; SR-protein-specific kinase 1
Gene ID	6732.0
SwissProt ID	Q96SB4
Immunogen	The antiserum was produced against synthesized peptide derived from human SRPK1. AA range:521-570

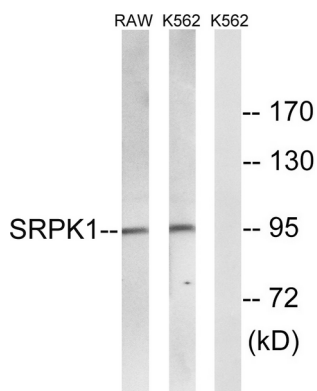
Background

This gene encodes a serine/arginine protein kinase specific for the SR (serine/arginine-rich domain) family of splicing factors. The protein localizes to the nucleus and the cytoplasm. It is thought to play a role in regulation of both constitutive and alternative splicing by regulating intracellular localization of splicing factors. Alternative splicing of this gene results in multiple transcript variants. Additional alternatively spliced transcript variants have been described for this gene, but their full length nature have not been determined.[provided by RefSeq, Jul 2010],catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Activated by phosphorylation on Ser-51 and Ser-555.,function:Plays a central role in the regulatory network for splicing, controlling the intranuclear distribution of splicing factors in interphase cells and the reorganization of nuclear speckles during mitosis. Hyperphosphorylates RS domain-containing proteins such as SFRS1 and SFRS2 on serine residues during metaphase but at lower levels during interphase. Locks onto SFRS1 to form a stable complex and processively phosphorylates the RS domain. Appears to mediate HBV core protein phosphorylation which is a prerequisite for pregenomic RNA encapsidation into viral capsids.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family.,similarity:Contains 1 protein kinase domain.,subunit:Present in a seven component complex, the toposome, which separates entangled circular chromatin DNA during chromosome segregation. The extended N-terminal domain of isoform 1 binds to the nuclear scaffold-associated protein SAFB suggesting this isoform may phosphorylate splicing factors in close vicinity to the nuclear matrix.,tissue specificity:Isoform 2 is predominantly expressed in the testis but is also present at lower levels in heart, ovary, small intestine, liver, kidney, pancreas and skeletal muscle. Isoform 1 is only seen in the testis, at lower levels than isoform 2.,

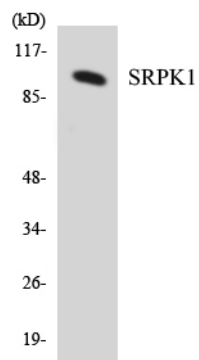
Research Area

Epigenetics and Nuclear Signaling; DNA / RNA; RNA Processing; Splicing

Image Data



Western blot analysis of lysates from K562 and RAW264.7 cells, using SRPK1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HUVECcells using SRPK1 antibody.