SRPK1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	SRPK1, Polyclonal Antibody
Full Product Name	SRPK1 (N-Term) Rabbit pAb
Product Gene Name	anti-SRPK1 antibody
Product Synonym Names	SRSF protein kinase 1; SFRS protein kinase 1; Serine/arginine-rich protein-specific kinase 1; SR-protein-specific kinase 1; SRPK1 {ECO:0000312|EMBL:CAC392991}
Clonality	Polyclonal
Isotype	Ig
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied in PBS with 0.09% (W/V) Sodium Azide. This antibody is purified through a protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.
Purity/Purification	Affinity Purified
OMIM	601939
3D Structure	ModBase 3D Structure for Q96SB4
Immunogen	This SRPK1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human SRPK1.
Cellular Localization	Cytoplasm, Endoplasmic Reticulum, Microsome, Nucleus
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-SRPK1 antibody	Western Blot (WB)
Application Notes for anti-SRPK1 antibody	WB: 1:2000
Related Product Information for anti-SRPK1 antibody	MBS8558259 is an antibody targeting SRPK1. Also known as SRPK1 (N-Term) Rabbit pAb. Reactive in Human. Host: Rabbit.
Other Notes	Small volumes of anti-SRPK1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for SRPK1. It may not necessarily be applicable to this product.

NCBI GI #	47419936
NCBI GeneID	6732
NCBI Accession #	NP_003128.3
UniProt Primary Accession #	Q96SB4
UniProt Related Accession #	Q96SB4

GenBank Nucleotide #	NP_003128.3
NCBI Official Full Name	SRSF protein kinase 1
NCBI Official Synonym Full Names	SRSF protein kinase 1
NCBI Official Symbol	SRPK1
NCBI Official Synonym Symbols	SFRSK1
UniProt Protein Name	SRSF protein kinase 1
UniProt Synonym Protein Names	SFRS protein kinase 1; Serine/arginine-rich protein-specific kinase 1
Protein Family	SRSF protein kinase
UniProt Gene Name	SRPK1
UniProt Synonym Gene Names	SR-protein-specific kinase 1
UniProt Entry Name	SRPK1_HUMAN
NCBI Protein Information	SRSF protein kinase 1
NCBI Summary for SRPK1	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]

UniProt Comments for SRPK1	SRPK1: 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. 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. Can influence additional steps of mRNA maturation, as well as other cellular activities, such as chromatin reorganization in somatic and sperm cells and cell cycle progression. Isoform 2 phosphorylates SFRS2, ZRSR2, LBR and PRM1. Isoform 2 phosphorylates SRSF1 using a directional (C-terminal to N-terminal) and a dual-track mechanism incorporating both processive phosphorylation (in which the kinase stays attached to the substrate after each round of phosphorylation) and distributive phosphorylation steps (in which the kinase and substrate dissociate after each phosphorylation event). The RS domain of SRSF1 binds first to a docking groove in the large lobe of the kinase domain of SRPK1. This induces certain structural changes in SRPK1 and/or RRM2 domain of SRSF1, allowing RRM2 to bind the kinase and initiate phosphorylation. The cycles continue for several phosphorylation steps in a processive manner (steps 1-8) until the last few phosphorylation steps (approximately steps 9-12). During that time, a mechanical stress induces the unfolding of the beta-4 motif in RRM2, which then docks at the docking groove of SRPK1. This also signals RRM2 to begin to dissociate, which facilitates SRSF1 dissociation after phosphorylation is completed. Isoform 2 can mediate hepatitis B virus (HBV) core protein phosphorylation. It 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. Isoform 1 and isoform 2 can induce splicing of exon 10 in MAPT/TAU. The ratio of isoform 1/isoform 2 plays a decisive role in determining cell fate in K562 leukaemic cell line: isoform 2 favors proliferation where as isoform 1 favors differentiation. Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Kinase, protein; Protein kinase, Ser/Thr (non-receptor); EC 2.7.11.1; Protein kinase, CMGC; CMGC group; SRPK family Chromosomal Location of Human Ortholog: 6p21.31 Cellular Component: nucleoplasm; nuclear matrix; endoplasmic reticulum; cytoplasm; plasma membrane; nucleus Molecular Function: protein serine/threonine kinase activity; protein binding; magnesium ion binding; ATP binding; protein kinase activity Biological Process: regulation of nuclear mRNA splicing, via spliceosome; positive regulation of viral genome replication; sperm chromatin condensation; viral reproduction; negative regulation of viral genome replication; RNA splicing; innate immune response; mRNA processing; protein amino acid phosphorylation; chromosome segregation; regulation of mRNA processing
Research Articles on SRPK1	**1.** SRPK1 inhibition produces a significant switch from the short to the long BRD4 isoform at the mRNA and protein levels.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-antibody/srpk1/8558259