SANTA CRUZ BIOTECHNOLOGY, INC.

SRPK2 (H-5): sc-390534

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Arginine/serine-rich (RS) domain-containing proteins and their phosphorylation by specific protein kinases constitute control circuits to regulate both constitutive and alternative pre-mRNA splicing and coordinate splicing with transcription in cells. Two SR protein-specific kinases (SRPK, also designated SFRSK), SRPK1 and SRPK2, are highly specific for the phosphorylation of these RS proteins, thereby contributing to splicing regulation. SRPK1 plays a role in the condensation of sperm chromatin. SRPK2 has a stringent preference for SR dipeptides and contains a proline-rich sequence at its amino terminus. SRPK1 is expressed as two alternatively spliced isoforms, one of which is localized specifically to testis and the other of which shares a similar localization pattern to SRPK2 and is present in brain, heart, liver and lung.

REFERENCES

1. Wang, H.Y., et al. 1998. SRPK2: a differentially expressed SR protein-specific kinase involved in mediating the interaction and localization of pre-mRNA splicing factors in mammalian cells. J. Cell Biol. 140: 737-750.
2. Kuroyanagi, N., et al. 1998. Novel SR-protein-specific kinase, SRPK2, disassembles nuclear speckles. Biochem. Biophys. Res. Commun. 242: 357-364.
3. Papoutsopoulou, S., et al. 1999. SR protein-specific kinase 1 is highly expressed in testis and phosphorylates protamine 1. Nucleic Acids Res. 27: 2972-2980.
4. Wang, H.Y., et al. 1999. Localization of serine kinases, SRPK1 (SFRSK1) and SRPK2 (SFRSK2), specific for the SR family of splicing factors in mouse and human chromosomes. Genomics 57: 310-315.
5. Tang, Z., et al. 2000. Biochemical and genetic conservation of fission yeast Dsk1 and human SR protein-specific kinase 1. Mol. Cell. Biol. 20: 816-824.

CHROMOSOMAL LOCATION

Genetic locus: SRPK2 (human) mapping to 7q22.3; Srpk2 (mouse) mapping to 5 A3.

SOURCE

SRPK2 (H-5) is a mouse monoclonal antibody raised against amino acids 372-452 mapping within an internal region of SRPK2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SRPK2 (H-5) is available conjugated to agarose (sc-390534 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-390534 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390534 PE), fluorescein (sc-390534 FITC), Alexa Fluor® 488 (sc-390534 AF488), Alexa Fluor® 546 (sc-390534 AF546), Alexa Fluor® 594 (sc-390534 AF594) or Alexa Fluor® 647 (sc-390534 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390534 AF680) or Alexa Fluor® 790 (sc-390534 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

SRPK2 (H-5) is recommended for detection of SRPK2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SRPK2 siRNA (h): sc-39237, SRPK2 siRNA (m): sc-39238, SRPK2 siRNA (r): sc-270185, SRPK2 shRNA Plasmid (h): sc-39237-SH, SRPK2 shRNA Plasmid (m): sc-39238-SH, SRPK2 shRNA Plasmid (r): sc-270185-SH, SRPK2 shRNA (h) Lentiviral Particles: sc-39237-V, SRPK2 shRNA (m) Lentiviral Particles: sc-39238-V and SRPK2 shRNA (r) Lentiviral Particles: sc-270185-V.

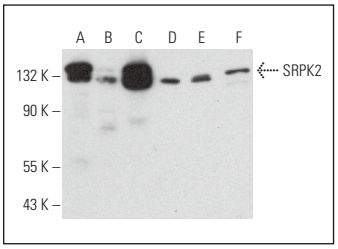
Molecular Weight of SRPK2: 120 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or Jurkat whole cell lysate: sc-2204.

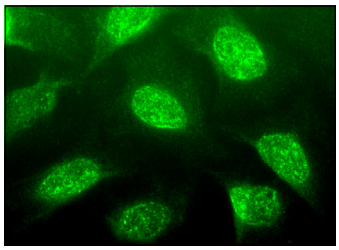
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



SRPK2 (H-5): sc-390534. Western blot analysis of SRPK2 expression in HeLa (**A**), A-431 (**B**), Jurkat (**C**), RAW 264.7 (**D**), EOC 20 (**E**) and RBL-1 (**F**) whole cell lysates.



SRPK2 (H-5): sc-390534. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.