SRPK2 (P-19): sc-11308



The Power to Overtin

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. Both SRPK1 and SRPK2 are highly expressed in testes. SRPK1 is found exclusively in pancreas and SRPK2 is found exclusively in brain and lung.

REFERENCES

- Wang, H.Y., Lin, W., Dyck, J.A., Yeakley, J.M., Songyang, Z., Cantley, L.C. and Fu, X.D. 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.
- Kuroyanagi, N., Onogi, H., Wakabayashi, T. and Hagiwara, M. 1998. Novel SR-protein-specific kinase, SRPK2, disassembles nuclear speckles. Biochem. Biophys. Res. Commun. 242: 357-364.
- Papoutsopoulou, S., Nikolakaki, E., Chalepakis, G., Kruft, V., Chevaillier, P. and Giannakouros, T. 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., Arden, K.C., Bermingham, J.R. Jr., Viars, C.S., Lin, W., Boyer, A.D. and Fu, X.D. 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.
- Tang, Z., Kuo, T., Shen, J. and Lin, R.J. 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 (P-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SRPK2 of human origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-11308 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

SRPK2 (P-19) is recommended for detection of SRPK2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

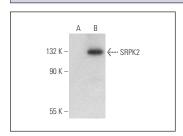
SRPK2 (P-19) is also recommended for detection of SRPK2 in additional species, including equine, canine, bovine and porcine.

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

Molecular Weight of SRPK2: 120 kDa.

Positive Controls: mouse brain extract: sc-2253, mouse testis extract: sc-2405 or SRPK2 (m): 293T Lysate: sc-123783.

DATA



SRPK2 (P-19): sc-11308. Western blot analysis of SRPK2 expression in non-transfected: sc-117752 (A) and mouse SRPK2 transfected: sc-123783 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **SRPK2 (H-5): sc-390534** or **SRPK2 (A-5): sc-390930**, our highly recommended monoclonal alternatives to SRPK2 (P-19).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com