SANTA CRUZ BIOTECHNOLOGY, INC.

SKRP1 (H-94): sc-292526

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Mitogen-activated protein (MAP) kinases are a large class of proteins involved in signal transduction pathways that are activated by a range of stimuli and mediate a number of physiological and pathological changes in the cell. Dual specificity phosphatases (DSPs) are a subclass of the protein tyrosine phosphatase (PTP) gene superfamily, which are selective for dephosphorylating critical phosphothreonine and phosphotyrosine residues within MAP kinases. DSP gene expression is induced by a host of growth factors and/or cellular stresses, thereby negatively regulating MAP kinase superfamily members including MAPK/ERK, SAPK/JNK and p38. The stress-activated protein kinase (SAPK) pathway-regulating phosphatase 1 (SKRP1) binds to MAP kinase MKK-7 to regulate JNK.

REFERENCES

1. Keyse, S.M. 1995. An emerging family of dual specificity MAP kinase phosphatases. Biochim. Biophys. Acta 1265: 152-160.
2. Sun, H. 1998. Functional studies of dual-specificity phosphatases. Methods Mol. Biol. 84: 307-318.
3. Camps, M., et al. 2000. Dual specificity phosphatases: a gene family for control of MAP kinase function. FASEB J. 14: 6-16.
4. Zama, T., et al. 2002. A novel dual specificity phosphatase SKRP1 interacts with the MAPK kinase MKK7 and inactivates the JNK MAPK pathway. Implication for the precise regulation of the particular MAPK pathway. J. Biol. Chem. 277: 23909-23918.
5. Zama, T., et al. 2002. Scaffold role of a mitogen-activated protein kinase phosphatase, SKRP1, for the JNK signaling pathway. J. Biol. Chem. 277: 23919-23926.

CHROMOSOMAL LOCATION

Genetic locus: DUSP19 (human) mapping to 2q32.1; Dusp19 (mouse) mapping to 2 C3.

SOURCE

SKRP1 (H-94) is a rabbit polyclonal antibody raised against amino acids 1-94 mapping at the N-terminus of SKRP1 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.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

SKRP1 (H-94) is recommended for detection of SKRP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

SKRP1 (H-94) is also recommended for detection of SKRP1 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for SKRP1 siRNA (h): sc-61557, SKRP1 siRNA (m): sc-61558, SKRP1 shRNA Plasmid (h): sc-61557-SH, SKRP1 shRNA Plasmid (m): sc-61558-SH, SKRP1 shRNA (h) Lentiviral Particles: sc-61557-V and SKRP1 shRNA (m) Lentiviral Particles: sc-61558-V.

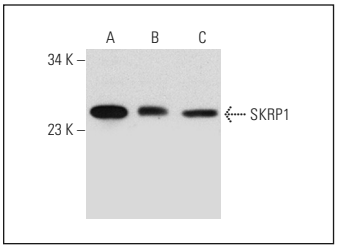
Molecular Weight of SKRP1: 27 kDa.

Positive Controls: PC-12 cell lysate: sc-2250, Ramos cell lysate: sc-2216 or Jurkat whole cell lysate: sc-2204.

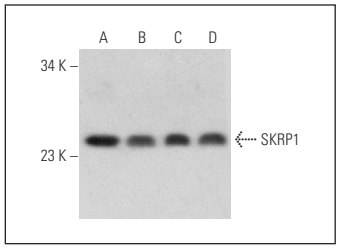
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SKRP1 (H-94): sc-292526. Western blot analysis of SKRP1 expression in PC-12 (**A**), Ramos (**B**) and Hep G2 (**C**) whole cell lysates.



SKRP1 (H-94): sc-292526. Western blot analysis of SKRP1 expression in Raji (**A**), HeLa (**B**), Jurkat (**C**) and IB4 (**D**) whole cell lysates.

RESEARCH USE

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