

# PSKH1 (E-9): sc-514401

## BACKGROUND

The phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions in eukaryotes, including cell division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the serine/threonine (Ser/Thr) protein kinases. PSKH1 (protein serine kinase H1) is a 424 amino acid protein that localizes to a variety of places within the cell, including the Golgi apparatus, nuclear speckles, centrosomes and the membrane of the endoplasmic reticulum. Expressed ubiquitously, PSKH1 belongs to the Ser/Thr protein kinase family and functions as a splicing factor compartment-associated serine kinase that is thought to play a role in mRNA processing and SR (serine/arginine) protein trafficking events. PSKH1 contains one protein kinase domain and exists as a homodimer that is subject to autophosphorylation on specific serine residues.

## REFERENCES

- Hanks, S.K. 1987. Homology probing: identification of cDNA clones encoding members of the protein-serine kinase family. *Proc. Natl. Acad. Sci. USA* 84: 388-392.
- Larsen, F., et al. 1993. A tight cluster of five unrelated human genes on chromosome 16q22.1. *Hum. Mol. Genet.* 2: 1589-1595.
- Brede, G., et al. 2000. Characterization of PSKH1, a novel human protein serine kinase with centrosomal, Golgi, and nuclear localization. *Genomics* 70: 82-92.
- Amarzguoui, M., et al. 2000. Secondary structure prediction and *in vitro* accessibility of mRNA as tools in the selection of target sites for ribozymes. *Nucleic Acids Res.* 28: 4113-4124.
- Pilch, B., et al. 2001. Specific inhibition of serine- and arginine-rich splicing factors phosphorylation, spliceosome assembly, and splicing by the anti-tumor drug NB-506. *Cancer Res.* 61: 6876-6884.

## CHROMOSOMAL LOCATION

Genetic locus: PSKH1 (human) mapping to 16q22.1; Pskh1 (mouse) mapping to 8 D3.

## SOURCE

PSKH1 (E-9) is a mouse monoclonal antibody raised against amino acids 1-90 mapping at the N-terminus of PSKH1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PSKH1 (E-9) is available conjugated to agarose (sc-514401 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514401 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514401 PE), fluorescein (sc-514401 FITC), Alexa Fluor<sup>®</sup> 488 (sc-514401 AF488), Alexa Fluor<sup>®</sup> 546 (sc-514401 AF546), Alexa Fluor<sup>®</sup> 594 (sc-514401 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-514401 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-514401 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-514401 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

PSKH1 (E-9) is recommended for detection of PSKH1 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 PSKH1 siRNA (h): sc-93066, PSKH1 siRNA (m): sc-152554, PSKH1 shRNA Plasmid (h): sc-93066-SH, PSKH1 shRNA Plasmid (m): sc-152554-SH, PSKH1 shRNA (h) Lentiviral Particles: sc-93066-V and PSKH1 shRNA (m) Lentiviral Particles: sc-152554-V.

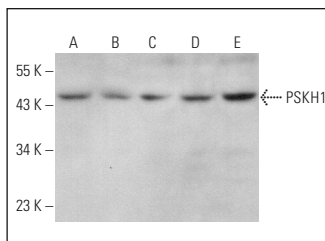
Molecular Weight of PSKH1: 48 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, c4 whole cell lysate: sc-364186 or MOLT-4 cell lysate: sc-2233.

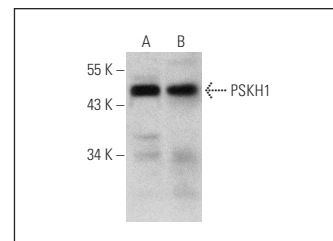
## RECOMMENDED SUPPORT REAGENTS

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<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



PSKH1 (E-9): sc-514401. Western blot analysis of PSKH1 expression in COLO 205 (A), SW480 (B), BYDP (C), TK-1 (D) and c4 (E) whole cell lysates.



PSKH1 (E-9): sc-514401. Western blot analysis of PSKH1 expression in MOLT-4 (A) and Hep G2 (B) whole cell lysates.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

Alexa Fluor<sup>®</sup> is a trademark of Molecular Probes, Inc., Oregon, USA