

PSKH1 (N-17): sc-130246

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.
- Amarzguioui, 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 antitumor drug NB-506. Cancer Res. 61: 6876-6884.
- Brede, G., et al. 2002. PSKH1, a novel splice factor compartment-associated serine kinase. Nucleic Acids Res. 30: 5301-5309.

CHROMOSOMAL LOCATION

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

SOURCE

PSKH1 (N-17) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of PSKH1 of human origin.

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.

RODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

PSKH1 (N-17) is recommended for detection of PSKH1 of mouse 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

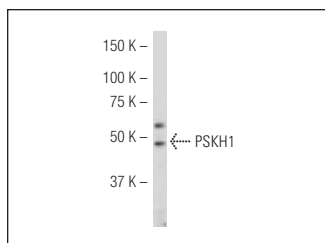
Suitable for use as control antibody for PSKH1 siRNA (h): sc-93066, PSKH1 siRNA (m): sc-152554, PSKH1 shRNA Plasmid (h): sc-93066-SH, PSKH1 shRNA Plasmid (m): sc-152554-SH, PSKH1 shRNA (h) Lentiviral Particles: sc-93066-V and PSKH1 shRNA (m) Lentiviral Particles: sc-152554-V.

Molecular Weight of PSKH1: 48 kDa.

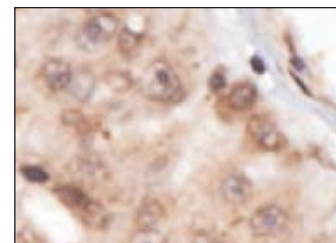
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



PSKH1 (N-17): sc-130246. Western blot analysis of PSKH1 expression in mouse lung tissue extract.



PSKH1 (N-17):sc-130246. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cancer tissue showing cytoplasmic staining.

RESEARCH USE

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