SANTA CRUZ BIOTECHNOLOGY, INC.

Snk (C-18): sc-9577



BACKGROUND

Plks (polo-like kinases) encode serine/threonine kinases that are closely related to polo and CDC5, genes that are required for passage through mitosis in *Drosophila* and *Saccharomyces*, respectively. Polo-like kinases, which include Plk, Snk (for serum-inducible kinase, also designated Plk2) and Fnk (for FGF-inducible kinase, also designated Plk3 or PRK), play a role in cell proliferation. Plk protein accumulates in the cell during S and G₂ phases of the cell cycle, and both protein content and catalytic activity peak at the onset of mitosis, followed by a rapid reduction after mitosis. Snk and Fnk are immediate-early response genes that are first expressed during G₁ phase. Fnk expression peaks in late S and G₂ phases, and it may play a role in regulating the onset of M phase.

REFERENCES

- Sunkel, C.E., et al. 1988. Polo, a mitotic mutant of *Drosophila* displaying abnormal spindle poles. J. Cell Sci. 89: 25-38.
- Kitada, K., et al. 1993. A multicopy suppressor gene of the Saccharomyces cerevisiae G₁ cell cycle mutant gene dbf4 encodes a protein kinase and is identified as CDC5. Mol. Cell. Biol. 13: 4445-4457.

CHROMOSOMAL LOCATION

Genetic locus: PLK2 (human) mapping to 5q11.2; Plk2 (mouse) mapping to 13 D2.2.

SOURCE

Snk (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Snk of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-9577 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Snk (C-18) is recommended for detection of Snk 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). Snk (C-18) is also recommended for detection of Snk in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Snk siRNA (h): sc-39152, Snk siRNA (m): sc-39153, Snk shRNA Plasmid (h): sc-39152-SH, Snk shRNA Plasmid (m): sc-39153-SH, Snk shRNA (h) Lentiviral Particles: sc-39152-V and Snk shRNA (m) Lentiviral Particles: sc-39153-V

Molecular Weight of Snk: 78 kDa.

Positive Controls: Snk (h2): 293T Lysate: sc-170549, ES-2 cell lysate: sc-24674 or MCF7 whole cell lysate: sc-2206.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



Snk (C-18): sc-9577. Western blot analysis of Snk expression in non-transfected: sc-117752 (A) and human Snk transfected: sc-170549 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

 Sui, H., et al. 2010. Decreased expression of spine-associated Rap guanosine triphosphatase-activating protein (SPAR) in glutamate-treated primary hippocampal neurons. J. Clin. Neurosci. 17: 1042-1046.

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

MONOS

Satisfation

Guaranteed

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

Try Snk (E-10): sc-374643 or Snk (A-6): sc-390827,

our highly recommended monoclonal alternatives to Snk (C-18).