

SNRK (N-20): sc-100164



The Power to Question

BACKGROUND

The phosphorylation and dephosphorylation of proteins, catalysed by protein kinases and phosphatases, is the major mechanism for the transduction of intracellular signals in eukaryotic organisms. SNRK (SNF related kinase), also known as HSNFRK, is a 765 amino acid nuclear protein and a member of the sucrose nonfermenting (SNF)-related kinase family of serine/threonine kinases. Expressed in hematopoietic progenitor cells and leukemic cell lines, SNRK may play a role in hematopoietic cell proliferation or differentiation. Found at low levels in the testis and activated by LKB1, SNRK may be a regulator of low K⁺-induced apoptosis of cerebellar granule neurons. The gene encoding SNRK maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

REFERENCES

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4. Jaleel, M., et al. 2005. Identification of the sucrose non-fermenting related kinase SNRK, as a novel LKB1 substrate. *FEBS Lett.* 579: 1417-1423.
5. Kameshita, I., et al. 2005. Expression cloning of a variety of novel protein kinases in *Lotus japonicus*. *J. Biochem.* 137: 33-39.
6. Bright, N.J., et al. 2009. The regulation and function of mammalian AMPK-related kinases. *Acta Physiol.* 196: 15-26.
7. Halford, N.G. and Hey, S.J. 2009. Snf1-related protein kinases (SnRKs) act within an intricate network that links metabolic and stress signalling in plants. *Biochem. J.* 419: 247-259.
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CHROMOSOMAL LOCATION

Genetic locus: SNRK (human) mapping to 3p22.1; Snrk (mouse) mapping to 9 F4.

SOURCE

SNRK (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SNRK 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-100164 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SNRK (N-20) is recommended for detection of SNRK of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 SNRK siRNA (h): sc-78359, SNRK siRNA (m): sc-153658, SNRK shRNA Plasmid (h): sc-78359-SH, SNRK shRNA Plasmid (m): sc-153658-SH, SNRK shRNA (h) Lentiviral Particles: sc-78359-V and SNRK shRNA (m) Lentiviral Particles: sc-153658-V.

Molecular Weight of SNRK: 82 kDa.

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) 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.

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 or our catalog for detailed protocols and support products.