

KHS (N-19): sc-6429

BACKGROUND

Several mammalian kinases have been identified with sequence similarity to the *Saccharomyces cerevisiae* serine/threonine kinase STE20. STE20 is involved in relaying signals from G-protein coupled receptors to cytosolic MAP kinase cascades, and it lies upstream of a MAP kinase kinase. Mammalian STE20-like kinases include KHS, GLK, NIK, YSK1, HPK1, Krs-1, Krs-2 and GC kinase. KHS (for kinase homologous to SPS1/STE20) is a protein that is most closely related to GC kinase. The KHS kinase has been shown to activate a variety of substrates, including JNK, suggesting a role in stress response.

REFERENCES

1. Leberer, E., et al. 1992. The protein kinase homologue Ste20p is required to link the yeast pheromone response G-protein $\beta\gamma$ subunits to downstream signalling components. *EMBO J.* 11: 4815-4824.
2. Wu, C., et al. 1995. Molecular characterization of Ste20p, a potential mitogen-activated protein or extracellular signal-regulated kinase kinase (MEK) kinase kinase from *Saccharomyces cerevisiae*. *J. Biol. Chem.* 270: 15984-15992.
3. Su, Y.C., et al. 1997. NIK is a new Ste20-related kinase that binds NCK and MEKK1 and activates the SAPK/JNK cascade via a conserved regulatory domain. *EMBO J.* 16: 1279-1290.
4. Diener, K., et al. 1997. Activation of the c-Jun N-terminal kinase pathway by a novel protein kinase related to human germinal center kinase. *Proc. Natl. Acad. Sci. USA* 94: 9687-9692.
5. Tung, R.M., et al. 1997. A novel human SPS1/STE20 homologue, KHS, activates Jun N-terminal kinase. *Oncogene.* 14: 653-659.

CHROMOSOMAL LOCATION

Genetic locus: MAP4K5 (human) mapping to 14q21.3; Map4k5 (mouse) mapping to 12 C2.

SOURCE

KHS (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of KHS of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6429 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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

KHS (N-19) is recommended for detection of KHS 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).

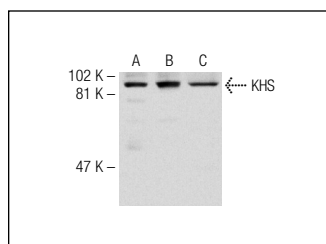
KHS (N-19) is also recommended for detection of KHS in additional species, including canine and bovine.

Suitable for use as control antibody for KHS siRNA (h): sc-39245, KHS siRNA (m): sc-39246, KHS shRNA Plasmid (h): sc-39245-SH, KHS shRNA Plasmid (m): sc-39246-SH, KHS shRNA (h) Lentiviral Particles: sc-39245-V and KHS shRNA (m) Lentiviral Particles: sc-39246-V.

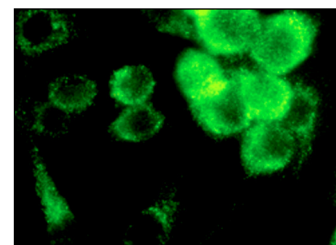
Molecular Weight of KHS: 95 kDa.

Positive Controls: HuT 78 whole cell lysate: sc-2208, IMR-32 cell lysate: sc-2409 or NIH/3T3 whole cell lysate: sc-2210.

DATA



KHS (N-19): sc-6429. Western blot analysis of KHS expression in HuT 78 (A), IMR-32 (B) and NIH/3T3 (C) whole cell lysates.



KHS (N-19): sc-6429. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **KHS (E-5): sc-374070** or **KHS (D-4): sc-374071**, our highly recommended monoclonal alternatives to KHS (N-19).