



# YSK1 (h3): 293T Lysate: sc-171799

## BACKGROUND

Several mammalian kinases have been identified which exhibit sequence similarity to the *Saccharomyces cerevisiae* serine/threonine kinase Ste20. Ste20 is involved in relaying signals from G protein-coupled receptors, and it lies upstream of a MAP kinase kinase kinase. Mammalian Ste20-like kinases include YSK1, KHS, GLK, NIK, HPK1, Krs-1, Krs-2 and GC kinase. YSK1 (yeast SPS/Ste20-related kinase 1) is expressed in a wide variety of cell types and tissues and has been shown to have kinase activity. Unlike many of the other Ste20-like kinases, however, overexpression of YSK1 does not lead to activation of the SAPK/JNK pathway.

## REFERENCES

1. Leberer, E., Dignard, D., Hargus, D., Thomas, D.Y. and Whiteway, M. 1992. The protein kinase homologue Ste20p is required to link the yeast pheromone response G protein  $\beta$  subunits to downstream signalling components. *EMBO J.* 11: 4815-4824.
2. Wu, C., Whiteway, M., Thomas, D.Y. and Leberer, E. 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., Han, J., Xu, S., Cobb, M. and Skolnik, E.Y. 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., Wang, X.S., Chen, C., Meyer, C.F., Keesler, G., Zukowski, M., Tan, T.H. and Yao, Z. 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. Osada, S., Izawa, M., Saito, R., Mizuno, K., Suzuki, A., Hirai, S. and Ohno, S. 1997. YSK1, a novel mammalian protein kinase structurally related to Ste20 and SPS1, but is not involved in the known MAPK pathways. *Oncogene* 14: 2047-2057.

## CHROMOSOMAL LOCATION

Genetic locus: STK25 (human) mapping to 2q37.3.

## PRODUCT

YSK1 (h3): 293T Lysate represents a lysate of human YSK1 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

YSK1 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive YSK1 antibodies. Recommended use: 10-20  $\mu$ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## STORAGE

Store at  $-20^{\circ}$  C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.