

YANK2 (H-44): sc-98342

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. YANK2, also known as STK32B (serine/threonine kinase 32B) or STKG6, is a 414 amino acid protein that contains one protein kinase domain and belongs to the Ser/Thr protein kinase family. Using magnesium as a cofactor, YANK2 functions to catalyze the ATP-dependent phosphorylation of target proteins and may play a role in various signaling events throughout the cell. Multiple isoforms of YANK2 exist due to alternatively splicing events.

REFERENCES

- Bairoch, A. and Claverie, J.M. 1988. Sequence patterns in protein kinases. *Nature* 331: 22.
- Hanks, S.K., Quinn, A.M. and Hunter, T. 1988. The protein kinase family: conserved features and deduced phylogeny of the catalytic domains. *Science* 241: 42-52.
- Hanks, S.K. and Quinn, A.M. 1991. Protein kinase catalytic domain sequence database: identification of conserved features of primary structure and classification of family members. *Meth. Enzymol.* 200: 38-62.
- Ruiz-Perez, V.L., Ide, S.E., Strom, T.M., Lorenz, B., Wilson, D., Woods, K., King, L., Francomano, C., Freisinger, P., Spranger, S., Marino, B., Dallapiccola, B., Wright, M., Meitinger, T., Polymeropoulos, M.H. and Goodship, J. 2000. Mutations in a new gene in Ellis-van Creveld syndrome and Weyers acro-dental dysostosis. *Nat. Genet.* 24: 283-286.
- Manning, G., Whyte, D.B., Martinez, R., Hunter, T. and Sudarsanam, S. 2002. The protein kinase complement of the human genome. *Science* 298: 1912-1934.
- Temtamy, S.A., Aglan, M.S., Valencia, M., Cocchi, G., Pacheco, M., Ashour, A.M., Amr, K.S., Helmy, S.M., El-Gammal, M.A., Wright, M., Lapunzina, P., Goodship, J.A. and Ruiz-Perez, V.L. 2008. Long interspersed nuclear element-1 (LINE1)-mediated deletion of EVC, EVC2, C4orf6, and STK32B in Ellis-van Creveld syndrome with borderline intelligence. *Hum. Mutat.* 29: 931-938.
- Trynka, G., Zhernakova, A., Romanos, J., Franke, L., Hunt, K., Turner, G., Platteel, M., Ryan, A.W., de Kovel, C., Barisani, D., Bardella, M.T., McManus, R., Van Heel, D.A. and Wijmenga, C. 2009. Coeliac disease associated risk variants in TNFAIP3 and REL implicate altered NFκB signalling. *Gut* E-published.

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.

CHROMOSOMAL LOCATION

Genetic locus: STK32B (human) mapping to 4p16.2.

SOURCE

YANK2 (H-44) is a rabbit polyclonal antibody raised against amino acids 371-414 mapping at the C-terminus of YANK2 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.

APPLICATIONS

YANK2 (H-44) is recommended for detection of YANK2 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for YANK2 siRNA (h): sc-76940, YANK2 shRNA Plasmid (h): sc-76940-SH and YANK2 shRNA (h) Lentiviral Particles: sc-76940-V.

Molecular Weight of YANK2: 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.

RESEARCH USE

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


 MONOS
Satisfaction
Guaranteed

Try **YANK2 (4A7): sc-517186**, our highly recommended monoclonal alternative to YANK2 (H-44).