

STK32C (Y-15): sc-165614

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. STK32C (serine/threonine kinase 32C), also known as PKE or YANK3, is a 486 amino acid protein belonging to the Ser/Thr protein kinase family. It contains one protein kinase domain and, using magnesium as a cofactor, STK32C catalyzes the conversion of ATP to ADP while transferring a phosphate to its target protein. Due to alternative splicing events, two isoforms exist for STK32C.

REFERENCES

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2. 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.
3. Lagerström, M.C., Rabe, N., Haitina, T., Kalnina, I., Hellström, A.R., Klovins, J., Kullander, K. and Schiöth, H.B. 2007. The evolutionary history and tissue mapping of GPR123: specific CNS expression pattern predominantly in thalamic nuclei and regions containing large pyramidal cells. *J. Neurochem.* 100: 1129-1142.
4. Purcarea, C., Fernando, R., Evans, H.G. and Evans, D.R. 2008. The sole serine/threonine protein kinase and its cognate phosphatase from *Aquifex aeolicus* targets Pyrimidine biosynthesis. *Mol. Cell. Biochem.* 311: 199-213.

CHROMOSOMAL LOCATION

Genetic locus: STK32C (human) mapping to 10q26.3; Stk32c (mouse) mapping to 7 F4.

SOURCE

STK32C (Y-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of STK32C 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-165614 P, (100 µg 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.

APPLICATIONS

STK32C (Y-15) is recommended for detection of STK32C 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); non cross-reactive with STK32A.

STK32C (Y-15) is also recommended for detection of STK32C in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for STK32C siRNA (h): sc-90587, STK32C siRNA (m): sc-153898, STK32C shRNA Plasmid (h): sc-90587-SH, STK32C shRNA Plasmid (m): sc-153898-SH, STK32C shRNA (h) Lentiviral Particles: sc-90587-V and STK32C shRNA (m) Lentiviral Particles: sc-153898-V.

Molecular Weight of STK32C: 55 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

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.

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.



Try **STK32C (18-56): sc-100439**, our highly recommended monoclonal alternative to STK32C (Y-15).