SANTA CRUZ BIOTECHNOLOGY, INC.

STK32C (C-6): sc-518228

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

1. Strausberg, R.L., et al. 2002. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Proc. Natl. Acad. Sci. USA 99: 16899-16903.
2. Manning, G., et al. 2002. The protein kinase complement of the human genome. Science 298: 1912-1934.
3. Lagerström, M.C., et al. 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., et al. 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 (C-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 41-61 of STK32C of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STK32C (C-6) is available conjugated to agarose (sc-518228 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-518228 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518228 PE), fluorescein (sc-518228 FITC), Alexa Fluor® 488 (sc-518228 AF488), Alexa Fluor® 546 (sc-518228 AF546), Alexa Fluor® 594 (sc-518228 AF594) or Alexa Fluor® 647 (sc-518228 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-518228 AF680) or Alexa Fluor® 790 (sc-518228 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

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

APPLICATIONS

STK32C (C-6) is recommended for detection of STK32C of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 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.

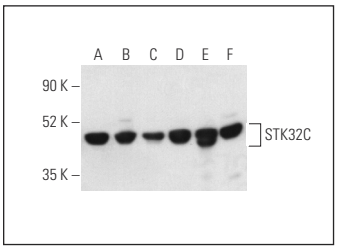
Molecular Weight of STK32C: 55 kDa.

Positive Controls: THP-1 cell lysate: sc-2238, Raji whole cell lysate: sc-364236 or A549 cell lysate: sc-2413.

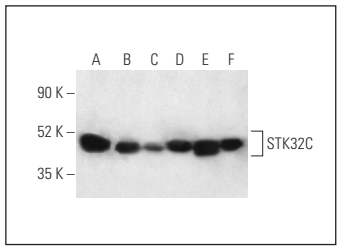
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



STK32C (C-6): sc-518228. Western blot analysis of STK32C expression in THP-1 (**A**), Raji (**B**), HEK293T (**C**), Jurkat (**D**), A549 (**E**) and NIH/3T3 (**F**) whole cell lysates. Detection reagent used: m-IgG_1 BP-HRP: sc-525408.



STK32C (C-6): sc-518228. Western blot analysis of STK32C expression in THP-1 (**A**), Raji (**B**), HEK293T (**C**), Jurkat (**D**), A549 (**E**) and NIH/3T3 (**F**) whole cell lysates. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.

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 for detailed protocols and support products.