

# YANK2 (E-19): sc-82430

## 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

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- Hanks, S.K., et al. 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., et al. 2000. Mutations in a new gene in Ellis-van Creveld syndrome and Weyers acrodistal dysostosis. *Nat. Genet.* 24: 283-286.
- Manning, G., et al. 2002. The protein kinase complement of the human genome. *Science* 298: 1912-1934.
- Temtamy, S.A., et al. 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.

## CHROMOSOMAL LOCATION

Genetic locus: STK32B (human) mapping to 4p16.2; Stk32b (mouse) mapping to 5 B3.

## SOURCE

YANK2 (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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.

Blocking peptide available for competition studies, sc-82430 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.

## RESEARCH USE

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

## APPLICATIONS

YANK2 (E-19) is recommended for detection of YANK2 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

YANK2 (E-19) is also recommended for detection of YANK2 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for YANK2 siRNA (h): sc-76940, YANK2 siRNA (m): sc-76941, YANK2 shRNA Plasmid (h): sc-76940-SH, YANK2 shRNA Plasmid (m): sc-76941-SH, YANK2 shRNA (h) Lentiviral Particles: sc-76940-V and YANK2 shRNA (m) Lentiviral Particles: sc-76941-V.

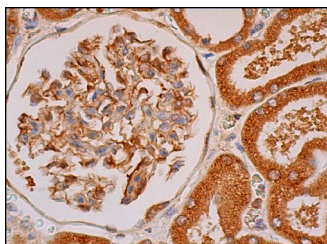
Molecular Weight of YANK2: 48 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209.

## 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



YANK2 (E-19): sc-82430. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic and membrane staining of cells in glomeruli and cytoplasmic staining of cells in tubules.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.