

STK36 (P-14): sc-169454

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. STK36 (serine/threonine-protein kinase 36), also known as fused homolog (FU), is a 1,315 amino acid protein that contains one protein kinase domain and belongs to the protein kinase superfamily and Ser/Thr protein kinase family. Localizing to nucleus and cytoplasm, STK36 is expressed at high levels in germ cells of adult testis, and at low levels in fetal tissues and adult ovaries. Utilizing magnesium as a cofactor, STK36 may play a role in Desert, Sonic and Indian hedgehog signaling pathways, and may be of use as a potential treatment of Hedgehog-dependent cancers. STK36 exists as two alternatively spliced isoforms.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: STK36 (human) mapping to 2q35; Stk36 (mouse) mapping to 1 C3.

RESEARCH USE

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

SOURCE

STK36 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of STK36 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-169454 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

STK36 (P-14) is recommended for detection of STK36 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 other STK family members.

STK36 (P-14) is also recommended for detection of STK36 in additional species, including canine and porcine.

Suitable for use as control antibody for STK36 siRNA (h): sc-95012, STK36 siRNA (m): sc-153900, STK36 shRNA Plasmid (h): sc-95012-SH, STK36 shRNA Plasmid (m): sc-153900-SH, STK36 shRNA (h) Lentiviral Particles: sc-95012-V and STK36 shRNA (m) Lentiviral Particles: sc-153900-V.

Molecular Weight of STK36 isoform 1: 144 kDa.

Molecular Weight of STK36 isoform 2: 142 kDa.

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.

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.