SANTA CRUZ BIOTECHNOLOGY, INC.

SGK3 (G-17): sc-47394

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Serine/threonine-protein kinase Sgk3 (SGK3), also designated serum/glucocorticoid regulated kinase 3, belongs to the Ser/Thr protein kinase family of proteins. The serum- and glucocorticoid-regulated kinase proteins are closely related to the Akt protein family. SGK1, a homolog of SGK3, activates ion channels, in particular potassium (K^+) channels. SGK2 and SGK3 have been found to also be involved in this activation process, making all three of these proteins important regulators for cell proliferation, epithelial transport and neuromuscular excitability. SGK3 acts as a mediator of IL-3 dependent survival signals in the cell. It localizes to the early endosome and in vesicle-like structures. SGK3 is a widely expressed protein, but it is primarily detected in kidney, liver, pancreas, brain and heart. Phosphorylation of SGK3 at residue Ser 486 leads to an increase in SGK3 activation.

CHROMOSOMAL LOCATION

Genetic locus: SGK3 (human) mapping to 8q13.1; Sgk2 (mouse) mapping to 1 A2.

SOURCE

SGK3 (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SGK3 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-47394 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

SGK3 (G-17) is recommended for detection of SGK3 of mouse, rat and 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).

SGK3 (G-17) is also recommended for detection of SGK3 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for SGK3 siRNA (h): sc-44852, SGK3 siRNA (m): sc-44853, SGK3 shRNA Plasmid (h): sc-44852-SH, SGK3 shRNA Plasmid (m): sc-44853-SH, SGK3 shRNA (h) Lentiviral Particles: sc-44852-V and SGK3 shRNA (m) Lentiviral Particles: sc-44853-V.

Molecular Weight of full length SGK3: 65 kDa.

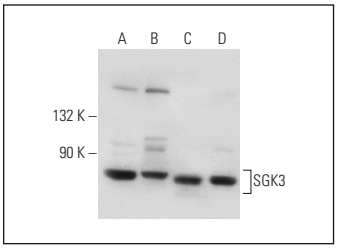
Molecular Weight of SGK3 partial product: 53 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MIA PaCa-2 cell lysate: sc-2285 or A-375 cell lysate: sc-3811.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



SGK3 (G-17): sc-47394. Western blot analysis of SGK3 expression in MIA PaCa-2 (**A**), KNRK (**B**), Hep G2 (**C**) and Caki-1 (**D**) whole cell lysates.

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.

MONOS Satisfaction Guaranteed

Try **SGK3 (C-6): sc-166847**, our highly recommended monoclonal alternative to SGK3 (G-17).