SANTA CRUZ BIOTECHNOLOGY, INC.

QSK (L-12): sc-138570



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. The salt-inducible kinases (SIKs) are a family of related serine-threonine kinases and are key enzymes that modulate important processes such as steroid hormone biosynthesis and Insulin signaling in adipocytes. QSK, also known as L19 or SIK3 (salt-inducible kinase 3), is a 1,263 amino acid cytoplasmic protein belonging to the protein kinase superfamily, CAMK Ser/Thr protein kinase family and the AMPK subfamily. Ubiquitously expressed, QSK consists of one protein kinase domain and a UBA domain. QSK is activated by 14-3-3 ζ and utilizes magnesium as a cofactor. QSK exists as three alternatively spliced isoforms.

CHROMOSOMAL LOCATION

Genetic locus: SIK3 (human) mapping to 11q23.3; Sik3 (mouse) mapping to 9 A5.2.

SOURCE

QSK (L-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of QSK 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-138570 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

QSK (L-12) is recommended for detection of QSK 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).

Suitable for use as control antibody for QSK siRNA (h): sc-97056, QSK siRNA (m): sc-141570, QSK shRNA Plasmid (h): sc-97056-SH, QSK shRNA Plasmid (m): sc-141570-SH, QSK shRNA (h) Lentiviral Particles: sc-97056-V and QSK shRNA (m) Lentiviral Particles: sc-141570-V.

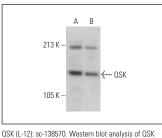
Molecular Weight of QSK: 140 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or HEK293 whole cell lysate: sc-45136.

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



expression in HeLa (A) and HEK293 (B) 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.

