

SIK2 (C-18): sc-33074

BACKGROUND

QIK (qin-induced kinase) is a serine/threonine-protein kinase that belongs to the AMPK/SNF1 kinase family. Also designated SIK2 (SNF1-like kinase 2), QIK is one of twelve human kinases (NUAK1, NUAK2, BRSK1, BRSK2, QIK, QSK, SIK, MARK1, MARK2, MARK3, MARK4 and MELK) related to AMPK. QIK is an ubiquitously expressed protein and is rapidly upregulated after a hormone-regulated form of Qin is activated. *In vitro* kinase tests demonstrate that QIK is capable of autophosphorylation. Elevated levels of QIK transcripts are also observed in Src-transformed cells, suggesting that Src and Qin share some targets.

REFERENCES

1. Nagase, T., et al. 1998. Prediction of the coding sequences of unidentified human genes. XI. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. DNA Res. 5: 277-286.
2. Xia, Y., et al. 2000. The new serine-threonine kinase, QIK, is a target of the Qin oncogene. Biochem. Biophys. Res. Commun. 276: 564-570.

CHROMOSOMAL LOCATION

Genetic locus: SNF1LK2 (human) mapping to 11q23.1; Snf1lk2 (mouse) mapping to 9 A5.3 .

SOURCE

SIK2 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of SIK2 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-33074 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SIK2 (C-18) is recommended for detection of SIK2 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), 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).

SIK2 (C-18) is also recommended for detection of SIK2 in additional species, including equine and bovine.

Suitable for use as control antibody for SIK2 siRNA (h): sc-44364, SIK2 siRNA (m): sc-44365, SIK2 shRNA Plasmid (h): sc-44364-SH, SIK2 shRNA Plasmid (m): sc-44365-SH, SIK2 shRNA (h) Lentiviral Particles: sc-44364-V and SIK2 shRNA (m) Lentiviral Particles: sc-44365-V.

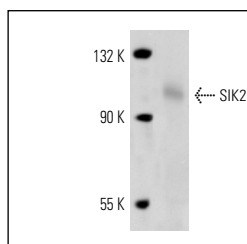
Molecular Weight of SIK2: 104 kDa.

Positive Controls: PC-12 cell lysate: sc-2250.

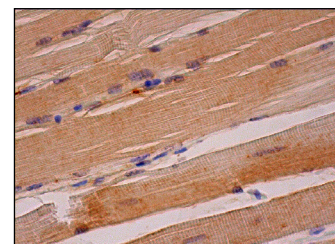
RECOMMENDED SECONDARY REAGENTS

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

DATA



SIK2 (C-18): sc-33074. Western blot analysis of SIK2 expression in PC-12 whole cell lysate.



SIK2 (C-18): sc-33074. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal muscle tissue showing cytoplasmic staining of myocytes.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **SIK2 (B-12): sc-393139**, our highly recommended monoclonal alternative to SIK2 (C-18).