

SLK (C-18): sc-79068

BACKGROUND

SLK (Ste20-like kinase), also known as STK2 (serine/threonine protein kinase 2) or se20-9, is a member of the serine/threonine kinase subfamily, Ste20. This subfamily is comprised of several mammalian kinases which exhibit sequence similarity to the *Saccharomyces cerevisiae* serine/threonine kinase Ste20, a protein involved in relaying signals from G protein-coupled receptors to cytosolic MAP kinase cascades. Members of this subfamily include KHS, GLK, YSK1, HPK1, Krs-1, Krs-2, GC kinase, HGK and SLK. SLK is a ubiquitously expressed protein that localizes to the cytoplasm and contains an N-terminal protein kinase domain, a central coiled-coil domain and a C-terminal ATH domain. SLK is activated through cleavage by caspase-3. SLK indirectly associates with microtubules and plays an important role in cellular stress, cell motility, cell death and cytoskeletal dynamics.

REFERENCES

- Zhang, Y.H., et al. 2002. Expression of the Ste20-like kinase SLK during embryonic development and in the murine adult central nervous system. *Brain Res. Dev. Brain Res.* 139: 205-215.
- Wagner, S., et al. 2002. Association of the Ste20-like kinase (SLK) with the microtubule. Role in Rac1-mediated regulation of Actin dynamics during cell adhesion and spreading. *J. Biol. Chem.* 277: 37685-37692.
- Cybulsky, A.V., et al. 2004. Renal expression and activity of the germinal center kinase SK2. *Am. J. Physiol. Renal Physiol.* 286: 16-25.
- Storbeck, C.J., et al. 2004. Ste20-like kinase SLK displays myofiber type specificity and is involved in C2C12 myoblast differentiation. *Muscle Nerve* 29: 553-564.
- O'Reilly, P.G., et al. 2005. The Ste20-like kinase SLK is required for cell cycle progression through G₂. *J. Biol. Chem.* 280: 42383-42390.

CHROMOSOMAL LOCATION

Genetic locus: SLK (human) mapping to 10q24.33; Slk (mouse) mapping to 19 D1.

SOURCE

SLK (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of SLK 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-79068 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

SLK (C-18) is recommended for detection of SLK of mouse 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).

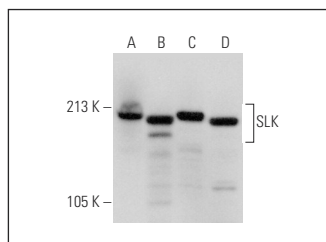
SLK (C-18) is also recommended for detection of SLK in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SLK siRNA (h): sc-76514, SLK siRNA (m): sc-76515, SLK shRNA Plasmid (h): sc-76514-SH, SLK shRNA Plasmid (m): sc-76515-SH, SLK shRNA (h) Lentiviral Particles: sc-76514-V and SLK shRNA (m) Lentiviral Particles: sc-76515-V.

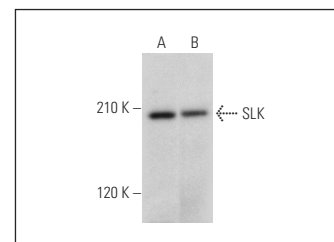
Molecular Weight of SLK: 200 kDa.

Positive Controls: mouse cerebellum extract: sc-2403, HeLa nuclear extract: sc-2120 or COLO 205 whole cell lysate: sc-364177.

DATA



SLK (C-18): sc-79068. Western blot analysis of SLK expression in mouse cerebellum (A) and human tonsil (B) tissue extracts and COLO 205 (C) and Hep G2 (D) whole cell lysates.



SLK (C-18): sc-79068. Western blot analysis of SLK expression in HEK293 (A) and A549 (B) whole cell lysates.

PROTOCOLS

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



Try **SLK (G-9): sc-515493** or **SLK (38): sc-136441**, our highly recommended monoclonal alternatives to SLK (C-18).