SANTA CRUZ BIOTECHNOLOGY, INC.

SBK2 (G-19): sc-244075



The Power to Question

BACKGROUND

SBK2 (SH3-binding domain kinase family, member 2) is a 348 amino acid protein that belongs to the protein kinase superfamily, the Ser/Thr protein kinase family and the STKL subfamily. SBK2 contains one protein kinase domain. The SBK2 gene is conserved in chimpanzee, bovine, mouse, rat, chicken and zebrafish, and maps to human chromosome 19q13.42. Chromosome 19 consists of approximately 63 million bases and makes up over 2% of human genomic DNA. Chromosome 19 includes a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fc α receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulindependent diabetes have been linked to chromosome 19.

REFERENCES

- Phillips, E., et al. 1989. A radioimmunoassay for bradykinin based on monoclonal antibodies. J. Neuroimmunol. 23: 179-185.
- 2. Trettel, F., et al. 2000. A fine physical map of the CACNA1A gene region on 19p13.1-p13.2 chromosome. Gene 241: 45-50.
- Buchet-Poyau, K., et al. 2002. Search for the second Peutz-Jeghers syndrome locus: exclusion of the STK13, PRKCG, KLK10, and PSCD2 genes on chromosome 19 and the STK11IP gene on chromosome 2. Cytogenet. Genome Res. 97: 171-178.
- Moodie, S.J., et al. 2002. Analysis of candidate genes on chromosome 19 in coeliac disease: an association study of the KIR and LILR gene clusters. Eur. J. Immunogenet. 29: 287-291.
- 5. Grimwood, J., et al. 2004. The DNA sequence and biology of human chromosome 19. Nature 428: 529-535.
- Brocke-Heidrich, K., et al. 2006. BCL3 is induced by IL-6 via Stat3 binding to intronic enhancer HS4 and represses its own transcription. Oncogene 25: 7297-7304.
- 7. Vikelis, M., et al. 2007. A novel CADASIL-causing mutation in a stroke patient. Swiss Med. Wkly. 137: 323-325.

CHROMOSOMAL LOCATION

Genetic locus: SBK2 (human) mapping to 19q13.42; Sbk2 (mouse) mapping to 7 A1.

SOURCE

SBK2 (G-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SBK2 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-244075 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SBK2 (G-19) is recommended for detection of SBK2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

SBK2 (G-19) is also recommended for detection of SBK2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SBK2 siRNA (m): sc-145469, SBK2 shRNA Plasmid (m): sc-145469-SH and SBK2 shRNA (m) Lentiviral Particles: sc-145469-V.

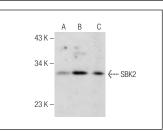
Molecular Weight of SBK2: 38 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, MDA-MB-231 cell lysate: sc-2232 or human kidney tissue extract.

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



SBK2 (G-19): sc-244075. Western blot analysis of SBK2 expression in NIH/3T3 (A) and MDA-MB-231 (B) whole cell lysates and human kidney tissue extract (C).

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.