

SBK1 (N-15): sc-244071

BACKGROUND

SBK1 (SH3-binding domain kinase 1), also known as Sbk or serine/threonine-protein kinase SBK1, is a 424 amino acid cytoplasmic protein that is thought to play a role in signal-transduction pathways during brain development. A member of the serine/threonine-protein kinase family and protein kinase superfamily, SBK1 contains one protein kinase domain and is encoded by a gene that maps to human chromosome 16p11.2. Chromosome 16 encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

1. Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. *Nat. Genet.* 26: 370-374.
2. Nara, K., et al. 2001. Cloning and characterization of a novel serine/threonine protein kinase gene expressed predominantly in developing brain. *Eur. J. Biochem.* 268: 2642-2651.
3. Kuhlenbäumer, G., et al. 2002. Giant axonal neuropathy (GAN): case report and two novel mutations in the gigaxonin gene. *Neurology* 58: 1273-1276.
4. Cho, J.H. 2004. Advances in the genetics of inflammatory bowel disease. *Curr. Gastroenterol. Rep.* 6: 467-473.
5. Mathew, C.G., et al. 2004. Genetics of inflammatory bowel disease: progress and prospects. *Hum. Mol. Genet.* 13 Spec. No. 1: R161-R168.
6. Linkermann, A., et al. 2009. Identification of interaction partners for individual SH3 domains of Fas ligand associated members of the PCH protein family in T lymphocytes. *Biochim. Biophys. Acta* 1794: 168-176
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CHROMOSOMAL LOCATION

Genetic locus: SBK1 (human) mapping to 16p11.2.

SOURCE

SBK1 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of SBK1 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-244071 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

SBK1 (N-15) is recommended for detection of SBK1 of 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); non cross-reactive with SBK2.

Suitable for use as control antibody for SBK1 siRNA (h): sc-93038, SBK1 shRNA Plasmid (h): sc-93038-SH and SBK1 shRNA (h) Lentiviral Particles: sc-93038-V.

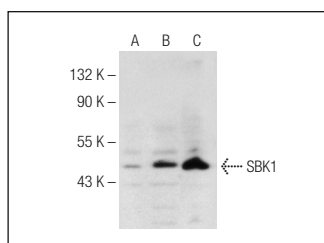
Molecular Weight of SBK1: 46 kDa.

Positive Controls: SBK1 (m): 293T Lysate: sc-127512 or Y79 cell lysate: sc-2240.

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



SBK1 (N-15): sc-244071. Western blot analysis of SBK1 expression in non-transfected 293T: sc-117752 (A), mouse SBK1 transfected 293T: sc-127512 (B) and Y79 (C) whole cell lysates.

STORAGE

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

PROTOCOLS

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