SANTA CRUZ BIOTECHNOLOGY, INC.

SBNO2 (N-14): sc-240849



BACKGROUND

SBN02 (protein strawberry notch homolog 2) is a 1,366 amino acid protein that belongs to the SBN0 family. Detected in macrophages, SBN02 seems to have transcriptional repression activity. SBN02 and ETV3 are components of the pathways that contribute to the downstream anti-inflammatory effects of IL-10. The expression of SBN02 is regulated by IL-10 in a STAT3-dependent way. Existing as two alternatively spliced isoforms, the SBN02 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish and *C. elegans*, and maps to human chromosome 19p13.3. GPx-4 and LKB1 are neighbors of SBN02 on chromosome 19. Chromosome 19 consists of approximately 63 million bases and makes up over 2% of human genomic DNA. 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 Insulin-dependent diabetes have been linked to chromosome 19.

REFERENCES

- Moodie, S.J., Norman, P.J., King, A.L., Fraser, J.S., Curtis, D., Ellis, H.J., Vaughan, R.W. and Ciclitira, P.J. 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.
- Grimwood, J., Gordon, L.A., Olsen, A., Terry, A., Schmutz, J., Lamerdin, J., Hellsten, U., Goodstein, D., Couronne, O., Tran-Gyamfi, M., Aerts, A., Altherr, M., Ashworth, L., Bajorek, E., Black, S., Branscomb, E., Caenepeel, S., Carrano, A., Caoile, C., Chan, Y.M., et al. 2004. The DNA sequence and biology of human chromosome 19. Nature 428: 529-535.
- El Kasmi, K.C., Smith, A.M., Williams, L., Neale, G., Panopoulos, A.D., Panopolous, A., Watowich, S.S., Häcker, H., Foxwell, B.M. and Murray, P.J. 2007. Cutting edge: A transcriptional repressor and corepressor induced by the STAT3-regulated anti-inflammatory signaling pathway. J. Immunol. 179: 7215-7219.
- Vikelis, M., Papatriantafyllou, J. and Karageorgiou, C.E. 2007. A novel CADASIL-causing mutation in a stroke patient. Swiss Med. Wkly. 137: 323-325.
- 5. Papp, J., Kovacs, M.E., Solyom, S., Kasler, M., Børresen-Dale, A.L. and Olah, E. 2010. High prevalence of germline STK11 mutations in Hungarian Peutz-Jeghers Syndrome patients. BMC Med. Genet. 11: 169.
- McCabe, M.T., Powell, D.R., Zhou, W. and Vertino, P.M. 2010. Homozygous deletion of the STK11/LKB1 locus and the generation of novel fusion transcripts in cervical cancer cells. Cancer Genet. Cytogenet. 197: 130-141.

CHROMOSOMAL LOCATION

Genetic locus: SBNO2 (human) mapping to 19p13.3; Sbno2 (mouse) mapping to 10 C1.

SOURCE

SBNO2 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SBNO2 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-240849 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-240849 X, 200 μ g/0.1 ml.

APPLICATIONS

SBN02 (N-14) is recommended for detection of SBN02 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 SBN01.

SBN02 (N-14) is also recommended for detection of SBN02 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for SBNO2 siRNA (h): sc-97340, SBNO2 siRNA (m): sc-153234, SBNO2 shRNA Plasmid (h): sc-97340-SH, SBNO2 shRNA Plasmid (m): sc-153234-SH, SBNO2 shRNA (h) Lentiviral Particles: sc-97340-V and SBNO2 shRNA (m) Lentiviral Particles: sc-153234-V.

SBN02 (N-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of SBN02 isoforms: 150/152 kDa.

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) Immunofluo-rescence: 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.

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.

MONOS Satisfation Guaranteed

Try **SBN02 (A-3):** sc-515634, our highly recommended monoclonal alternative to SBN02 (N-14).