SANTA CRUZ BIOTECHNOLOGY, INC.

SPINK6 (T-14): sc-139066



BACKGROUND

SPINK6 (serine peptidase inhibitor, Kazal type 6), also known as BUSI2, is an 80 amino acid secreted protein that contains one kazal-like domain and is thought to function as a serine protease inhibitor. The gene encoding SPINK6 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also associated with chromosome 5 and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

- Dixon, M.J., Read, A.P., Donnai, D., Colley, A., Dixon, J. and Williamson, R. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. Am. J. Hum. Genet. 49: 17-22.
- Joslyn, G., Carlson, M., Thliveris, A., Albertsen, H., Gelbert, L., Samowitz, W., Groden, J., Stevens, J., Spirio, L. and Robertson, M. 1991. Identification of deletion mutations and three new genes at the familial polyposis locus. Cell 66: 601-613.
- Kinzler, K.W., Nilbert, M.C., Su, L.K., Vogelstein, B., Bryan, T.M., Levy, D.B., Smith, K.J., Preisinger, A.C., Hedge, P. and McKechnie, D. 1991. Identification of FAP locus genes from chromosome 5q21. Science 253: 661-665.
- Nishisho, I., Nakamura, Y., Miyoshi, Y., Miki, Y., Ando, H., Horii, A., Koyama, K., Utsunomiya, J., Baba, S. and Hedge, P. 1991. Mutations of chromosome 5q21 genes in FAP and colorectal cancer patients. Science 253: 665-669.
- Prieschl, E.E., Pendl, G.G., Harrer, N.E. and Baumruker, T. 1996. The murine homolog of TB2/DP1, a gene of the familial adenomatous polyposis (FAP) locus. Gene 169: 215-218.
- Puente, X.S. and López-Otín, C. 2004. A genomic analysis of rat proteases and protease inhibitors. Genome Res. 14: 609-622.
- Shin, S.M., Chung, Y.J., Oh, S.T., Jeon, H.M., Hwang, L.J., Namkoong, H., Kim, H.K., Cho, G.W., Hur, S.Y., Kim, T.E., Lee, Y.S., Park, Y.G., Ko, J. and Kim, J.W. 2006. HCCR-1-interacting molecule "deleted in polyposis 1" plays a tumor-suppressor role in colon carcinogenesis. Gastroenterology 130: 2074-2086.

CHROMOSOMAL LOCATION

Genetic locus: SPINK6 (human) mapping to 5q32; Spink6 (mouse) mapping to 18 B3.

SOURCE

SPINK6 (T-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SPINK6 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139066 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SPINK6 (T-14) is recommended for detection of SPINK6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other SPINK family members.

SPINK6 (T-14) is also recommended for detection of SPINK6 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for SPINK6 siRNA (h): sc-91966, SPINK6 siRNA (m): sc-153767, SPINK6 shRNA Plasmid (h): sc-91966-SH, SPINK6 shRNA Plasmid (m): sc-153767-SH, SPINK6 shRNA (h) Lentiviral Particles: sc-91966-V and SPINK6 shRNA (m) Lentiviral Particles: sc-153767-V.

Molecular Weight of SPINK6: 9 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **D0 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.