SANTA CRUZ BIOTECHNOLOGY, INC.

SPINK5L3 (G-16): sc-248681



BACKGROUND

SPINK5L3 (serine protease inhibitor Kazal-type 5-like 3), also known as SPINK13 (serine peptidase inhibitor, Kazal type 13), LiESP6, HESPINTOR and HBVDNAPTP1 (hepatitis B virus DNA polymerase transactivated serine protease inhibitor), is a 94 amino acid secreted protein that contains one Kazallike domain and exists as 2 alternatively spliced isoforms. SPINK5L3 may function as a serine protease inhibitor. The gene that encodes SPINK5L3 maps to the human chromosome 5q32, the cytogenetic region of human chromosome 5, which is thought to be associated with hereditary disorders such as Netherton disease and immune system conditions such as type 1 diabetes and atopic dermatitis. With 181 million base pairs encoding around 1,000 genes, chromosome 5 is about 6% of human genomic DNA. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome and deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

- Chavanas, S., et al. 2000. Localization of the Netherton syndrome gene to chromosome 5q32, by linkage analysis and homozygosity mapping. Am. J. Hum. Genet. 66: 914-921.
- Nishio, Y., et al. 2003. Association between polymorphisms in the SPINK5 gene and atopic dermatitis in the Japanese. Genes Immun. 4: 515-517.
- Chao, S.C., et al. 2003. A compound heterozygous mutation of the SPINK5 gene in a Taiwanese boy with Netherton syndrome. J. Formos. Med. Assoc. 102: 418-423.
- 4. South, S.T., et al. 2006. A new genomic mechanism leading to Cri-du-chat syndrome. Am. J. Med. Genet. A 140: 2714-2720.
- Smyth, D.J., et al. 2006. Analysis of polymorphisms in 16 genes in type 1 diabetes that have been associated with other immune-mediated diseases. BMC Med. Genet. 7: 20.
- Wapenaar, M.C., et al. 2007. The SPINK gene family and celiac disease susceptibility. Immunogenetics 59: 349-357.
- Komatsu, N., et al. 2008. Correlation between SPINK5 gene mutations and clinical manifestations in Netherton syndrome patients. J. Invest. Dermatol. 128: 1148-1159.

CHROMOSOMAL LOCATION

Genetic locus: SPINK13 (human) mapping to 5q32.

SOURCE

SPINK5L3 (G-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SPINK5L3 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-248681 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SPINK5L3 (G-16) is recommended for detection of SPINK5L3 of 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 SPINK5L2.

Suitable for use as control antibody for SPINK5L3 siRNA (h): sc-92047, SPINK5L3 shRNA Plasmid (h): sc-92047-SH and SPINK5L3 shRNA (h) Lentiviral Particles: sc-92047-V.

Molecular Weight of SPINK5L3 isoforms: 11/6 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.

PROTOCOLS

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