

SPINK14 (P-12): sc-136903

BACKGROUND

SPINK14 (serine peptidase inhibitor, Kazal type 14), also known as SPINK5L2 (serine protease inhibitor Kazal-type 5-like 2), is a 97 amino acid secreted protein that contains a Kazal-like serine protease inhibitor domain. Kazal-type serine proteinase inhibitors (SPINKs) are a family of protein molecules that contain at least one conserved Kazal domain with six cysteine residues forming three disulfide bonds in a 1-5, 2-4, and 3-6 pattern. The SPINK family has nine gene members in the human genome known as SPINK1, SPINK2, SPINK4, SPINK5, SPINK5L2 (SPINK14), SPINK5L3, SPINK6, SPINK7 and SPINK9. The gene that encodes SPINK14 maps to the 5q32 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.

REFERENCES

1. 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.
2. Nishio, Y., et al. 2003. Association between polymorphisms in the SPINK5 gene and atopic dermatitis in the Japanese. *Genes Immun.* 4: 515-517.
3. Puente, X.S., et al. 2004. A genomic analysis of rat proteases and protease inhibitors. *Genome Res.* 14: 609-622.
4. 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.
5. Wapenaar, M.C., et al. 2007. The SPINK gene family and celiac disease susceptibility. *Immunogenetics* 59: 349-357.
6. Chen, T., et al. 2009. Identification of trypsin-inhibitory site and structure determination of human SPINK2 serine proteinase inhibitor. *Proteins* 77: 209-219.

CHROMOSOMAL LOCATION

Genetic locus: SPINK14 (human) mapping to 5q32.

SOURCE

SPINK14 (P-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SPINK14 of human origin.

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.

PRODUCT

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

Blocking peptide available for competition studies, sc-136903 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SPINK14 (P-12) is recommended for detection of SPINK14 of 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).

Suitable for use as control antibody for SPINK14 siRNA (h): sc-91879, SPINK14 shRNA Plasmid (h): sc-91879-SH and SPINK14 shRNA (h) Lentiviral Particles: sc-91879-V.

Molecular Weight of SPINK14: 11 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) Immunofluorescence: 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.