

LEKTI (N-15): sc-30847

BACKGROUND

Lympho-epithelial Kazal-type inhibitor (LEKTI) is a serine protease inhibitor which protects mucous epithelia against microbial attack and inflammation. LEKTI is a marker of epithelial differentiation and expresses strongly in the granular and uppermost spinous layers of the epidermis and differentiated layers of stratified epithelia. Defects in SPINK5, the gene encoding LEKTI, are the cause of Netherton syndrome, a severe autosomal recessive disorder characterized by atopic dermatitis, hayfever and other conditions.

REFERENCES

- Magert, H.J., et al. 1999. LEKTI, a novel 15-domain type of human serine proteinase inhibitor. *J. Biol. Chem.* 274: 21499-21502.
- Walden, M., et al. 2002. Biochemical features, molecular biology and clinical relevance of the human 15-domain serine proteinase inhibitor LEKTI. *Biol. Chem.* 383: 1139-1141.
- Magert, H.J., et al. 2002. LEKTI: a multidomain serine proteinase inhibitor with pathophysiological relevance. *Int. J. Biochem. Cell. Biol.* 34: 573-576.
- Lauber, T., et al. 2003. Homologous proteins with different folds: the three-dimensional structures of domains 1 and 6 of the multiple Kazal-type inhibitor LEKTI. *J. Mol. Biol.* 328: 205-219.
- Mitsudo, K., et al. 2003. Inhibition of serine proteinases plasmin, trypsin, subtilisin A, cathepsin G, and elastase by LEKTI: a kinetic analysis. *Biochemistry* 42: 3874-3881.
- Bitoun, E., et al. 2003. LEKTI proteolytic processing in human primary keratinocytes, tissue distribution and defective expression in Netherton syndrome. *Hum. Mol. Genet.* 12: 2417-2430.
- SWISS-PROT/TrEMBL (Q9NQ38). World Wide Web URL: <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>

CHROMOSOMAL LOCATION

Genetic locus: SPINK5 (human) mapping to 5q33.1.

SOURCE

LEKTI (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of LEKTI 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-30847 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

LEKTI (N-15) is recommended for detection of LEKTI precursor and HF6478 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).

Suitable for use as control antibody for LEKTI siRNA (h): sc-45358, LEKTI shRNA Plasmid (h): sc-45358-SH and LEKTI shRNA (h) Lentiviral Particles: sc-45358-V.

Molecular Weight (predicted) of LEKTI: 120 kDa.

Molecular Weight (observed) of full-length LEKTI: 130 kDa.

Molecular Weight (observed) of LEKTI fragments: 80/72/40 kDa.

Positive Controls: CCD-1064Sk cell lysate: sc-2263, HeLa whole cell lysate: sc-2200 or SK-N-SH cell lysate: sc-2410.

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) 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.

PROTOCOLS

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



Try **LEKTI (E-9): sc-137109** or **LEKTI (F-2): sc-166604**, our highly recommended monoclonal alternatives to LEKTI (N-15).