

LEKTI (F-2): sc-166604

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

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- 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.
- 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.
- 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.
- 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 5q32.

SOURCE

LEKTI (F-2) is a mouse monoclonal antibody raised against amino acids 261-560 mapping within an internal region of LEKTI of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO 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 for detailed protocols and support products.

APPLICATIONS

LEKTI (F-2) is recommended for detection of LEKTI precursor and mature form and HF7665 active peptide of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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.

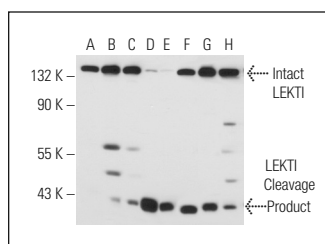
Molecular Weight (observed) of LEKTI fragments: 80/72/40 kDa.

Positive Controls: Hs 732.Sk/Mu whole cell lysate: sc-364362, CCD-1064Sk cell lysate: sc-2263 or SK-N-SH cell lysate: sc-2410.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



LEKTI (F-2): sc-166604. Western blot analysis of LEKTI expression in HeLa (A), SK-N-SH (B), CCD-1064Sk (C), Hs 732.Sk/Mu (D), SCC-4 (E), C32 (F), BJ (G) and U-698-M (H) whole cell lysates.

SELECT PRODUCT CITATIONS

- Miyai, M., et al. 2014. Keratinocyte-specific mesotrypsin contributes to the desquamation process via kallikrein activation and LEKTI degradation. *J. Invest. Dermatol.* 134: 1665-1674.

RESEARCH USE

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