# LEKTI (E-9): sc-137109



The Power to Question

## **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.

## **CHROMOSOMAL LOCATION**

Genetic locus: SPINK5 (human) mapping to 5q32; Spink5 (mouse) mapping to 18 B3.

## **SOURCE**

LEKTI (E-9) 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  $\mu g \ lgG_{2a}$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

LEKTI (E-9) is available conjugated to agarose (sc-137109 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-137109 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-137109 PE), fluorescein (sc-137109 FITC), Alexa Fluor® 488 (sc-137109 AF488), Alexa Fluor® 546 (sc-137109 AF546), Alexa Fluor® 594 (sc-137109 AF594) or Alexa Fluor® 647 (sc-137109 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-137109 AF680) or Alexa Fluor® 790 (sc-137109 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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# **APPLICATIONS**

LEKTI (E-9) is recommended for detection of LEKTI precursor and mature form and HF7665 active peptide of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 siRNA (m): sc-45359, LEKTI shRNA Plasmid (h): sc-45358-SH, LEKTI shRNA Plasmid (m): sc-45359-SH, LEKTI shRNA (h) Lentiviral Particles: sc-45358-V and LEKTI shRNA (m) Lentiviral Particles: sc-45359-V.

Molecular Weight (predicted) of LEKTI: 120 kDa.

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

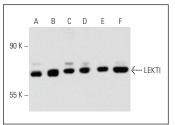
Molecular Weight (observed) of LEKTI fragments: 80/72/40 kDa.

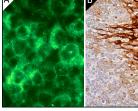
Positive Controls: CCD-1064Sk cell lysate: sc-2263, RBL-1 whole cell lysate: sc-364790 or SK-N-SH cell lysate: sc-2410.

## **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> 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-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-lgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

#### **DATA**





LEKTI (E-9): sc-137109. Western blot analysis of LEKTI expression in CCD-1064Sk (A), SK-N-SH (B), RAW 264.7 (C), WEHI-231 (D), RPE-J (E) and RBL-1 (F) whole cell lysates.

LEKTI (E-9): sc-137109. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing cytoplasmic and membrane staining of squamous epithelial cells (B).

# **SELECT PRODUCT CITATIONS**

1. Wang, S., et al. 2020. Single cell transcriptomics of human epidermis identifies basal stem cell transition states. Nat. Commun. 11: 4239.

#### **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 for detailed protocols and support products.

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