SANTA CRUZ BIOTECHNOLOGY, INC.

LECT2 (A-7): sc-398072

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Leukocyte cell-derived chemotaxin 2 (LECT2) is a secreted protein with a neutrophil chemotactic activity. LECT2 is highly expressed in liver and shows diffuse immunostaining within the cytoplasm of hepatocytes. The LECT2 protein consists of 133 amino acids and three intramolecular disulfide bonds, and homologues of LECT2 have been widely identified in many vertebrates. LECT2 has a multifunctional role that extends from cell growth, differentiation, damage/repair process and carcinogenesis to autoimmune diseases. LECT2 expression is specifically induced in liver by β-catenin signaling. Serum LECT2 levels have been shown to increase in response to liver recovery, suggesting LECT2 may be used as a prognostic indicator.

REFERENCES

1. Kishimoto, H., et al. 1976. Anomalous origin of of a successful corrective surgery. Nippon Kyobu Geka Gakkai Zasshi 24: 1519-1527.
2. Yamagoe, S., et al. 1998. Molecular cloning, structural characterization, and chromosomal mapping of the human LECT2 gene. Genomics 48: 324-329.
3. Yamagoe, S., et al. 1998. The mouse Lect2 gene: cloning of cDNA and genomic DNA, structural characterization and chromosomal localization. Gene 216: 171-178.
4. Uchida, T., et al. 1999. Expression pattern of a newly recognized protein, LECT2, in hepatocellular carcinoma and its premalignant lesion. Pathol. Int. 49: 147-151.
5. Ito, M., et al. 2003. Expression, oxidative refolding, and characterization of six-histidine-tagged recombinant human LECT2, a 16-kDa chemotactic protein with three disulfide bonds. Protein Expr. Purif. 27: 272-278.
6. Sato, Y., et al. 2004. Changes in serum LECT 2 levels during the early period of liver regeneration after adult living related donor liver transplantation. Transplant. Proc. 36: 2357-2358.
7. Sato, Y., et al. 2004. Serum LECT2 level as a prognostic indicator in acute liver failure. Transplant. Proc. 36: 2359-2361.

CHROMOSOMAL LOCATION

Genetic locus: LECT2 (human) mapping to 5q31.1; Lect2 (mouse) mapping to 13 B1.

SOURCE

LECT2 (A-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 48-75 near the N-terminus of LECT2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-398072 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

LECT2 (A-7) is recommended for detection of mature LECT2 and LECT2 precursor of mouse, rat and 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 LECT2 siRNA (h): sc-60928, LECT2 siRNA (m): sc-60929, LECT2 shRNA Plasmid (h): sc-60928-SH, LECT2 shRNA Plasmid (m): sc-60929-SH, LECT2 shRNA (h) Lentiviral Particles: sc-60928-V and LECT2 shRNA (m) Lentiviral Particles: sc-60929-V.

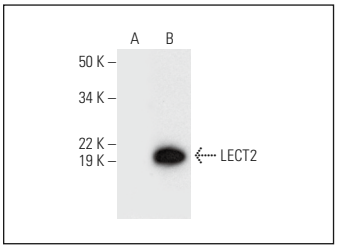
Molecular Weight of LECT2: 16 kDa.

Positive Controls: human LECT2 transfected HEK293T whole cell lysate.

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



LECT2 (A-7): sc-398072. Western blot analysis of LECT2 expression in non-transfected (**A**) and human LECT2 transfected (**B**) HEK293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Wang, Y., et al. 2020. Leukocyte cell-derived chemotaxin 2 affects nonalcoholic fatty liver disease. J. Endocrinol. 246: Z1.

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.