SANTA CRUZ BIOTECHNOLOGY, INC.

LIPM (A-15): sc-247451

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

LIPM (lipase member M), also known as LIPL3 (lipase-like abhydrolase domain-containing protein 3), is a 423 amino acid secreted protein that is expressed in granular keratinocytes. Involved in the last step of keratinocyte differentiation, LIPM is also implicated in lipid metabolism of differentiated epidermal layers. LIPM belongs to the lipase family and AB hydrolase superfamily, and is encoded by a gene that maps to human chromosome 10q23.31. Spanning nearly 135 million base pairs, chromosome 10 makes up approximately 4.5% of total DNA in cells and encodes nearly 1,200 genes. Several protein-coding genes, including those that encode for chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie-Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromatic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

1. Troelstra, C., et al. 1992. Localization of the nucleotide excision repair gene ERCC6 to human chromosome 10q11-q21. Genomics 12: 745-749.
2. Jabs, E.W., et al. 1994. Jackson-Weiss and Crouzon syndromes are allelic with mutations in fibroblast growth factor receptor 2. Nat. Genet. 8: 275-279.
3. Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. Neurogenetics 4: 1-15.
4. Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. Am. J. Hum. Genet. 81: 756-767.
5. Toulza, E., et al. 2007. Large-scale identification of human genes implicated in epidermal barrier function. Genome Biol. 8: R107.
6. Cho, M.Y., et al. 2008. First report of ovarian dysgerminoma in Cowden syndrome with germline PTEN mutation and PTEN-related 10q loss of tumor heterozygosity. Am. J. Surg. Pathol. 32: 1258-1264.
7. Yin, Y. and Shen, W.H. 2008. PTEN: a new guardian of the genome. Oncogene 27: 5443-5453.
8. Laugel, V., et al. 2010. Mutation update for the CSB/ERCC6 and CSA/ERCC8 genes involved in Cockayne syndrome. Hum. Mutat. 31: 113-126.

CHROMOSOMAL LOCATION

Genetic locus: LIPM (human) mapping to 10q23.31.

SOURCE

LIPM (A-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LIPM 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.

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-247451 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LIPM (A-15) is recommended for detection of LIPM 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); non cross-reactive with other LIP family members.

Suitable for use as control antibody for LIPM siRNA (h): sc-90631, LIPM shRNA Plasmid (h): sc-90631-SH and LIPM shRNA (h) Lentiviral Particles: sc-90631-V.

Molecular Weight of LIPM: 48 kDa.

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.

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.