SANTA CRUZ BIOTECHNOLOGY, INC.

LHFPL5 (C-19): sc-103597

BACKGROUND

The development of lipomas, benign tumors composed of fatty tissues, have been linked to breakpoints in the HMGI-C gene. LHFP (lipoma HMGIC fusion partner) is a 200 amino acid multi-pass membrane protein that acts as a fusion partner with HMGI-C in a lipoma with the translocation t(12;13)(q13-q15;q12). As a LHFP family member, LHFPL4 (lipoma HMGIC fusion partner-like 4 protein) is a 247 amino acid multi-pass membrane protein that is encoded by a gene which is found to be methylated in 55% of cervical cancers. This suggests that LHFPL4 is a novel methylation target specific for cervical cancer and may be evaluated for early detection and risk prediction. LHFPL4 shares 62% sequence similarity with LHFPL5, a protein which has been linked to normal function of the human cochlea. Mutations in the LHFPL5 gene cause non-syndromic sensorineural deafness autosomal recessive type 67 (DFNB67).

REFERENCES

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4. Nilsson, M., et al. 2006. Truncation and fusion of HMGA2 in lipomas with rearrangements of 5q32→q33 and 12q14→q15. Cytogenet. Genome Res. 112: 60-66.
5. Mansouri, M.R., et al. 2006. Molecular genetic analysis of a *de novo* balanced translocation t(6;17)(p21.31;q11.2) associated with hypospadias and anorectal malformation. Hum. Genet. 119: 162-168.
6. Kalay, E., et al. 2006. Mutations in the lipoma HMGIC fusion partner-like 5 (LHFPL5) gene cause autosomal recessive nonsyndromic hearing loss. Hum. Mutat. 27: 633-639.
7. Shabbir, M.I., et al. 2006. Mutations of human TMHS cause recessively inherited non-syndromic hearing loss. J. Med. Genet. 43: 634-640.
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CHROMOSOMAL LOCATION

Genetic locus: LHFPL5 (human) mapping to 6p21.31; Tmhs (mouse) mapping to 17 A3.3.

SOURCE

LHFPL5 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of LHFPL5 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-103597 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LHFPL5 (C-19) is recommended for detection of LHFPL5 of mouse, rat and 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 LHFPL family members.

Suitable for use as control antibody for LHFPL5 siRNA (h): sc-95425, LHFPL5 siRNA (m): sc-105613, LHFPL5 shRNA Plasmid (h): sc-95425-SH, LHFPL5 shRNA Plasmid (m): sc-105613-SH, LHFPL5 shRNA (h) Lentiviral Particles: sc-95425-V and LHFPL5 shRNA (m) Lentiviral Particles: sc-105613-V.

Molecular Weight of LHFPL5: 24 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.

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 or our catalog for detailed protocols and support products.