

LHFPL3 (C-11): sc-164862

BACKGROUND

The development of lipomas, benign tumors composed of fatty tissues, has been linked to breakpoints in the HMGI-C gene. LHFP is a protein that acts as a fusion partner with HMGI-C in lipomas. An LHFP family member, LHFPL3 (lipoma HMGI-C fusion partner-like 3 protein) is a 222 amino acid multi-pass membrane protein. The amino acid sequence of LHFPL3 shares a 40% identity with the N-terminus of LHFP. Computational analysis suggests that LHFPL3 belongs to the tetraspanin superfamily of transmembrane proteins that play an important role in the control of cell proliferation, cellular adhesion and signaling. LHFPL3 has been discussed as a candidate gene in uterine leiomyomata. The gene encoding LHFPL3 maps to human chromosome 7q22.1 and mouse chromosome 5 A3.

REFERENCES

1. Ishwad, C.S., et al. 1997. The high mobility group I-C gene (HMGI-C): polymorphism and genetic localization. *Hum. Genet.* 99: 103-105.
2. Petit, M.M., et al. 1999. LHFP, a novel translocation partner gene of HMGI-C in a lipoma, is a member of a new family of LHFP-like genes. *Genomics* 57: 438-441.
3. Rogalla, P., et al. 2002. Absence of HMGI-C-LHFP fusion in pulmonary chondroid hamartomas with aberrations involving chromosomal regions 12q13 through 15 and 13q12 through q14. *Cancer Genet. Cytogenet.* 133: 90-93.
4. Curtiss, N.P., et al. 2005. Isolation and analysis of candidate myeloid tumor suppressor genes from a commonly deleted segment of 7q22. *Genomics* 85: 600-607.
5. Lee, E.J., et al. 2005. Profiling of differentially expressed genes in human uterine leiomyomas. *Int. J. Gynecol. Cancer* 15: 146-154.
6. Ptacek, T., et al. 2007. Physical mapping of distinct 7q22 deletions in uterine leiomyoma and analysis of a recently annotated 7q22 candidate gene. *Cancer Genet. Cytogenet.* 174: 116-120.
7. Uliana, V., et al. 2010. 3.2 Mb microdeletion in chromosome 7 bands q22.2-q22.3 associated with overgrowth and delayed bone age. *Eur. J. Med. Genet.* 53: 168-170.

CHROMOSOMAL LOCATION

Genetic locus: LHFPL3 (human) mapping to 7q22.2; Lhfp13 (mouse) mapping to 5 A3.

SOURCE

LHFPL3 (C-11) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of LHFPL3 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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-164862 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LHFPL3 (C-11) is recommended for detection of LHFPL3 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.

LHFPL3 (C-11) is also recommended for detection of LHFPL3 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for LHFPL3 siRNA (h): sc-89842, LHFPL3 siRNA (m): sc-146722, LHFPL3 shRNA Plasmid (h): sc-89842-SH, LHFPL3 shRNA Plasmid (m): sc-146722-SH, LHFPL3 shRNA (h) Lentiviral Particles: sc-89842-V and LHFPL3 shRNA (m) Lentiviral Particles: sc-146722-V.

Molecular Weight of LHFPL3: 25 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.