SANTA CRUZ BIOTECHNOLOGY, INC.

L3MBTL2 (E-16): sc-86512

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Polycomb group (PcG) proteins are important for maintaining the transcriptionally repressed state of target genes and are thought to function via chromatin modification. L3MBTL2 (Lethal(3)malignant brain tumor-like 2 protein), also known as L3MBT or H-l(3)mbt-l, is a 705 amino acid member of the PcG family. Localized to the nucleus, L3MBTL2 associates with chromatin-remodeling complexes and helps inhibit the expression of proteins that trigger the cell to enter mitosis. During the G_0 phase of the cell cycle, L3MBTL2 is part of a complex that contains other proteins (such as HP1γ, E2F-6 and Max) that participate in transcriptional repression. L3MBTL2 contains one FCS-type zinc finger and four MBT repeats and is expressed as three isoforms due to alternative splicing events.

REFERENCES

1. Dunham, I., et al. 1999. The DNA sequence of human chromosome 22. Nature 402: 489-495.
2. Wismar, J. 2001. Molecular characterization of h-l(3)mbt-like: a new member of the human mbt family. FEBS Lett. 507: 119-121.
3. Ogawa, H., et al. 2002. A complex with chromatin modifiers that occupies E2F- and Myc-responsive genes in G_0 cells. Science 296: 1132-1136.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611865. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Markus, J., et al. 2003. Prolif-eration-linked expression of the novel murine gene m4mbt encoding a nuclear zinc finger protein with four mbt domains. Gene 319: 117-126.
6. Li, J., et al. 2004. Imprinting of the human L3MBTL gene, a polycomb family member located in a region of chromosome 20 deleted in human myeloid malignancies. Proc. Natl. Acad. Sci. USA 101: 7341-7346.

CHROMOSOMAL LOCATION

Genetic locus: L3MBTL2 (human) mapping to 22q13.2.

SOURCE

L3MBTL2 (E-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of L3MBTL2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86512 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

L3MBTL2 (E-16) is recommended for detection of L3MBTL2 of human origin by Western Blotting (starting dilution 1:200, 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).

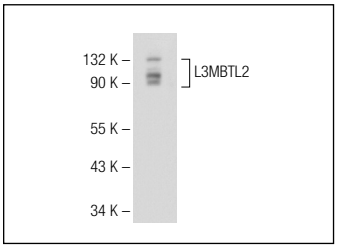
Suitable for use as control antibody for L3MBTL2 siRNA (h): sc-75403, L3MBTL2 shRNA Plasmid (h): sc-75403-SH and L3MBTL2 shRNA (h) Lentiviral Particles: sc-75403-V.

Molecular Weight of L3MBTL2 isoforms: 79/69 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



L3MBTL2 (E-16): sc-86512. Western blot analysis of L3MBTL2 expression in 293T whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures.