

L3MBTL2 (H-53): sc-134879

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 G₀ phase of the cell cycle, L3MBTL2 is part of a complex that contains other proteins (such as HP1 γ , 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

- Dunham, I., Shimizu, N., Roe, B.A., Chissoe, S., Hunt, A.R., Collins, J.E., Bruskiewich, R., Beare, D.M., Clamp, M., Smink, L.J., Ainscough, R., Almeida, J.P., Babbage, A., Bagguley, C., Bailey, J., et al. 1999. The DNA sequence of human chromosome 22. *Nature* 402: 489-495.
- Wismar, J. 2001. Molecular characterization of h-l(3)mbt-like: a new member of the human mbt family. *FEBS Lett.* 507: 119-121.
- Ogawa, H., Ishiguro, K., Gaubatz, S., Livingston, D.M. and Nakatani, Y. 2002. A complex with chromatin modifiers that occupies E2F- and Myc-responsive genes in G₀ cells. *Science* 296: 1132-1136.
- 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/>
- Markus, J., Feiková, S., Sramko, M., Wolff, L. and Bies, J. 2003. Proliferation-linked expression of the novel murine gene m4mbt encoding a nuclear zinc finger protein with four mbt domains. *Gene* 319: 117-126.
- Li, J., Bench, A.J., Vassiliou, G.S., Fourouclas, N., Ferguson-Smith, A.C. and Green, A.R. 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; L3mbtl2 (mouse) mapping to 15 E1.

SOURCE

L3MBTL2 (H-53) is a rabbit polyclonal antibody raised against amino acids 141-193 mapping within an internal region of L3MBTL2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

L3MBTL2 (H-53) is recommended for detection of L3MBTL2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

L3MBTL2 (H-53) is also recommended for detection of L3MBTL2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for L3MBTL2 siRNA (h): sc-75403, L3MBTL2 siRNA (m): sc-146625, L3MBTL2 shRNA Plasmid (h): sc-75403-SH, L3MBTL2 shRNA Plasmid (m): sc-146625-SH, L3MBTL2 shRNA (h) Lentiviral Particles: sc-75403-V and L3MBTL2 shRNA (m) Lentiviral Particles: sc-146625-V.

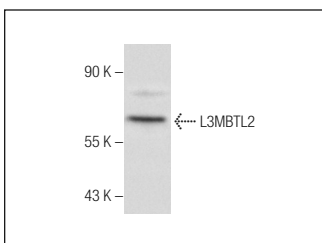
Molecular Weight of L3MBTL2: 79/69 kDa.

Positive Controls: KNRK nuclear extract: sc-2141.

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 (H-53): sc-134879. Western blot analysis of L3MBTL2 expression in KNRK nuclear extract.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **L3MBTL2 (F-3): sc-365134**, our highly recommended monoclonal alternative to L3MBTL2 (H-53).