# L3MBTL2 (S-14): sc-86514



The Boures to Overtion

#### **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-I(3)mbt-I, 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 HP1 $\gamma$ , 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., et al. 1999. The DNA sequence of human chromosome 22. Nature 402: 489-495.
- Wismar, J. 2001. Molecular characterization of h-I(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<sub>0</sub> 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., 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.

# **CHROMOSOMAL LOCATION**

Genetic locus: L3MBTL2 (human) mapping to 22q13.2; L3mbtl2 (mouse) mapping to 15 E1.

## **SOURCE**

L3MBTL2 (S-14) 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  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86514 P, (100  $\mu$ g 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 (S-14) 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), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 (S-14) is also recommended for detection of L3MBTL2 in additional species, including equine, canine, bovine and porcine.

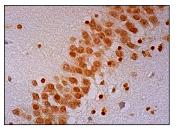
Suitable for use as control antibody for L3MBTL2 siRNA (h): sc-75403, L3MBTL2 siRNA (m): sc-146625, L3MBTL2 shRNA Plasmid (h): sc-75403-SH, L3MBTL2 shRNA Plasmid (m): sc-146625-SH, L3MBTL2 shRNA (h) Lentiviral Particles: sc-75403-V and L3MBTL2 shRNA (m) Lentiviral Particles: sc-146625-V.

Molecular Weight of L3MBTL2 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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

#### DATA



L3MBTL2 (S-14): sc-86514. Immunoperoxidase staining of formalin fixed, paraffin-embedded human hippocampus tissue showing nuclear staining of neuronal cells and glial cells.

## **RESEARCH USE**

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



Try **L3MBTL2 (F-3):** sc-365134, our highly recommended monoclonal alternative to L3MBTL2 (S-14).