SANTA CRUZ BIOTECHNOLOGY, INC.

L3MBTL3 (D-15): sc-168398



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. PcG proteins assemble into multimeric protein complexes, which are involved in maintaining the transcriptional repressive state of genes over successive cell generations. PcG proteins are also required for normal maturation of myeloid progenitor cells. A putative PcG protein, L3MBTL3 (lethal(3)malignant brain tumor-like protein 3), also known as MBT-1 or KIAA1798, is a 780 amino acid protein containing 3 MBT repeats and one SAM (sterile alpha motif) domain. Localized to the nucleus, L3MBTL3 interacts with RING1B, another PcG protein that may be involved in the specification of anterior-posterior axis and cell proliferation in early development. L3MBTL3 exists as two isoforms produced by alternative splicing events.

REFERENCES

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- 4. Tuckfield, A., et al. 2002. Binding of the RING polycomb proteins to specific target genes in complex with the grainyhead-like family of developmental transcription factors. Mol. Cell. Biol. 22: 1936-1946.
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- 8. 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.
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CHROMOSOMAL LOCATION

Genetic locus: L3MBTL3 (human) mapping to 6q23.1; L3mbtl3 (mouse) mapping to 10 A4.

SOURCE

L3MBTL3 (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of L3MBTL3 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168398 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

L3MBTL3 (D-15) is recommended for detection of L3MBTL3 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 L3MBTL family members.

Suitable for use as control antibody for L3MBTL3 siRNA (h): sc-95210, L3MBTL3 siRNA (m): sc-146626, L3MBTL3 shRNA Plasmid (h): sc-95210-SH, L3MBTL3 shRNA Plasmid (m): sc-146626-SH, L3MBTL3 shRNA (h) Lentiviral Particles: sc-95210-V and L3MBTL3 shRNA (m) Lentiviral Particles: sc-146626-V.

Molecular Weight of L3MBTL3 isoform 1: 88 kDa.

Molecular Weight of L3MBTL3 isoform 2: 86 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) Immunofluo-rescence: 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.