10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

L3MBTL1 polyclonal antibody
Rabbit Polyclonal Antibody
Catalog # ABV11391

Specification

L3MBTL1 polyclonal antibody - Product Information

Application	**WB, IP**
Primary Accession	Q9Y468
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**92297**

L3MBTL1 polyclonal antibody - Additional Information

Gene ID 26013

Positive Control	**Western blot: HeLa cells, IP: HeLa cells**
Application & Usage	**Western Blot: 1:1000, IP: 1 - 5 µg/IP**

Other Names
L3MBTL, L3MBT

Target/Specificity
L3MBTL1

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
In PBS with 0.05% sodium azide and 0.05% ProClin 300.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
L3MBTL1 polyclonal antibody is for research use only and not for use in diagnostic or therapeutic procedures.

L3MBTL1 polyclonal antibody - Protein Information

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Name L3MBTL1

Synonyms KIAA0681, L3MBT, L3MBTL

Function
Polycomb group (PcG) protein that specifically recognizes and binds mono- and dimethyllysine residues on target proteins, thereby acting as a 'reader' of a network of post-translational modifications. PcG proteins maintain the transcriptionally repressive state of genes: acts as a chromatin compaction factor by recognizing and binding mono- and dimethylated histone H1b/H1-4 at 'Lys-26' (H1bK26me1 and H1bK26me2) and histone H4 at 'Lys-20' (H4K20me1 and H4K20me2), leading to condense chromatin and repress transcription. Recognizes and binds p53/TP53 monomethylated at 'Lys-382', leading to repress p53/TP53- target genes. Also recognizes and binds RB1/RB monomethylated at 'Lys- 860'. Participates in the ETV6-mediated repression. Probably plays a role in cell proliferation. Overexpression induces multinucleated cells, suggesting that it is required to accomplish normal mitosis.

Cellular Location
Nucleus. Note=Excluded from the nucleolus. Does not colocalize with the PcG protein BMI1, suggesting that these two proteins do not belong to the same complex

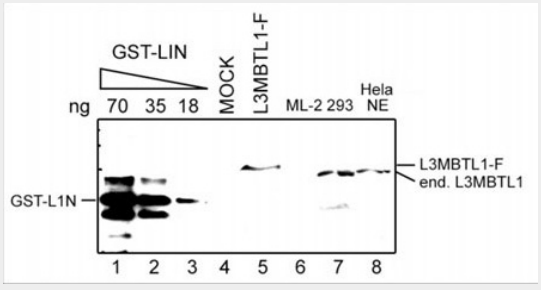
Tissue Location
Widely expressed. Expression is reduced in colorectal cancer cell line SW480 and promyelocytic leukemia cell line HL-60.

L3MBTL1 polyclonal antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

L3MBTL1 polyclonal antibody - Images



Western blot was performed on nuclear extracts from HeLa cells (HeLa NE) using the antibody diluted 1:1,000 in TBS-Tween containing 5% skimmed milk (lane 2). A molecular weight marker is shown in lane 1; the location of the protein of interest is indicated on the right.

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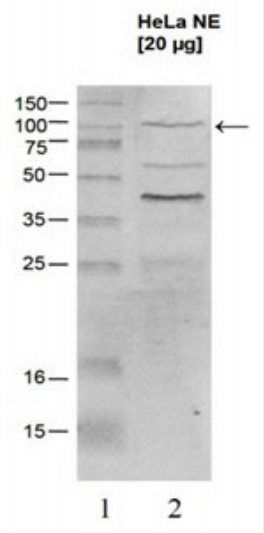

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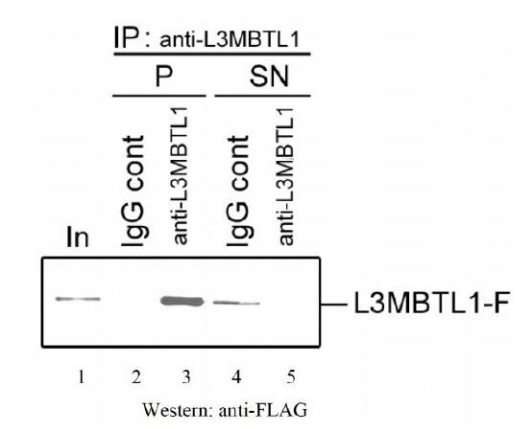

Immunoprecipitation was performed on nuclear extracts from cells transfected with FLAG-tagged L3MBTL1 (L3MBTL1-F) with the antibody and with an IgG negative control antibody. Western Blot was performed with an anti-FLAG antibody to demonstrate the presence of L3MBTL1-F in the input (lane 1), in the precipitated fraction (P) and in the supernatant (SN). These data show that L3MBTL1-F was efficiently precipitated by the L3MBTL1 antibody (lane 3 and 5), whereas it was not precipitated by the IgG negative control antibody (lane 2 and 4).

L3MBTL1 polyclonal antibody - Background

L3MBTL1 is a member of the polycomb group (PcG) proteins, which function as transcriptional regulators in large protein complexes. In Drosophila, homozygous mutations in the L3MBTL1 gene have been demonstrated to cause brain tumors, identifying L3MBTL1 as a tumor suppressor gene. L3MBTL1 forms a homodimer and interacts with TEL (ETV6). L3MBTL1 probably plays a role in cell proliferation. Overexpression of L3MBTL1 induces multinucleated cells, suggesting that it is required for normal mitosis.