10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

L3MBTL1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21815c

Product Information

Application	WB, E
Primary Accession	Q9Y468
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB53645
Calculated MW	92297

Additional Information

Gene ID	26013
Other Names	Lethal(3)malignant brain tumor-like protein 1, H-l(3)mbt, H-l(3)mbt protein, L(3)mbt-like, L(3)mbt protein homolog, L3MBTL1, L3MBTL1, KIAA0681, L3MBT, L3MBTL
Target/Specificity	This L3MBTL1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 451-485 amino acids from the Central region of human L3MBTL1.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	L3MBTL1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

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.

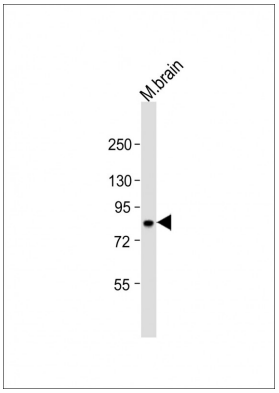
Background

Polycomb group (PcG) protein that specifically recognizes and binds mono- and dimethyllysine residues on target proteins, therey 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/HIST1H1E 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.

References

Koga H.,et al.Oncogene 18:3799-3809(1999).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Deloukas P.,et al.Nature 414:865-871(2001).
Ishikawa K.,et al.DNA Res. 5:169-176(1998).

Images



Anti-L3MBTL1 Antibody (Center) at 1:2000 dilution + mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 84 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.