

## **Product datasheet for TR518073**

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## L3mbtl1 Mouse shRNA Plasmid (Locus ID 241764)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: L3mbtl1 Mouse shRNA Plasmid (Locus ID 241764)

**Locus ID:** 241764

Synonyms: C630004G01; L3mbtl; mKIAA0681

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: L3mbtl1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID =

241764). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

**RefSeq:** <u>BC116639</u>, <u>NM 001081338</u>, <u>NM 001081338.1</u>, <u>NM 001081338.2</u>

UniProt ID: A2A5N8

**Summary:** 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 (By similarity).[UniProtKB/Swiss-Prot Function]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).