

Product datasheet for **TR501389**

Mtf2 Mouse shRNA Plasmid (Locus ID 17765)

Product data:

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| Product Type: | shRNA Plasmids |
| Product Name: | Mtf2 Mouse shRNA Plasmid (Locus ID 17765) |
| Locus ID: | 17765 |
| Synonyms: | 9230112N11Rik; AA537621; C76717; M96; Pcl2 |
| Vector: | pRS (TR20003) |
| E. coli Selection: | Ampicillin |
| Mammalian Cell Selection: | Puromycin |
| Format: | Retroviral plasmids |
| Components: | Mtf2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 17765). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free. |
| RefSeq: | BC092237 , BC100340 , NM_001253877 , NM_001253878 , NM_001253879 , NM_001253880 , NM_013827 , NR_045608 , NM_001359088 , NM_001359089 , NR_152817 , NM_013827.1 , NM_013827.2 , NM_013827.3 , NM_001253877.1 , NM_001253878.1 , NM_001253879.1 , NM_001253880.1 , BC024889 , BC029076 , BC050826 , BC057163 , BC071223 |
| UniProt ID: | Q02395 |
| Summary: | Polycomb group (PcG) that specifically binds histone H3 trimethylated at 'Lys-36' (H3K36me3) and recruits the PRC2 complex. Acts by binding to H3K36me3, a mark for transcriptional activation, and recruiting the PRC2 complex, leading to enhance PRC2 H3K27me3 methylation activity. Regulates the transcriptional networks during embryonic stem cell self-renewal and differentiation. Promotes recruitment of the PRC2 complex to the inactive X chromosome in differentiating XX ES cells and PRC2 recruitment to target genes in undifferentiated ES cells. Required to repress Hox genes by enhancing H3K27me3 methylation of the PRC2 complex. In some conditions may act as an inhibitor of PRC2 activity: able to activate the CDKN2A gene and promote cellular senescence by suppressing the catalytic activity of the PRC2 complex locally. Binds to the metal-regulating-element (MRE) of MT1A gene promoter. [UniProtKB/Swiss-Prot Function] |



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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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

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).