

## **Product datasheet for TR514453**

## Mov10l1 Mouse shRNA Plasmid (Locus ID 83456)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Mov10l1 Mouse shRNA Plasmid (Locus ID 83456)

**Locus ID:** 83456

**Synonyms:** CHAMP; Csm

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Selection:

Puromycin

Format:

Retroviral plasmids

Components: Mov10l1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

83456). 5µg purified plasmid DNA per construct

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

RefSeq: NM 031260, NM 031260.1, NM 031260.2, BC167258

UniProt ID: Q99MV5

**Summary:** Isoform 1: ATP-dependent RNA helicase required during spermatogenesis to repress

transposable elements and prevent their mobilization, which is essential for germline integrity (PubMed:20534472, PubMed:20547853, PubMed:23166510, PubMed:25762440). Acts via the piRNA metabolic process, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and governs the methylation and subsequent repression of transposons (PubMed:20534472, PubMed:20547853, PubMed:23166510, PubMed:25762440). Involved in the primary piRNA

metabolic process (PubMed:20534472, PubMed:20547853, PubMed:23166510,

PubMed:25762440). Specifically binds to piRNA precursors and promotes the generation of intermediate piRNA processing fragments that are subsequently loaded to Piwi proteins (PubMed:25762440). Acts via its ATP-dependent RNA helicase activity: displays 5'-3' RNA unwinding activity and probably mediates unwinding and funneling of single-stranded piRNA precursor transcripts to the endonuclease that catalyzes the first cleavage step of piRNA processing to generate piRNA intermediate fragments that are subsequently loaded to Piwi

proteins (PubMed:25762440).[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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="mailto:custom shRNA service">custom shRNA service</a>.

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).