

## **Product datasheet for TR510471**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## **Set Mouse shRNA Plasmid (Locus ID 56086)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Set Mouse shRNA Plasmid (Locus ID 56086)

**Locus ID:** 56086

**Synonyms:** 2610030F17Rik; 5730420M11Rik; AA407739; I-2PP2A; StF-IT-1; TAF-I

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

shRNA Design:

Retroviral plasmids

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

56086). 5µg purified plasmid DNA per construct

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

RefSeq: BC018255, BC103791, NM 001204875, NM 023871, NM 023871.1, NM 023871.2,

NM 023871.3, NM 023871.4, NM 001204875.1, BC012508

UniProt ID: Q9EQU5

**Summary:** Multitasking protein, involved in apoptosis, transcription, nucleosome assembly and histone

chaperoning. Isoform 2 anti-apoptotic activity is mediated by inhibition of the GZMA-activated DNase, NME1. In the course of cytotoxic T-lymphocyte (CTL)-induced apoptosis, GZMA cleaves SET, disrupting its binding to NME1 and releasing NME1 inhibition. Isoform 1 and isoform 2 are potent inhibitors of protein phosphatase 2A. Isoform 1 and isoform 2 inhibit EP300/CREBBP and PCAF-mediated acetylation of histones (HAT) and nucleosomes, most probably by masking the accessibility of lysines of histones to the acetylases. The predominant target for inhibition is histone H4. HAT inhibition leads to silencing of HAT-dependent transcription and prevents active demethylation of DNA. Both isoforms stimulate DNA replication of the adenovirus genome complexed with viral core proteins; however,

isoform 2 specific activity is higher (By similarity).[UniProtKB/Swiss-Prot Function]

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>.

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



## 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).