

## **Product datasheet for TR500768**

## Gapdh Mouse shRNA Plasmid (Locus ID 14433)

## Product data:

**Product Type:** shRNA Plasmids

**Product Name:** Gapdh Mouse shRNA Plasmid (Locus ID 14433)

**Locus ID:** 14433

**Synonyms:** Ga; Gapd

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

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

14433). 5µg purified plasmid DNA per construct

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

**RefSeq:** BC083065, BC083079, BC083080, BC083149, BC085274, BC085275, BC085315, BC091768,

BC092252, BC092264, BC092267, BC092294, BC093508, BC094037, BC095932, BC096042, BC096440, BC096590, BC110311, NM 001289726, NM 008084, NM 008084.1, NM 008084.2, NM 008084.3, NM 001289726.1, BC091768.1, BC096042.1, BC020407, BC023196, BC091736,

BC145810, BC145812

UniProt ID: P16858

**Summary:** This gene encodes a member of the glyceraldehyde-3-phosphate dehydrogenase protein

family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. The encoded protein was originally identified as a key glycolytic enzyme that converts D-glyceraldehyde 3-phosphate (G3P) into 3-phospho-D-glyceroyl phosphate. Subsequent studies have assigned a variety of additional functions to the protein including nitrosylation of nuclear proteins, the regulation of mRNA stability, and acting as a transferrin receptor on the cell surface of macrophage. Alternative splicing results in multiple transcript variants. Many pseudogenes similar to this locus are found throughout

the mouse genome. [provided by RefSeq, Jan 2014]

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>.



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## 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).