

Product datasheet for TR515541

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Alkbh8 Mouse shRNA Plasmid (Locus ID 67667)

Product data:

Product Type: shRNA Plasmids

Product Name: Alkbh8 Mouse shRNA Plasmid (Locus ID 67667)

Locus ID: 67667

Synonyms: 4930562C03Rik; 8030431D03Rik; 9430088N01Rik; Abh8

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: Alkbh8 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

67667). 5µg purified plasmid DNA per construct

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

RefSeq: <u>BC050863</u>, <u>NM 026303</u>, <u>NM 026303.1</u>

UniProt ID: Q80Y20

Summary: Catalyzes the methylation of 5-carboxymethyl uridine to 5-methylcarboxymethyl uridine at

the wobble position of the anticodon loop in tRNA via its methyltransferase domain (PubMed:20123966). Catalyzes the last step in the formation of 5-methylcarboxymethyl uridine at the wobble position of the anticodon loop in target tRNA (PubMed:20123966). Has a preference for tRNA(Arg) and tRNA(Glu), and does not bind tRNA(Lys) (By similarity). Binds tRNA and catalyzes the iron and alpha-ketoglutarate dependent bydroxylation of 5-

tRNA and catalyzes the iron and alpha-ketoglutarate dependent hydroxylation of 5-methylcarboxymethyl uridine at the wobble position of the anticodon loop in tRNA via its dioxygenase domain, giving rise to 5-(S)-methoxycarbonylhydroxymethyluridine; has a preference for tRNA(Gly) (PubMed:20583019). Required for normal survival after DNA damage (By similarity). May inhibit apoptosis and promote cell survival and angiogenesis (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).