

Product datasheet for TR506512

Dhx33 Mouse shRNA Plasmid (Locus ID 216877)

Product data:

Product Type: shRNA Plasmids

Product Name: Dhx33 Mouse shRNA Plasmid (Locus ID 216877)

Locus ID: 216877

Synonyms: 3110057P17Rik; 9430096J02Rik; Ddx33

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Dhx33 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

216877). 5µg purified plasmid DNA per construct

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

RefSeq: <u>BC052172</u>, <u>NM 178367</u>, <u>NM 178367.2</u>, <u>NM 178367.3</u>, <u>NM 178367.4</u>, <u>BC011309</u>, <u>BC027842</u>

UniProt ID: Q80VY9

Summary: Implicated in nucleolar organization, ribosome biogenesis, protein synthesis and cytoplasmic

dsRNA sensing (By similarity) (PubMed:21930779). Stimulates RNA polymerase I transcription of the 47S precursor rRNA. Associates with ribosomal DNA (rDNA) loci where it is involved in POLR1A recruitment (PubMed:21930779). In the cytoplasm, promotes elongation-competent 80S ribosome assembly at the late stage of mRNA translation initiation (PubMed:26100019). Senses cytosolic dsRNA mediating NLRP3 inflammasome formation in macrophages and type I interferon production in myeloid dendritic cells (By similarity). Required for NLRP3 activation

induced by viral dsRNA and bacterial RNA (By similarity). In dendritic cells, required for induction of type I interferon production induced by cytoplasmic dsRNA via the activation of MAPK and NF-kappa-B signaling pathways (PubMed:24037184).[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>.



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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).