

Product datasheet for **TR500634**

Khdrbs3 Mouse shRNA Plasmid (Locus ID 13992)

Product data:

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| Product Type: | shRNA Plasmids |
| Product Name: | Khdrbs3 Mouse shRNA Plasmid (Locus ID 13992) |
| Locus ID: | 13992 |
| Synonyms: | Etle; Salp; SLM-2; SIm2; T-STAR |
| Vector: | pRS (TR20003) |
| E. coli Selection: | Ampicillin |
| Mammalian Cell Selection: | Puromycin |
| Format: | Retroviral plasmids |
| Components: | Khdrbs3 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 13992). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free. |
| RefSeq: | BC031507 , BC057577 , NM_010158 , NM_010158.1 , NM_010158.2 |
| UniProt ID: | Q9R226 |



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Summary:

RNA-binding protein that plays a role in the regulation of alternative splicing and influences mRNA splice site selection and exon inclusion. Binds preferentially to the 5'-[AU]UAAA-3' motif in vitro (PubMed:19457263). Binds optimally to RNA containing 5'-[AU]UAA-3' as a bipartite motif spaced by more than 15 nucleotides (By similarity). Binds poly(A). RNA-binding abilities are down-regulated by tyrosine kinase PTK6 (PubMed:15471878). Involved in splice site selection of vascular endothelial growth factor (By similarity). In vitro regulates CD44 alternative splicing by direct binding to purine-rich exonic enhancer (By similarity). Can regulate alternative splicing of neurexins NRXN1-3 in the laminin G-like domain 6 containing the evolutionary conserved neurexin alternative spliced segment 4 (AS4) involved in neurexin selective targeting to postsynaptic partners such as neuroligins and LRRTM family members. High concentrations in forebrain structures block splicing inclusion of NRXN1-3 AS4 exons while low concentrations favor their inclusion. Targeted, cell-type specific splicing regulation of NRXN1 at AS4 is involved in neuronal glutamatergic synapse function and plasticity and is linked to behavioral aspects (PubMed:22196734, PubMed:23637638, PubMed:24469635, PubMed:27174676). Regulates expression of KHDRBS2/SLIM-1 in defined neuron populations in the hippocampus by modifying its alternative splicing resulting in a transcript predicted to undergo nonsense-mediated decay (PubMed:25505328). Can bind FABP9 mRNA (PubMed:19916944). May play a role as a negative regulator of cell growth. Inhibits cell proliferation.[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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

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).