

## **Product datasheet for TR500177**

## Hnrnpd Mouse shRNA Plasmid (Locus ID 11991)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Hnrnpd Mouse shRNA Plasmid (Locus ID 11991)

**Locus ID:** 11991

**Synonyms:** Auf1; Hnrpd

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

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

11991). 5µg purified plasmid DNA per construct

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

**RefSeq:** <u>BC011172</u>, <u>BC049098</u>, <u>NM 001077265</u>, <u>NM 001077266</u>, <u>NM 001077267</u>, <u>NM 007516</u>,

NM 007516.1, NM 007516.2, NM 007516.3, NM 001077266.1, NM 001077266.2,

NM 001077267.1, NM 001077267.2, NM 001077265.1, NM 001077265.2

UniProt ID: Q60668

**Summary:** Binds with high affinity to RNA molecules that contain AU-rich elements (AREs) found within

the 3' UTR of many proto-oncogenes and cytokine mRNAs. Also binds to double- and single-stranded DNA sequences in a specific manner and functions a transcription factor. Each of the RNA-binding domains specifically can bind solely to a single-stranded non-monotonous 5'-UUAG-3' sequence and also weaker to the single-stranded 5'-TTAGGG-3' telomeric DNA repeat. Binds RNA oligonucleotides with 5'-UUAGGG-3' repeats more tightly than the telomeric single-stranded DNA 5'-TTAGGG-3' repeats. Binding of RRM1 to DNA inhibits the formation of DNA quadruplex structure which may play a role in telomere elongation. May be involved in translationally coupled mRNA turnover. Implicated with other RNA-binding proteins in the cytoplasmic deadenylation/translational and decay interplay of the FOS mRNA mediated by the major coding-region determinant of instability (mCRD) domain. May play a role in the regulation of the rhythmic expression of circadian clock core genes. Directly binds to the 3' UTR of CRY1 mRNA and induces CRY1 rhythmic translation. May also be involved in

the regulation of PER2 translation.[UniProtKB/Swiss-Prot Function]



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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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="mailto:custom shRNA service">custom shRNA service</a>.

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).