

Product datasheet for TL515104

Hnrnpa2b1 Mouse shRNA Plasmid (Locus ID 53379)

Product data:

OriGene Technologies, Inc.

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| Product Type: | shRNA Plasmids |
|------------------------------|--|
| Product Name: | Hnrnpa2b1 Mouse shRNA Plasmid (Locus ID 53379) |
| Locus ID: | 53379 |
| Synonyms: | 9130414A06Rik; hnrnp-A; Hnrpa2; Hnrpa2b1 |
| Vector: | pGFP-C-shLenti (TR30023) |
| E. coli Selection: | Chloramphenicol (34 ug/ml) |
| Mammalian Cell Selection: | Puromycin |
| Format: | Lentiviral plasmids |
| Components: | Hnrnpa2b1 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 53379). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free. |
| RefSeq: | <u>NM 016806, NM 182650, NR 104468, NM 182650.1, NM 182650.2, NM 182650.3, NM 182650.3, NM 182650.4, NM 016806.1, NM 016806.2, NM 016806.3, BC141253, BC145588, BC059107</u> |
| UniProt ID: | <u>088569</u> |



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GRIGENE Hnrnpa2b1 Mouse shRNA Plasmid (Locus ID 53379) – TL515104

Heterogeneous nuclear ribonucleoprotein (hnRNP) that associates with nascent pre-mRNAs, Summary: packaging them into hnRNP particles. The hnRNP particle arrangement on nascent hnRNA is non-random and sequence-dependent and serves to condense and stabilize the transcripts and minimize tangling and knotting. Packaging plays a role in various processes such as transcription, pre-mRNA processing, RNA nuclear export, subcellular location, mRNA translation and stability of mature mRNAs. Forms hnRNP particles with at least 20 other different hnRNP and heterogeneous nuclear RNA in the nucleus. Involved in transport of specific mRNAs to the cytoplasm in oligodendrocytes and neurons: acts by specifically recognizing and binding the A2RE (21 nucleotide hnRNP A2 response element) or the A2RE11 (derivative 11 nucleotide oligonucleotide) sequence motifs present on some mRNAs, and promotes their transport to the cytoplasm (By similarity). Specifically binds single-stranded telomeric DNA sequences, protecting telomeric DNA repeat against endonuclease digestion (By similarity). Also binds other RNA molecules, such as primary miRNA (pri-miRNAs): acts as a nuclear 'reader' of the N6-methyladenosine (m6A) mark by specifically recognizing and binding a subset of nuclear m6A-containing pri-miRNAs. Binding to m6A-containing primiRNAs promotes pri-miRNA processing by enhancing binding of DGCR8 to pri-miRNA transcripts. Involved in miRNA sorting into exosomes following sumoylation, possibly by binding (m6A)-containing pre-miRNAs. Acts as a regulator of efficiency of mRNA splicing, possibly by binding to m6A-containing pre-mRNAs (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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

PerformanceOriGene guarantees that the sequences in the shRNA expression cassettes are verified toGuaranteed: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).

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