

Product datasheet for RN213922

Hnrnpa2b1 (NM_001104613) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Hnrnpa2b1 (NM_001104613) Rat Untagged Clone
Tag: Tag Free
Symbol: Hnrnpa2b1
Synonyms: hnRNP; Hnrpa2; Hnrpa2b1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN213922 representing NM_001104613
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGAAAACCTTAGAACTGTTCTTTGGAGAGGAAAAAGAGAGAGAAGGAACAGTCCGTAAGCTCT
TTATTGGTGGCTTAAGCTTTGAAACCACAGAAGAAAGTTTGGAGAACTACTACGAGCAATGGGAAAGCT
CACAGACTGTGTGTTATGCGGGATCCTGCAAGCAAAGATCAAGAGGATTTGGCTTTGTAACCTTTCTCA
TCTATGGCTGAGGTTGATGCTGCCATGGCTGCAAGGCCTCATTCCATTGATGGCAGGGTGGTTGAGCCAA
AACGTGCTGTGGCAAGAGAGGAGTCTGGGAAACCAGGAGCCCATGTGACTGTGAAGAAAACCTTCGTTGG
TGGAAATTAAGGAAGATACTGAGGAGCATCACCTTAGAGATTACTTTGAAGAATATGGAAAAATTGATACT
ATTGAAATAATTACTGATAGGCAGTCTGGAAAAAAGAGGCTTTGGCTTTGTTACCTTTGATGACCATG
ATCCTGTGGATAAGATTTTCTTGAGAAATATCACACCATAAATGGTCACAATGCAGAAGTTAGAAAAGGC
ATTGTCTAGACAAGAAATGCAGGAAGTCCAAAGTTCTAGGAGTGGAAAGAGGAGGAACTTTGGTTTTGGA
GATTCTCGAGGTGGCGGTGGCAATTTGGACCAGGACCAGGAAGCAACTTAGGGGGGTTCTGATGGAT
ATGGAAGTGGACGTGGATTTGGGGATGGCTATAATGGGTATGGAGGAGGACCTGGAGGTGGCAATTTTGG
AGGTAGCCCTGGTTATGGAGGAGGAAGAGGAGGATATGGTGGTGGAGGACCTGGATATGGCAACCAGGGT
GGGGGCTACGGAGGTGGTTATGACAACCTATGGAGGAGGAAATATGGAAGTGGAAATTACAATGATTTTG
GAAATTATAACCAGCAACCTTCTAACTACGGTCCAATGAAGAGTGGAACTTTGGTGGTAGCAGGAACAT
GGGAGGACCATATGGTGGAGGAACTATGGTCCTGGAGGAAGTGGAGGAAGTGGGGGCTATGGTGGGAGG
AGCCGATACTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001104613



Insert Size:	1062 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM_001104613.1</u> , <u>NP_001098083.1</u>
RefSeq Size:	1062 bp
RefSeq ORF:	1062 bp
Locus ID:	362361
UniProt ID:	<u>A7VJC2</u>
Cytogenetics:	4q24
Gene Summary:	<p>Heterogeneous nuclear ribonucleoprotein (hnRNP) that associates with nascent pre-mRNAs, 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 (PubMed:19099192). 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 (PubMed:9578590, PubMed:10567417). Specifically binds single-stranded telomeric DNA sequences, protecting telomeric DNA repeat against endonuclease digestion (PubMed:15659580). 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 pri-miRNAs 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]</p>