

Product datasheet for RR213922

Hnrnpa2b1 (NM_001104613) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hnrnpa2b1 (NM_001104613) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hnrnpa2b1
Synonyms:	hnRNP; Hnrpa2; Hnrpa2b1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RR213922 representing NM_001104613 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGAGAAAACCTTAGAACTGTTCTTTGGAGAGGAAAAAGAGAGAGAAGGAACAGTTCGGTAAGCTCT
TTATTGGTGGCTTAAGCTTTGAAACCACAGAAGAAAGTTTGGAGAACTACTACGAGCAATGGGGAAAGCT
CACAGACTGTGTGGTTATGCGGGATCCTGCAAGCAAAAGATCAAGAGGATTTGGCTTTGTAACCTTCTCA
TCTATGGCTGAGGTTGATGCTGCCATGGCTGCAAGGCCTCATTCCATTGATGGCAGGGTGGTTGAGCCAA
AACGTGCTGTGGCAAGAGAGGAGTCTGGGAAACCAGGAGCCCATGTGACTGTGAAGAACTGTTCTGTTGG
TGGAAATTAAGGAAGATACTGAGGAGCATCACCTTAGAGATTACTTTGAAGAATATGGAAAAATTGATACT
ATTGAAATAATTACTGATAGGCAGTCTGAAAAAAAAGAGGCTTTGGCTTTGTTACCTTTGATGACCATG
ATCCTGTGGATAAGATTTTCTTGCAAAAATACACACCATAAATGGTCACAATGCAGAAGTTAGAAAAGGC
ATTGTCTAGACAAGAAATGCAGGAAGTCCAAGTTCTAGGAGTGGAAAGAGGAGGAAACTTTGGTTTTGGA
GATTCTCGAGGTGGCGGTGGCAATTTGGACCAGGACCAGGAAGCAACTTTAGGGGGGTTCTGATGGAT
ATGGAAGTGGACGTGGATTTGGGGATGGCTATAATGGGTATGGAGGAGGACCTGGAGGTGGCAATTTTGG
AGGTAGCCCTGGTTATGGAGGAGGAAGAGGAGGATATGGTGGTGGAGGACCTGGATATGGCAACCAGGT
GGGGCTACGGAGGTGGTTATGACAACATGGAGGAGGAAATTAATGGAAGTGGAAATTAACAATGATTTTG
GAAATTATAACCAGCAACCTTCTAACTACGGTCCAATGAAGAGTGGAACTTTGGTGGTAGCAGGAACAT
GGGAGGACCATATGGTGGAGGAACTATGGTCCTGGAGGAAGTGGAGGAAGTGGGGCTATGGTGGGAGG
AGCCGATAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RR213922 representing NM_001104613
 Red=Cloning site Green=Tags(s)

MEKTLETVPLERKKREKEQFRKLFIGGLSFETTEESLRNYEQWGKLTDCVVMRDPASKRSRGFGFVTFSSMAEVDAAAMAARPHSIDGRVVEPKRAVAREESGKPGAHVTVKLLFVGGIKEDTEEHLRDYFEEYKIDTIEIITDRQSGKKRGFGFVTFDDHDPVDKIFLQKYHTINGHNAEVRKALSRQEMQEVQSSRSRGGNGFGGDSRGGGNGFGPGPGSNFRGGSDGYGSRGFGDGYNGYGGGPGGGNFGGSPGYGGGRGGYGGGGPGYGNQGGYGGGGYDNYGGGNYGSGNYNDFGNYNQQPSSNYGPMKSGNFGGSRNMGPPYGGGNYGPGGSGGSGGYGGRSRY

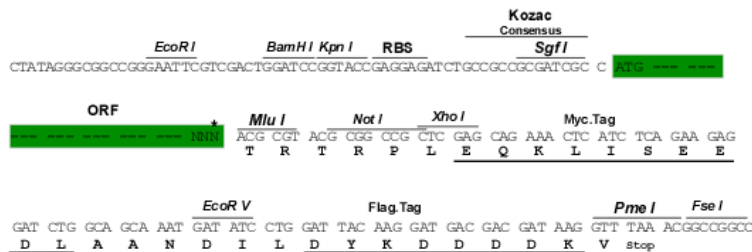
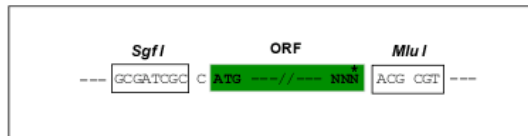
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001104613

ORF Size: 1059 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:

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: [NM_001104613.1](#), [NP_001098083.1](#)

RefSeq Size: 1062 bp

RefSeq ORF: 1062 bp

Locus ID: 362361

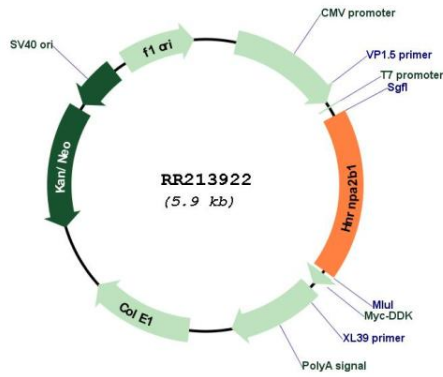
UniProt ID: [A7VIC2](#)

Cytogenetics: 4q24

MW: 37.5 kDa

Gene Summary: 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]

Product images:



Circular map for RR213922