

## Product datasheet for **MG223655**

### Hnrnpa2b1 (NM\_016806) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Hnrnpa2b1 (NM_016806) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Hnrnpa2b1
Synonyms:	9130414A06Rik; hnrnp-A; Hnrpa2; Hnrpa2b1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG223655 representing NM_016806 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGAGAGAAAAGGAACAGTTCGAAAGCTCTTTATTGGTGGCTTAAGCTTTGAAACCACAGAAGAAA  
GTTTGAGAACTACTATGAGCAATGGGAAAGCTCACAGACTGTGTGTTATGCGGGATCCTGCAAGCAA  
AAGATCAAGAGGATTTGGCTTTGTAACCTTCTCATCCATGGCCGAGGTTGACGGTGCCATGGCTGCAAGG  
CCCCATTCCATTGATGGCAGGAGTGTGAGCCAAAACGTGCTGTAGCAAGAGAGGAGTCTGAAAAACCAG  
GAGCCCATGTGACTGTGAAGAAGCTGTTGTTGGTGAATTAAGGAAGATACTGAGGAACACCACCTTAG  
AGATTACTTTGAAGATATGAAAAATTGATACTATTGAAATAATTACCGATAGGCAGTCTGAAAAGAAA  
AGAGGCTTTGGCTTTGTTACTTTTGATGACCATGATCCTGTGGATAAAATTGCTTGCAAAAATATCACA  
CCATAAATGGTCACAATGCAGAAGTTAGAAAGGCATTGTCTAGACAAGAAATGCAGGAAGTCCAAAGTTC  
TAGGAGTGAAGAGGAGGAACTTTGGTTTTGGGATTCTCGTGGTGGCGGTGGCAATTTGGACCAGGA  
CCAGGAAGCACTTTAGGGGGGATCTGATGGATACGGAAGTGGACGTGGATTTGGGGATGGCTATAATG  
GGTATGGAGGAGGACCTGGAGGTGGCAATTTGGAGGTAGCCCTGGTTATGGAGGAGGAAGAGGAGGATA  
TGGTGGTGGAGGACCTGGATATGGCAACCAGGTTGGGGCTACGGAGGTGGTTATGACAACTATGGAGGA  
GGAAATTATGGAAGTGAAGTTACAATGATTTTGGAAATTATAACCAGCAGCCTTCTAACTATGGTCCAA  
TGAAGAGTGGAACTTTGGGGTACGAGGAACATGGGAGGACCATATGGTGGAGGAACTATGGTCTCGG  
AGGAAGTGGAGGAAGTGGTGGCTATGGTGAAGGAGCAGATAT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG223655 representing NM\_016806  
 Red=Cloning site Green=Tags(s)

MEREKEQFRKLFIGGLSFETTEESLRNYEQWGKLTDCVVMRDPASKRSRGGFVTFSSMAEVDGMAAR  
 PHSIDGRVVEPKRAVAREESGKPGAHVTVKCLFVGGIKEDTEEHLRDYFEEYKIDTIEIITDRQSGKK  
 RGFVTFDDHDPVDKIVLQKYHTINGHNAEVRKALSRQEMQEVQSSRSRGGNFVGFDSRGGGGNFGPG  
 PGSNFRGGSDGYSGRGGFVGGYNGYGGGPGGGNFGGSPGYGGGRGGYGGGGPGYGNQGGYGGGYDNYGG  
 GNYGSGSYNDFGNYNQPSNYGPMKSGNFGGSRNMGGPYGGGNYGPGSSGGSGGYGGRSRY

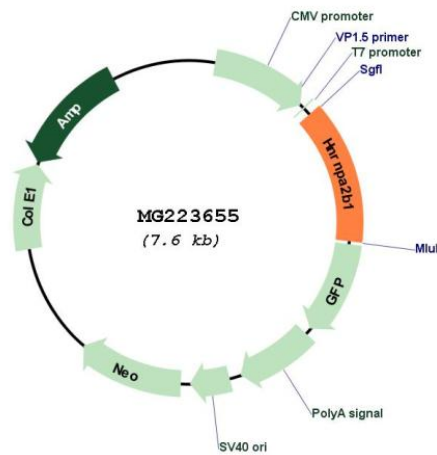
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_016806

**ORF Size:** 1023 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_016806.2](#), [NP\\_058086.2](#)

**RefSeq Size:** 4086 bp

**RefSeq ORF:** 1026 bp

**Locus ID:** 53379

**UniProt ID:** [O88569](#)

**Cytogenetics:** 6 B3

**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. 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 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]