

## Product datasheet for **MG215320**

### **Rbm15 (NM\_001045807) Mouse Tagged ORF Clone**

#### **Product data:**

|                           |                                             |
|---------------------------|---------------------------------------------|
| Product Type:             | Expression Plasmids                         |
| Product Name:             | Rbm15 (NM_001045807) Mouse Tagged ORF Clone |
| Tag:                      | TurboGFP                                    |
| Symbol:                   | Rbm15                                       |
| Synonyms:                 | C230088J01Rik; mKIAA1438                    |
| Mammalian Cell Selection: | Neomycin                                    |
| Vector:                   | pCMV6-AC-GFP (PS100010)                     |
| E. coli Selection:        | Ampicillin (100 ug/mL)                      |



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**ORF Nucleotide Sequence:**

>MG215320 representing NM\_001045807  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAGGTCTGCGGGCGGGAGCCTTTGCCGCGCGGAGTCCAAGATGGCGCGTGGAGTCCGCTGTGTG  
 AAACGAGCGCGGGTGGCGGGTTAGTCAGCTCCGCAGAGACGACCTCCGCGACCCCTCAACAATGAAAGG  
 AAAGGAGCGCTCGCCGGTCAAGCCAAGCGCTCCCGTGGCGGTGAGGACTCCAGTTCTCGTGGGGAGCGG  
 AGCAAGAAGTTAGGGGGCTCCGCGCGCAGCAATGGGAGCAGCAGCGGGAAGACGGACAGCGGGCGGGTTCG  
 GGCGGAGCCTTCACTGGACAAGTCCAGCAGCCGGGGCGCAGCCGCGAGTACGAGACCGCGGGGGCAG  
 CTCCAGTAGCCGCTTGCACAGTTACAGTCCCCGAGCACAAAAATTCCTCAGGCGGGGGCAGTCCGCG  
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 CGGGCTGTTTACGAGTTCAAACGCTTCGGTGATGTAAGTGTCAAATCAGTCACCTCTCAGTTTCTGGC  
 AGCGGGGATGAGCGGGTAGCCTTTGTGAACTTCGGAGGCCAGAGGACCGGAGGGCGGCCAAGCATGCCA  
 GAGGCCGCTGGTGTCTATGACCCGCTCTGAAGATAGAAGCCGTGTACGTGAGCCGGCCCGCAGCCG  
 CTCCCCGTTAGACAAAGATGCTTACGCCCGTCATCCAGCGTGGTGGGACCTCAGTCGGTAGCCACCGG  
 CACGCCCTGGAGGAGGGGAGGTGAGAGTTCGCTTCCCTGGAGGTGCTGCTTGGGATACAGAGACT  
 ACCGGTTGCAGCAGTTGGCCCTGGGCGGCTGCCTCCTCCACCCCGCCACCATTGCCCGAGAGCTGGA  
 AAGAGAACGAGACTATCCGTTCTATGACCGGTGCGCCCGGCTACAGCTGGAGCCGAGGGTGGAGCT  
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 CACTTTTCTGGCAACTTAGATATCACTGTGACGGAAAATGATCTCAGAAGGGCTTTTGTATCGTTTTGG  
 AGTCATACAGAAGTGGACATTAAGAGGCTTCTCGAGGCCAGACCAGTACCTATGGCTTCTCAAATTT  
 GAGAATCTAGACATGTCTCACAGGGCAAACCTGCAATGTCTGGCAAATTTATAATTCGGAATCCATCA  
 AGATTGGTTATGGTAAAGCCACACCCACTACCCGACTTTGGTGGGTGGTCTGGGACCTGGGTGCCTCT  
 TGCTGCCCTGGCAGGAAATTTGACCGATTTGGCACCATTGCAACCATAGACTACCGTAAAGGTGACAGT  
 TGGGCATATACAGTATGAAAGTTGGATGCAGCTCATGCTGCCTGGACCCATATGCGTGGATTCCCAC  
 TTGGTGGCCAGATCGTCGCTCAGGGTAGACTTTGCAGACACAGAACATCGTTACCAGCAGCAATATCT  
 TCAGCCTCTGCCCTTACCCACTATGAACTAGTGACGGATACTTTTGGACATAGAGCACCTGACCCTTTG  
 AGGAGTGTCTGGGACAGGACACCACCTTACTATACAGAGATCGTGATAGGGACCTTTATACTGATTCTG  
 ACTGGGTGCCACCCACCCAGGTTCCGAGAACGCAAGTGTCTGGGCTGCAACTAGTGTCTCACTGCTTA  
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 GATCACCTGAGAGTGAACGGCTCGAAAACAGCGTCACTGCACCTCTTCTCTGACCGAAGTCCAGAAGT  
 GAGCAGTAACAGAGATCGCTACAACAGTGAATGATCGATCATCTCGTCTTCTCTCTTGGAAAGGTCT  
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 ACTTGTGGAGGGCTCAACTGGAGGCAAAGTGGCCAACTCAAGATCACTCAGCGGCTCCGTTTGGACCAA  
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 TACCTGGAAGTTCTGACAGCCGATCTTCTCTTCTCAGCCACATCAGACACTGCCGCTCTACTCAGAG  
 GCCACTTAGGAACCTTGTCTCTATTTAAAGCAAAGCAGGCAGCTGGGGTATCAGCCTCCCTGTGGGA  
 GGCAATAAAGACAAGGAAAACCCGGGTTCTTATGCCTTCCCACCTTGTGAGTCTCTCAGCAGTTCC  
 TGGATTCCCTGCCAAGGCACTGGCCAAATCTGAAGAAGATTACCTGGTCAATGATGATTGCTCGTGCAA  
 ACTGGTGAACAGCGGA

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG215320 representing NM\_001045807  
 Red=Cloning site Green=Tags(s)

MRSAGREPLRRSPRWRRASPLCETSAGWRVSQLRRDDLRRPSTMKGKERSPVKPKRSRGGEDSSSRGER  
 SKKLGSGGSSNGSSSGKTDSSGSRRLHLDKSSSRGGSREYETGGGSSSSRLHSYSSPSTKNSSGGGSR  
 SSSRGGGGERSSGAASSAPGGGDGVEYKTLKISELGSQLSDEAVEDGLFHEFKRFGDVSVKISHLSGSG  
 SGGDERVAFVNFRRPEDARAAKHARGRLVLYDRPLKIEAVVYVSRRRSRSPDKDAYAPSSSVVGTSSVGS  
 HAPGGGGQORSLSPGGAALGYRDYRLQQLALGRLPPPPPPPLPRELERERDYPFYDRVVPAYSLEPRVGA  
 GAGAAPPREVDEISPEDDQRANRTLFLGNLDITVTENDLRRAFDRFGVITEVDIKRPSRGTSTYGLK  
 ENLDMSHRAKLAMSGKIIIRNPIKIGYGKATPTTRLWVGGGLPWVPLAALAREFDRFGTIRTIDYRKGS  
 WAYIQYESLDAHAHAATHMRGFPLGGPDRRLRVDFADTEHRYQQYLQPLPLTHYELVTDTFGHRAPDPL  
 RSARDRTPLLYRDRDRDLYTDSDWVPPPPVRRERSARAATSAVTAYEPLDSLDRRRDGSWLDLDRDRGDRD  
 LPSSRDQPRKRLPEESGGRHLDRSPEERPRKQRHCTSPDRSPELSSNRDRYNSDNDRSSRLLLERS  
 SPVDRRGSLEKSQSDKDRKNSASAERDRKHRTAAPTEGKNPLKEDRSDGNAPSASTSSKQKPPSQK  
 QDGGTAPVAASSPKLCLAWQGMLLLKNSNFPNMHLLQGDQLQVASSLLVEGSTGGKVAQLKITQRLRLDQ  
 PKLDEVTRRIKVAGPNGYAILLAVPGSSDRSSSSSSATSDTAASTQRPLRNLVSYLKQKQAAGVISLPGV  
 GNKD KENTGVLHAFPPCEFSSQFLDSPAKALAKSEEDYLVMIIVRAKLVNSG

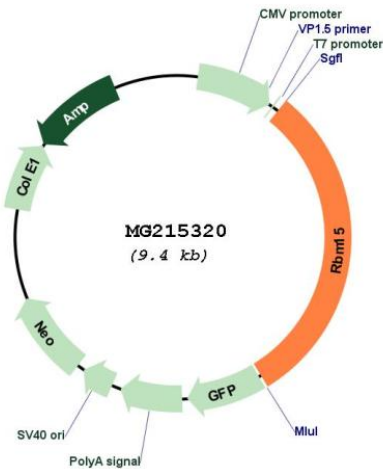
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_001045807

**ORF Size:** 2886 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\\_001045807.1](#), [NP\\_001039272.1](#)

**RefSeq Size:** 3270 bp

**RefSeq ORF:** 2889 bp

**Locus ID:** 229700

**UniProt ID:** [Q0VBL3](#)

**Cytogenetics:** 3 F2.3

**Gene Summary:** RNA-binding protein that acts as a key regulator of N6-methyladenosine (m6A) methylation of RNAs, thereby regulating different processes, such as hematopoietic cell homeostasis, alternative splicing of mRNAs and X chromosome inactivation mediated by Xist RNA (PubMed:29535189). Associated component of the WMM complex, a complex that mediates N6-methyladenosine (m6A) methylation of RNAs, a modification that plays a role in the efficiency of mRNA splicing and RNA processing (PubMed:29535189). Plays a key role in m6A methylation, possibly by binding target RNAs and recruiting the WMM complex (PubMed:29535189). Involved in random X inactivation mediated by Xist RNA: acts by binding Xist RNA and recruiting the WMM complex, which mediates m6A methylation, leading to target YTHDC1 reader on Xist RNA and promoting transcription repression activity of Xist (By similarity). Required for the development of multiple tissues, such as the maintenance of the homeostasis of long-term hematopoietic stem cells and for megakaryocyte (MK) and B-cell differentiation (PubMed:17283045, PubMed:17376872, PubMed:18981216, PubMed:25468569). Regulates megakaryocyte differentiation by regulating alternative splicing of genes important for megakaryocyte differentiation; probably regulates alternative splicing via m6A regulation (By similarity). Required for placental vascular branching morphogenesis and embryonic development of the heart and spleen (PubMed:18981216). Acts as a regulator of thrombopoietin response in hematopoietic stem cells by regulating alternative splicing of MPL (PubMed:25468569). May also function as an mRNA export factor, stimulating export and expression of RTE-containing mRNAs which are present in many retrotransposons that require to be exported prior to splicing (By similarity). High affinity binding of pre-mRNA to RBM15 may allow targeting of the mRNP to the export helicase DBP5 in a manner that is independent of splicing-mediated NXF1 deposition, resulting in export prior to splicing (By similarity). May be implicated in HOX gene regulation (By similarity).[UniProtKB/Swiss-Prot Function]