

## Product datasheet for **MG216121**

### **Rbbp5 (NM\_172517) Mouse Tagged ORF Clone**

#### **Product data:**

<b>Product Type:</b>	Expression Plasmids
<b>Tag:</b>	TurboGFP
<b>Symbol:</b>	Rbbp5
<b>Synonyms:</b>	4933411J24Rik; C330016J05
<b>Mammalian Cell Selection:</b>	Neomycin
<b>Vector:</b>	pCMV6-AC-GFP (PS100010)
<b>E. coli Selection:</b>	Ampicillin (100 ug/mL)



**ORF Nucleotide Sequence:** >MG216121 representing NM\_172517  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGAACCTCGAGTTGCTGGAGTCCTTTGGACAGAACTACCCAGAGGAAGCTGATGGGACTCTGGACTGCA  
 TCAGCATGGCCCTGACCTGCACCTTTAACAGGTGGGGCACACTGCTTGCTGTTGGCTGTAACGATGGCCG  
 GATTGTTATTTGGGATTTCTTGACCAGAGGCATTGCTAAAAAATTAAGTGCACACATCCATCCAGTCTGT  
 TCTTTGTGTGGAGCCGAGATGGTCATAAGCTTGTGAGTGTCTACAGATAACATAGTGTACAGTGGG  
 ATGTTCTTTTCAAGGATGCGACCAGAGGTTTCGATTCCCTTACCCATCTTAAAAGTCCAATATCATCC  
 TCGAGATCAGAAACAAGGTTCTCGTGTGCCATGAAATCTGCTCCTGTCATGTTGACCTTTTCAGATTCC  
 AAACATGTTGTTCTGCCGTAGACGATGACTCGGATTTGAACGTGGTGGCATCTTTTATAGCGGAGGGG  
 AATATATTTATACAGGAAATGCAAAAGGCAAGATCTTGGTCCTAAAAACAGACTCTCAGGATCTTGTTC  
 TTCTTCAGAGTAACAACCTGGACAAGCAATACTACCGCCATTAATCAATTGAGTTTGCCCGGAAGGGG  
 AGTTGCTTCCCTGATTAACACAGCAGATCGAATAATAAGAGTCTATGACGGCAGAGAGATTTTAACTGTG  
 GAAGGGATGGAGAGCCAGAGCCTATGCAGAAGCTGCAGGACTTGGTGAATAGGACTCCATGGAAAAATG  
 TTGTTTCTCTGGGGATGGGAGTACATAGTGGCGGGCTCTGCGAGGCAGCATGCGCTGTATATCTGGAA  
 AAGAGCATTGGCAACCTGGTGAAGATCTTACATGGGACCAGAGGGGAACCTCTGCTGGACGTGGCTTGGC  
 ATCCAGTCCGACCCATCATAGCTTCTATCTCTAGTGGAGTGGTGTCCATTTGGGCCCAAAATCAAGTAGA  
 AAATTGGAGTGCATTTGCACCAGACTTCAAAGAGTTGGATGAAAATGTAGAATATGAGGAAAAGAGAAATCA  
 GAATTTGATATTGAGGATGAAGATAAGAGTGAAGCTGAGCAAAACAGGGGCTGATGCTGCTGAAGATGAGG  
 AAGTGGATGTACCAGCGTGGATCCCATCGCTGCCTTCTGTAGCAGTGTGAAGAGCTGGAAGATTCAAA  
 GGCTCTATTGATTTACCCATTGCCCTGAGGTAGAAGACCCTGAAGAAAACCCGATGGCCCTCCACCG  
 GATGCAGTCCCAAGCTCCTTGATGGATGAAGGGGCTAGTTCAGAGAAGAAGAGGCAGTCTTCAGCAGATG  
 GATCCCAGCCACCAAGAAGAAACCTAAAACCACCAATATAGAGCTCCAAGGAGTGCCGAATGATGAAGT  
 CCATCCACTACTGGGTGTAAGGGGGATGGCAAAATCCAAGAAGAAGCAAGCAGGCCCGCCTAAAGGATCA  
 AAAGGTAAAGAGAAAGATTCTCCATTTAAACCGAAACTCTACAAAGGGGACAGAGGTTTACCTCTGGAAG  
 GATCAACGAAGGTAAGTGCAGCGGAACTCAGCCAGTCTTGGCAGCAGGAGGAGCCATCTCAGAAGT  
 GCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG216121 representing NM\_172517  
 Red=Cloning site Green=Tags(s)

MNLELLESFGQNYPEEADGTLDCISMAALTCTFNRWGTLAVGCNDGRIVIWDFLTRGIAKIIISAHHPVC  
 SLCWSRDGHKLVASSTDNIVSQWDLVSGDCDQRFRRFPSPILKVQYHPRDQNKVLVCPMKSAPVMLTSLDS  
 KHVVLVDDSDLNVAASFDRRGEIYITGNAGKILVLKTDSDQLVASFRTTGTSTNTTAAIKSIEFARKG  
 SCFLINTADRIIRVYDGREILTCGRDGEPEPMQKLDLVNRTPWKKCCFSGDGEYIVAGSARQHLYIWE  
 KSIIGNLVKILHGTRGELLLDVAWHPVPIIASISSGVVSIWAQNQVENWSAFAPDFKELDENVEYEERES  
 EFDIEDEDKSEPEQTGADAAEDEVVTSVDPIAAFCSSDEELEDKALLYLPIAPEVEDPEENPYGPPP  
 DAVPSSLMDGASSEKKRQSSADGSQPPKKPKTTNIELQGVNDEVHPLLGVKGDGKSKKKQAGRPKGS  
 KGKEKDSFPKPKLYKGRGLPLEGSKGKVAELSQLAAGGAISELL

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

## Cloning Scheme:



**ACCN:** NM\_172517

**ORF Size:** 1614 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

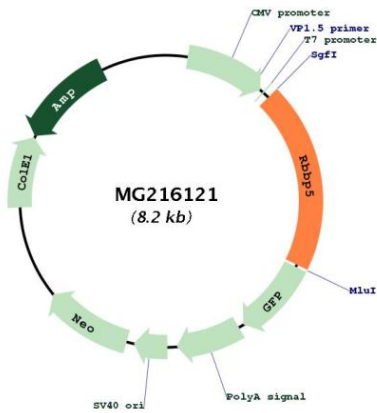
**RefSeq:** [NM\\_172517.2](#), [NP\\_766105.2](#)

**RefSeq Size:** 3632 bp

**RefSeq ORF:** 1617 bp  
**Locus ID:** 213464  
**UniProt ID:** [Q8BX09](#)  
**Cytogenetics:** 1 E4

**Gene Summary:** As part of the MLL1/MLL complex, involved in mono-, di- and trimethylation at 'Lys-4' of histone H3. Histone H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation. In embryonic stem (ES) cells, plays a crucial role in the differentiation potential, particularly along the neural lineage, regulating gene induction and H3 'Lys-4' methylation at key developmental loci, including that mediated by retinoic acid. Does not affect ES cell self-renewal.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG216121