

## Product datasheet for MC227282

### Rbm4 (NM\_001290123) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rbm4 (NM_001290123) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Rbm4
Synonyms:	4921506I22Rik; lark; Lark1; Mlark; Rbm4a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC227282 representing NM_001290123 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGGTGAAGCTGTTTCATTGGAATCTGCCCCGGGAGGCCACAGAGCAGGAGATCCGCTCACTCTTCGAGC  
 AGTACGGGAAGGTGCTGGAATGTGACATCATTAGAATTATGGCTTTGTGCACATAGAGGACAAGACGGC  
 CGCTGAGGATGCCATACGCAACCTGCACCACTACAAGCTGCACGGAGTGAACATCAATGTGGAAGCCAGC  
 AAGAATAAGAGCAAAGCTTCAACCAAGTTACACGTGGGCAACATCAGCCCCACTTGTACCAACCAAGAGC  
 TTCGGGCCAAGTTTGGAGGATACGGCCAGTCATCGAATGTGACATCGTGAAGATTATGCCTTTGTACA  
 CATGGAGCGGGCAGAGGATGCGGTGGAGGCCATCAGGGGCTCGACAACACAGAGTTTCAAGGCAAACGA  
 ATGCACGTGCAGTTGTCCACCAGCCGGCTTAGGACCGCGCCCGGATGGGAGACCAGAGCGGCTGTATC  
 GGTGCGGGAAAGAGGGGCACTGGTCCAAAGAGTGTCCAATAGATCGTTCCGGCCGCGTGGCAGACTTGAC  
 CGAGCAATATAATGAGCAATATGGAGCAGTGCCTACGCCCTACACCATGAGTTATGGGGATTCAATTGTAT  
 TACAACAACACGTACGGAGCGCTCGATGCCTACTACAAGCGTGCCGTGCTGCCCGTCTATGAGGCAG  
 TGGCAGCTGCAGCTGCCTCTGCGTATAGTAATATGCAGAGCAGACTTTGTCTCAGCTGCCACAAGTCCA  
 GAACACAGCCATGGCCAGTCACCTCACCTCCACCTCTCTCGATCCCTACAATAGACATCTGTTGCCGCT  
 TCAGGAGCTGCAGCAGCAGCAGCTGCTGCTGCTTGTACTGCAGCTTCTACTTCATATTACGGGCGGG  
 ATCGGAGCCCCCTGCGTGCCTACAGGCCAGTCCTCACTGTTGGAGAGGGCTACGGTTACGGGCATGA  
 CAGTGAGTTGTCCAAGCTTCAGCAGCTGCTCGGAATTCCTGTACGACATGGCCCGGTATGAGCGGGAG  
 CAGTATGCGGATCGGGCGCGTACTCAGCCTTTTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI



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<b>ACCN:</b>	NM_001290123
<b>Insert Size:</b>	1086 bp
<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u>NM_001290123.1</u> , <u>NP_001277052.1</u>
<b>RefSeq Size:</b>	2583 bp
<b>RefSeq ORF:</b>	1086 bp
<b>Locus ID:</b>	19653
<b>UniProt ID:</b>	<u>Q8C7Q4</u>
<b>Cytogenetics:</b>	19 A

**Gene Summary:**

RNA-binding factor involved in multiple aspects of cellular processes like alternative splicing of pre-mRNA and translation regulation. Modulates alternative 5'-splice site and exon selection. Acts as a muscle cell differentiation-promoting factor. Activates exon skipping of the PTB pre-mRNA during muscle cell differentiation. Antagonizes the activity of the splicing factor PTBP1 to modulate muscle cell-specific exon selection of alpha tropomyosin. Binds to intronic pyrimidine-rich sequence of the TPM1 and MAPT pre-mRNAs. Required for the translational activation of PER1 mRNA in response to circadian clock. Binds directly to the 3' UTR of the PER1 mRNA. Exerts a suppressive activity on Cap-dependent translation via binding to CU-rich responsive elements within the 3' UTR of mRNAs, a process increased under stress conditions or during myocytes differentiation. Recruits EIF4A1 to stimulate IRES-dependent translation initiation in response to cellular stress. Associates to internal ribosome entry segment (IRES) in target mRNA species under stress conditions. Plays a role for miRNA-guided RNA cleavage and translation suppression by promoting association of AGO2-containing miRNPs with their cognate target mRNAs. Associates with miRNAs during muscle cell differentiation. Binds preferentially to 5'-CGCGCG[GCA]-3' motif in vitro.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) differs in the 5' UTR compared to variant 1. Variants 1, 2 and 3 all encode isoform a.