

## Product datasheet for MR223309

### Rbm4 (NM\_009032) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rbm4 (NM_009032) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rbm4
Synonyms:	4921506I22Rik; lark; Lark1; Mlark; Rbm4a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR223309 representing NM_009032 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTGAAGCTGTTCATTGGAATCTGCCCGGGAGGCCACAGAGCAGGAGATCCGCTCACTCTTCGAGC  
AGTACGGGAAGGTGCTGGAATGTGACATCATTAAAGATTATGGCTTTGTGCACATAGAGGACAAGACGGC  
CGCTGAGGATGCCATACGCAACCTGCACCACTACAAGCTGCACGGAGTGAACATCAATGTGAAGCCAGC  
AAGAATAAGAGCAAAGCTTCAACCAAGTTACACGTGGCAACATCAGCCCCACTTGTACCAACCAAGAGC  
TTCGGGCCAAGTTTGGAGGTACGGCCAGTCATCGAATGTGACATCGTAAAAGATTATGCCTTTGTACA  
CATGGAGCGGGCAGAGGATGCGGTGGAGGCCATCAGGGGCTCGACAACACAGAGTTTCAAGGCAAACGA  
ATGCACGTGCAGTTGTCCACCAGCCGGCTTAGGACCGCGCCCGGATGGGAGACCAGAGCCGGCTGCATC  
GGTGCGGGAAAGAGGGGCACTGGTCAAAGAGTGTCCAATAGATCGTTCCGGCCGCTGGCAGACTTGAC  
CGAGCAATATAATGAGCAATATGGAGCAGTGCCTACGCCCTTACACCATGAGTTATGGGGATTCAATGTAT  
TACAACAACACGTACGGAGCGCTCGATGCCTACTACAAGCGTGCCTGCTGCCGGTCCATGAGGCAG  
TGGCAGCTGCAGCTGCCTCTGCGTATAGTAATATGCAGAGCAGACTTTGTCTCAGCTGCCACAAGTCCA  
GAACACAGCCATGGCCAGTCACCTCACCTCCACCTCTCTCGATCCCTACAATAGACATCTGTTGCCGCT  
TCAGGAGCTGCAGCAGCAGCAGCAGCTGCTGCTGCTTGTACTGCAGCTTCTACTCATATTACGGGCGGG  
ATCGGAGCCCCCTGCGTGCCTACAGGCCAGTCCCTCACTGTTGGAGAGGGCTACGGTTACGGGCATGA  
CAGTGAGTTGTCCAAGCTTACGAGCTGCTCGGAATTCCTGTACGACATGGCCCGGTATGAGCGGGAG  
CAGTATGCGGATCGGGCGGCTACTCAGCCTTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >MR223309 representing NM\_009032  
Red=Cloning site Green=Tags(s)

MVKLFIGNLPREATEQEIRSLFEQYGKVLCECDIIKNYGFVHIEDKTAEDAIRNLHHYKLHGVNINVEAS  
 KNKSKASTKLVHGNISPTCTNQELRAKFEEYGPVIECDIVKDYAFVHMERAEAVEAIRGLDNTEFQGKR  
 MHVQLSTSRLRTAPMGDQSGCYRCGKEGHWSKECPIDRSGRVADLTEQYNEQYGAVRTPYTMSTYDLSLY  
 YNNTYGALDAYYKRCRAARSYEAVAAAAASAYSNYAEQTLSQLPQVQNTAMASHLTSTSLDPYNRHLLPP  
 SGAAAAAAAATAASTSYGRDRSPLRRATGPVLTVGEGYGYGHDSLSQASAAARNSLYDMARYERE  
 QYADRARYSAF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9107\\_g09.zip](https://cdn.origene.com/chromatograms/mm9107_g09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_009032

**ORF Size:** 1083 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\\_009032.3](#), [NP\\_033058.2](#)

**RefSeq Size:** 2630 bp

**RefSeq ORF:** 1086 bp

**Locus ID:** 19653

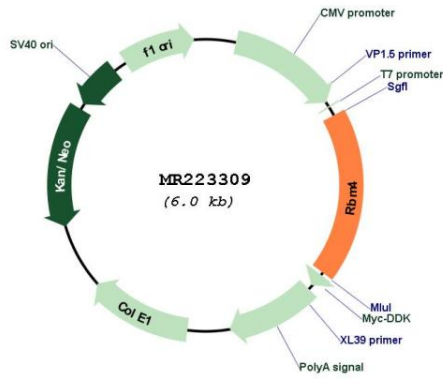
**UniProt ID:** [Q8C7Q4](#)

**Cytogenetics:** 19 A

**MW:** 40 kDa

**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]

Product images:



Circular map for MR223309