

Product datasheet for **MR228103**

Rbm4 (NM_001290124) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Rbm4 (NM_001290124) 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: >MR228103 representing NM_001290124
Red=Cloning site **Blue**=ORF **Green**=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGC**

ATGGTGAAGCTGTTCATTGGAATCTGCCCCGGGAGGCCACAGAGCAGGAGATCCGCTCACTCTTCGAGC
AGTACGGGAAGGTGCTGGAATGTGACATCATTAGAATTATGGCTTTGTGCACATAGAGGACAAGACGGC
CGCTGAGGATGCCATACGCAACCTGCACCACTACAAGCTGCACGGAGTGAACATCAATGTGGAAGCCAGC
AAGAATAAGAGCAAAGCTTCAACCAAGTTACACGTGGGCAACATCAGCCCCACTTGTACCAACCAAGAGC
TTCGGGCCAAGTTTGAAGAGTACGGCCAGTCATCGAATGTGACATCGTGAAGATTATGCCTTTGTACA
CATGGAGCGGGCAGAGGATGCGGTGGAGGCCATCAGGGGCCTCGACAACACAGAGTTTCAAGGTGGGATG
TGTGTGGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR228103 representing NM_001290124
Red=Cloning site **Green**=Tags(s)

MYKLFIGNLPREATEQEIRSLFEQYGKVLCDIKNYGFVHIEDKTAEDAIRNLHHYKLHGVNINVEAS
KNKSKASTKLHVGNISPTCTNQELRAKFEEYGPVIECDIVKDYAFVHMERAEADAEAIRGLDNTEFGGM
CVG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_001290124

ORF Size: 429 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_001290124.1](#), [NP_001277053.1](#)

RefSeq Size: 1912 bp

RefSeq ORF: 432 bp

Locus ID: 19653

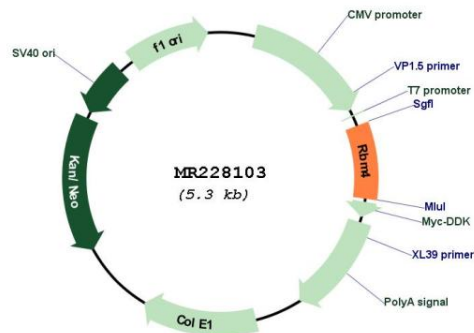
UniProt ID: [Q8C7Q4](#)

Cytogenetics: 19 A

MW: 16.6 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 MR228103