

Product datasheet for RC209770

Y14 (RBM8A) (NM_005105) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Y14 (RBM8A) (NM_005105) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Y14
Synonyms:	BOV-1A; BOV-1B; BOV-1C; C1DELq21.1; DEL1q21.1; MDS014; RBM8; RBM8B; TAR; Y14; ZNRP; ZRNP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209770 representing NM_005105 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCGGACGTGCTAGATCTTCACGAGGCTGGGGCGAAGATTTCCGCATGGATGAGGATGGGGACGAGA
 GCATTCACAACTGAAAGAAAAAGCGAAGAAACGGAAGGGTCGCGGCTTTGGCTCCGAAGAGGGGTCCCG
 AGCGCGGATGCGTGAGGATTATGACAGCGTGGAGCAGGATGGCGATGAACCCGGACCACAACGCTCTGTT
 GAAGGCTGGATTCTTTGTAAGTGGAGTCCATGAGGAAGCCACCGAAGAAGACATACACGACAAATTCG
 CAGAATATGGGGAATTAACATTCATCTCAACCTCGACAGGCGAACAGGATATCTGAAGGGGTATAC
 TCTAGTTGAATATGAAACATACAAGGAAGCCAGGCTGCTATGGAGGGACTCAATGGCCAGGATTTGATG
 GGACAGCCCATCAGCGTTGACTGGTGTGTTTGTTCGGGGTCCACCAAAAGCAAGAGGAGAGGTGGCCGAA
 GACGCAGCAGAAGTCCAGACCGGAGACGTCGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC209770 representing NM_005105 Red=Cloning site Green=Tags(s)
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MADVLDLHEAGGEDFAMDEDGDESIHKLKEKAKKRKGRGFGSEEGSRARMREDYDSVEQDDEPGPQRSV
 EGWILFVTGVHEEATEEDIHDKFAEYGEIKNIHLNLDRTGYLKGTYLVEYETYKEAQAAMEGLNQDLM
 GQPIISVDWCFVRGPPKGKRRGRRRSRSPDRRR

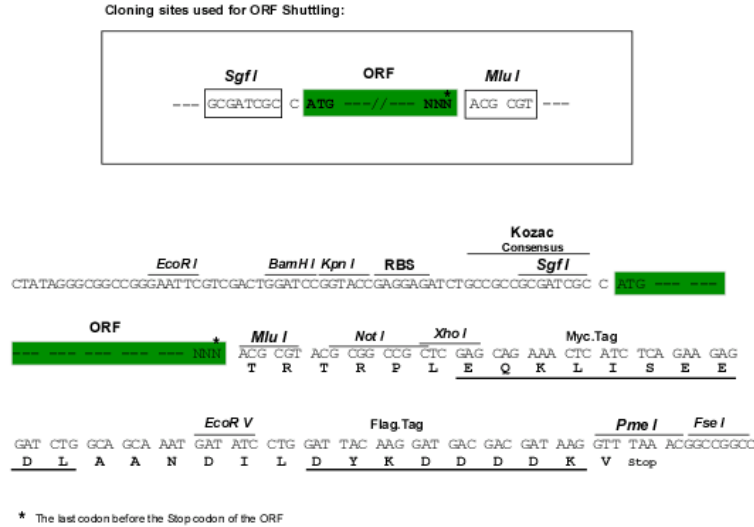
TRTRPLEQKLISEEDLAANDILDYKDDDDKV


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Chromatograms: https://cdn.origene.com/chromatograms/mk6358_a11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005105

ORF Size: 522 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.

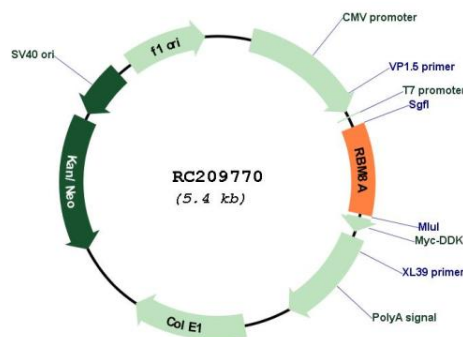
RefSeq: [NM_005105.5](#)

RefSeq Size: 2787 bp

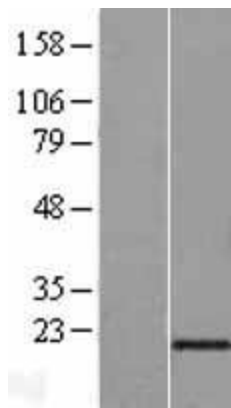
RefSeq ORF: 525 bp
 Locus ID: 9939
 UniProt ID: [Q9Y5S9](#)
 Cytogenetics: 1q21.1
 Domains: RRM
 Protein Families: Druggable Genome
 Protein Pathways: Spliceosome
 MW: 19.7 kDa

Gene Summary: This gene encodes a protein with a conserved RNA-binding motif. The protein is found predominantly in the nucleus, although it is also present in the cytoplasm. It is preferentially associated with mRNAs produced by splicing, including both nuclear mRNAs and newly exported cytoplasmic mRNAs. It is thought that the protein remains associated with spliced mRNAs as a tag to indicate where introns had been present, thus coupling pre- and post-mRNA splicing events. Previously, it was thought that two genes encode this protein, RBM8A and RBM8B; it is now thought that the RBM8B locus is a pseudogene. There are two alternate translation start codons with this gene, which result in two forms of the protein. An allele mutation and a low-frequency noncoding single-nucleotide polymorphism (SNP) in this gene cause thrombocytopenia-absent radius (TAR) syndrome. [provided by RefSeq, Jul 2013]

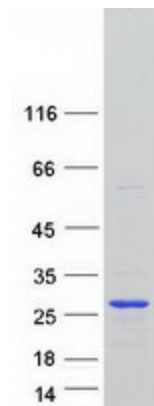
Product images:



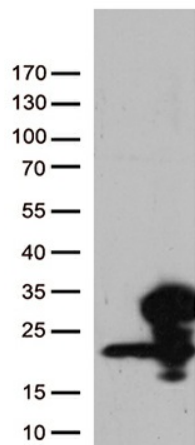
Circular map for RC209770



Western blot validation of overexpression lysate (Cat# [LY417520]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209770 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RBM8A protein (Cat# [TP309770]). The protein was produced from HEK293T cells transfected with RBM8A cDNA clone (Cat# RC209770) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RBM8A (Cat# RC209770, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RBM8A (Cat# [TA812498])(1:500). Positive lysates [LY417520] (100ug) and [LC417520] (20ug) can be purchased separately from OriGene.