

Product datasheet for **RC200726**

RRM1 (NM_001033) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	RRM1
Synonyms:	R1; RIR1; RR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC200726 representing NM_001033.

Blue=ORF Red=Cloning site Green=Tag(s)

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Protein Sequence: >Peptide sequence encoded by RC200726
 Blue=ORF Red=Cloning site Green=Tag(s)

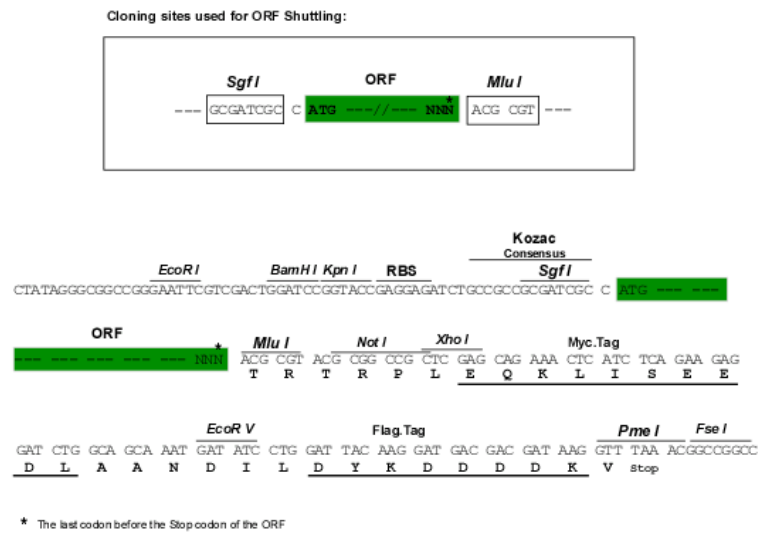
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Recombinant protein using RC200726 also available, [TP300726](#)

Chromatograms: https://cdn.origene.com/chromatograms/mg4669_c01.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



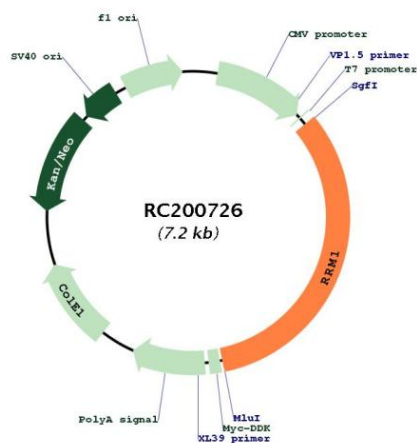
ACCN: NM_001033

ORF Size: 2376 bp

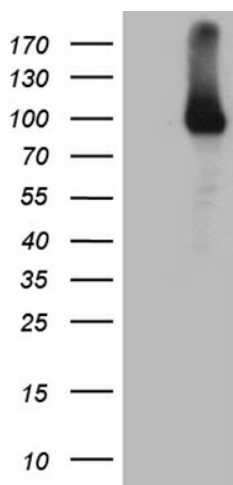
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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 Size:	3117 bp
RefSeq ORF:	2379 bp
Locus ID:	6240
UniProt ID:	P23921
Cytogenetics:	11p15.4
Domains:	ribonuc_red_lg, ATP-cone
Protein Families:	Druggable Genome
Protein Pathways:	Glutathione metabolism, Metabolic pathways, Purine metabolism, Pyrimidine metabolism
MW:	90.1 kDa

Gene Summary:

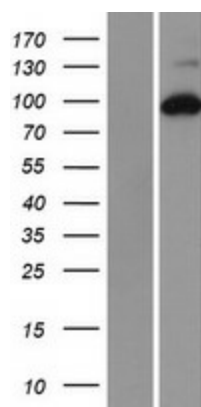
This gene encodes the large and catalytic subunit of ribonucleotide reductase, an enzyme essential for the conversion of ribonucleotides into deoxyribonucleotides. A pool of available deoxyribonucleotides is important for DNA replication during S phase of the cell cycle as well as multiple DNA repair processes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2015]

Product images:


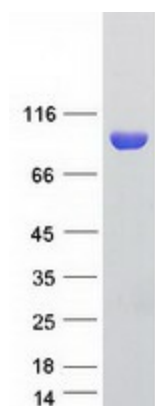
Circular map for RC200726



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RRM1 (Cat# RC200726, 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-RRM1 (Cat# [TA804382])(1:500). Positive lysates [LY422336] (100ug) and [LC422336] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY422336]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200726 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RRM1 protein (Cat# [TP300726]). The protein was produced from HEK293T cells transfected with RRM1 cDNA clone (Cat# RC200726) using MegaTran 2.0 (Cat# [TT210002]).