

Product datasheet for **SC111007**

RRM1 (NM_001033) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RRM1 (NM_001033) Human Untagged Clone
Tag:	Tag Free
Symbol:	RRM1
Synonyms:	R1; RIR1; RR1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC111007 sequence for NM_001033 edited (data generated by NextGen Sequencing)

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ATGCATGTGATCAAGCGAGATGGCCGCAAGAACGAGTCATGTTTGACAAAATTACATCT
CGAATCCAGAAGCTTTGTTATGGACTCAATATGGATTTTGTGATCCTGCTCAGATCACC
ATGAAAGTAATCCAAGCCTTGTACAGTGGGGTACCACAGTGGAACTAGATACTTTGGCT
GCTGAAACAGCTGCAACCTTGACTACTAAGCACCTGACTATGCTATCCTGGCAGCCAGG
ATCGCTGTCTCTAACTTGCACAAAAGAAACAAAGAAAGTTCAGTGATGTGATGGAAAGAC
CTCTATAACTACATAAAATCCACATAATGGCAAACACTCTCCCATGGTGGCCAAGTCAACA
TTGGATATTGTTCTGGCCAATAAAGATCGCCTGAATTCTGCTATTATCTATGACCAGAT
TTCTCTTACAATTACTTCGGCTTTAAGACGCTAGAGCGGTCTTATTTGTTGAAGATCAAT
GGAAAAGTGGCTGAAAGACCACAACATATGTTGATGAGAGTATCTGTTGGGATCCACAAA
GAAGACATTGATGCAGCAATTGAAACATATAATCTTCTTCTGAGAGGTGGTTTACTCAT
GCTTCGCCACTCTCTTCAATGCTGGTACCAACCGCCACAACCTTCTAGCTGTTTTCTT
CTGAGTATGAAAGATGACAGCATTGAAGGCATTTATGACACTCTAAAGCAATGTGCATTG
ATTTCTAAGTCTGCTGGAGGAATTGGTGTGCTGTGAGTTGTATTCGGGCTACTGGCAGC
TACATTGCTGGGACTAATGGCAATTCGAATGGCCTTGTACCGATGCTGAGAGTATAAAC
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GTTAGCAAAGGAATCTCAGTATGATATGTGGAATGTTACTCCTACAGACCTATGGGAC
TGGAAAGTTCTCAAGGAGAAGATTGCAAAGTATGGTATAAGAAACAGTTTACTTATTGCC
CCGATGCCTACAGCTTCCACTGCTCAGATCCTGGGGAATAATGAGTCCATTGAACCTTAC
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TTGGAGAATAGAGATGAATGTCTGATGTGTGGATCCTGA
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Clone variation with respect to NM_001033.3
2232 g=>a

5' Read Nucleotide Sequence: >OriGene 5' read for NM_001033 unedited
 GCACGAGGGCCTCTGCTCTGAAGAAGTGTGTCTGGCTCCAACCTCCAGTTCTTTCCCTG
 AGCAGCGCCTGGAACCTAACCCCTCCCCTCTGTACCTTCTCGATCCCAGCCGCGCTTT
 AGAGCCGAGTCCAGTCTTGGATCCTTCAGAGCCTCAGCCACTAGCTGCGATGCATGTGA
 TCAAGCGAGATGGCCCAAGAACGAGTCATGTTTGACAAAATTACATCTCGAATCCAGA
 AGCTTTGTTATGGACTCAATATGGATTTTGTGATCCTGCTCAGATCACCATGAAAGTAA
 TCCAAGGCTTGTACAGTGGGGTACCACAGTGGAACTAGATACTTTGGCTGCTGAAACAG
 CTGCAACCTTGACTACTAAGCACCTGACTATGCTATCCTGGCAGCCAGGATCGCTGTCT
 CTAACCTGCACAAAGAAACAAAGAAAGTGTTCAGTGATGTGATGGAAGACCTCTATAACT
 ACATAAATCCACATAATGGCAAACACTCTCCCATGGTGGCCAAGTCAACATTGGATATTG
 TTCTGGCCAATAAAGATCGCCTGAATTCTGCTATTATCTATGACCGAGATTTCTCTTACA
 ATTACTTC

3' Read Nucleotide Sequence: >OriGene 3' read for NM_001033 unedited
 CCGCGGGCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTCAAAGCTTATTTTGGT
 GAAAATCCCAATATATGAGTTTAAAAAAAATCATTAAACATCATTAAACAGTACTTTAAAT
 CAATTACTCCTTTTGCCTGCAACAGGGTCCAGCAAAGCCTTACCACCTCAAGCAAACCCA
 CTATACCTATCTATGCTCAAGAAGTAGTTTGGCTACTGAAGACATGCTGGTCTCTTCCAA
 GTCTTTCTCAGGATCCACACATCAGACATTCATCTATTCTCCAAAGAGCACACCATG
 GCTGCTGGGTTCTCCTTCTCTTCTTCTTCTTGGATACCTTTTCTTTATCTTTTAGC
 TTCTCCTATTTAGAGTGAAGTGGATTGGATTAGCTGCTGGTCTTGTCTTAAATAATAC
 ATCCCAGTCTTCAAACCTGCTTCCAGCCGTAGAAGTGCATACTAGTGAGTTTGCCATAG
 TTAGGCTCAGCAATGTGGATGTTCAAAGATTGGCTTTGATCAATGAAAGCACCTCTCTCA
 GCTGCCATCTTGAGAACAGTTTTCTGAGAGATTTCCACACAGTTCTATAAAGTTGCTTC
 AGGTCATCAGGAATTTCTGGTATGCTCTGAATAGAGCCATTGCATGGCATAATCTGGTT
 TTTTCATCTTTCATGCCATAGGCCCGCTCGGGAAGACCTTTAATTAGTGAGGATTTACA
 TTCTGAAATCCTCCTGACCAGACCCTGCAAGTATAGATGTGCTGTGGTAGGGTCCAAGGA
 CCCATTATCCCACGACTGAACAGGGGACCCGATAGCTCCGGGCAATAATAAACGGTTCT
 TAACCATACTTGCAATTTTTCTGGAAACCTCCAGTCCATAGGCTGTAGGGGACCTCCC
 AATTAACCGGAAATTCCTTGACCGGAAGCCCTAAGGTTTTATGCCTTGTCTGGAAGGG
 ACCCGGCTTCAAGCCATAAAAAGTAAAAACGGTTTTAAACGGGCTGGCCCAAG

Restriction Sites: NotI-NotI

ACCN: NM_001033

Insert Size: 2930 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](#)

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:	<ol style="list-style-type: none">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:	<u>NM_001033.2</u> , <u>NP_001024.1</u>
RefSeq Size:	3117 bp
RefSeq ORF:	2379 bp
Locus ID:	6240
UniProt ID:	<u>P23921</u>
Cytogenetics:	11p15.4
Domains:	ribonuc_red_lg, ATP-cone
Protein Families:	Druggable Genome
Protein Pathways:	Glutathione metabolism, Metabolic pathways, Purine metabolism, Pyrimidine metabolism
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).</p>