

Product datasheet for **SC334939**

RRP4 (EXOSC2) (NM_001282708) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RRP4 (EXOSC2) (NM_001282708) Human Untagged Clone
Tag:	Tag Free
Symbol:	EXOSC2
Synonyms:	hRrp4p; p7; RRP4; Rrp4p; SHRF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001282708, the custom clone sequence may differ by one or more nucleotides

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ATGGCGATGGAGATGAGGCTTCCAGTGGCTCGCAAGCCTCTTAGCGAGAGACTGGGCCGCGACACTAAGA  
AACATCTAGTGGTGCCGGGGGATACAATCACTACGGACACAGGATTCATGCGGGGCCATGGAACGTATAT  
GGGAGAAGAGAAGCTCATTGCATCTGTTGCTGGCTCTGTGGAGAGAGTAAACAAGTTGATCTGTGTGAAA  
GCTTTGAAAACCAGATACATTGGTGAAGTAGGAGACATCGTAGTGGACGAATCACAGAGGTTCAACAGA  
AGAGGTGGAAGGTGGAGACCAACTCCAGGCTGGATTCGGTCTTGCTGCTCTCGTCCATGAACCTTCCTGG  
AGGAGAGCTGAGGAGAAGATCTGCAGAAGATGAGCTTGAATGAGAGGTTTCTTACAGGAAGGGGACCTT  
ATCAGTGGGGTTTTGGTCCAGGTTTCCCCCTCCCTGGTAAACGGCAGAAGACCCACTTTCATGATTTGC  
CATGTGGTGCCTCAGTGATTCTCGGTAACAACGGCTTCATCTGGATTTACCCAACACCTGAGCACAAAGA  
AGAGGAAGCAGGGGGCTTCATTGCAAACCTGGAGCCTGTCTCTTGCTGATCGAGAGGTGATATCCCGG  
CTTCGGAAGTGCATCATCTCGCTGGTAACTCAGAGGATGATGCTGTATGATACCAGCATCCTGTACTGCT  
ATGAAGCATCCCTTCCACATCAGATCAAAGACATCTTAAAGCCAGAAATAATGGAGGAGATTGTGATGGA  
AACACGCCAGAGGCTTTTGAACAGGAGGGA
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Restriction Sites:	Sgfl-MluI
ACCN:	NM_001282708
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).



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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_001282708.1</u> , <u>NP_001269637.1</u>
RefSeq Size:	1956 bp
RefSeq ORF:	804 bp
Locus ID:	23404
UniProt ID:	<u>Q13868</u>
Cytogenetics:	9q34.12
Protein Pathways:	RNA degradation
Gene Summary:	<p>Non-catalytic component of the RNA exosome complex which has 3'->5' exoribonuclease activity and participates in a multitude of cellular RNA processing and degradation events. In the nucleus, the RNA exosome complex is involved in proper maturation of stable RNA species such as rRNA, snRNA and snoRNA, in the elimination of RNA processing by-products and non-coding 'pervasive' transcripts, such as antisense RNA species and promoter-upstream transcripts (PROMPTs), and of mRNAs with processing defects, thereby limiting or excluding their export to the cytoplasm. The RNA exosome may be involved in Ig class switch recombination (CSR) and/or Ig variable region somatic hypermutation (SHM) by targeting AICDA deamination activity to transcribed dsDNA substrates. In the cytoplasm, the RNA exosome complex is involved in general mRNA turnover and specifically degrades inherently unstable mRNAs containing AU-rich elements (AREs) within their 3' untranslated regions, and in RNA surveillance pathways, preventing translation of aberrant mRNAs. It seems to be involved in degradation of histone mRNA. The catalytic inactive RNA exosome core complex of 9 subunits (Exo-9) is proposed to play a pivotal role in the binding and presentation of RNA for ribonucleolysis, and to serve as a scaffold for the association with catalytic subunits and accessory proteins or complexes. EXOSC2 as peripheral part of the Exo-9 complex stabilizes the hexameric ring of RNase PH-domain subunits through contacts with EXOSC4 and EXOSC7. [UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame exon in the central coding region compared to variant 1. It encodes isoform 2 which is shorter than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>