

Product datasheet for SC113302

EXOSC4 (NM_019037) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EXOSC4 (NM_019037) Human Untagged Clone
Tag:	Tag Free
Symbol:	EXOSC4
Synonyms:	hRrp41p; p12A; RRP41; RRP41A; Rrp41p; SKI6; Ski6p
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC113302 sequence for NM_019037 edited (data generated by NextGen Sequencing)

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ATGGCGGGGCTGGAGCTTTGTGCGACCAGGGCTACCGGGTGGACGGGCGGCGCCGGG
GAGCTGCGCAAGATCCAGGCGCGGATGGGCGTGTTCGCGCAGGCTGACGGCTCGGCCTAC
ATTGAGCAGGGCAACACCAAGGCACTGGCTGTGGTCTACGGCCCGCACGAGATCCGGGGC
TCCCGGGCTCGAGCCCTGCCGGACAGGGCCCTAGTGAAGTGTCAATATAGTTCAGCGACC
TTCAGCACAGGTGAGCGCAAGCGACGGCCACATGGGGACCGTAAGTCTGTGAGATGGGC
CTGCAGCTCCGCCAGACTTTGGAAGCAGCCATCCTCACACAGCTGCACCCACGCTCCCAG
ATTGATATCTATGTGCAGGTGCTACAGGCAGATGGTGGGACCTATGCAGCTTGTGTGAAT
GCAGCCACGCTGGCAGTGTGGATGCCGGGATACCCATGAGAGACTTTGTGTGTGCGTGC
TCAGCTGGCTTCGTGGACGGCACAGCCCTGGCGGACCTCAGCCATGTGGAGGAAGCAGCT
GGTGGCCCCCAGCTGGCCCTGGCCCTGCTGCCAGCCTCAGGACAGATTGCCTGCTTGAG
ATGGATGCCCCGGCTGCACGAGGACCACCTGGAGCGGGTGTGGAGGCTGCTGCCAGGCT
GCCCGAGATGTGCACACCCTCTTAGATCGAGTGGTCCGGCAGCATGTGCGTGAGGCCTCT
ATCTTGTGGGGGACTGA

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Clone variation with respect to NM_019037.2



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_019037 unedited
 GTGGATTTGTATCCGACTTCTATAGGCGGCCGCGCAATTCGCACGAGGGCGGACCTGGCG
 GCCGGGCAGCATGGCGGGGCTGGCAGCTCTTGTGCGGACCAGGGCTACCGGGTGGACGGGC
 GGCGCGCCGGGGAGCTGCGCAAGATCCAGGCGCGGATGGGCGTGTTCGCGCAGGCTGACG
 GCTCGGCTACATTGAGCAGGGCAACACTTTGCACTGGCTGTGGTCTACGGCCCCGACGA
 GATCCGGGGCTCCCGGGCTCGAGCCCTGCCGGACAGGGCCCTAGTGAAGTGTCAATATAG
 TTCAGCGACCTTCAGCACAGGTGAGCGCAAGCGACGGCCACATGGGGACCGTAAGTCCTG
 TGAGATGGGCCTGCAGCTCCGCCAGACTTTCGAAGCAGCCATCCTCACACAGCTGCACCC
 ACGCTCCCAGATTGATATCTATGTGCAGGTGCTACAGGCAGATGGTGGGACCTATGCAGC
 TTGTGTGAATGCAGCCACGCTGGCAGTGTGGATGCCGGGATACCCATGAGAGACTTTGT
 GTGTGCGTGTCTAGCTGGCTTCGTGGACGGCACAGCCCTGGCGGACCTCAGCCATGTGGA
 GGAAGCAGCTGGTGGCCCCAGCTGGCCCTGGCCCTGCTGCCAGCCTCAGGACAGATTGC
 GCTGCTTGAGATGGATGCCCGGCTGCACGAGGACCACCTGGAGCCGGTGTGGAGGCTG
 CTGCCCAGGCTGCCCGAGATGTGCACACCCTCTTAGATCGAGTGGTCCCGCAGCATGTGC
 GTGAAGCTCTATTCTGTGGGGACTGACCACCCACCACCATGTCCAGAATAAACCCCTT
 CTCTGCCCCAAAAAAGAAAAAATAAACTTGACTCTAGATTGGGCGCGTCATAG
 TTGTCCCTGAAAGATCCCGGTGGC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_019037 unedited
 GGCAACTTCCAGGGCCAGNANAGCACTGGGGAGGGGTACAGGNATGCCACCCGGGATCT
 GTTCAGGAAACAGCTATGACCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTT
 TCTTTTTTTGGGGCAGAGGAGGTTTTATTCTGGACATGGGTGGCTGGGTGGTCACTCC
 CCCAGCAAGATAGAGGCCTCACGCACATGCTGCCGGACCACTCGATCTAAGAGGGTGTGC
 ACATCTCGGGCAGCCTGGGCAGCAGCCTCCAACACCCGCTCCAGGTGGTCCCTCGTGCAGC
 CGGGCATCCATCTCAAGCAGCGCAATCTGTCTGAGGCTGGCAGCAGGGCCAGGGCCAGC
 TGGGGGCCACCAGCTGCTTCTCCACATGGCTGAGGTCCGCCAGGGCTGTGCCGTCCACG
 AAGCCAGCTGAGCAGCACACAAAGTCTCTCATGGGTATCCCGGCATCCAGCACTGCC
 AGCGTGGCTGCATTACACAAGTGCATAGGTCCCACCATCTGCCTGTAGCACCTGCACA
 TAGATATCAATCTGGGAGCGTGGGTGCANCTGTGTGAGGATGGTGTTCNAAAGTCTGG
 CGGAGCTGCAGGCCATCTCACAGGACTTACGGTCCCCATGTGGCCGTGCTTGCCTCA
 CCTGTGCTGANAGTCGCTGAAGTATATTGACAGTTCACCTANGGGCCCTGTCCGGCAGGGC
 TCGAGCCCCGGAGCCCCGNTCTCGTGGGGCCGTAAACACAGCCAGTGCCTTGTGTGCC
 CTGCTCATGTANGCCGGAGCCGTAGCCTGCGCGAACACGCCATCCCGGGCTGGATNTTT
 GGCAGNTCCCCGGNGCGGNCCCTCCACCCGGTAGCCCTGGTCCAAA

Restriction Sites:

NotI-NotI

ACCN:

NM_019037

Insert Size:

860 bp

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).

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.

RefSeq: [NM_019037.2](#), [NP_061910.1](#)

RefSeq Size: 948 bp

RefSeq ORF: 738 bp

Locus ID: 54512

UniProt ID: [Q9NPD3](#)

Cytogenetics: 8q24.3

Domains: RNase_PH_C

Protein Pathways: RNA degradation

Gene Summary: 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. EXOSC4 binds to ARE-containing RNAs.[UniProtKB/Swiss-Prot Function]