

## Product datasheet for **SC124367**

### EXOSC10 (NM\_001001998) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EXOSC10 (NM_001001998) Human Untagged Clone
Tag:	Tag Free
Symbol:	EXOSC10
Synonyms:	p2; p3; p4; PM-Scl; PM/Scl-100; PMSCL; PMSCL2; RRP6; Rrp6p
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_001001998, the custom clone sequence may differ by one or more nucleotides

```
ATGGCGCCACCCAGTACCCGGGAGCCAGGGTCTGTGCGGACCAGCGCAACCAATCCGACGGAGAGA
TGGTGCTGCCAGGCTTCCCGACGCCGACAGCTTTGTGAAGTTTGTCTTTGGGTCGGTGGCAGTCAC
CAAGGCATCTGGGGCCACCACAGTTTGGCGATGAGTATGATTTTTACCGAAGTTTTCTGGCTTCCAA
GCATTTTGCAGAACACAGGGAGACAGTTGCTTCAAGTGCATGAGCAGAGTAATGCAGTACCATGGGTGTC
GCAGCAACATTAAGGATCGAAGTAAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGT
TGATGTAATTCTGGAGAGAGTGGGTATTTACTGGATGAAGCCTCAGGTGTAAACAAGAATCAACAGCCT
GTCCTCCCTGCCGGCTTGCAGGTCCCAAAACGGTAGTGTCCAGCTGGAACCGTAAGGCAGCAGAAATATG
GCAAAAAAGCAAAATCTGAACTTTCCGGCTGCTTCAAGCAAAAAATATCATCCGACCTCAGCTCAAGTT
TCGAGAGAAGATTGACAATTCACACACACCATTCTTCTCTAAAATCTTCAACACCAATGCTCAGAAA
CCTCTCCCTCAAGCTCTCTAAGGAAAGCGGGAACGCCACAGGATCGTCTGAGGACTTGGACGTCC
CCCCTGCACTGGCTGATTTTCCATCAGCAGAGAACCAGCAGGTTGAGCAAGACATGTTTGCACATCC
TTATCAATATGAACTAAATCACTTTACCCAGCAGATGCAGTGTCTCAAAGCCACAACCCAGTTATAC
AGACCTATAGAAGAGACACCATGCCATTTTCAATCCTCCCTGGATGAACTCGTGGAACTCAACGAAAAGC
TCTTGAATTGTCAGGAATTTGCAGTTGACTTGGAGCACCCTTACAGGAGCTTCTGGGACTGACCTG
CCTGATGCAAAATTTACTCGGACGGAAGACTTCAATGACACCCTCGAGCTTCAAGTGACATGTAC
ATTCTCAATGAGAGCCTCACAGACCCAGCCATCGTTAAGGTCTTTCATGGTGTGATTCAGACATAGAAT
GGCTACAGAAAGACTTTGGGTTGTATGTAGTAAACATGTTTGATACTCATCAGGCAGCACGCCTTCTAA
CCTGGGCAGGCACTCACTCGATCATCTCTGAACTCTACTGCAACGTGGACTCAAAACAAGCAATATCAG
CTGGCTGATTGGAGAATACGCCCTCTGCCGAGGAGATGCTCAGCTACGCCGGGATGACACCCATTACC
TGCTATATATCTATGACAAAATGAGGCTGGAGATGTGGGAGCGCGCAACGGGCAGCCGGTGCAGCTGCA
GGTGGTGTGGCAACGGAGCAGGGACATCTGCCTCAAGAAATTCATCAAACCTATCTTACGGATGAGTCC
TACCTTGAATCTATAGGAAGCAGAAGAAGCACCTTAACACACAGCAGTTGACAGCCTTTTCAAGTGTGT
TTGCCTGGAGGGATAAAACAGCTCGCAGGGAAGATGAAAGTTACGGATATGTAAGTCCAAACCATGAT
GCTGAAAATAGCTGAAGAAGTGCCTAAGGAACCTCAGGGCATCATAGCTTGTGCAACCCAGTACCGCCC
CTTGTGCGGCAGCAGATCAACGAAATGCACCTTTAATCCAGCAGGCCGAGAGATGCCCTGCTCAAGT
CTGAAGTTGCAGCCGAGTGAAGAAGAGCGGACCCTGCCAGTGTGAGAGATTGGAGAATGTTCTCTT
TGGACCTCAGACTGCTCCCATGCCCTCCGGATGGCTATCCAATCATCCAACCCAGTGGATCTGTGCCA
GTTCAGAAAGCAGGCGAGCCTTCCCTGATGAAAAAGAAGATAACTTGCTGGGTACCACATGCCTGATTG
CCACAGCTGTATCAGTTATTTAATGAACCTAGTGTGAAGACAGTAAAAAGGGTCCATTGACAGTTGC
ACAGAAAAAGGCCAGAACATCATGGAGTCTTTGAAAATCCATTTAGGATGTTTCTGCCCTCACTGGGA
CACCGTGTCCCCTCTCAGGCAGCGAAGTTCGATCCATCAACCAAAATCTATGAAATCAGCAACCGCT
GGAAGCTGGCCAGGTACAAGTACAAAAGACTCTAAAGAAGCTGTCAAGAAGAAGGCAGCTGAGCAAAAC
AGCTGCCCGGGAACAGGCAAGGAGGCGTGCAAGCTGCAGCAGAACAGGCCATCTCCGTCGACAGCAG
GTCGTGTAGAAAATGCTGCAAGAAGAGAGCGGAGCAACAAGCGACCCAAAGGACCACAGAACAGAAAAC
AAGAGAAGAAACGACTCAAAATTTCAAGAAGCCAAAGGACCCAGAGCCACGAAAAAGAGTTTTACGCC
TTACGACTACAGCCAGTCAAGCTTCAAGGCTTTTGTGGAACAGCAAAATCCAAAGTTTCTTCTCAGTTT
GATCCAAATAAACAGACCCCTGCTGCAAGAAATGCATTGACAGCAAAAAAATTAACAGTCCGTGGGAA
ACAAAAGCATGTCCTTTCAACTGGAAAGTCAAGCAGAGGCTTCAAGTACAACCTGCCACAGAGATAG
```

<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_001001998 unedited TTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGAAAAATGGCGCCA CCCAGTACCCGGGAGCCCAGGGTCTGTTCGGCGACCAGCGCAACCAATCCGACGGAGAG ATGGTGTGCCAGGCTTCCCGGACGCCGACAGCTTTGTGAAGTTTGCTCTTGGGTCCGTG GTGGCAGTCACCAAGGCATCTGGGGCCTACCACAGTTTGGCGATGAGTATGATTTTTAC CGAAGTTTTCTGGCTTCCAAGCATTTTGCGAAACACAGGGAGACAGGTTGCTTCAGTGC ATGAGCAGAGTAATGCAGTACCATGGGTGTCGCAGCAACATTAAGGATCGAAGTAAAGTG ACTGAGCTGGAAGACAAGTTTGATTTACTAGTTGATGCCAATGATGTAATTCTGGAGAGA GTGGGTATTTACTGGATGAAGCCTCAGGTGTAACAAGAATCAACAGCCTGTCTCCCT GCCGGCTTGCAGGTCCCAAAACGGTAGTGTCCAGCTGGAACCGTAAGGCAGCAGAATAT GGCAAAAAGCAAAATCTGAAACTTTCCGGCTGCTTCATGCAAAAATATCATCCGACCT CAGCTCAAGTTTCGAGAGAAGATTGACAATTCACACACACATTTTCTTCTAAAATCTT CATCAAACCAATGCTCAGAAACCTCTCCCTCAAGCTCTCTCTAGGAAAGCGGGGACGC CACAGGATCGTCCTGAGACTTGGACGTNCCCCTGACTGGCTGATTTATCCATAGCAGAG ACCCAGCAGNTGAGCAAGATGTTTGCCTCTTATATGACTAAATACTTTACCCAGC GATGCAGGCTTCAAACCAACCCAGTTTCAGACTATGAAAGACTGCCTTTCTATCTCC TGGAGACTCGGGG
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_001001998
<b>Insert Size:</b>	3000 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_001001998.1</a></u> , <u><a href="#">NP_001001998.1</a></u>
<b>RefSeq Size:</b>	2834 bp
<b>RefSeq ORF:</b>	2658 bp
<b>Locus ID:</b>	5394
<b>UniProt ID:</b>	<u><a href="#">Q01780</a></u>
<b>Cytogenetics:</b>	1p36.22
<b>Protein Pathways:</b>	RNA degradation

**Gene Summary:**

Putative 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. EXOSC10 has 3'-5' exonuclease activity (By similarity). EXOSC10 is required for nucleolar localization of C1D and probably mediates the association of MTREX, C1D and MPP6 with the RNA exosome involved in the maturation of 5.8S rRNA.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).